REAL ASSETS

CAMBRIDGE ASSOCIATES

Developed Markets Property Securities

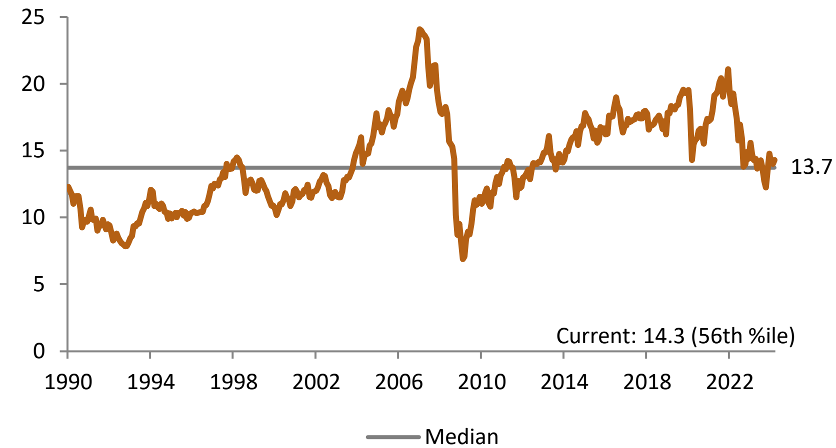
Facts & Figures First Quarter 2024

DM property securities returned -1.0% in USD terms in 1Q. A decrease in the spread between DM property security yields relative to government bond yields attributed to the decline. Higher growth forecasts caused policy rate expectations to remain evaluated for longer. This moved bond yields higher and was a headwind for rate sensitive DM property securities. Over the last 12 months, DM property securities have returned 8.6% but have lagged board DM equities by more than 16 ppts.

- DM property securities trade at 14.3x normalized funds from operations, which is higher than 56% of historical data going back to 1990. Furthermore, property securities offer a yield spread of just 0.8% over government bonds, well below the long-term median of 1.7%. Spreads narrowed during the quarter as government bond yields increased due to upside surprises in economic data.
- The global economy is expected to grow 2.8% in 2024, according to analysts surveyed by Bloomberg in March. This is up 20 bps from the 2.6% forecast last quarter. Furthermore, DM economies have also had 2024 upside growth surprises increasing from 1.1% to 1.5% over the quarter. The increase in DM growth forecasts is mainly driven by upside surprises in the US where forecasts have increased 90 bps to 2.2%.
- A key concern for property investors is the pandemic's long-term impact on consumer and business preferences. For instance, while funds from operations of broad DM property securities have recovered from the pandemic, some sectors such as offices, hotels, and retail, remain below 2019 levels. Conversely, other sectors such as industrials and residential, have fared far better growing funds from operations.
- Real estate is a capital-intensive business, which uses debt to finance its growth to a greater degree than other sectors. Still, developed property securities' leverage has fallen since the GFC, with net debt as a percentage of total assets at 39% at the end of 1Q relative to the 42% at the beginning of 2010. The current level of leverage is below the average over the last two decades and reflects more discipline in capital markets.

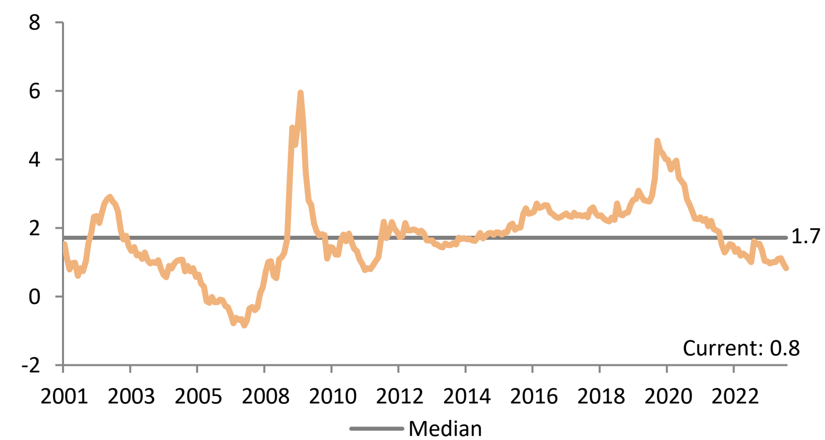
NORMALIZED PRICE-TO–FUNDS FROM OPERATIONS MULTIPLE

Jan 31, 1990 – Mar 31, 2024



SPREAD BETWEEN DY AND GLOBAL GOVT BONDS

Oct 31, 2001 – Mar 31, 2024



Sources: EPRA, FTSE International Limited, J.P. Morgan Securities, Inc., National Association of Real Estate Investment Trusts, and Thomson Reuters Datastream.

US Private Property

Facts & Figures First Quarter 2024

US property returned 4.6% annualized over the last three-year period at the asset level, according to NCREIF Property Index data as of 4Q. That return masks considerable sector dispersion, with industrial properties returning 16.3% annualized over the same period, while office returned -5.5%. Retail was only the segment where returns improved versus 3Q. Factors, such as tighter financial conditions, increased supply, and continuing trend of working-from-home, have weighed on the sector.

- Capitalization rates, or cap rates, have steadily fallen since the end of the GFC. While levels remain relatively low, cap rates began to inflect upwards in 4Q 2023 as tighter financial conditions in a higher interest rate environment weighed on the sector. Across sectors, cap rates are lowest within industrial (3.9%) and apartments (4.1%) and highest within office (5.5%) and retail (5.4%).

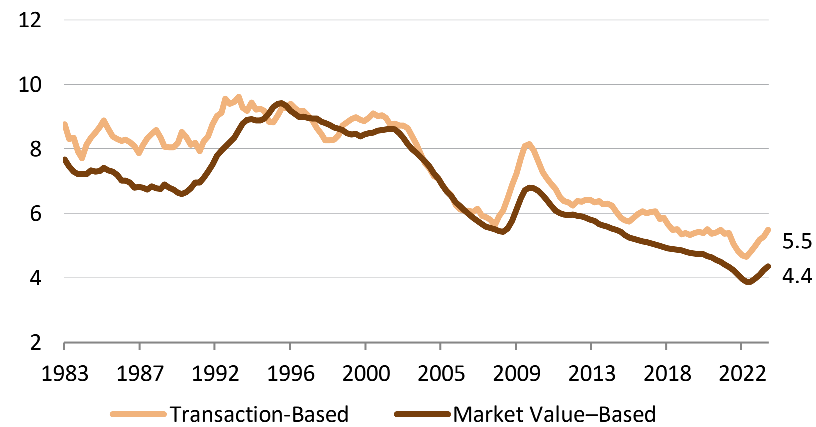
- Four-quarter NOI growth rate, at an aggregate level, declined modestly versus 3Q 2023 at 5.38% but is over 20% higher than the recent 2Q low. The retail sector has rebounded from years of stress; however, 4Q growth of 2.8% was lower than 4Q 2022 (4.5%). While office NOI growth of 1.5% is positive, it is notably below the 3Q rate of 4.5% and 4Q 2022 rate of 3.7% as the sector continues to work through supply/demand imbalances. Industrials NOI growth of 12.3% improved from 9.8% in the prior quarter and is now in line with the rates enjoyed over the past two years. Apartment NOI growth (4.4%) improved sequentially, whoever it is less than half the rate of 4Q 2022, as the market contends with higher supply.

- The global economy is expected to grow by 2.8% and 3.0% in 2024 and 2025, respectively, according to analysts surveyed by Bloomberg in March, marginally below the expected growth in 2023 (2.9%). The 2024 estimate has improved slightly from 4Q (2.6%). Growth expectations for 2024 are highest for Asia ex Japan (4.8%) and China (4.6%). Growth expectations for developed markets are modest at 1.5%, led by the US (2.2%), contrasted by the UK at 0.3% on the low end.

- New commercial real estate construction collapsed following the GFC, and, while it has been minimal for most of this cycle, construction has picked up in recent years. YTD total construction ending in February is 11.3% higher than the same period in 2023, although spending has been trending down since the recent nominal peak in December 2023.

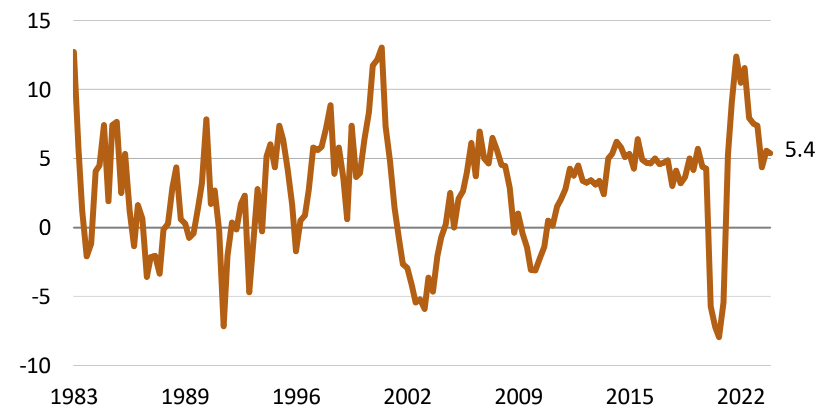
ALL PROPERTY CAP RATES

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



FOUR-QUARTER ROLLING NOI GROWTH

First Quarter 1983 – Fourth Quarter 2023 • Percent (%)



Source: National Council of Real Estate Investment Fiduciaries.

UK Private Property

Facts & Figures First Quarter 2024

UK private property returned 1.6% annually over the last three-year period at the asset level, according to the unlevered MSCI UK Quarterly Property Index as of 4Q in GBP terms. Returns are markedly lower as monetary tightening in the economy takes hold. Industrial performance was strongest at 6.6%, and all other sectors posted low single-digit to negative mid single-digit returns.

- After dipping to a low of 5.1% in mid-2022, yields across all UK investment properties increased to 7.1% as the BOE monetary policy remained restrictive. According to data from the UK government, non-residential monthly transactions are 4% higher than February 2023, on a seasonally adjusted basis, and running only 2.5% higher than 2015. Vacancy rates have also increased recently, almost 2 ppts higher than levels seen at the beginning of the COVID-19 pandemic. Ongoing affordability concerns and higher government yields may mean transaction activity continues to be modest in 2024.

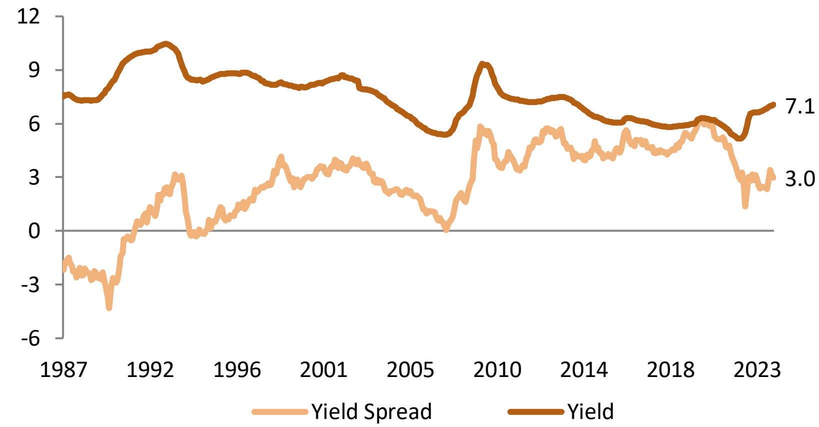
- Property yields can be sensitive to changes in government rates. As government rates have increased, property's yield spread has fallen to 3.0. The current spread is lower than the ten-year average (3.8 ppts), which suggests the asset class's attractiveness relative to gilts has declined in recent quarters.

- The global economy is expected to grow by 2.8% and 3.0% in 2024 and 2025, respectively, according to analysts surveyed by Bloomberg in March, marginally below the expected growth in 2023 (2.9%). The 2024 estimate has improved slightly from 4Q (2.6%). Growth expectations for 2024 are highest for Asia ex Japan (4.8%) and China (4.6%). Growth expectations for developed markets are modest at 1.5%, led by the US (2.2%), contrasted by the UK at 0.3% on the low end.

- As of 2022, the UK commercial real estate market is estimated to be roughly $881B, according to MSCI Real Estate—$31 higher YOY. It is the largest market in Europe and is followed by Germany's roughly $793B market. The UK commercial real estate market is composed primarily of retail, office, and industrial properties, with the industrial sector being the largest sector in the country.

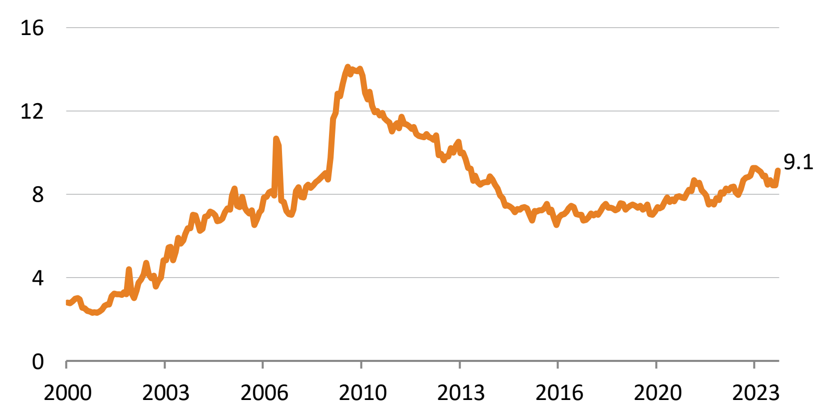
ALL PROPERTY EQUIVALENT YIELDS AND SPREADS

Dec 31, 1987 – Feb 29, 2024 • Percent (%)



VACANCY RATE

Jan 31, 2000 – Feb 29, 2024 • Percent (%)



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

Notes: The MSCI Real Estate index measures returns to direct investment in commercial property. Initial yield is current net income divided by gross capital value.

Europe ex UK Private Property

Facts & Figures First Quarter 2024

Continental property returned -4.7% annually over the last three-year period at the asset level, according to the unlevered MSCI Global Property Fund Index data as of 4Q 2023 in local currency terms. At a sector level, retail returned 0.1%, while residential, industrial properties, and office returned -1.1%, -5.0%, and -6.3%, respectively. Properties face challenges, including affordability, given the impact of higher interest rates and tighter lending conditions.

- Property yields across most European countries have steadily decreased over the last decade. Top markets, such as Germany and France, have property yields near the lowest level for which data are available, according to MSCI Real Estate. But it seems reasonable to expect property yields to come under pressure, given the increase in sovereign yields recently.

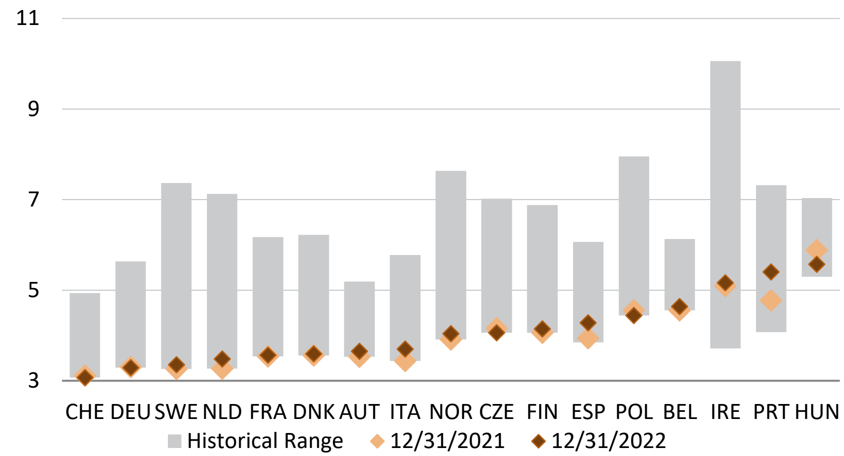
- The global economy is expected to grow by 2.8% and 3.0% in 2024 and 2025, respectively, according to analysts surveyed by Bloomberg in March, marginally below the expected growth in 2023 (2.9%). The 2024 estimate has improved slightly from 4Q (2.6%). Growth expectations for 2024 are highest for Asia ex Japan (4.8%) and China (4.6%). Growth expectations for developed markets are modest at 1.5%, led by the US (2.2%), contrasted by the UK at 0.3% on the low end, while the Eurozone is expected to grow at 0.5%.

- Investment in European commercial real estate fell 30% in 4Q relative to 2022, and is down 47% on TTM basis, according to CBRE. The office sector saw the largest decline, down by 61% YOY, as affordability due to higher rates has become a concern. Meanwhile, hotels were the strongest, down only 13% YOY. Of the top seven countries in the region, Germany, France, and Netherlands saw the worst declines in investment, down 56%, 55%, and 53%, respectively.

- The top two largest commercial real estate investment markets across Europe, excluding the UK, are Germany and France. MSCI estimates the size of all commercial real estate in 2022 in those two markets to be roughly $793B and $610B, respectively. Offices make up a large portion of both Germany and France's commercial real estate markets. Indeed one-year rents in these countries have led and outpaced three-,five- and ten-year growth rates.

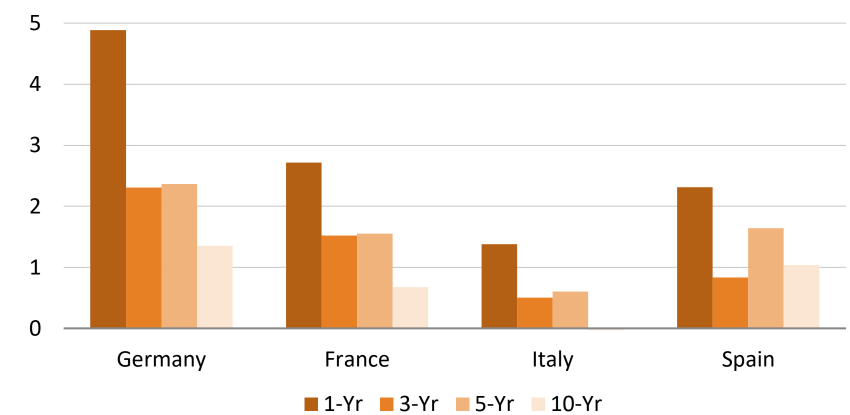
EUROPEAN PROPERTY NET OPERATING INCOME YIELDS

As of Dec 31, 2022 • Percent (%)



ANNUALIZED RENT GROWTH

As of Dec 31, 2022 • Percent (%)



Source: MSCI Real Estate. MSCI data provided "as is" without any express or implied warranties.

Asian Private Property

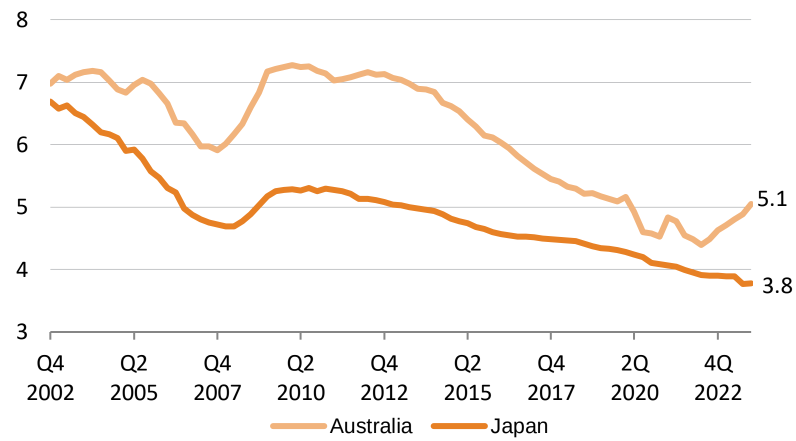
Facts & Figures First Quarter 2024

Asian property returned 3.2% annually over the last three-year period at the asset level, according to MSCI Global Property Fund Index data as of 4Q 2023 in USD terms. At a sector level, retail delivered the best results, returning 3.9%, whereas industrials had the lowest returns of 2.7%, over the same period.

- Property yields in many markets have steadily decreased since the GFC. Two top markets, Australia and Japan, have property yields near or at the lowest level for which data are available, according to MSCI real estate data. Property yields in some countries, such as Australia, have begun to see upward pressure, given sovereign yields have increased.
- Vacancy rates held mostly steady through the pandemic for many markets. But many properties have multi-year leases, so they make not reflect changed consumer and work life preferences. In some geographies with higher frequency data, higher office and retail vacancy rates have been observed.
- The global economy is expected to grow by 2.8% and 3.0% in 2024 and 2025, respectively, according to analysts surveyed by Bloomberg in March, marginally below the expected growth in 2023 (2.9%). The 2024 estimate has improved slightly from 4Q (2.6%). Growth expectations for 2024 are highest for Asia ex Japan (4.8%) and China (4.6%). Growth expectations for developed markets are modest at 1.5%, led by the US (2.2%), contrasted by the UK at 0.3% on the low end.
- Asia-Pacific real estate total investment volume fell by 36% YOY in 4Q according to CBRE. Japan outperformed in 2023 but still saw volumes decrease 15% YOY, while China, Australia, and Singapore saw material declines. Recovery in office continued in Q4, with net absorption 65% higher in the last two quarters versus the 1H23. Office capital values decreased 7.7% YOY dragged down by Greater China, Tokyo, and Australia.
- Property investors continue to focus on six primary locations in Asia Pacific: China, Japan, Hong Kong, Australia, South Korea, and Singapore, which account for most of the property transactions in the region. The focus as it relates to Asian properties (ex Australia) has been primarily from investors within Asia.

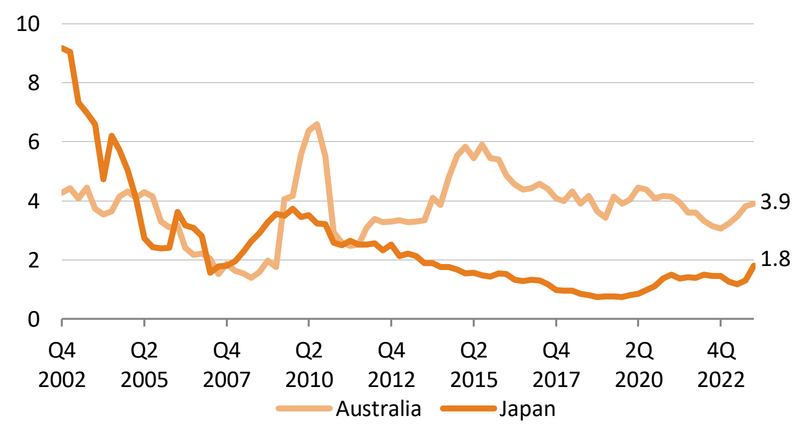
PROPERTY YIELDS

Fourth Quarter 2002 – Fourth Quarter 2023 • Percent (%)



VACANCY RATES

Fourth Quarter 2002 – Fourth Quarter 2023 • Percent (%)



Source: MSCI Real Estate. MSCI data provided "as is" without any express or implied warranties.

Note: Japan third quarter 2023 data are as of November 30.

Private Infrastructure

Facts & Figures First Quarter 2024

Private infrastructure returned 11.5% annualized over the last three-year period, according to the Cambridge Associates Infrastructure Index as of 3Q 2023. This index, which calculates horizon internal rates of return, net of fees, expenses, and carried interest, returned 10.5% annualized over the last ten-year period. Albeit more recent returns have been relatively modest in the face of tighter financial conditions. Developed markets contributed the bulk of the return. The industry benefited from stable demand and increased interest among institutional investors.

- Infrastructure companies transacted at 11.7 times EBITDA over the prior 12-month period, which is in line with the industry's long-term average level. Broadly speaking, institutional investors have been increasingly attracted to brownfield infrastructure investments, as an effort to generate portfolio income and protect against inflation.

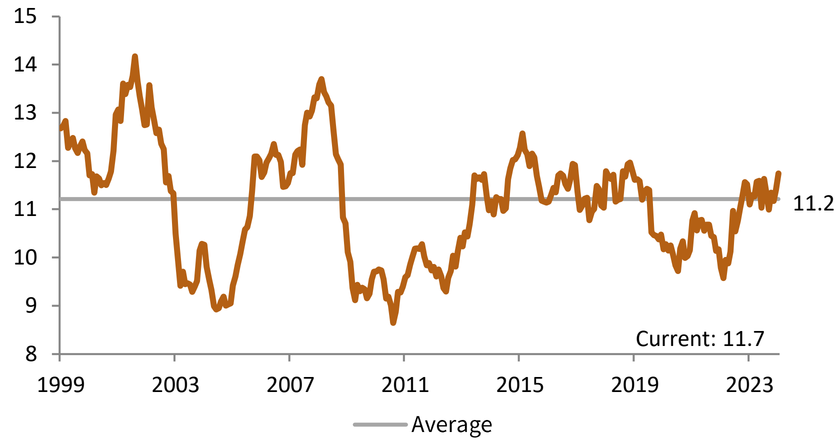
- The global economy is expected to grow by 2.8% and 3.0% in 2024 and 2025, respectively, according to analysts surveyed by Bloomberg in March, marginally below the expected growth in 2023 (2.9%). The 2024 estimate has improved slightly from 4Q (2.6%). Growth expectations for 2024 are highest for Asia ex Japan (4.8%) and China (4.6%). Growth expectations for developed markets are modest at 1.5%, led by the US (2.2%), contrasted by the UK at 0.3% on the low end.

- Global infrastructure transaction values trailed 2022 in 2023. Thus far in 2024, global refinancing, greenfield, and brownfield deals accounted for 12%, 30%, and 57% of deal volume, respectively. Energy and renewables were the top two sectors for investment, accounting for 32% and 18%, respectively, of deal volume.

- Global infrastructure PE fundraising slowed considerably, declining by more than 40% YOY in 2023. Annualizing 2024 activity points to a nearly 12% improvement in volumes versus last year. Direct investments by pension funds and sovereign wealth funds in infrastructure assets have increased in recent years. Direct investments can offer attractive return potential, given fees are generally lower, and they allow investors to build custom exposures.

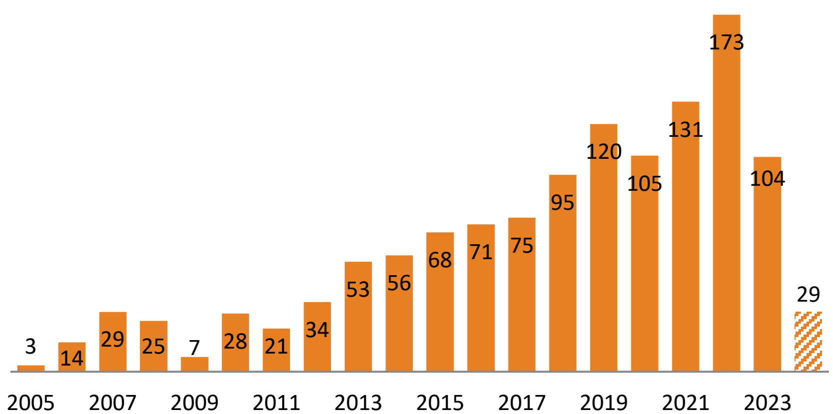
PRICES OF TRANSACTIONS (EV/EBITDA)

Mar 31, 1999 – Mar 31, 2024 • Rolling 12M Average



GLOBAL CAPITAL COMMITMENTS TO INFRASTRUCTURE PE FUNDS

2005–24 • US$B



Sources: Dealogic and InfraDeals.

Notes: Data are monthly and represent the trailing 12-month average EV/EBITDA for all infrastructure transactions. Historical data revise. 2024 capital comitments data are through March 31.

Natural Resources Equities

Facts & Figures First Quarter 2024

Natural resources equities returned 6.4% in 1Q according to the MSCI World Natural Resources Index in local currency terms. Performance during the quarter was largely driven by more supportive supply/demand dynamics for commodities.

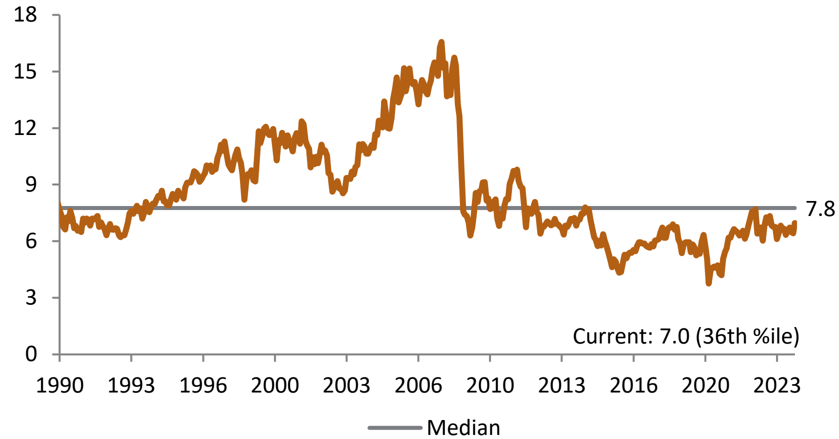
- Natural resources firms trade at 7.0 times cyclically adjusted price-to–cash earnings, which ranks in the 36th percentile of month-end observations dating back to 1990. While valuations remain rangebound and below the median level of 7.7x, the multiple did expand by 0.5x versus 4Q 2023. NREs rallied as oil prices rose by around 12% on fears that OPEC+ would extend its production cuts driving the market into a supply deficit. Some industrial metals prices also rose on news of a rebound in Chinese industrial activity.

- Low investment levels contributed to the rise in oil & gas prices in recent years, with capital expenditures hitting at trough of 4.5% of total assets in 2021. However, as prices have recovered, capital expenditures have rebounded to levels not seen since late 2016. Increased spending resulted in the number of rotary rigs operating around the world in 2023 to increase by nearly 4% versus 2022 and 34% versus 2020. Rig count in 1Q is also 3% higher sequentially. Still, these spending levels are lower than those that led to a severe glut in energy commodities and the rig count remains far lower than the ~3,000 rigs that operated on average between 2010 and 2016.

- A key consideration for investors is the extent that renewable energy could undercut future hydrocarbon demand. Indeed, the recent COP28 called for a possible tripling of renewables capacity by 2030, while encouraging a phase down of fossil fuel usage. Some long-term energy analyses, such as the US Energy Information Administration's 2023 Annual Energy Outlook reference case, highlight that oil and natural gas may continue to be a dominant energy source for decades. Still, long-term energy forecasts have wide confidence intervals, and investors would be wise to carefully consider how different future energy scenarios may impact their portfolios. On the other hand, natural resources equities may attract more investor interest, as weaning off fossil fuels supports demand for certain metals to facilitate the transition to net zero.

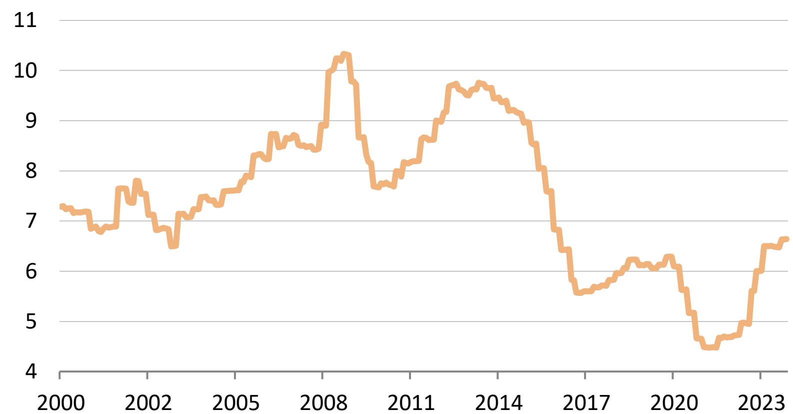
CYCLICALLY ADJUSTED PRICE-TO–CASH EARNINGS

Dec 31, 1989 – Mar 31, 2024



CAPITAL EXPENDITURES

Jan 31, 2000 – Mar 31, 2024 • Percent (%) of Total Assets



Source: Thomson Reuters Datastream.

Notes: Natural resources equities are made up of constituents in the Datastream World Energy Index and the Datastream World Basic Resources Index, weighted on a market-capitalization basis. Historical data revise.

Commodity Futures

Facts & Figures First Quarter 2024

The Bloomberg Commodity Index returned 2.2% in 1Q in USD terms, while the more energy-heavy index S&P GSCI™ was up 10.4% driven by price increases in underlying commodities. Industrial metals were supported by a rebound in Chinese industrial activity, while oil prices were up around 12% on fears that OPEC+ production cuts would be extended.

- Commodity spot prices are just above the ten-year inflation-adjusted mean, using the constituents and weights associated with the Bloomberg Commodity Index. Prices reflect supply/demand issues unique to commodities. Robust economic data and improving demand expectations have buoyed prices. Oil markets may now enter a supply deficit if OPEC+ continues with its production cuts.

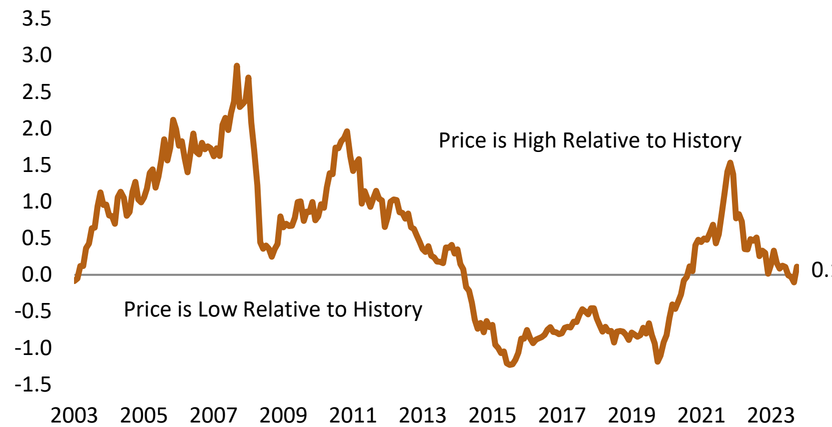
- The global economy is expected to grow by 2.8% and 3.0% in 2024 and 2025, respectively, according to analysts surveyed by Bloomberg in March, marginally below the expected growth in 2023 (2.9%). The 2024 estimate has improved slightly from 4Q (2.6%). Growth expectations for 2024 are highest for Asia ex Japan (4.8%) and China (4.6%). Growth expectations for developed markets are modest at 1.5%, led by the US (2.2%), contrasted by the UK at 0.3% on the low end.

- The performance of commodity futures consists of the returns linked to spot price changes, rolling a futures contract forward as it comes due, and the cash used to collateralize the contracts. When the markets are in contango, meaning near-dated contracts are cheaper than contracts dated farther out, the roll return can detract from commodity index returns. After being in backwardation since late 2020 markets are in contango again, reflecting expectations of economic uncertainty and weaker demand in the near term.

- Two frequently referenced commodity benchmarks are the Bloomberg Commodity Index and the S&P GSCI™. The former is a world production- and liquidity-weighted index, with restrictions on individual commodity and commodity subsector sizes to promote diversification. The latter is a world production-weighted index of liquid futures contracts, which has most of its exposure in energy. While both indexes only hold near-month futures contracts, many active managers have the capability to buy contracts all along futures curves.

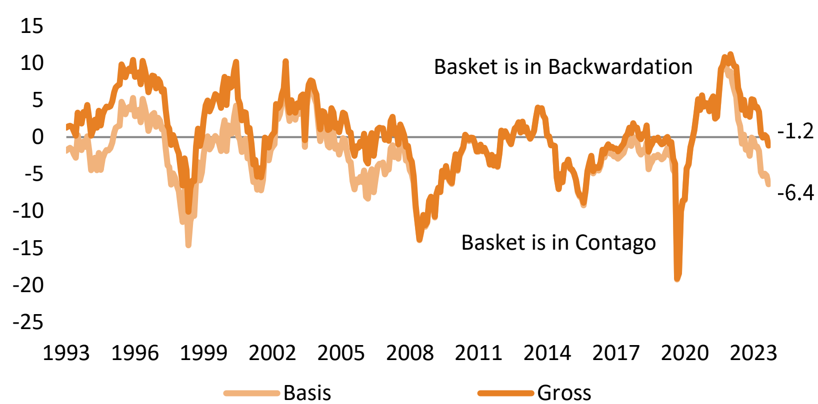
COMMODITY FUTURES BASKET PRICE DEVIATION

Jun 30, 2003 – Mar 31, 2024 • Z-Score



COMMODITY FUTURES BASKET INDICATIVE ROLL YIELD

Jul 31, 1993 – Mar 31, 2024 • Percent (%)



Sources: Bloomberg L.P. and Thomson Reuters Datastream.

Notes: Exhibits are based on the current futures and weights of the Bloomberg Commodity Index. Price deviation is the weighted z-score of commodity futures using ten years of trailing data. Basis is the roll yield's weighted percentage difference of front month contract relative to contracts one year later. Gross is the roll yield plus cash yield.

Gold

Facts & Figures First Quarter 2024

The price of gold climbed 7.2% in 1Q, ending the quarter at $2,214/troy ounce, an all-time nominal price high. Gold's rally has been unusual given the lack of typical supporting fundamentals, but geopolitical risks and speculative flows appear to be factors driving gold prices higher. For the last 12 months, gold has advanced 12%.

- Gold has surged in 2024, even as the dollar has strengthened and yields have moved higher. Typically, those moves would create challenging backdrop for gold—specifically the rise in real yields, which raises the opportunity cost of holding a non-interest–bearing asset like gold. But gold has defied these negative fundamentals, suggesting that other factors are at play.

- Investors may still be looking ahead to future rate cuts as a supportive factor for gold. Futures markets are still pricing two Fed policy rate cuts by December of this year—albeit far fewer than what was priced in just a few months ago. If inflation remains stubborn and the Fed is forced hold rates at current levels or hike again, this would be expected to negatively impact gold.

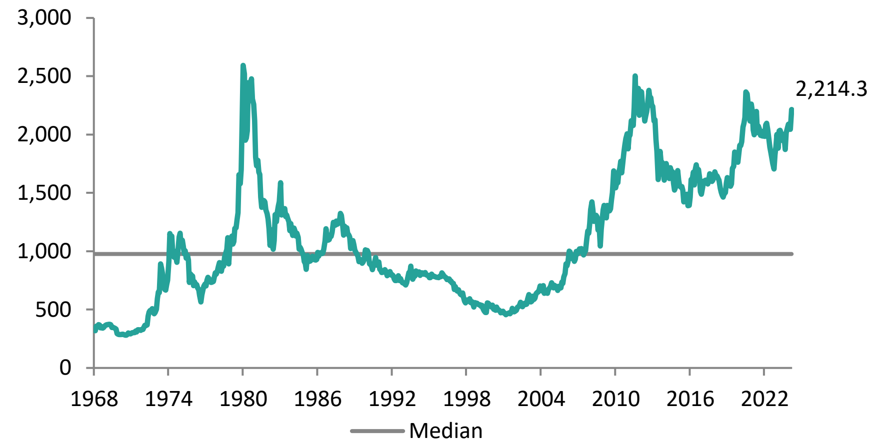
- In addition, geopolitical tensions remain elevated. They increased last year with the outbreak of the Israel-Hamas conflict, and measures of geopolitical risk are elevated. Historically, the price of gold has often climbed during periods of geopolitical uncertainty, given its reputation as a safe-haven investment.

- There are several low-cost, physically backed gold ETFs that track the price of gold without requiring physical storage. While these "paper gold" products offer liquidity, they also carry counterparty risk. Physical gold, which provides investors with a tangible asset, is subject to purchase premiums and storage fees. However, these fees are typically in the low-single digit basis point range.

- Gold has an expected real return of zero over the long term, which makes it problematic for institutions tasked with meeting a real spending objective. However, it provides a hedge against conditions that are hostile to capital markets.

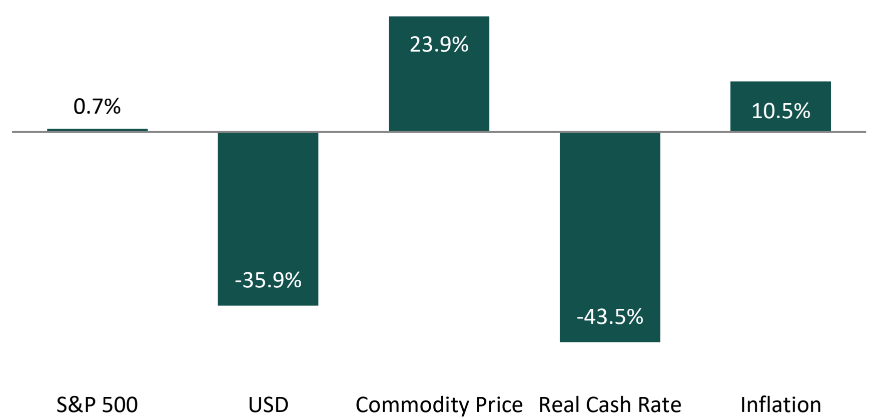
GOLD BULLION REAL PRICE

Jan 31, 1968 – Mar 31, 2024 • US Dollars per Troy Oz



LONG-TERM CORRELATION VS GOLD PRICES

Dec 31, 1970 – Mar 31, 2024



Sources: Intercontinental Exchange, Inc., Standard & Poor's, and Thomson Reuters Datastream.

Notes: Real prices are inflation adjusted to today's dollar. Data for CPI-U are through February 29, 2024.