

# REAL ASSETS



# Developed Markets Property Securities

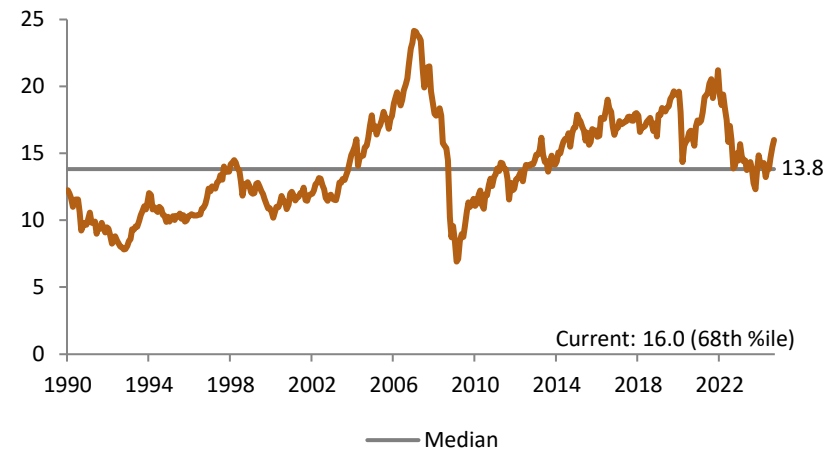
Facts & Figures Third Quarter 2024

DM property securities returned 16.3% in USD terms in 3Q marking the best quarterly return for the asset class since 3Q 2010. Easing monetary policy lead rates lower driving performance for the quarter. The strong quarter significantly improved 2024 performance bringing YTD returns to 12.6%. However, DM property securities have still lagged broad DM equities on both a YTD and trailing one-year basis underperforming by 6.2 and 2.2 pts, respectively.

- DM property securities trade at 16.0x normalized funds from operations, which is higher than 68% of historical data going back to 1990. Furthermore, property securities offer a yield spread of just 0.6% over government bonds, well below the long-term median of 1.7%. Spreads were relatively unchanged over the quarter as lower bond yields were offset by lower DM property securities dividend yields.
- The global economy is expected to grow 3.1% in 2024, according to analysts surveyed by Bloomberg in September. This is up 10 bps from the 3.0% forecast last quarter. Furthermore, DM economies have also had 2024 upside growth surprises increasing 10 bps over the quarter and 60 bps since the start of the year.
- 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 3Q 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.

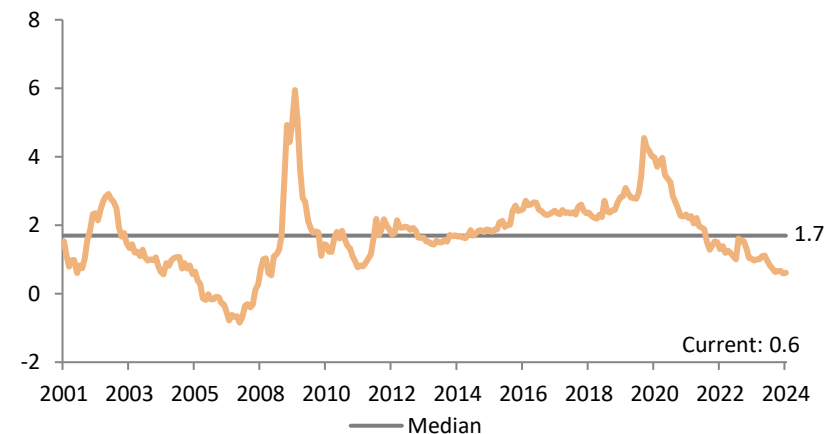
## NORMALIZED PRICE-TO-FUNDS FROM OPERATIONS MULTIPLE

Jan 31, 1990 – Sep 30, 2024



## SPREAD BETWEEN DY AND GLOBAL GOVT BONDS

Oct 31, 2001 – Sep 30, 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

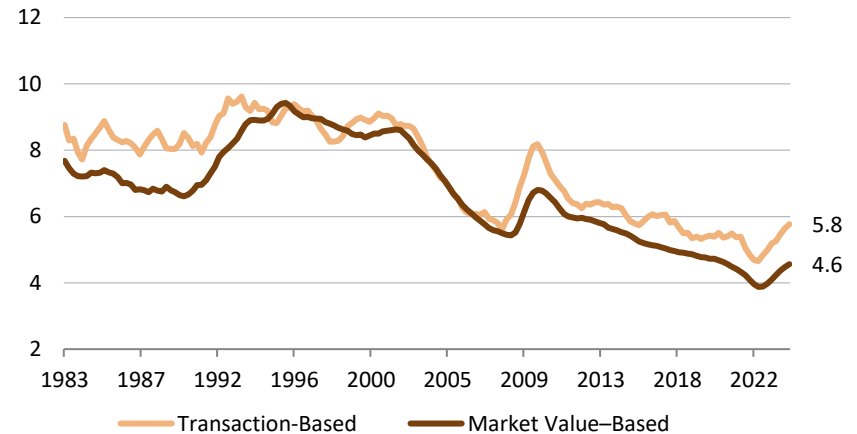
Facts & Figures Third Quarter 2024

US property returned 2.4% annualized over the last three-year period at the asset level, according to NCREIF Property Index data as of 2Q. Sequentially, returns are broadly softer as tighter financial conditions, ongoing trend of working-from-home and supply/demand dynamics weigh on the sector. Considerable return dispersion among sectors remains, with industrial properties returning 11.5% annualized over the same period, while office returned -8.1%.

- Capitalization rates, or cap rates, have steadily fallen since the end of the GFC. While levels remain relatively low, cap rates are sharply higher than the recent 2022 low as tighter financial conditions weighed on the sector. Across sectors, cap rates are lowest within industrial (4.0%) and apartments (4.2%) and highest within office (5.75%) and retail (5.43%).
- Four-quarter NOI growth rate, at an aggregate level, declined nearly 70 bps versus 1Q 2024 at 3.7% recent lows seen in 2Q, 2023. The retail sector has rebounded from years of stress, with growth generally stabilizing near 1.4%, albeit slowing in recent quarters. Office NOI inflected negative (-0.8%) for the first time since late 2021, as the sector continues to work through supply/demand imbalances. Industrials NOI growth of 8.7% has declined for two consecutive quarters but remains one of the highest growth rates in the sector. Apartment NOI growth at 4.7%, improved sequentially, as the market works through higher supply in select markets.
- Most major central banks have begun monetary easing as inflation has moderated. The global economy is widely expected to achieve a soft landing and expected to grow by 3.1% in both 2024 and 2025, according to analysts surveyed by Bloomberg in September. Among major global economies, growth expectations for 2024 are highest for Asia ex Japan (4.6%), while modest for developed markets at 1.8%, led by the US (2.6%), and contrasted by Japan at 0.0% on the low-end. Earnings growth is expected to rebound globally increasing to 9.4% and 13.3% for 2024 and 2025, respectively.
- 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. YOY total non-residential construction ending in August is 5.2% higher than the same period in 2023.

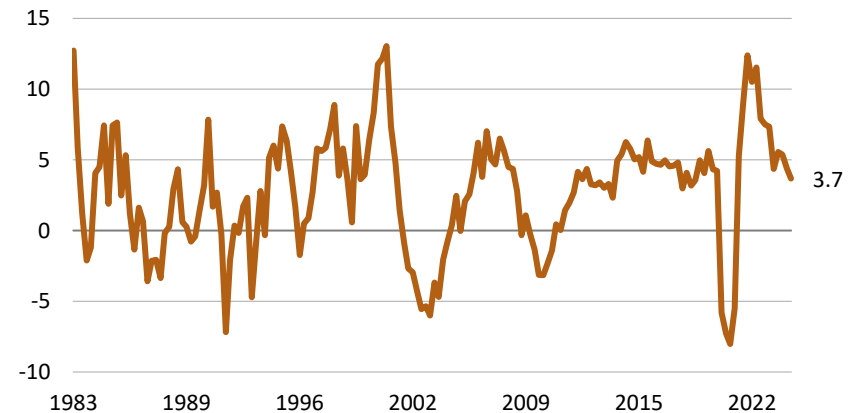
## ALL PROPERTY CAP RATES

Second Quarter 1983 – Second Quarter 2024 • Percent (%)



## FOUR-QUARTER ROLLING NOI GROWTH

First Quarter 1983 – Second Quarter 2024 • Percent (%)



Source: National Council of Real Estate Investment Fiduciaries.

# UK Private Property

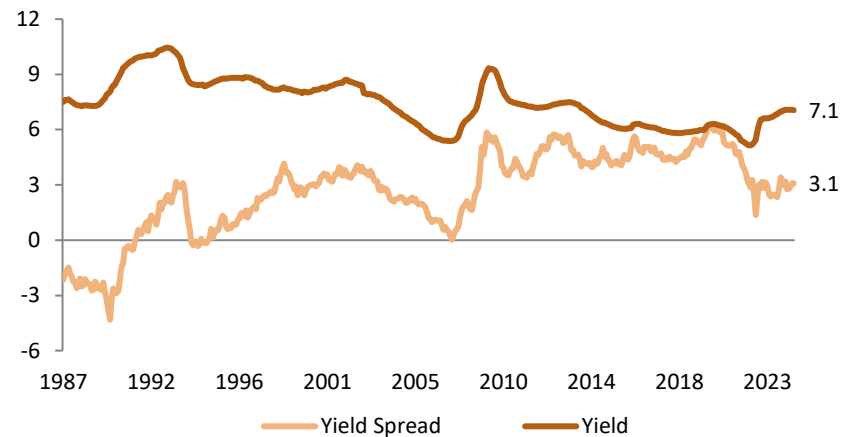
Facts & Figures Third Quarter 2024

UK private property returned 0.5% annually over the last three-year period at the asset level, according to the unlevered MSCI UK Quarterly Property Index as of 2Q in GBP terms. Lower returns highlight the impact from monetary tightening. Industrial performance was strongest at 3.4%, albeit notably lower than recent quarters, while office lagged at -6.1%.

- 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. Although, rate cuts did begin this quarter, it is still early in the easing cycle. According to data from the UK government, YTD non-residential monthly transactions are 5% higher versus 2023, on a seasonally adjusted basis, and running 2% lower than 2015. Vacancy rates have stabilized near 8%. 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 3.1 ppts. 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.
- Most major central banks have begun monetary easing as inflation has moderated. The global economy is widely expected to achieve a soft landing and expected to grow by 3.1% in both 2024 and 2025, according to analysts surveyed by Bloomberg in September. Among major global economies, growth expectations for 2024 are highest for Asia ex Japan (4.6%), while modest for developed markets at 1.8%, led by the US (2.6%), and contrasted by Japan at 0.0% on the low-end. Earnings growth is expected to rebound globally increasing to 9.4% and 13.3% for 2024 and 2025, respectively.
- As of 2023, the UK commercial real estate market is estimated to be roughly \$937B, according to MSCI Real Estate—\$56B higher YOY. It is the largest market in Europe and is followed by Germany's roughly \$777B market (down \$16B YOY). 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.

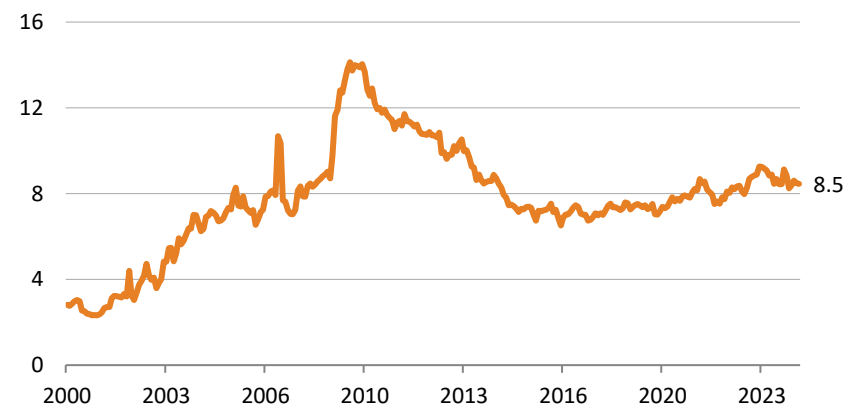
## ALL PROPERTY EQUIVALENT YIELDS AND SPREADS

Dec 31, 1987 – Aug 31, 2024 • Percent (%)



## VACANCY RATE

Jan 31, 2000 – Aug 31, 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

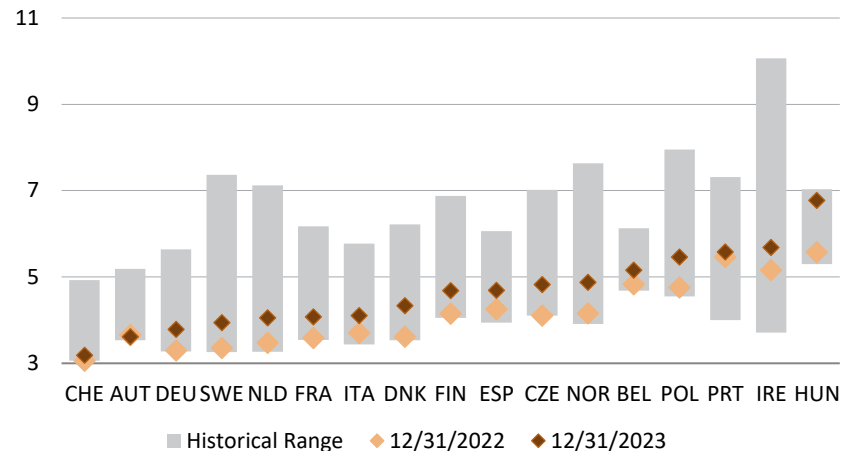
Facts & Figures Third Quarter 2024

Continental property returned 3% annually over the last three-year period at the asset level, according to the unlevered MSCI Global Property Fund Index data as of 1Q 2024 in local currency terms. Returns reverted to positive returns after a notable decrease in the prior quarter. At a sector level, retail returned 2.9%, while residential, industrial properties, and office returned 1%, 5.2%, and -0.7%, respectively. Properties face challenges, including affordability, given the impact of higher interest rates and tighter lending conditions.

- Property yields across most of Europe 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. However, property yields have moderately increased versus 2022, given the increase in sovereign yields.
- Most major central banks have begun monetary easing as inflation has moderated. The global economy is widely expected to achieve a soft landing and expected to grow by 3.1% in both 2024 and 2025 according to analysts surveyed by Bloomberg in September. Among major global economies, growth expectations for 2024 are highest for Asia ex Japan (4.6%), while modest for developed markets at 1.8%, led by the US (2.6%), and contrasted by Japan at 0.0% on the low-end. Earnings growth is expected to rebound globally increasing to 9.4% and 13.3% for 2024 and 2025, respectively.
- Although investment in European commercial real estate in 2Q remained below its ten-year average, it inflected positive, increasing by 16% relative to 2023 according to CBRE. The increase was largely led by hotels, while other sub-sectors declined. Of the top seven countries in the region, France, Germany, and Netherlands saw the worst declines in investment, down 46%, 30% and 21%, 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 2023 in those two markets to be roughly \$777B and \$617B, respectively. German market fell by \$16B, while France grew by \$7B. 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.

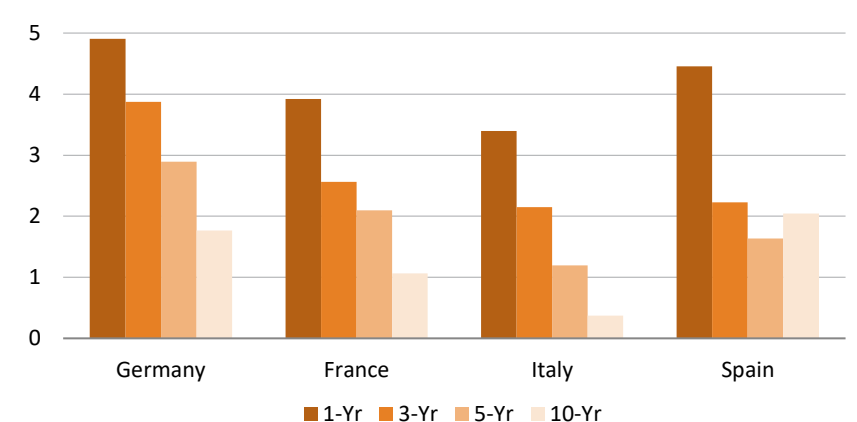
## EUROPEAN PROPERTY NET OPERATING INCOME YIELDS

As of Dec 31, 2023 • Percent (%)



## ANNUALIZED RENT GROWTH

As of Dec 31, 2023 • Percent (%)



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

# Asian Private Property

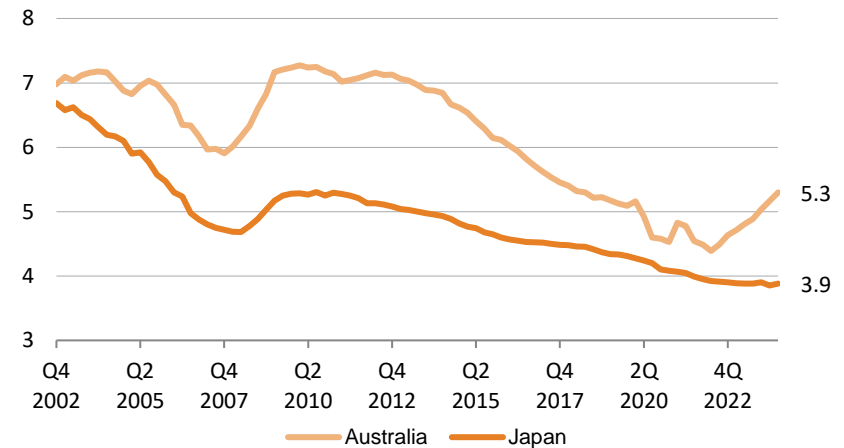
Facts & Figures Third Quarter 2024

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 1Q 2024 in USD terms. At a sector level, retail delivered the best results, returning 4.0%, whereas industrials had the lowest returns of 2.7%, over the same period.

- Property yields in many markets have steadily decreased since the GFC. Within two top markets, Japan continues to see property yields near or at the lowest level for which data are available, according to MSCI real estate data, while yields have notably marched up in Australia as monetary policy will likely remain tight.
- 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 widely expected to achieve a soft landing and expected to grow by 3.1% in both 2024 and 2025, according to analysts surveyed by Bloomberg in September. Among major global economies, growth expectations for 2024 are highest for Asia ex Japan (4.6%), while modest for developed markets at 1.8%, led by the US (2.6%), and contrasted by Japan at 0.0% on the low-end. Earnings growth is expected to rebound globally increasing to 9.4% and 13.3% for 2024 and 2025, respectively.
- Asia-Pacific real estate total investment volume fell by 19% QOQ in 2Q according to CBRE. This was largely due to declines in China (-34% QOQ) and Japan (-53% QOQ), as investors awaited clarity on monetary policies. Industrials primarily drove the weakness, and excess supply in office remains a pain-point for the region, with vacancies jumping to a record high of 19%. Low consumer confidence weighed on the retail sector.
- 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.

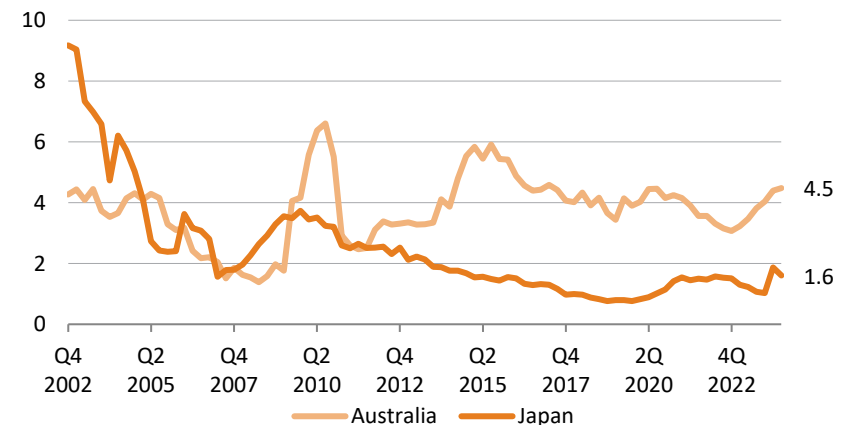
## PROPERTY YIELDS

Fourth Quarter 2002 – Second Quarter 2024 • Percent (%)



## VACANCY RATES

Fourth Quarter 2002 – Second Quarter 2024 • Percent (%)



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

Note: Japan second quarter 2024 data are as of May 31.

# Private Infrastructure

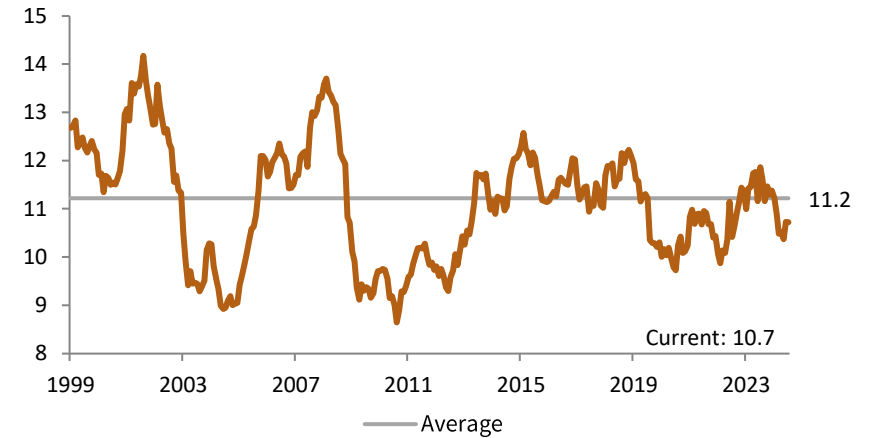
Facts & Figures Third Quarter 2024

Private infrastructure returned 10.34% annualized over the last three-year period, according to the Cambridge Associates Infrastructure Index as of 1Q 2024. This index, which calculates horizon internal rates of return, net of fees, expenses, and carried interest, returned 10.15% annualized over the last ten-year period. Albeit more recent returns have been relatively modest in the face of tighter financial conditions and increased competition. Developed markets contributed the bulk of the return. The industry benefited from stable demand and increased interest among institutional investors.

- Infrastructure companies transacted at 10.7 times EBITDA over the prior 12-month period, which is slightly below 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.
- Most major central banks have begun monetary easing as inflation has moderated. The global economy is widely expected to achieve a soft landing and expected to grow by 3.1% in both 2024 and 2025, according to analysts surveyed by Bloomberg in September. Among major global economies, growth expectations for 2024 are highest for Asia ex Japan (4.6%), while modest for developed markets at 1.8%, led by the US (2.6%), and contrasted by Japan at 0.0% on the low-end. Earnings growth is expected to rebound globally increasing to 9.4% and 13.3% for 2024 and 2025, respectively.
- Global infrastructure 2023 transaction values trailed 2022. Thus far in 2024, global refinancing, greenfield, and brownfield deals accounted for 20%, 26%, and 53% of deal volume, respectively. Energy and telecommunications were the top two sectors for investment, accounting for 22% and 20%, respectively, of deal volume followed by renewables.
- Global infrastructure PE fundraising slowed considerably, declining by nearly 40% YOY in 2023. Annualizing 2024 activity points to another decline this 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.

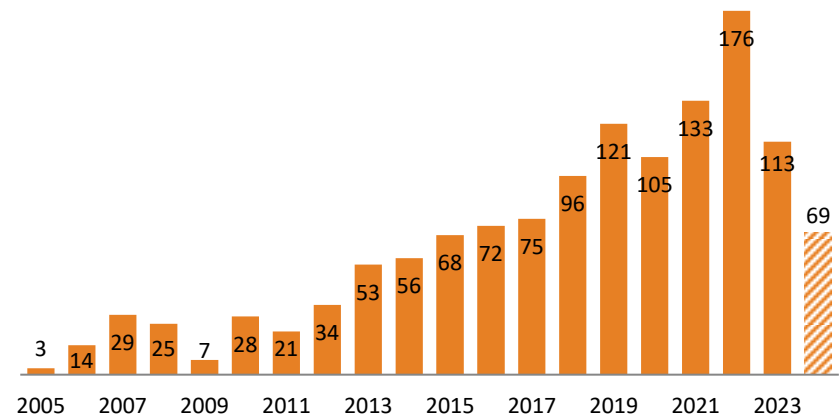
## PRICES OF TRANSACTIONS (EV/EBITDA)

Mar 31, 1999 – Sep 30, 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 commitments data are through September 30.

# Natural Resources Equities

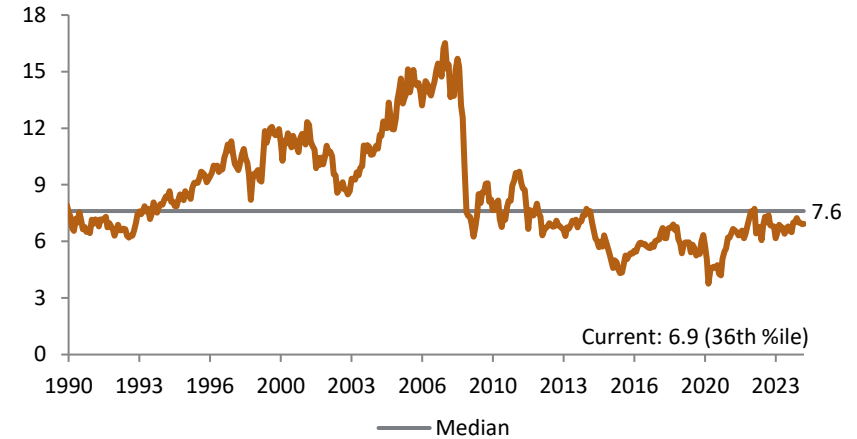
Facts & Figures Third Quarter 2024

Natural resources equities returned 0.4% in 3Q according to the MSCI World Natural Resources Index in USD terms. Performance during the quarter was dragged down by softer oil prices and disappointing earnings results.

- Natural resources firms trade at 6.9 times cyclically adjusted price-to-cash earnings, which ranks in the 36th percentile of month-end observations dating back to 1990. Valuations remain rangebound and slightly below the median level of 7.6x. NREs faltered as oil declined 17% on concerns of excess supply, even as geopolitical tensions rose. Rumors that Saudi Arabia may abandon its \$100 “price target” and refocus efforts on gaining market share also depressed oil prices. A poor earnings season also weighed on performance. However, news of several stimulus measures by the Chinese government to boost the economy did help drive copper prices higher late in 3Q.
- 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. However, the rig count only increased by 2% in 3Q sequentially, driven by an 8% increase North America, while international rigs decreased by 3%. Spending levels remain 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.

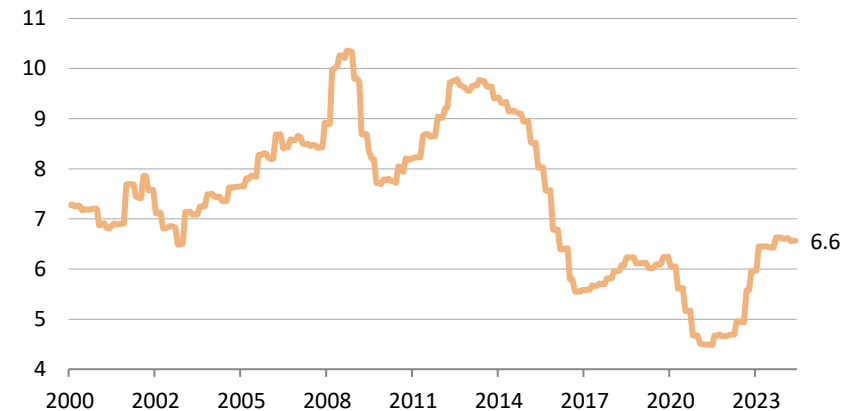
## CYCLICALLY ADJUSTED PRICE-TO-CASH EARNINGS

Dec 31, 1989 – Sep 30, 2024



## CAPITAL EXPENDITURES

Jan 31, 2000 – Sep 30, 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 Third Quarter 2024

The Bloomberg Commodity Index returned 0.7% in 3Q in USD terms, while the more energy-heavy index S&P GSCI™ was down 5.3%, on lower oil prices. Energy prices were the main detractor as oil prices fell 17% despite heightened geopolitical risks on fears of excess supply. Copper prices rose late in the quarter on positive news of stimulus measures to help boost the Chinese economy.

- 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. Oil markets declined on excess supply concerns and rumors that Saudi Arabia may no longer attempt to defend prices and renew a focus on gaining market share.
- Most major central banks have begun monetary easing as inflation has moderated. The global economy is widely expected to achieve a soft landing and expected to grow by 3.1% in both 2024 and 2025, according to analysts surveyed by Bloomberg in September. Among major global economies, growth expectations for 2024 are highest for Asia ex Japan (4.6%), while modest for developed markets at 1.8%, led by the US (2.6%), and contrasted by Japan at 0.0% on the low-end. Earnings growth is expected to rebound globally increasing to 9.4% and 13.3% for 2024 and 2025, respectively.
- 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 hovering near 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.

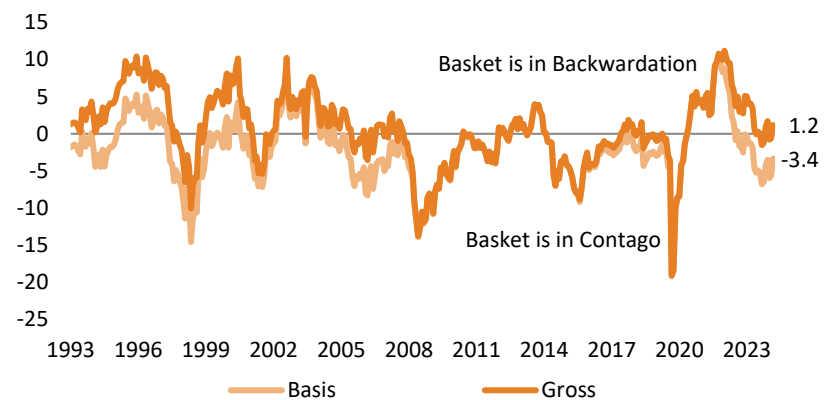
## COMMODITY FUTURES BASKET PRICE DEVIATION

Jun 30, 2003 – Sep 30, 2024 • Z-Score



## COMMODITY FUTURES BASKET INDICATIVE ROLL YIELD

Jul 31, 1993 – Sep 30, 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

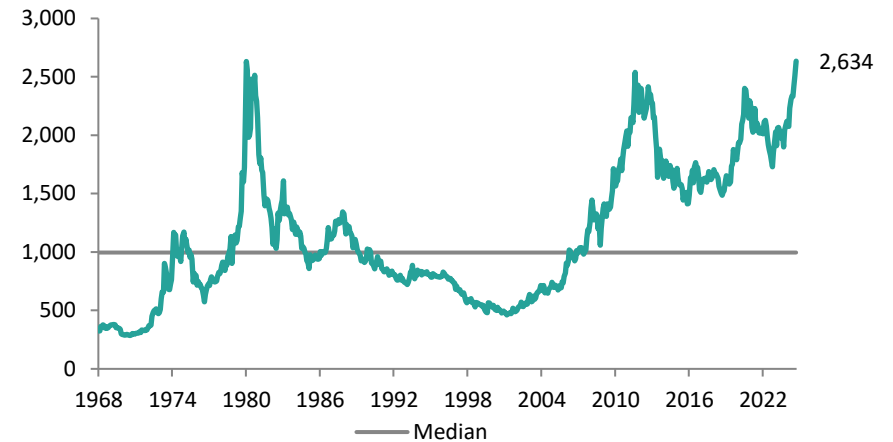
## Facts & Figures Third Quarter 2024

The price of gold climbed 13% in 3Q and hit record highs in both nominal and real terms. In the past year, gold has advanced 42%, the highest 12-month return since August 2011. Gold's rally was supported by escalating geopolitical tensions and monetary easing driving yields lower.

- 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 also be looking ahead to future rate cuts as a supportive factor for gold. The global economy has started showing signs of softening, and futures markets are pricing one Fed policy rate cuts by December—albeit far fewer than what was priced in earlier this year. 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.

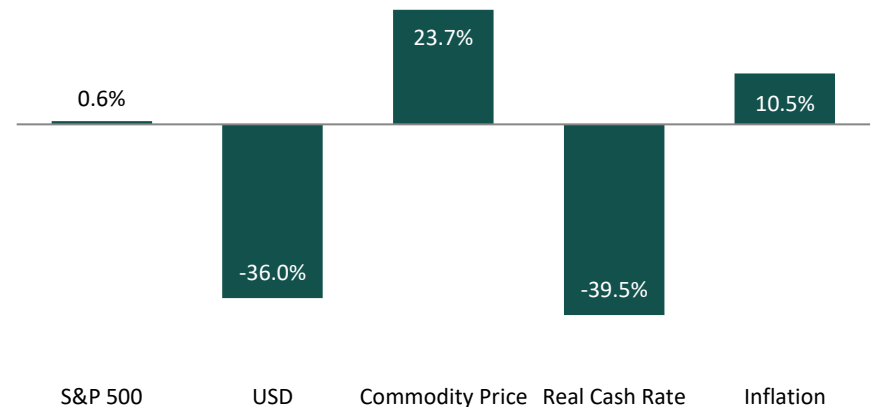
### GOLD BULLION REAL PRICE

Jan 31, 1968 – Sep 30, 2024 • US Dollars per Troy Oz



### LONG-TERM CORRELATION VS GOLD PRICES

Dec 31, 1970 – Sep 30, 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 August 31, 2024.