REVIEW OF MARKET PERFORMANCE

FISCAL YEAR 2023

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Key Points

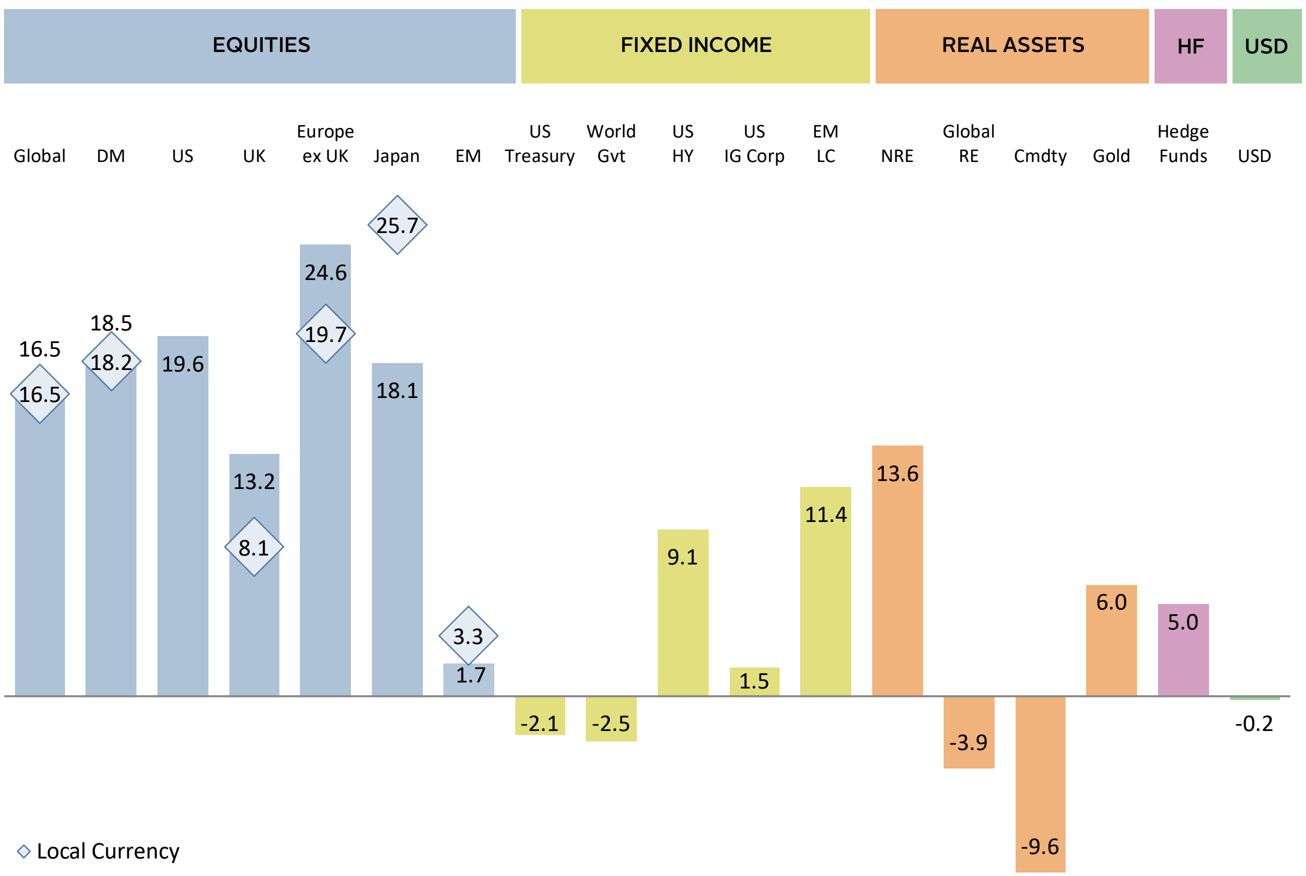
- Risk assets enjoyed mostly positive returns in FY 2023. Developed markets equities led as fears over the severity of a possible recession moderated.
- Emerging markets equities lagged developed markets as economic activity in China remained restricted for the first half of the fiscal year, and the pace of reopening disappointed in the second half.
- Bond performance improved from the previous fiscal year. Credit assets posted positive returns but developed markets sovereign bonds struggled.
- Some real assets suffered on higher interest rates, and commodity futures lagged on slowing demand.

C|A CAMBRIDGE ASSOCIATES FIFTY YEARS

Equities rebounded while real assets lagged

GLOBAL ASSET CLASS PERFORMANCE: FY 2023

As of June 30, 2023 • Total Return (%) • US Dollar



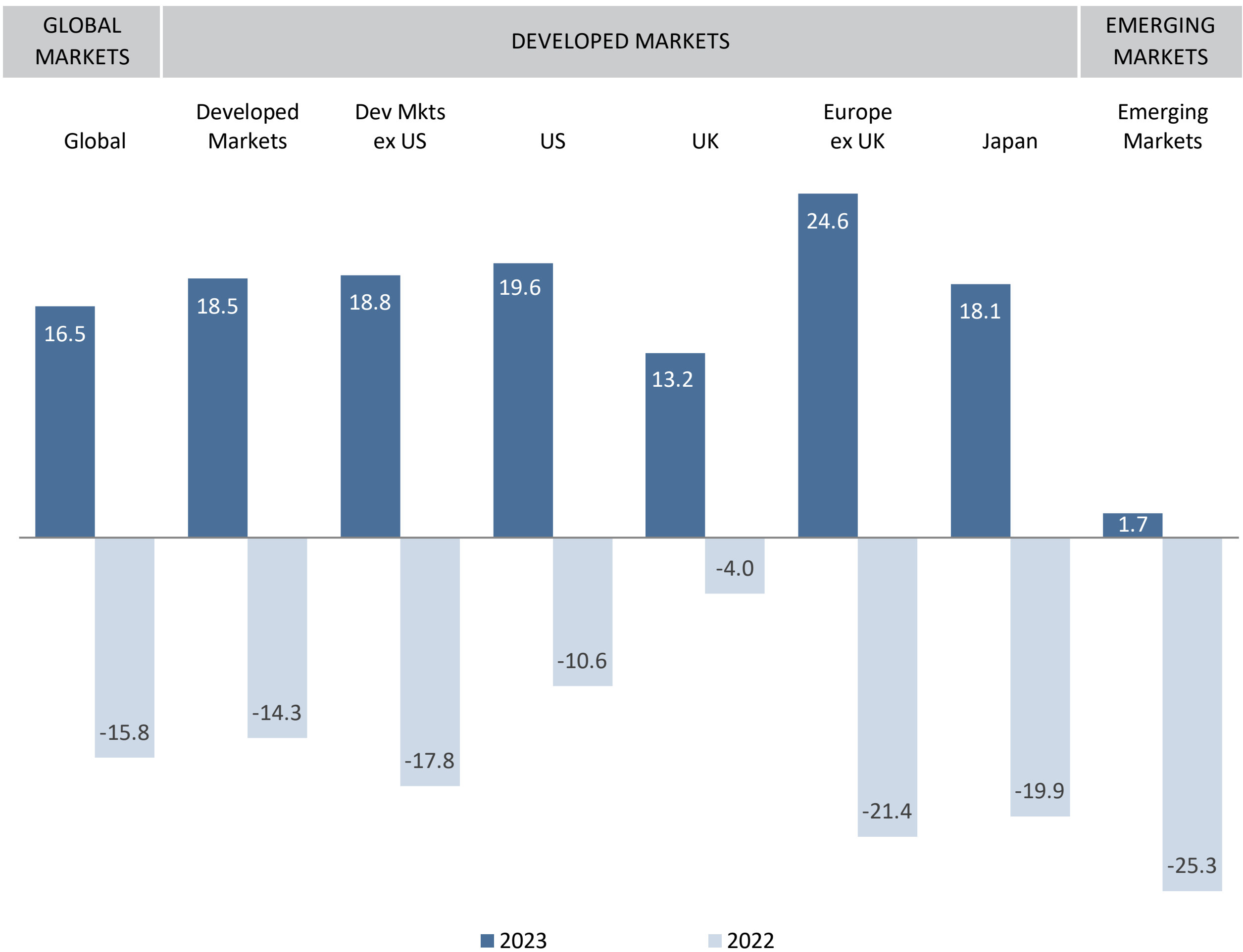
Risk assets enjoyed mostly positive returns in FY 2023. Equities rebounded strongly as fears over the severity of a possible recession moderated. Emerging markets (EM) equities lagged developed markets (DM) as economic activity in China remained restricted for the first half of the fiscal year, and the pace of reopening disappointed in the second half. This disappointment, due to softening demand, also contributed to poor returns for commodity futures. Inflation rates remained above target for most of the world, driving central banks to keep monetary policies tight. Higher yields, particularly for the front-end of the curve, weighed on government bonds. Meanwhile, attractive yields drove investment to high-yield (HY) bonds and EM local currency debt.

Sources: Bloomberg Index Services Limited, Bloomberg L.P., EPRA, Federal Reserve, FTSE Fixed Income LLC, FTSE International Limited, Hedge Fund Research, Inc., Intercontinental Exchange, Inc., J.P. Morgan Securities, Inc., MSCI Inc., National Association of Real Estate Investment Trusts, Standard & Poor's, and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.
Notes: Asset classes represented by: MSCI AC World Index ("Global"), MSCI World Index ("DM"), S&P 500 Index ("US"), MSCI UK Index ("UK"), MSCI Europe ex UK Index ("Europe ex UK"), MSCI Japan Index ("Japan"), MSCI Emerging Markets Index ("EM"), Bloomberg US Treasury Index ("US Treasury"), FTSE World Government Bond Index ("World Gvt"), Bloomberg US High Yield Bond Index ("US HY"), Bloomberg US Corporate Investment Grade Bond Index ("US IG Corp"), J.P. Morgan GBI-EM Global Diversified Index ("EM LC"), market cap-weighted Datastream World Energy Index and Datastream World Basic Resources Index blend ("NRE"), FTSE® EPRA/NAREIT Global Real Estate Index ("Global RE"), Bloomberg Commodity TR Index ("Cmdty"), LBMA Gold Price ("Gold"), Hedge Fund Research Fund Weighted Composite Index ("Hedge Funds"), and Nominal Trade Weighted US Dollar Index: Broad ("USD"). Total return data for all MSCI indexes are net of dividend taxes. Hedge Fund Research data are preliminary for the preceding five months. Gold performance is based on spot price returns.

Global equity markets reversed course in FY 2023

GLOBAL EQUITY PERFORMANCE: FY 2023 VS FY 2022

Total Return (%) • US Dollar



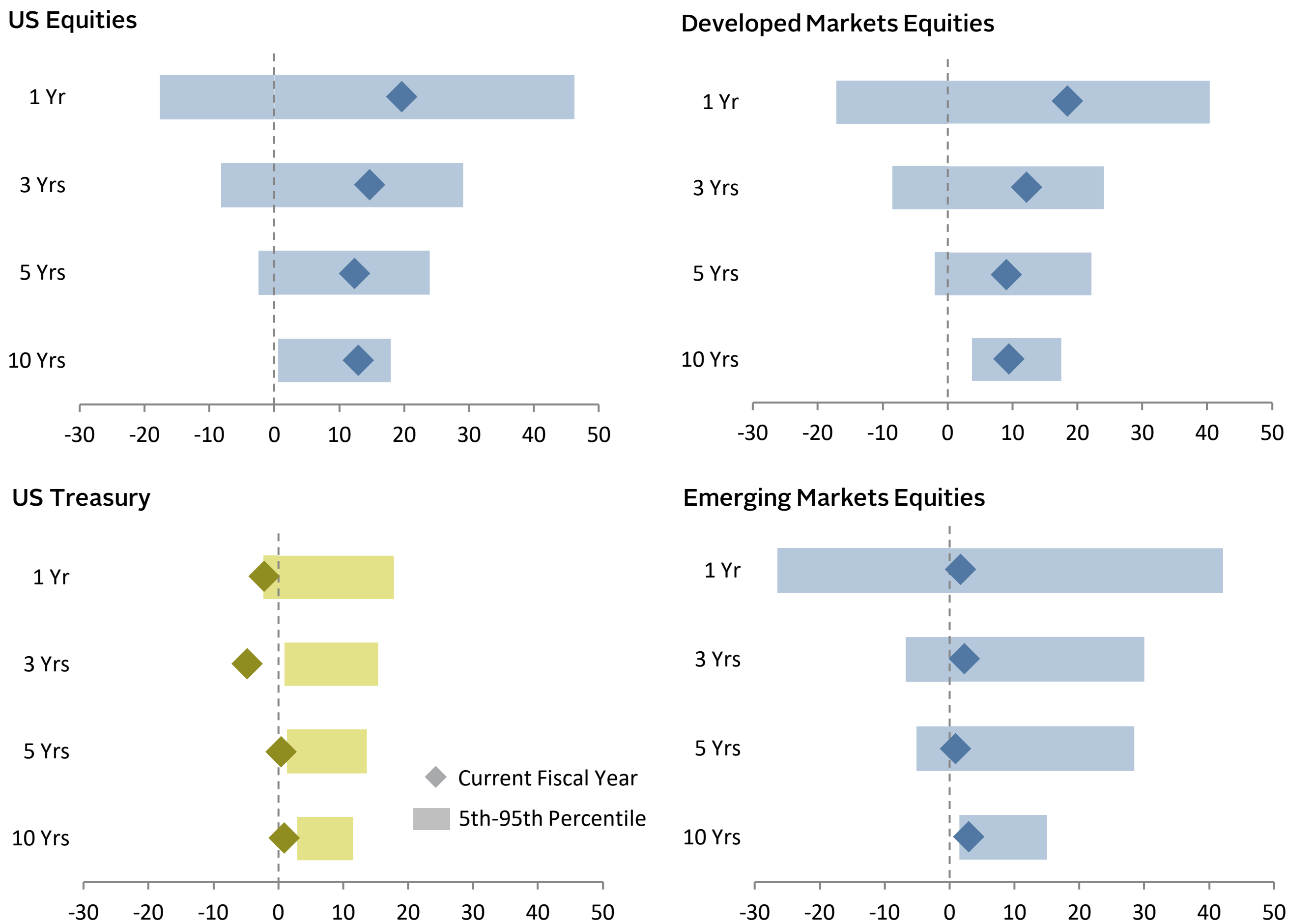
Global equities reversed course this fiscal year, posting positive returns across the board. Within DM, Europe ex UK led, as it became apparent that the worst of the energy crisis had been averted. US equities outperformed broader DM as well, owing to its economy being more resilient than expected. Inflation was relatively benign in Japan, and with the Bank of Japan committed to an ultra-easy monetary policy, equities earned strong results. UK equities' poor performance reflected the country's challenges of curbing the highest peak inflation rate among major DM. EM also advanced, but lagged DM, as investors became skeptical of the positive contribution from China's economic reopening after the lifting of its zero-COVID policies.

Sources: MSCI Inc., Standard & Poor's, and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.
Notes: Asset classes represented by the following: MSCI All Country World Index ("Global"), MSCI World Index ("Developed Markets"), MSCI EAFE Index ("Dev Mkts ex US"), S&P 500 Index ("US"), MSCI UK Index ("UK"), MSCI Europe ex UK Index ("Europe ex UK"), MSCI Japan Index ("Japan"), and MSCI Emerging Markets Index ("Emerging Markets"). Total return data for all MSCI indexes are net of dividend taxes.

US and developed markets equities led across different time periods

AVERAGE ANNUAL COMPOUND RETURNS FOR VARIOUS TIME PERIODS

Periods Ended June 30, 2023 • Total Return (%) • US Dollar



As investors worried less about the severity of a potential recession in the United States and Europe, one-year equity returns swung from negative extremes in FY 2022 to above median in FY 2023. One-year returns for EM equities also improved from the very low-end of their historical range. The lifting of China's COVID-19 restrictions contributed to this positive performance. Investors became wary of the Federal Reserve's increasingly hawkish tone through the fiscal year, pressuring US Treasury returns. Overall, US Treasury returns were in the bottom decile across different time periods—posting their third consecutive fiscal year decline (-2.1%).

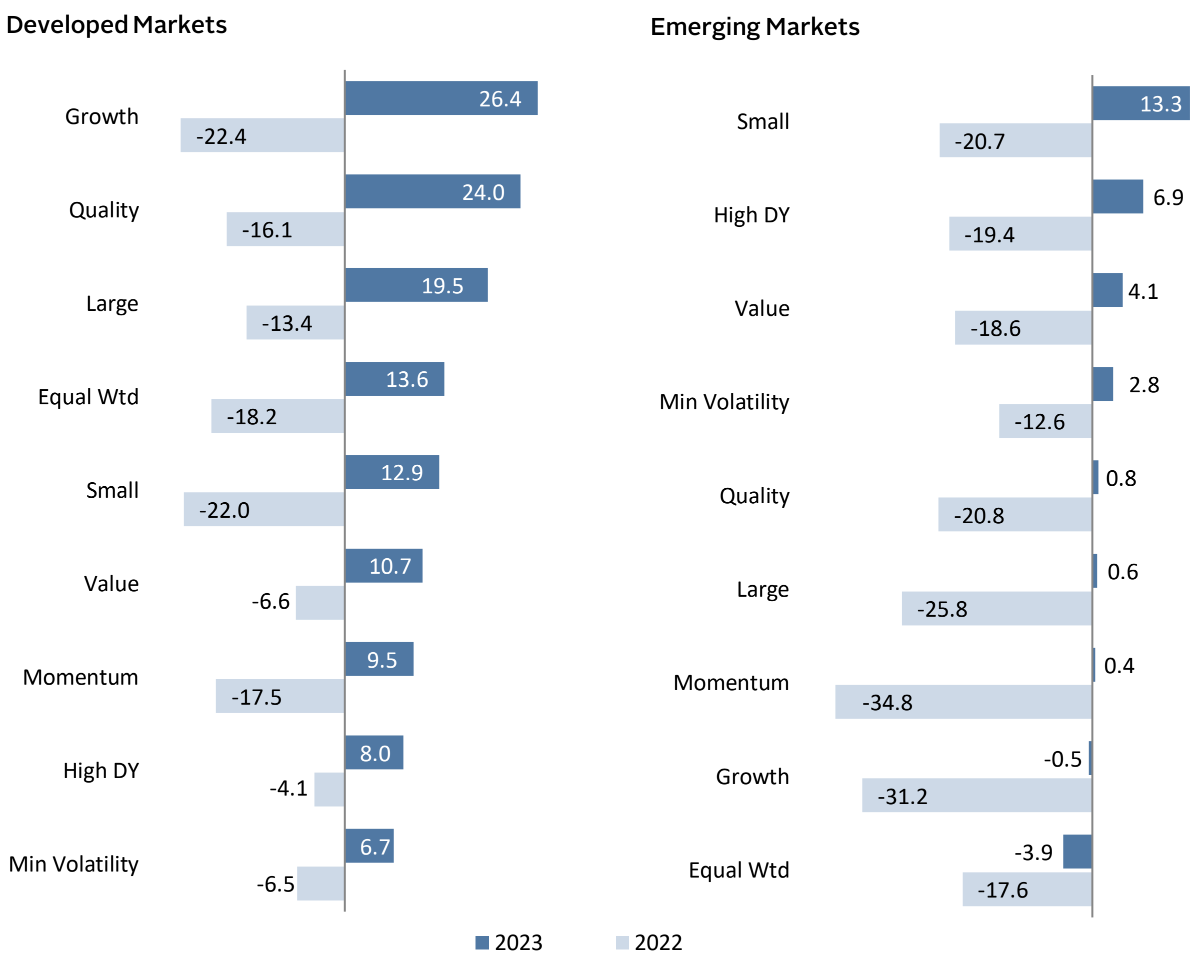
Sources: Bloomberg Index Services Limited, Global Financial Data, Inc., MSCI Inc., Standard & Poor's, and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.

Notes: Ranges reflect the 5th and 95th percentile of fiscal year returns. Asset classes are represented by the following indexes: S&P 500 Index ("US Equities"), MSCI World Index ("Developed Markets Equities"), Bloomberg Barclays US Treasury Index ("US Treasury"), and MSCI Emerging Markets Index ("Emerging Markets Equities"). Total returns for all MSCI indexes are net of dividend taxes. Total returns for the MSCI Emerging Markets Index are gross of dividend taxes prior to fiscal year 2002. The first full fiscal year periods are 1901 for S&P 500, 1971 for MSCI World, 1974 for US Treasury, and 1989 for MSCI Emerging Markets. Data prior to 1969 for US Equities are from Global Financial Data, Inc.

Growth made a comeback in developed markets but lagged in emerging markets

EQUITY PERFORMANCE BY FACTOR AND STYLE: FY 2023 VS FY 2022

As of June 30, 2023 • US Dollar • Percent (%)

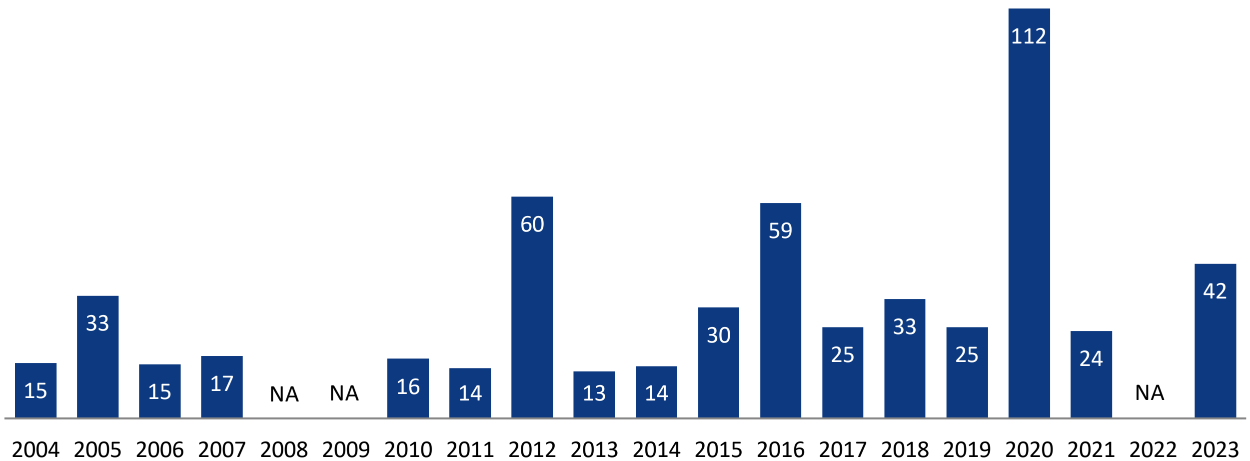


Growth strategies made an impressive comeback in DM on the heels of investor frenzy around artificial intelligence (AI) technologies. DM quality stocks also benefited from this phenomenon, along with investors positioning more defensively with expectations of an economic slowdown. However, EM still saw growth strategies lag, along with equal-weighted and momentum strategies. Investors instead chose high-yielding dividend companies to ride out the storm of an economic slowdown. Small-cap stocks led on an overweight to India, significantly lower exposure to China than the broader EM index, and strong performance in the technology and industrials sectors.

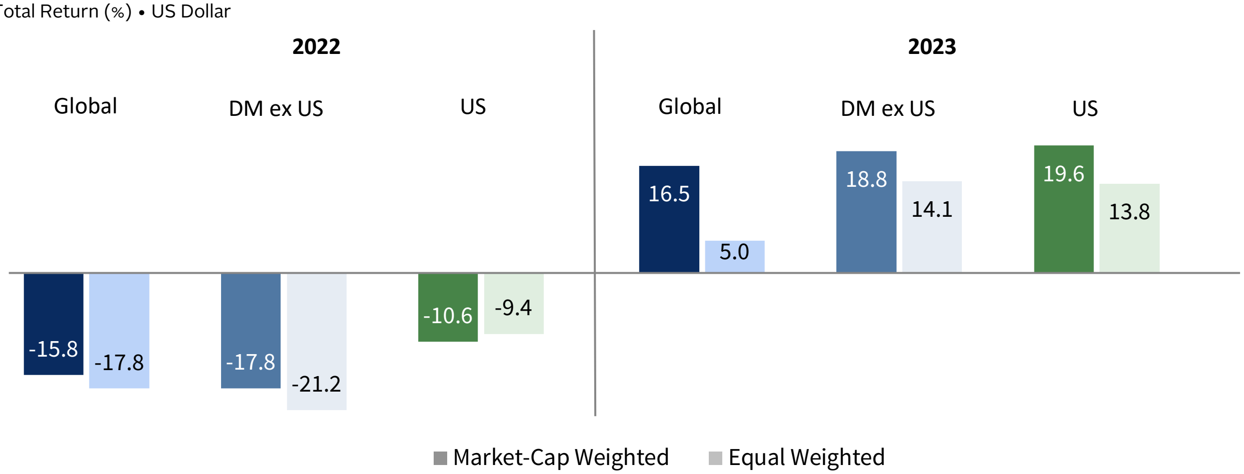
Sources: MSCI Inc. and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.
Notes: Factors are based on the MSCI World Index and MSCI Emerging Markets Index. Total return data for all MSCI indexes are net of dividend taxes.

Return contribution narrowed toward the end of FY 2023

% OF S&P 500 TOTAL RETURNS ATTRIBUTED TO THE TOP 5 CONTRIBUTING STOCKS TO TOTAL RETURN
FY 2004–FY 2023 • Percent (%)



MARKET CAPITALIZATION WEIGHTED AND EQUAL WEIGHTED RETURNS: FY 2022 VS FY 2023
Total Return (%) • US Dollar



Over the course of FY 2023, investors flocked to growth stocks (particularly in the IT sector) whenever rate hike expectations softened. However, investor interest in large-cap technology stocks gained momentum when positive developments in the AI space were announced in late FY 2023. Investor frenzy for this space led to strong overall market results, but performance was concentrated in only a handful of large-cap technology stocks. Looking at equal-weighted indexes to help adjust for this narrowness in market breadth unveiled that performance was relatively modest when compared to market-weighted equivalents.

Sources: FactSet Research Systems, MSCI Inc., Standard & Poor's, and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.
Notes: Top chart data reflect fiscal years ended June 30. Fiscal years where the S&P 500 returned negative returns are excluded from the contribution analysis. Alphabet Class A & C shares are combined in calculations. Bottom chart asset classes represented by the following: MSCI All Country World Index ("Global"), MSCI EAFE Index ("DM ex US"), and S&P 500 Index ("US"). Total return data for all MSCI indexes are net of dividend taxes.

Investors looked past near-term weakness and rewarded IT and industrials sectors

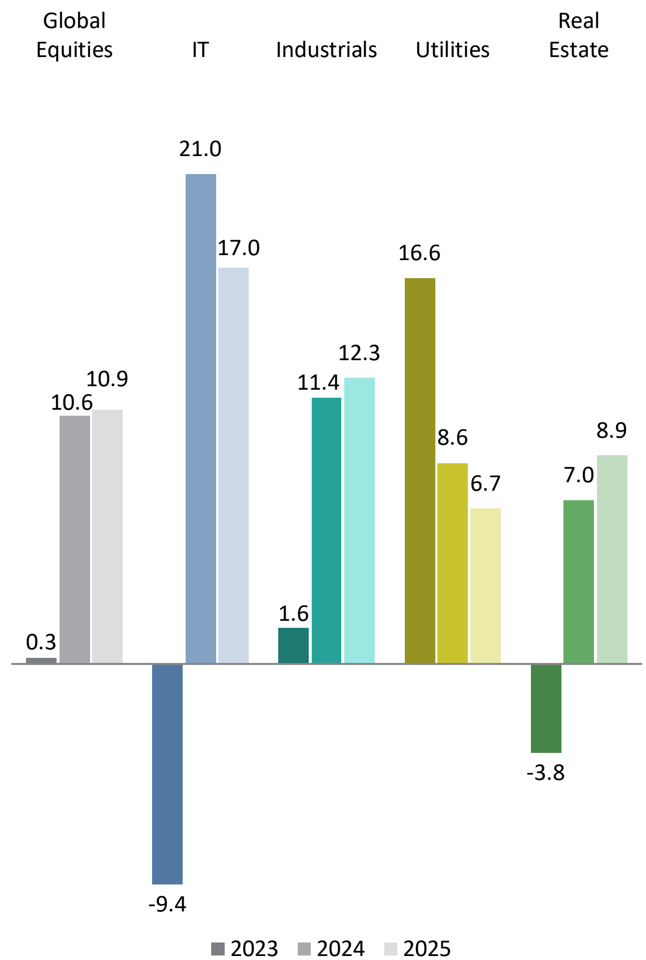
GLOBAL EQUITIES FY PERFORMANCE BY SECTOR

FY 2021–FY 2023 • US Dollar • Percent (%)

FY21	FY22	FY23
Materials 49.0	Energy 21.4	IT 34.3
Financials 48.9	Utilities 3.2	Industrials 25.2
Cons Disc 46.3	Healthcare -4.6	Cons Disc 19.2
IT 46.0	Cons Stap -4.6	Energy 13.2
Industrials 44.6	Financials -12.0	Materials 12.1
Comm Svcs 42.0	Real Estate -13.1	Financials 11.5
Energy 39.1	Materials -16.1	Comm Svcs 10.5
Real Estate 27.0	Industrials -18.7	Cons Stap 7.7
Healthcare 23.5	IT -20.5	Healthcare 5.7
Cons Stap 20.7	Cons Disc -28.9	Utilities 0.7
Utilities 14.7	Comm Svcs -29.8	Real Estate -6.9

CY EARNINGS GROWTH ESTIMATES

As of June 30, 2023 • US Dollar • Percent (%)



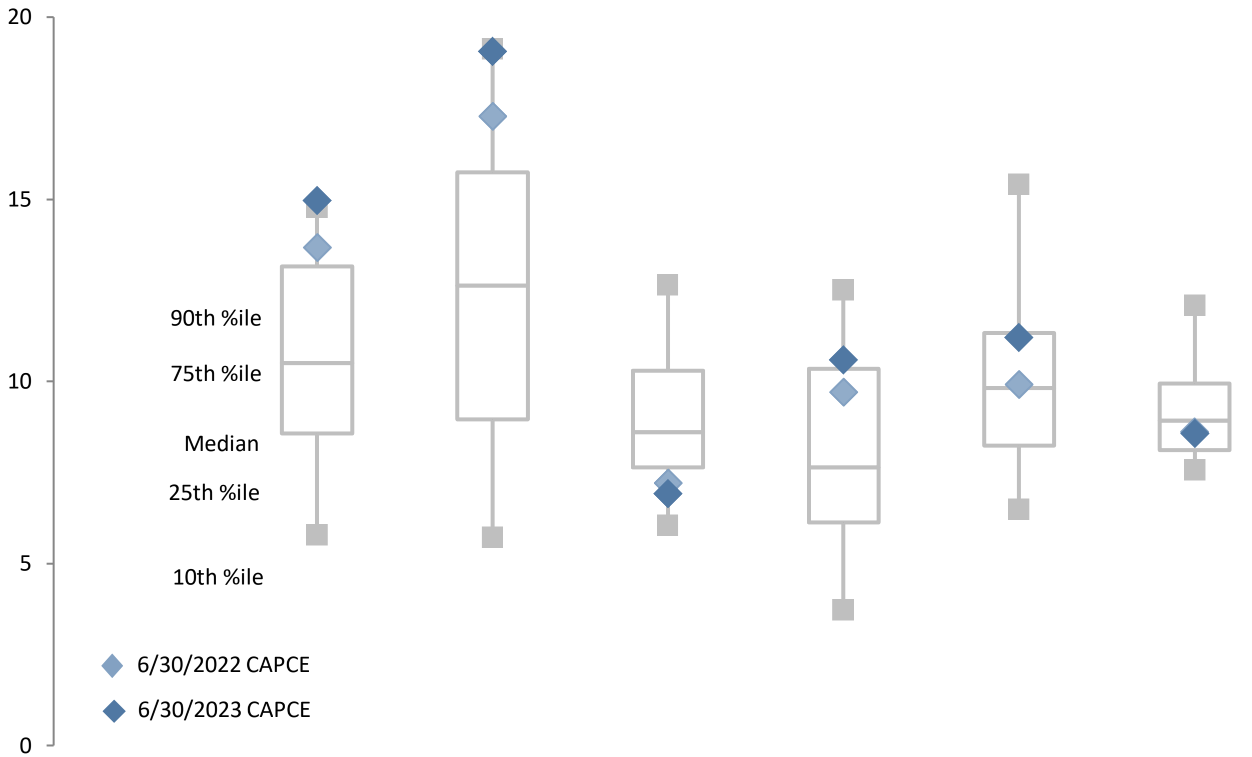
Sector winners and losers looked quite different from the prior year, with the bottom-half performers of FY 2022 posting some of the strongest returns this year. The top five sectors this year had representation from growth, cyclical, and value strategies. The IT sector posted the best return despite expectations of negative earnings growth in 2023, as investors looked through near-term challenges to expectations of above market growth in 2024 and 2025. Similarly, investors drove strong returns in the industrials sector, focusing on higher projected growth rates in 2024 and 2025, commensurate with expectations of an economic recovery. On the other hand, the real estate and utilities sectors suffered on concerns of rising interest rates.

Sources: I/B/E/S, MSCI Inc., and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.
Notes: LHS chart data reflect performance for fiscal years ended June 30. Total return data for all MSCI indexes are net of dividend taxes. RHS chart data reflect earnings growth estimates for calendar years ended December 31.

Equity valuations expanded across most major markets

CYCLICALLY ADJUSTED PRICE-TO–CASH EARNINGS (CAPCE) RATIOS BY REGION

As of June 30, 2023



% Change	World	US	UK	Europe ex UK	Japan	EM
to 50th %ile	-29.8	-33.7	24.3	-27.9	-12.3	4.0
to 25th %ile	-42.8	-53.0	10.4	-42.1	-26.4	-5.4
to 10th %ile	-61.4	-70.0	-12.7	-64.9	-42.2	-11.8

Cyclically adjusted price-to–cash earnings (CAPCE) multiples expanded in most regions in FY 2023. Global and US equities valuations expanded to the 90th percentile of historic observations, as investors drove equity returns up despite a near-term slowdown in earnings growth. Europe ex UK and Japan enjoyed modest expansion in multiples, while EM equities' valuation held steady and remained attractive. UK equities multiples contracted even further and were the lowest of the group (approaching the 10th percentile of historical observations). Investors became increasingly nervous about the United Kingdom's persistently high inflation and the economic fallout from a tight monetary policy.

Sources: MSCI Inc. and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.

Notes: The cyclically adjusted price-to–cash earnings (CAPCE) ratio is calculated by dividing the inflation-adjusted index price by trailing ten-year average inflation-adjusted cash earnings. Cash earnings are defined as net income from continuing operations plus depreciation and amortization expense. MSCI does not publish cash earnings for banks and insurance companies, and therefore excludes these two industry groups from index-level cash earnings. EM is cyclically adjusted by trailing five-year data.

Investors looked past margin compression, driving markets higher on P/E multiple expansion

GLOBAL EQUITY RETURN DECOMPOSITION

As of June 30, 2023 • Percent (%) • US Dollar

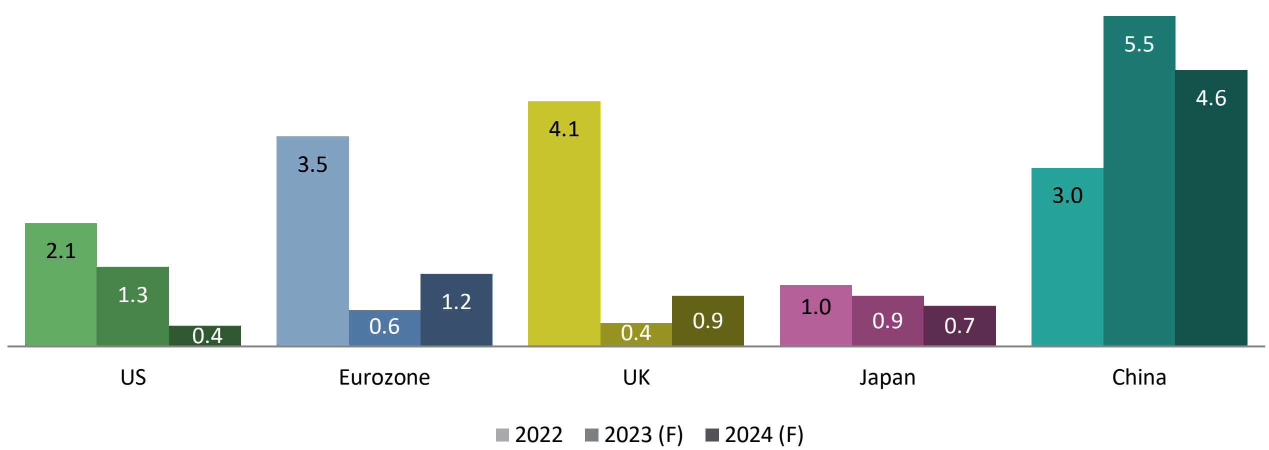
Investors found several reasons to be more optimistic in FY 2023, driving up global equity markets—from Europe averting an energy crisis to China's reopening and resilience of the US economy. Although earnings declined nearly 4%, equities returned 17%—well above the average total returns since FY 2005. This was largely due to investors' willingness to price in higher P/E multiples, reflecting lower discount rates as markets began to forecast possible rate cuts as early as FY 2024. Sales growth was above the average pace of growth since 2005. However, this did not flow through to the bottom line as profit margins compressed. Margins were lower because inflationary pressures increased the cost of inputs and higher interest rates drove up financing costs.

Sources: I/B/E/S, MSCI Inc., and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.
Notes: Data are based on the MSCI All Country World Index and in annualized terms. Data use proprietary smoothing techniques.

GDP growth softened around the world, except in China

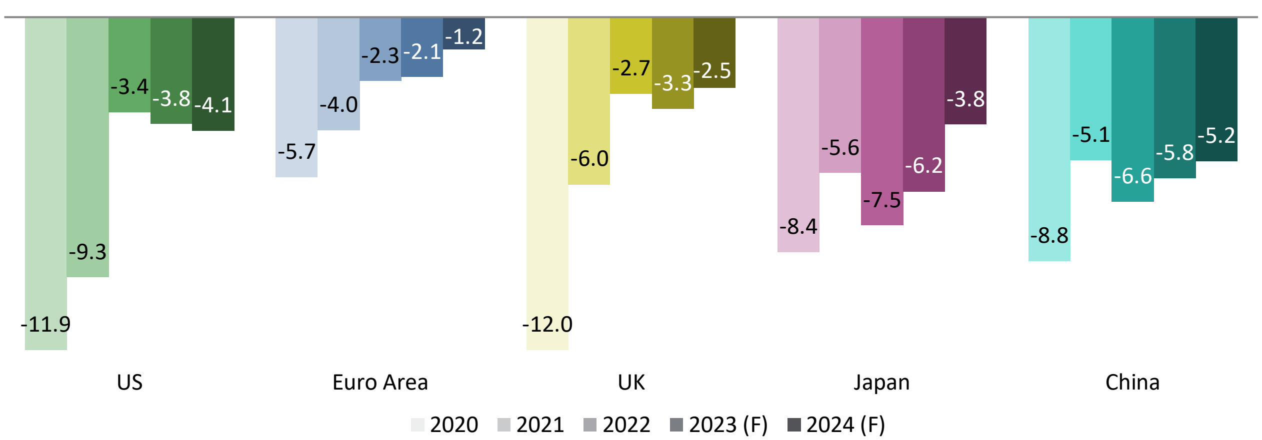
REAL GDP GROWTH

2022–24 • Forecasts from 2023 • Percent (%)



GENERAL GOVERNMENT PRIMARY BALANCE

As at April 3, 2023 • Percent of Potential GDP (%)



Forecasts for real GDP showed growth rates moderating in 2023 versus 2022 across most major economies. Within DM, the outlook for GDP growth was highest for the United States in 2023 and for the Eurozone in 2024. The United Kingdom suffered the largest drop in year-over-year GDP growth expectations, in part due to weaker energy sector returns relative to 2022, and because it faced the toughest challenge among major DM in reining in inflation. China stood apart, with GDP growth expectations improving in FY 2023, as it benefited from its economic reopening after lifting its zero-COVID policies. Japan and China continued to employ more accommodative policies to support economic growth. Forecasts also indicated that the government's budget deficit would grow in the United States but remain well below levels seen right after the pandemic began.

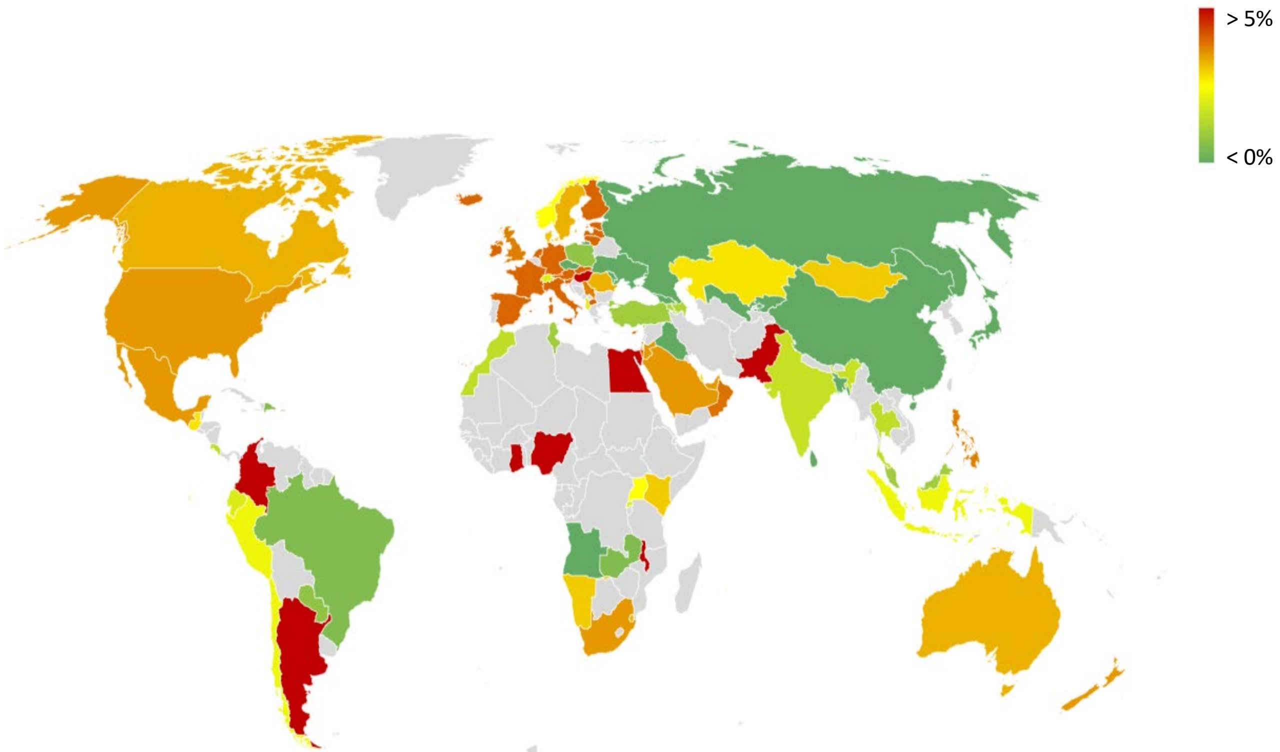
Sources: IMF Fiscal Monitor April 2023 and Oxford Economics.

Notes: General government primary balance is defined as the overall government budget balance, excluding net interest payments. For cross-economy comparison, the expenditures and fiscal balances of the United States are adjusted to exclude the imputed interest on unfunded pension liabilities and the imputed compensation of employees, which are counted as expenditures under the 2008 System of National Accounts (2008 SNA) adopted by the United States, but not in economies that have not yet adopted the 2008 SNA. Data for the United States in this table may therefore differ from data published by the US Bureau of Economic Analysis. Real GDP growth data for China is not seasonally adjusted and are seasonally adjusted for all other economies.

Monetary policies remain tight, but some central banks signal an end to hikes

FY 2023 RISE IN GLOBAL CENTRAL BANK POLICY RATES

June 30, 2022 – June 30, 2023 • Percent (%)



	Fed	ECB	BOE	BOJ	PBOC
Ending Policy Rate	5.25	4.00	5.00	-0.10	3.55
FY 2023 Change in Rate	+3.50	+4.00	+3.75	—	-0.15

79 out of 91 economies for which data are available have higher policy rates at the end of FY 2023 than at the beginning. Among economies that have higher policy rates, the following have kept interest rates unchanged over the last three months: Albania, Brazil, Chile, Ghana, Hungary, India, Indonesia, Kazakhstan, Mauritius, Mexico, Mongolia, Morocco, Paraguay, Peru, the Philippines, Poland, Romania, Rwanda, Tunisia, and Uganda.

Central banks became increasingly hawkish across most developed economies as inflation proved to be more persistent than initially expected. As a result, these countries continued to see increases in interest rates. However, toward the close of FY 2023, it became increasingly apparent that most economies were approaching the end of their hiking cycle. In fact, Australia, Canada, and the United States paused hiking to assess the impact of their policies before resuming increases. Many EMs signaled that they were approaching or had reached peak rates, as many had been hiking for longer than their DM peers, and inflation was now coming into target ranges. Japan and China were outliers as they continued an easy monetary policy stance, having faced more benign inflation trends.

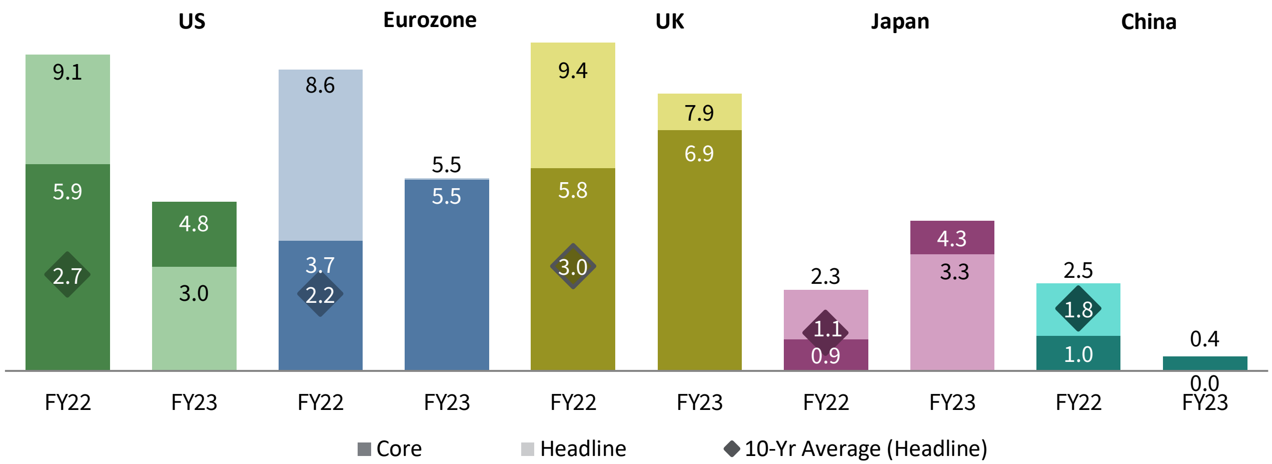
Sources: Australian Bureau of Statistics, Bing, GeoNames, Microsoft, National Sources, Navindo, OpenStreetMap, Thomson Reuters Datastream, and TomTom.

Notes: Gray regions reflect countries where policy rate data is unavailable. ECB and China policy rates reflect the main refinancing operations fixed rate tenders fixed rate and one-year Loan Prime Rate, respectively.

Labor tightness and housing prices kept inflation sticky

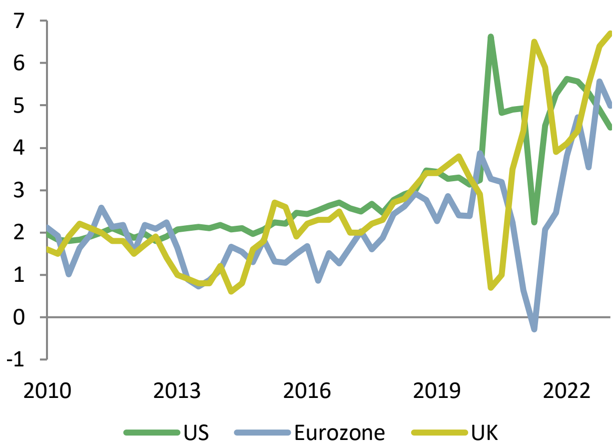
INFLATION

As at June 30, 2023 • Percent (%)



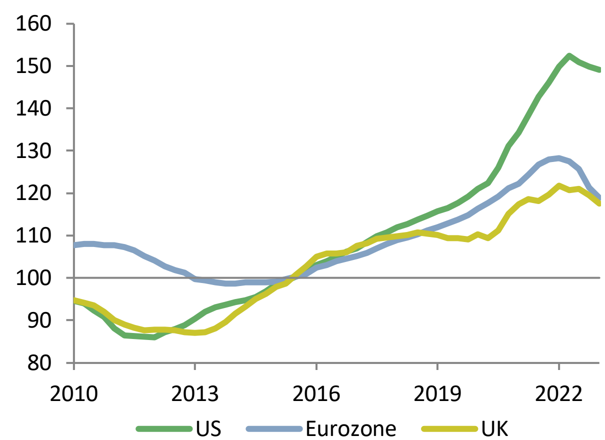
WAGE GROWTH

1Q 2010 – 1Q 2023 • YOY Percent (%) • Local Currency



REAL HOUSE PRICE INDEX

1Q 2010 – 1Q 2023 • Cumulative Wealth • Local Currency • 2015 = 100



Although inflation moderated in most countries during the year, core inflation proved persistent. As energy and food prices came down, headline inflation fell more than core inflation in the United States and the Eurozone. The United Kingdom is grappling with one of the highest inflation rates within DM. Although Japan has enjoyed one of the lowest within DM, inflation is still hitting 40-year highs. Across regions, incredibly tight labor markets with above trend wage growth and higher housing prices have contributed to inflation. Additionally, higher interest rates have driven mortgage rates to levels that had consumers questioning the affordability of homeownership. China is a clear outlier, with low inflation and the government looking to stimulate its property sector.

Sources: OECD and Thomson Reuters Datastream.

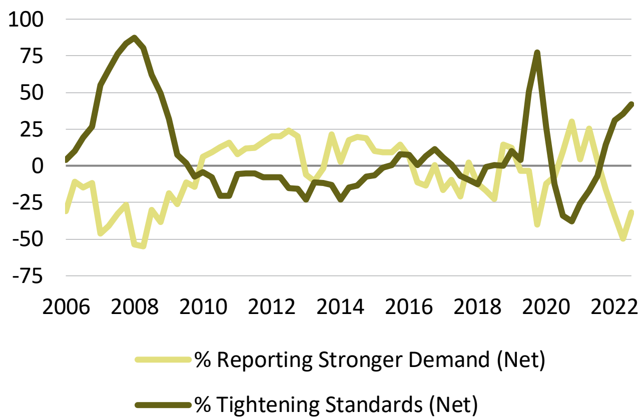
Notes: Ten-year average inflation reflects the annual fiscal year (i.e., periods ended June 30) headline inflation from 2014 through 2023. All economic data wage growth and real house price data are seasonally adjusted, except for Eurozone wage growth. Real House Price Index represents OECD's Analytical House Prices Indicators.

Banking crisis contributed to tightening financial conditions

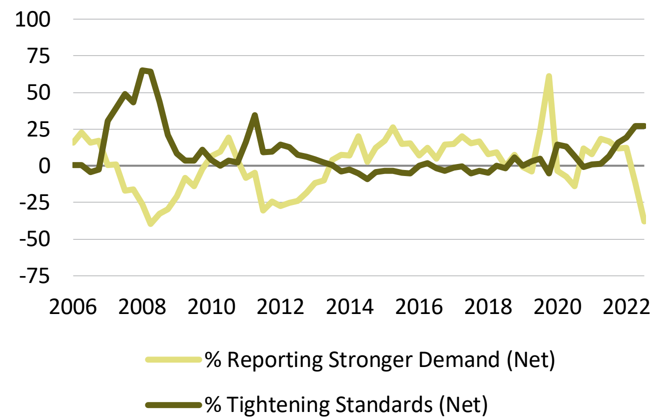
BANK LENDING CONDITIONS

Fourth Quarter 2006 – Second Quarter 2023

United States

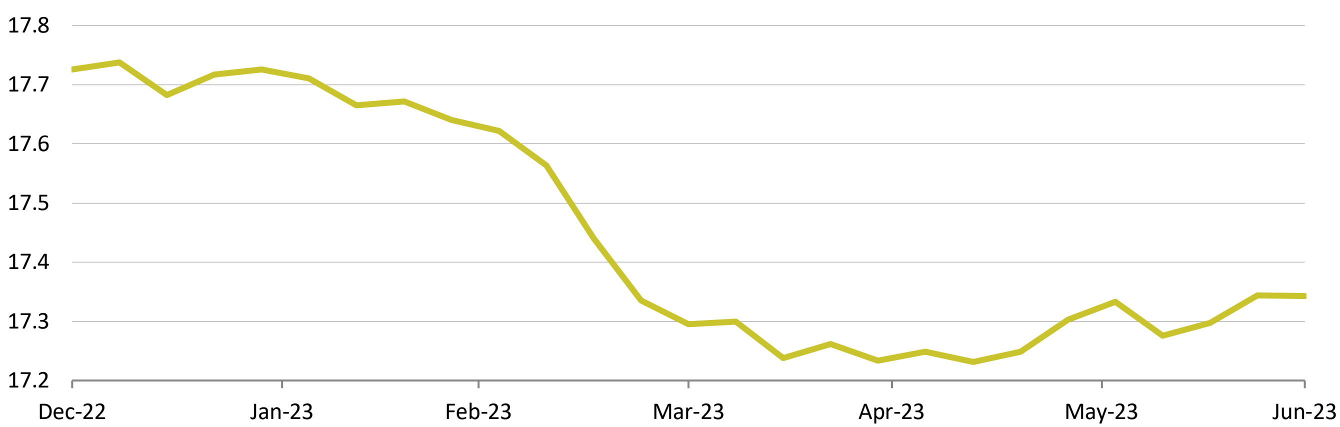


Euro Area



US COMMERCIAL BANK DEPOSITS

December 31, 2022 – June 30, 2023 • US$ Trillions



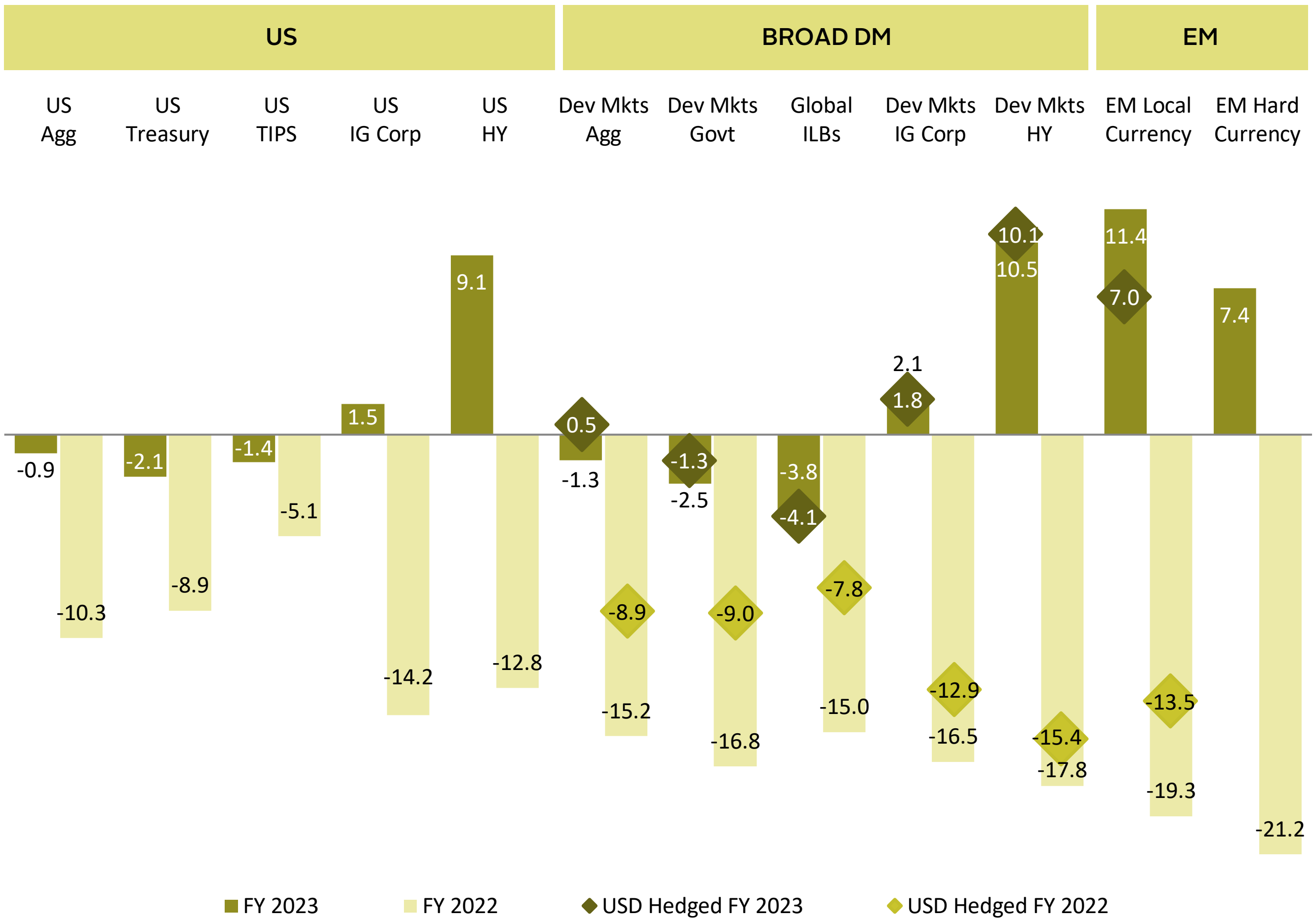
Lending conditions were already tightening as central banks increased policy rates and expectations of a recession took hold. However, in March 2023 conditions tightened further after the collapse of Silicon Valley Bank (SVB) and the sudden acquisition of Credit Suisse by UBS. Concerns of additional bank failures added to the run on small banks. In response, the Fed issued a new lending facility to help shore-up bank balance sheets. Following the sale of Credit Suisse, a consortium of central banks temporarily increased the frequency at which they provided US dollar funding from weekly to daily to allow for funneling increased liquidity to help calm global markets.

Sources: European Central Bank, Federal Reserve, and Thomson Reuters Datastream.
Notes: US bank lending data reflect credit conditions for households and firms. Euro area bank lending data reflect credit conditions for firms.

HY and EM bonds were clear winners among fixed income asset classes

GLOBAL BOND PERFORMANCE: FY 2023 VS FY 2022

Total Return (%) • US Dollar



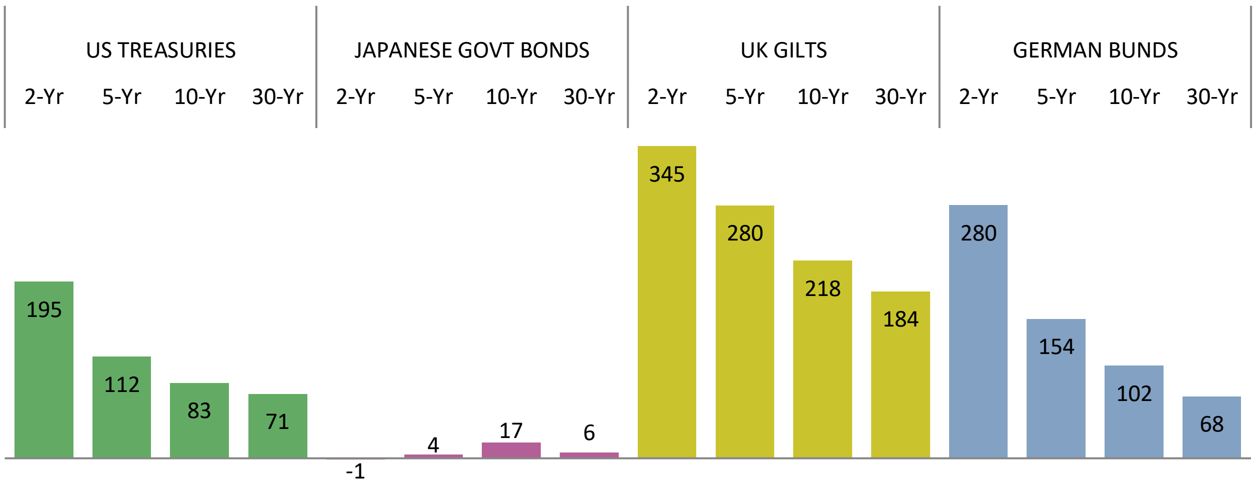
Bond performance improved compared to the steep losses of the previous fiscal year. Credit assets posted positive returns, but DM sovereign bonds struggled, given persistent inflation fears, and increasing central bank hawkishness. Higher-duration bonds underperformed, while attractive spreads and easing hard landing fears helped draw interest to HY counterparts. The US dollar proved less of a headwind to both categories of EM bonds this year, while local EM debt returns also boosted on easing inflationary pressures and many EM central banks becoming less hawkish.

Sources: Bloomberg Index Services Limited, FTSE Fixed Income LLC, J.P. Morgan Securities, Inc., and Thomson Reuters Datastream.
Notes: Asset classes represented by Bloomberg US Aggregate Bond Index ("US Agg"), Bloomberg US Treasury Index ("US Treasury"), Bloomberg US TIPS Index ("US TIPS"), Bloomberg US Corporate Investment Grade Bond Index ("US IG Corp"), Bloomberg US High Yield Bond Index ("US HY"), Bloomberg Global Aggregate Bond Index ("Dev Mkts Agg"), FTSE World Government Bond Index ("Dev Mkts Govt"), Bloomberg Global Inflation Linked Index ("Global ILBs"), Bloomberg Global Aggregate Corporate Bond Index ("Dev Mkts IG Corp"), Bloomberg Global High Yield Bond Index ("Dev Mkts HY"), J.P. Morgan Government Bond Index - Emerging Markets Global Diversified Index ("EM Local Currency"), and J.P. Morgan Emerging Markets Bond Index - Global Diversified Index ("EM Hard Currency").

Yield curves inverted further in most developed markets

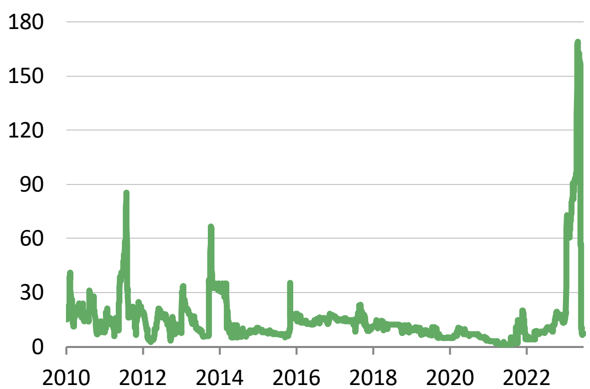
CHANGE IN YIELD VS JUNE 30, 2022 FOR VARIOUS GOVERNMENT BOND MATURITIES

As of June 30, 2023 • Basis Points (bps)



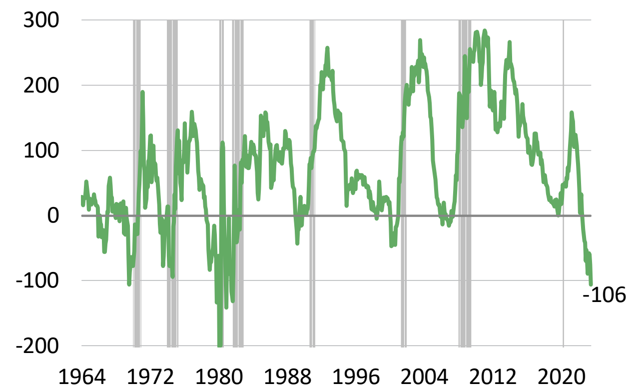
US 1-YR TREASURY BILL CDS SPREAD

January 1, 2010 – June 30, 2023 • Basis Points (bps)



10-YR/2-YR US TREASURY YIELD CURVE SPREAD

January 31, 1964 – June 30, 2023 • Basis Points (bps)



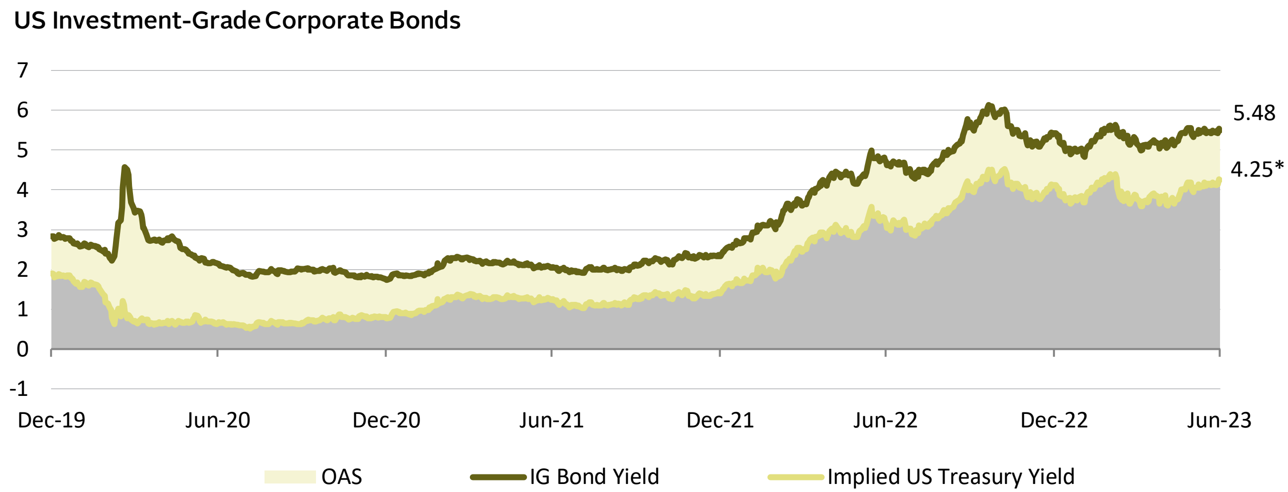
Despite inflation proving sticky, it took central banks reiterating their commitment to higher rates (especially after the March 2023 banking crisis) for investors to walk back expectations of an imminent rate cut. This drove shorter-term rates higher, further inverting the yield curve, which has historically been a harbinger of recession. It proved true in Europe, where sovereign yields rose the most, and the region entered a technical recession in the second half of FY 2023. Concerns that a resolution on the US debt ceiling would not be reached in time also briefly catapulted one-year US Treasury credit default swap spreads to all-time highs. However, Japan's continued implementation of an ultra-easy monetary policy, even as inflation ticked higher, saw the country buck the flattening trend.

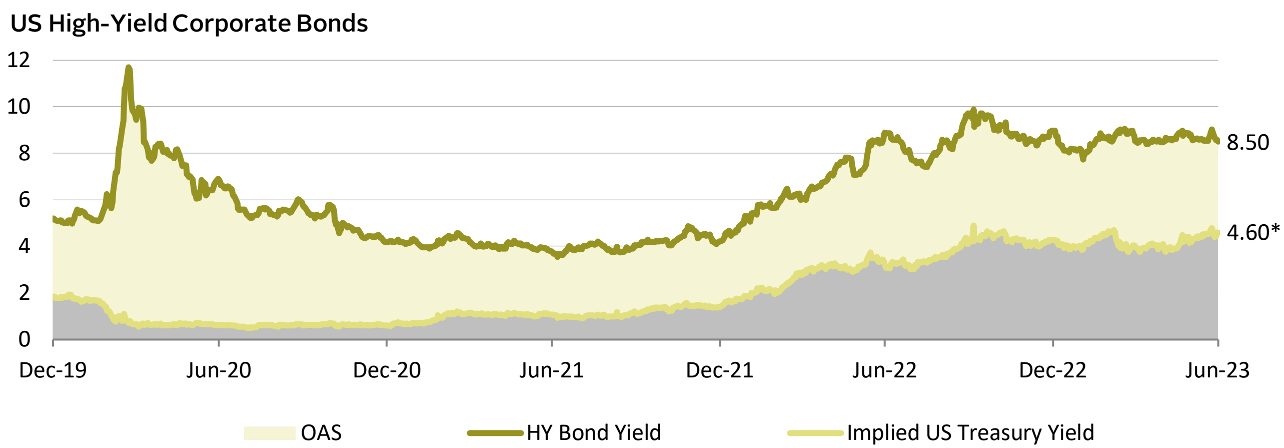
Sources: Federal Reserve, National Bureau of Economic Research (NBER), and Thomson Reuters Datastream.

Notes: Grey bars in bottom right chart represent US-defined NBER recessions. Data for bottom charts are daily other than NBER recession dates, which are monthly. The Credit Default Swap (CDS) spread represents the cost of insuring an investment against default. The one-year US Treasury Bill CDS spread thus represents the annual cost of insuring a one-year UST bill against a US government debt default.

Credit losses were driven primarily by duration, while spreads narrowed modestly

OPTION-ADJUSTED SPREADS (OAS) ON US INVESTMENT-GRADE AND HIGH-YIELD CORPORATE BONDS
December 31, 2019 – June 30, 2023 • Yield to Worst (%)





* US Treasury yields are calculated by subtracting the IG and HY OAS from the IG and HY bond yields, respectively.

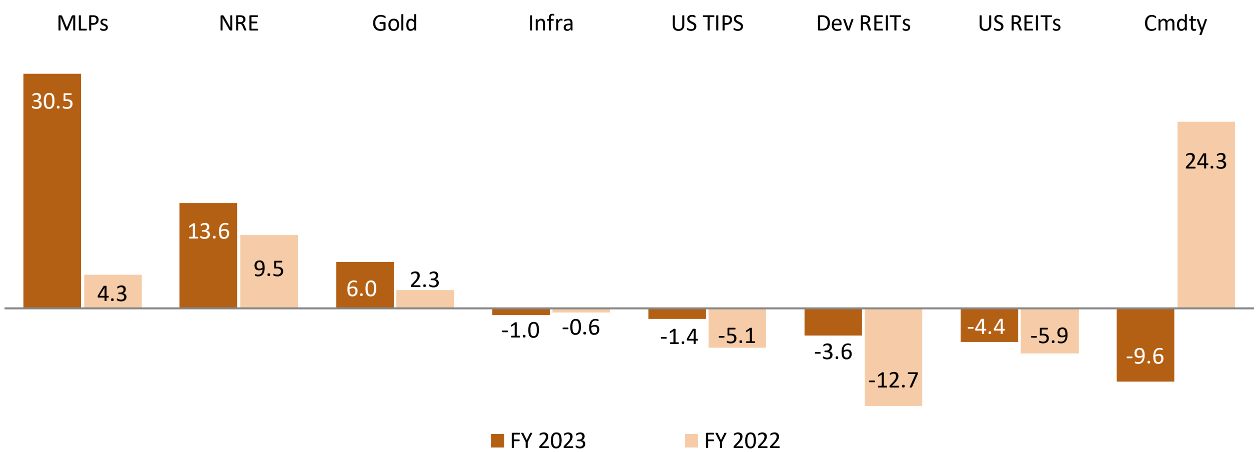
US corporate investment-grade (IG) bonds posted positive returns but lagged HY peers by almost 8 percentage points (ppts). The IG bond index is longer duration (7+years) and was particularly impacted by the rise in discount rates though moderate spread compression helped offset the impact. Shorter-duration high-yield corporates generated strong relative and absolute performance as spreads narrowed 170 basis points. Like IG bonds, HY spreads remained well below their COVID-era peak as an extended credit cycle means defaults remain subdued.

Sources: Bloomberg Index Services Limited and Thomson Reuters Datastream.
Notes: Data for US investment-grade (IG) corporate bonds are represented by the Bloomberg US Corporate Investment Grade Bond Index, and data for US high-yield (HY) bonds are represented by the Bloomberg US High Yield Bond Index. Data are daily.

Real assets performance improved versus prior year, however commodities lagged

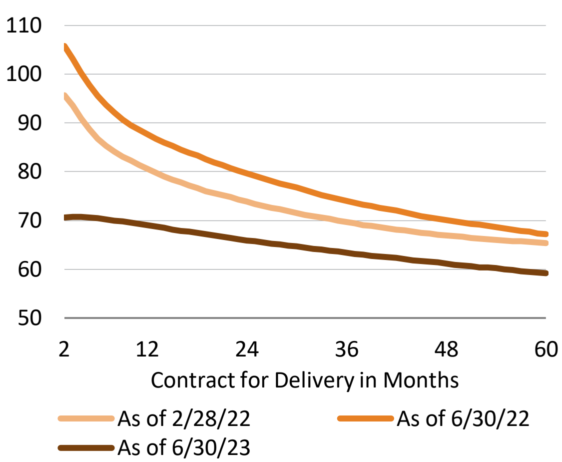
REAL ASSET AND INFLATION SENSITIVE PERFORMANCE: FY 2023 VS FY 2022

Total Return (%) • US Dollar



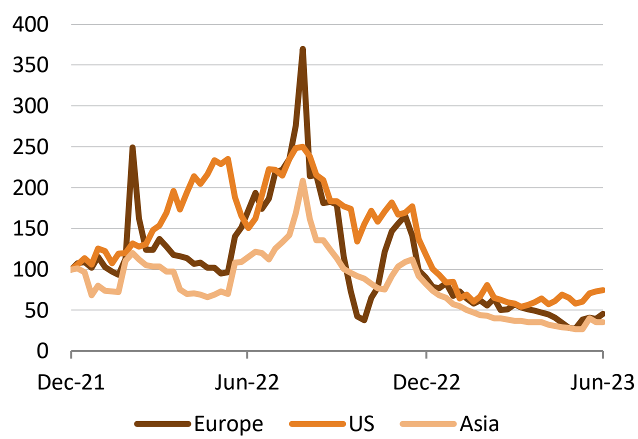
WTI CRUDE OIL FUTURES CURVE

As of June 30, 2023 • US Dollar



NATURAL GAS PRICES

December 31, 2021 – June 30, 2023 • Cumulative Wealth • December 31, 2021 = US$100



Interest rate sensitive assets, such as infrastructure, US TIPs, and REITs posted negative returns yet again in FY 2023 as central banks continued to tighten monetary policies. Commodities lagged the real assets group on fears of demand softening due to a global economic slowdown and disappointment with the pace of China's economic reopening. Natural gas prices were the worst performer in the energy space, down almost 50%, as supply concerns abated, and demand softened. However, natural resources equities performed well despite a more than 30% drop in oil prices, as investors took advantage of attractive valuations. Similarly, MLPs offered investors attractive distribution yields, and energy infrastructure MLPs enjoyed lower input costs.

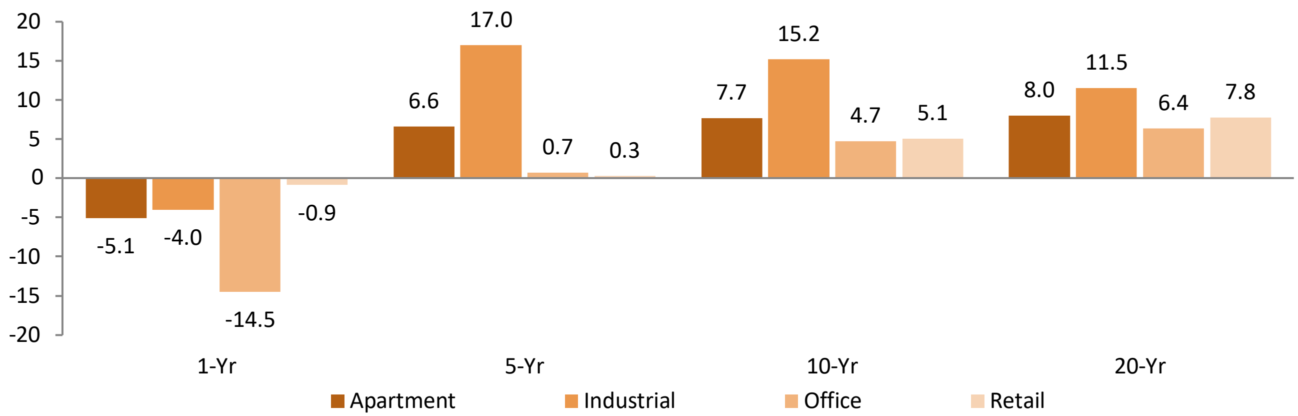
Sources: Alerian, Bloomberg Index Services Limited, Bloomberg L.P. EPRA, FTSE International Limited, Intercontinental Exchange, Inc., MSCI Inc., National Association of Real Estate Investment Trusts, Refinitiv, and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.

Notes: All returns are total returns, except those for gold, which are based on spot price returns. Asset classes represented by the following: Alerian MLP Index ("MLPs"), market cap-weighted blend of Datastream World Energy Index and Datastream World Basic Resources Index ("NRE"), LBMA Gold Price ("Gold"), MSCI World Infrastructure Index ("Infra"), Bloomberg US TIPS Index ("US TIPS"), FTSE® EPRA/NAREIT Developed Real Estate Index ("Dev REITs"), FTSE® NAREIT All Equity REITs Index ("US REITs"), and Bloomberg Commodity TR Index ("Cmdty"). Total return data for all MSCI indexes are net of dividend taxes. Bottom left chart shows WTI Crude Oil futures contracts as traded on the New York Mercantile Exchange (NYMEX). Bottom right chart uses weekly data. Natural gas prices are based on the following calculated by Refinitiv: Dutch TTF futures (Europe), NYMEX Henry Hub futures (US), and Asia LNG spot prices (Asia).

Real estate returns disappointed, with office lagging its peers

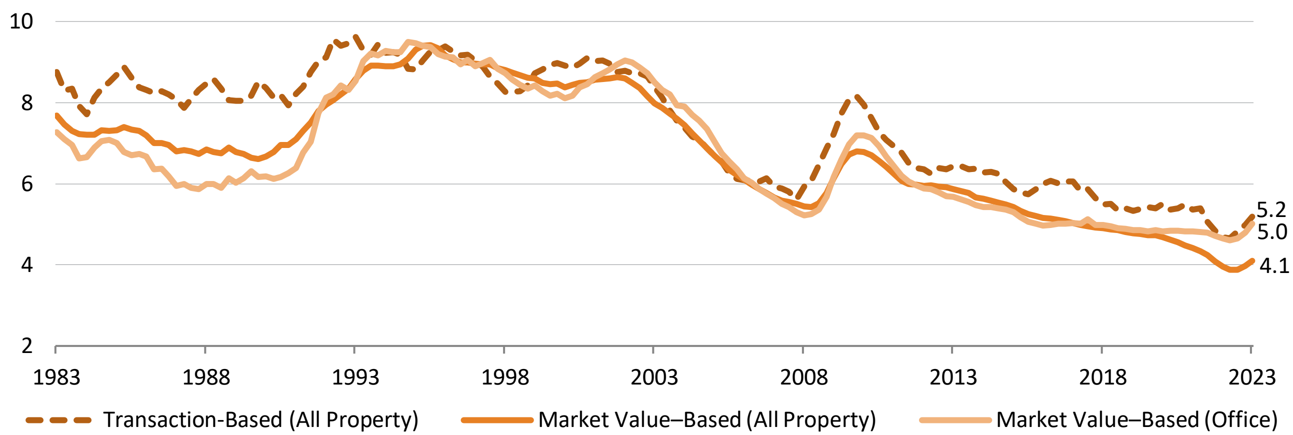
RETURNS BY PROPERTY TYPE

As of Second Quarter 2023 • AACR (%) • US Dollar



PROPERTY CAPITALIZATION RATES

Second Quarter 1983 – Second Quarter 2023 • Percent (%)



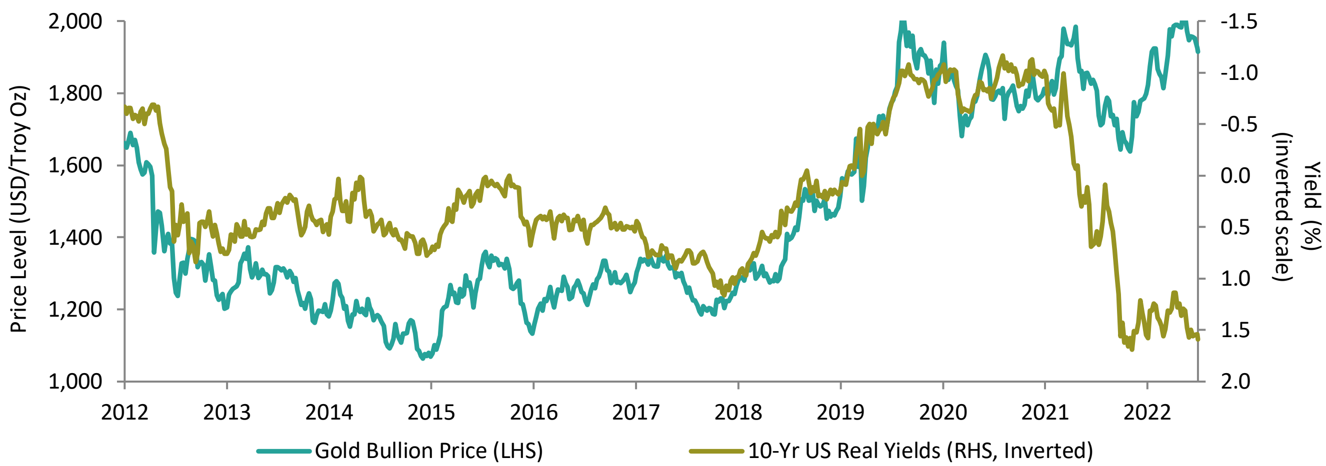
Real estate posted relatively disappointing FY results, with all four sub-sectors posting negative performance. Industrials posted negative returns despite secular tailwinds, while retail outperformed, as it continues to recover from the lows experienced during the pandemic. The apartment sector performance turned negative as it had to contend with increased supply coming to market. Office remained the most challenged sector as work-from-home trends perpetuated, leading to higher vacancy rates and lower property values. As a result, office cap rates ticked up.

Source: National Council of Real Estate Investment Fiduciaries.
Notes: Returns are total, reflecting property price appreciation and income return. Transaction-based capitalization (cap) rates are from sold properties, and market value-based cap rates are from properties that were revalued during the quarter. All cap rates are based on a four-quarter moving average.

Gold price rebounded as yields remained rangebound

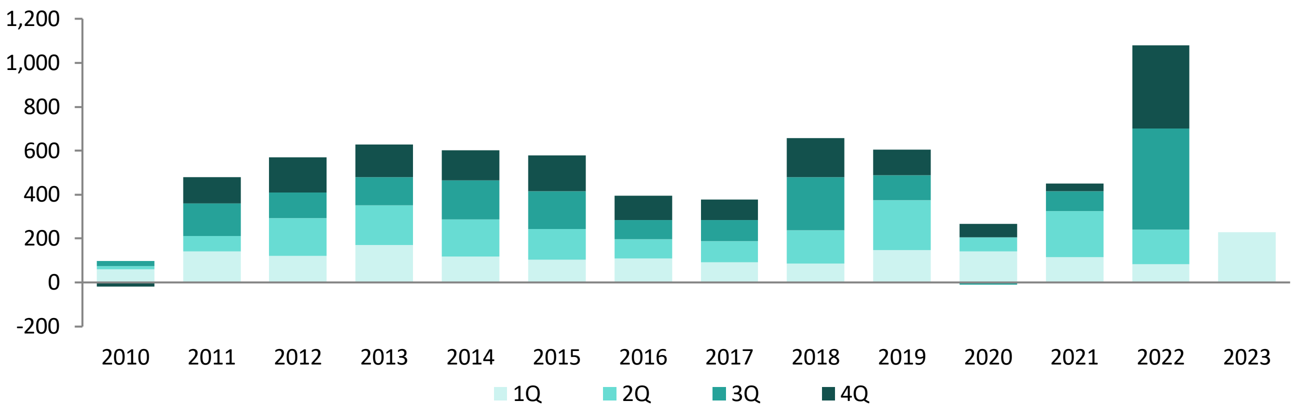
GOLD BULLION PRICE VS 10-YR US REAL YIELDS

December 31, 2012 – June 30, 2023



GLOBAL CENTRAL BANKS GOLD DEMAND

2010–23 • Tonnes



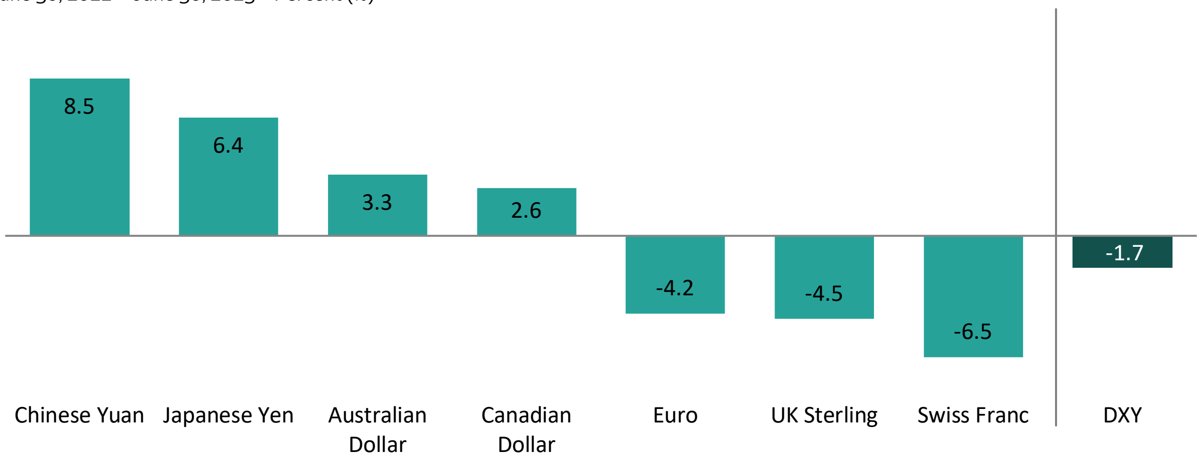
Historically, gold trades in line with long-dated real yields, particularly those of the United States. This relationship broke down recently, as gold's value increased in USD terms, while interest rates rose rapidly (the US ten-year real yield rose more than 2 ppts since rate hikes began in March 2022). Real gold prices sit at the 75th percentile of monthly observations from the last 20 fiscal years. Central bank buying, investment demand, and Chinese consumers were the main drivers of gold prices rising 6% in FY 2023. In fact, central bank demand hit a first calendar-quarter record at the beginning of 2023. Periods of higher economic and geopolitical uncertainty tend to be marked by higher demand for gold.

Sources: Intercontinental Exchange, Inc., Metals Focus, Refinitiv GFMS, Thomson Reuters Datastream, and World Gold Council.
Notes: Ten-year US Real Yields reflect the US ten-year TIPS yield. Top chart uses weekly data.

US Dollar performance was mixed

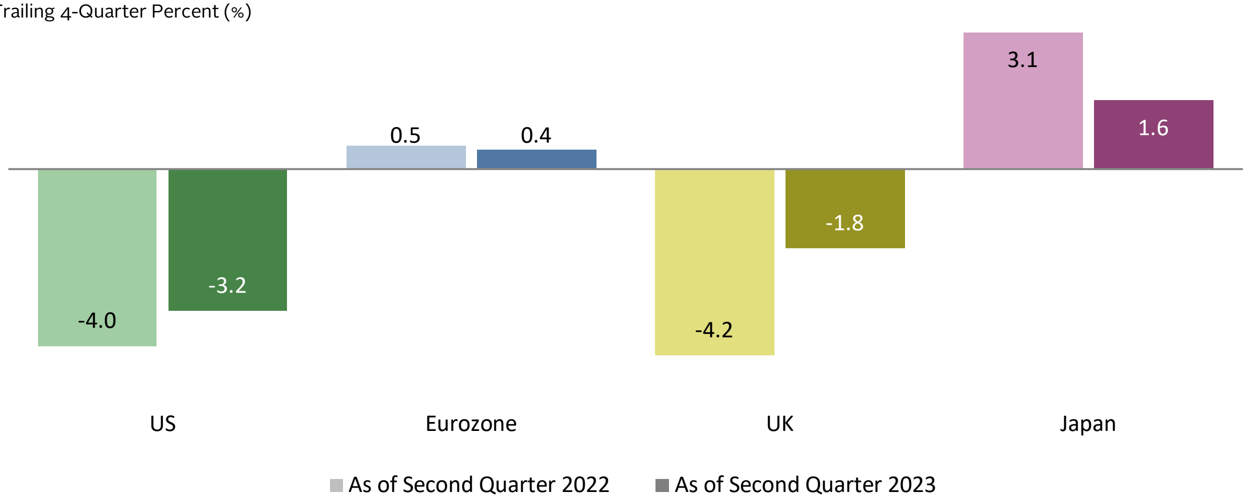
FY 2023 US DOLLAR PERFORMANCE VS SELECT CURRENCIES

June 30, 2022 – June 30, 2023 • Percent (%)



CURRENT ACCOUNT BALANCE AS % OF GDP

Trailing 4-Quarter Percent (%)

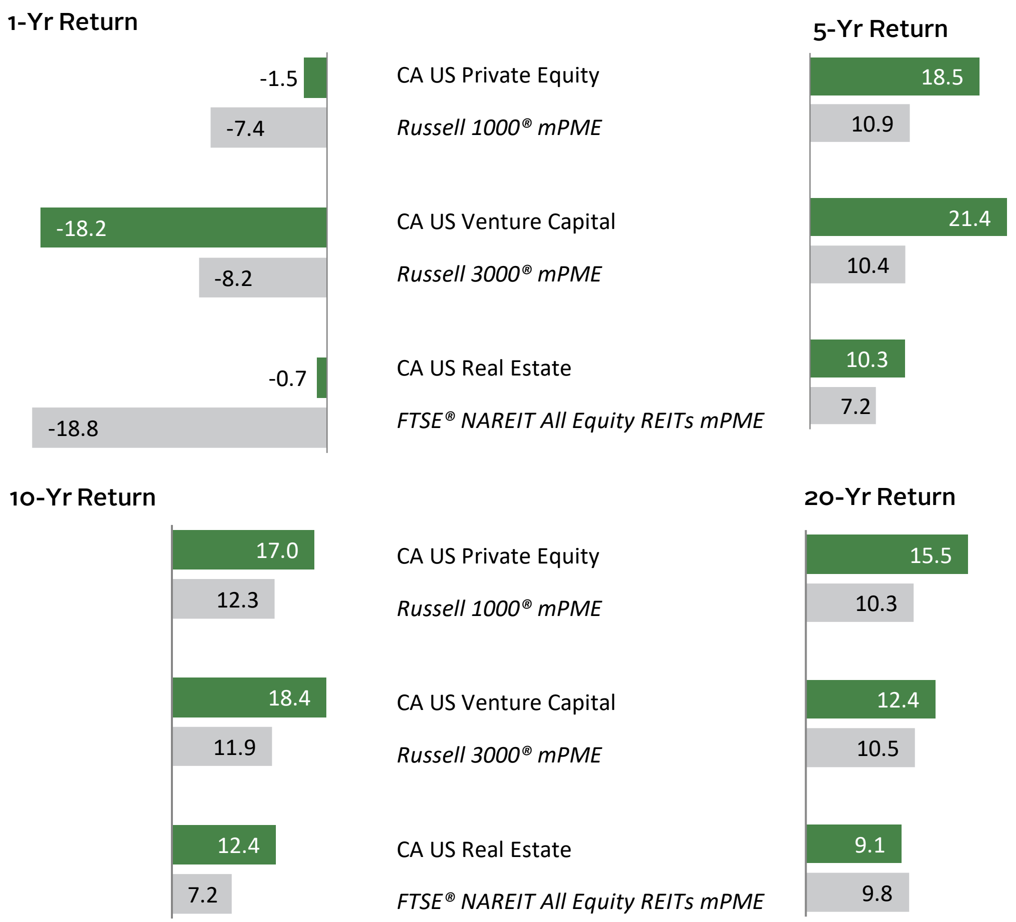


The US dollar index closed FY 2023 down almost 2%, with mixed performance across key currency pairs. Performance was weaker when compared to regions where interest rate tightening was perceived to be more prolonged than the United States, such as the United Kingdom and Europe. There were periods where the greenback's status as a safe haven increased demand for the US dollar, such as during the banking crisis and when investors were concerned that the US would reach its debt ceiling sooner than expected. The US dollar gained versus the yen and yuan, as those countries continue to pursue more easy monetary policies. Weaker resource prices weighed on currencies linked to commodity-heavy economies, such as Canada and Australia.

Sources: Intercontinental Exchange, Inc., Oxford Economics, Refinitiv, and Thomson Reuters Datastream.
Notes: The DXY is an index of US dollar performance versus a weighted basket of six currencies (the British pound, Canadian dollar, the euro, Japanese yen, Swedish krona, and Swiss franc). Bottom chart data are calculated as the rolling four-quarter real current account balance divided by the corresponding rolling four-quarter real GDP. Current account balance data for 2Q 2023 are estimates.

Private markets performance weakened, mimicking public markets

PERFORMANCE OF SELECT CAMBRIDGE ASSOCIATES PRIVATE INVESTMENT INDEXES VS PUBLIC EQUIVALENTS
As of First Quarter 2023 • Percent (%)



All three private asset classes presented posted negative returns on a 1-year basis; however, private equity and real estate outperformed their respective public benchmarks. Private markets tended to display a lag to public counterparts, and pressure from higher interest rates and slowing growth has begun to show its impact on valuations. Venture capital underperformed its public counterpart. It was a tumultuous second half for the group as the collapse of SVB, a key lender for its constituents, left markets concerned about future funding sources for the group. Relative to the other asset classes presented, real estate was the only area where private markets did not outperform public markets in the 20-year time horizon.

Sources: Cambridge Associates LLC, FTSE International Limited, National Association of Real Estate Investment Trusts, and Thomson Reuters Datastream.
Notes: Private index returns are pooled horizon internal rate of returns, net of fees, expenses, and carried interest. The CA Modified Public Market Equivalent (mPME) replicates private investment performance under public market conditions. The public index's shares are purchased and sold according to the private fund cash flow schedule, with distributions calculated in the same proportion as the private fund, and mPME net asset value is a function of mPME cash flows and public index returns.

Hedge fund performance rebounded

Source: Hedge Fund Research, Inc.
Note: Hedge Fund Research data are preliminary for the preceding five months.

Based on preliminary data from Hedge Fund Research, Inc., hedge fund performance rebounded in FY 2023. Given the rebound in equity markets since the lows of October 2022, strategies that tend to have net long equity exposure performed well. Markets became more concerned about tighter financial conditions in FY 2023, especially after a bout of banking failures, creating a favorable environment for event-driven and distressed strategies. However, as consensus grew among investors on monetary policy projections, there were fewer dislocations to take advantage of, compared to the prior year. This resulted in macro strategies posting the only negative returns in this group—a reversal from FY 2022.

David Kautter also contributed to this publication.