

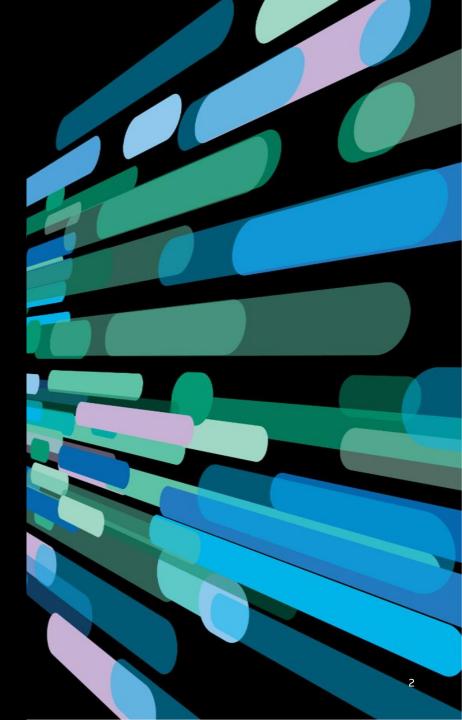
Macquarie Asset Management

Opportunity in a volatile world

Outlook 2023

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Key messaging



Global growth	We expect the major developed world (DW) economies to be in recession in 1H23. But DW growth should bounce back in 2H23, and with China's growth also accelerating over the course of 2023, the global economic landscape is likely to be much improved towards the end of the year.
Inflation	Inflation is likely to slow over the next 12 months, with US inflation falling faster than inflation in the UK and Euro area. But we believe it is unlikely to fall back to ~2% quickly. We expect it to remain in the 3% to 5% range, a level that is still challenging for both investors and policymakers.
Interest rate expectations	Market expectations for central bank tightening are now peaking out, in our view. They could soon fall as growth deteriorates and inflationary pressures start to ease, but we don't expect significant cuts in policy rates in 2023.
Our preferred asset classes	For 2023 we prefer (in order) infrastructure, fixed income, and agriculture. They offer defensiveness, yield, reliable return delivery and, in the case of infrastructure and agriculture, protection against high inflation. In a volatile and uncertain year these are traits investors are likely to find attractive.
Other opportunities	Listed equities and real estate face more headwinds in the near term in the form of earnings risk and higher financing costs, respectively. But we see attractive thematics in both asset classes and we believe that cyclical opportunities will emerge as the recessions progress and then morph into recoveries.

Three investment themes for 2023



Supply-side dynamics: Cyclical versus structural change

- Inflation is likely to fall in the near term as supply chains normalise, commodity markets realign, and aggregate demand softens. But from a structural perspective, we believe growth in the supply side of the global economy has slowed. There are three main drivers of this slowdown:
 - **Deglobalisation.** Globalisation has slowed and possibly even gone into reverse in recent years.
 - **Demographics.** The demographic outlook has deteriorated sharply over the past 20 years.
 - **DW productivity growth.** Productivity has been slowing across the DW due to factors that are, in our view, durable.



Global growth, recessions, and the recovery

- Recessions are likely for the world's major developed world economies in 2023.
- The UK and Euro area are probably already in recession and the US will likely join them in 1H23.
- But we expect recoveries in 2H23. And with China's economy set to steadily accelerate all year, the global economic landscape is likely to improve significantly in the second half of the vear.



Energy security and the energy transition

- The global energy crisis has brought the issues of energy security and cost to the fore.
- A renewables-based energy system is likely to be both more secure and cheaper than a fossil fuel-based system.
- So while short-term measures will be necessary in some places to ensure supply, the recent stresses should ultimately accelerate the transition to a low-carbon energy system.

Investment implications



Our view



Equities



- The derating selloff is now mostly over, but earnings are at risk and we remain cautious about the outlook for listed equities in aggregate.
- We see opportunities in playing key themes such as deglobalisation and reshoring via construction and engineering firms, railroads, and consumer discretionary-related companies.



Fixed income



• With inflation set to moderate, expectations for monetary policy peaking out, and DW economies set to enter recession in early 2023, we believe fixed income offers an array of attractive opportunities.



Real estate



- Real estate markets in developed markets ex-Japan face headwinds in the near term with the rise in risk-free rates (particularly real yields) and financing costs impacting valuations and transactions.
- High-quality buildings with strong cash flows and premium tenants, and assets in attractive locations where there are supplydemand imbalances, should continue to perform solidly however.





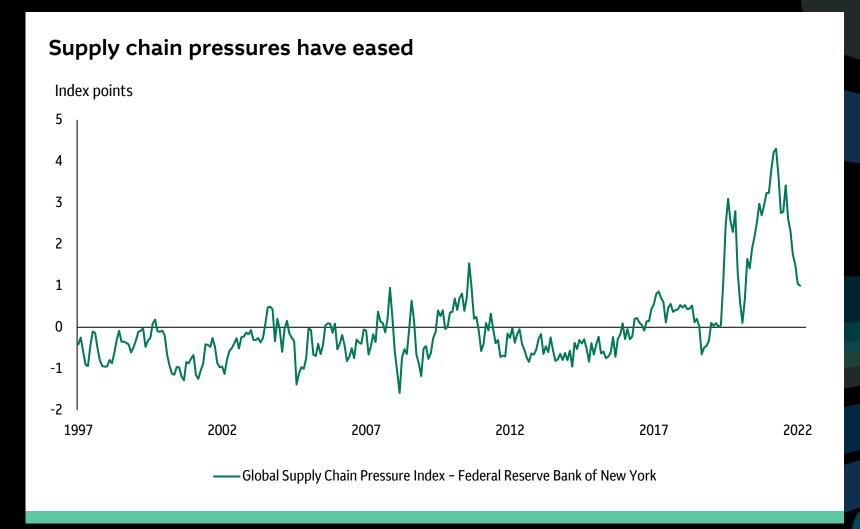
- Infrastructure is our favoured sector for 2023. It offers defensiveness, inflation protection, a high yield, and exposure to structural growth drivers, all of which should be attractive to investors next year. It also has the tailwind of government policy support.
- We believe core and core plus infrastructure assets should perform more strongly than assets higher up in the risk spectrum (e.g. value add and opportunistic).





Agriculture's stable return profile, land-rich asset composition, inflation protection traits, and high yield make it an attractive proposition in what promises to be a volatile and challenging 2023.

Supply-side dynamics: Pressures are easing in the near term





Inflation should slow over the next 12 months as supply chains normalise, commodity markets realign, and aggregate demand softens.

But in our view it is unlikely to return to central bank targets and will remain at a level (say 3% to 5%) that is uncomfortable for policymakers and investors alike.

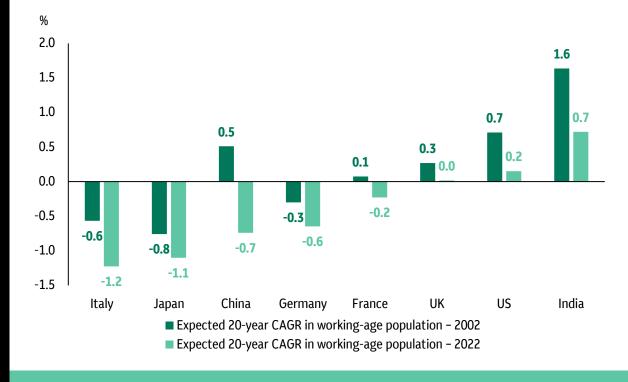
Source: Macrobond (November 2022).

Supply-side dynamics: Long-term dynamics are challenging

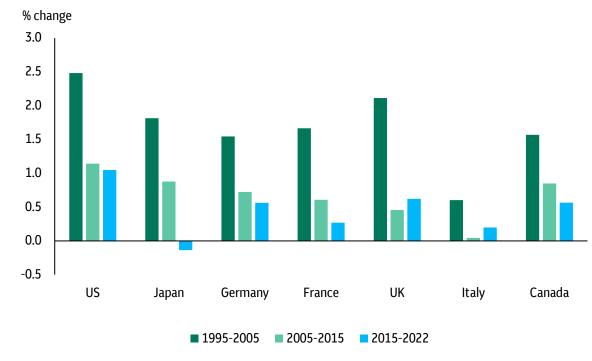


From a structural perspective, supply growth has weakened materially – globalisation has gone into reverse, demographics have deteriorated, and productivity growth has slowed to a crawl.

The demographic outlook is now far more challenging



Labour productivity growth has collapsed

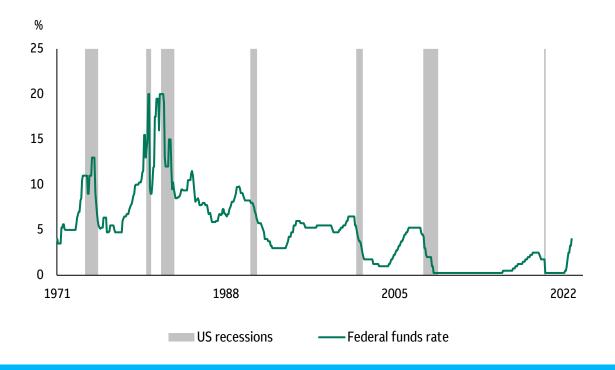


Global growth, recessions, and the recovery

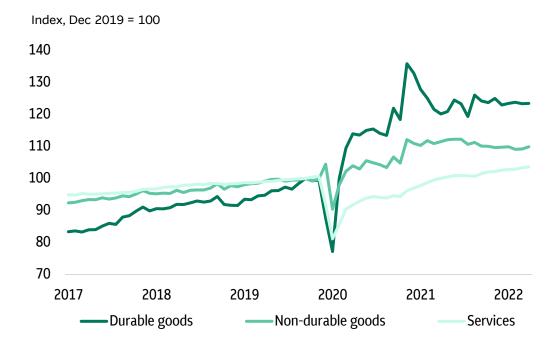


In the US, we expect a garden variety, interest-rate-driven recession in 1H23. Housing and goods consumption have already weakened, and we expect this to continue and broaden.

Recessions often follow sharp increases in interest rates



Consumer spending: Goods have been much weaker than services



Global growth, recessions, and the recovery



China's economy should steadily accelerate over the course of 2023 as policy easing steps up a gear, and the drag from housing fades.

China gross domestic product (GDP) growth has been weak in 2022



China's housing market is in the midst of a major downturn

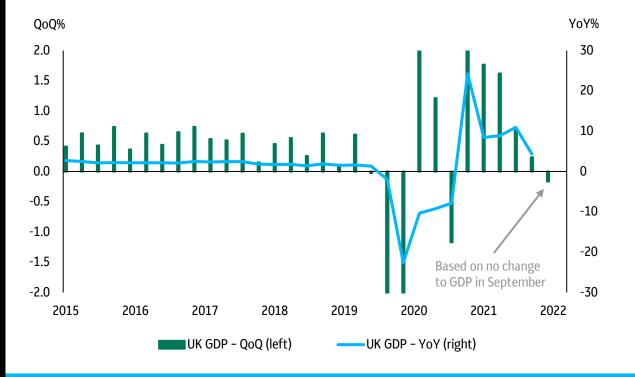


Global growth, recessions, and the recovery

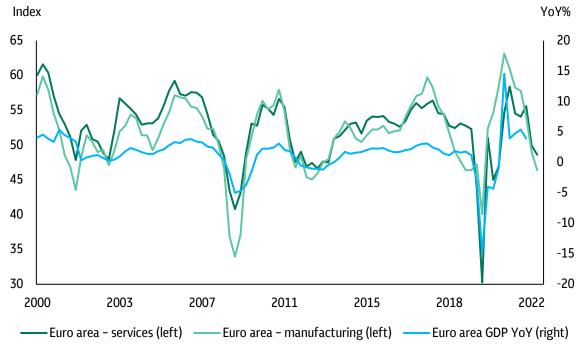


The energy crisis, falling real incomes, and rising interest rates have tipped Europe into recession in late 2022. But we expect a recovery in 2H23.

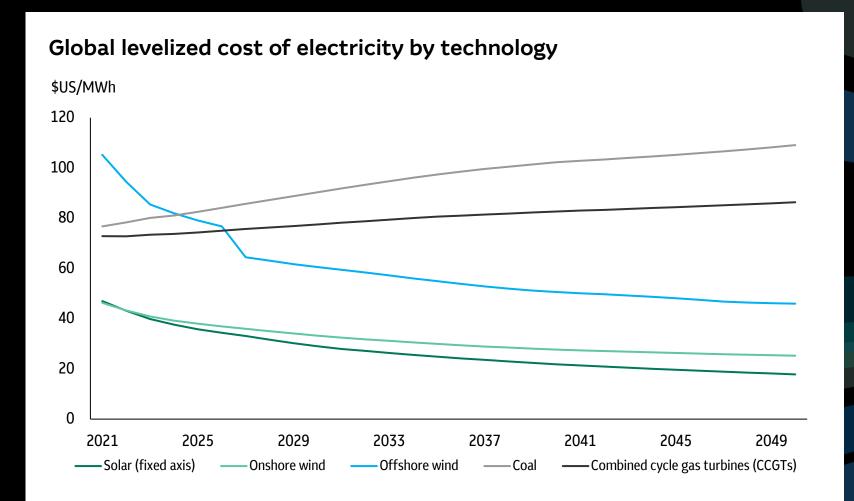
UK GDP: The recession began in 3Q22



Euro area GDP: The economy likely entered recession in 4Q22



Energy security and the energy transition





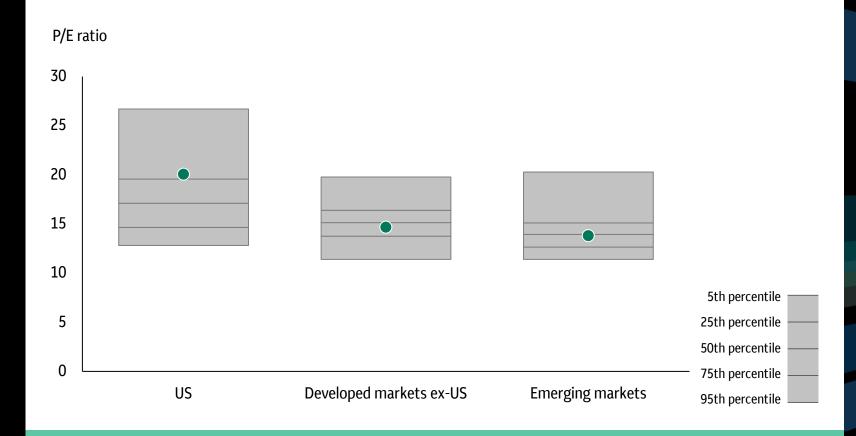
Rising energy prices have increased the focus on energy security and cost.

Renewables have the potential to offer both greater energy security and cheaper power, so the recent crisis may ultimately accelerate the transition to a low-carbon energy system.

Source: BloombergNEF (June 2022)

Global listed equities: Thematic opportunities

P/E ratios have come down but are still elevated in the US





Most of the derating selloff is now behind us. But earnings are still at risk.

We see opportunities in playing deglobalisation and reshoring through construction and engineering, railroads, and consumer discretionary.

Sources and notes: FactSet and MSCI, showing 5th to 95th percentiles of prices to consensus FY1 earnings from 31 Dec 2005 to 30 Sep 2022, with additional breakpoints at the 25th, 50th, and 75th percentiles; the green dot shows the value as of 30 Sep 2022.

Fixed income: Opportunities abound





Rates



- With inflation set to moderate, expectations for monetary policy peaking out, and DW economies set to enter recession in early 2023, we believe fixed income offers an array of attractive opportunities and strong protection levels for portfolios.
- While acknowledging the presence of short-term volatility, duration exposure, particularly within high-quality sovereigns, offers an increasingly attractive opportunity, especially in regions where markets have aggressively priced policy moves, such as Australia, New Zealand, South Korea, and Canada.



Credit



- Credit fundamentals remain strong in both the investment grade and high yield markets, though we foresee increased headwinds and weakening fundamentals ahead.
- Against this backdrop, we believe defensive positioning within credit is appropriate with a preference for highly-rated investment grade credit in favourable sectors.
- Within high yield, we feel that a disciplined and cautious approach is warranted with a higher-quality bias within portfolios, focusing on compensation for fundamental risk.



Emerging markets debt



- Emerging market (EM) sovereign fundamentals are mixed, with inflationary pressures and recession possibilities as the risks.
- We are cautious on EM foreign exchange (FX) exposure as US dollar strength continues to be the key driver, though we recognise valuations are attractive.
- We maintain the risk-controlled approach within our EM strategies with very selective exposures. We favour energy exporters and are avoiding food importers and high-dollar-price high yield.



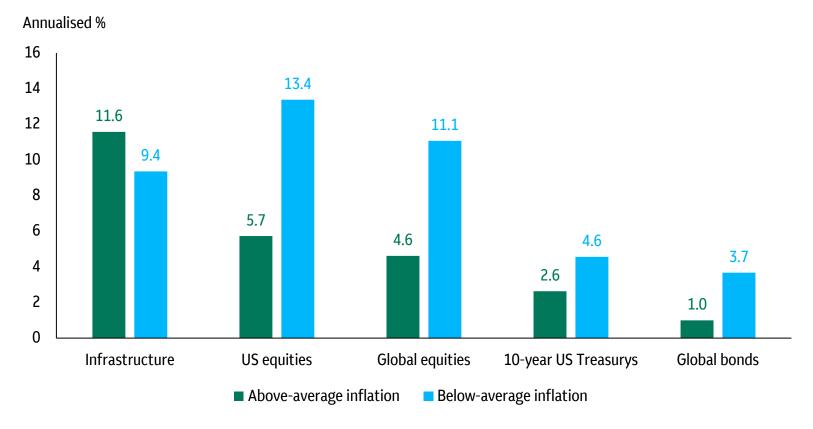
Structured



- · Fundamentals are stable overall in the structured security market.
- In general, the spike in rate market volatility has led to the spread on mortgage-backed securities (MBS) widening. While spreads are at near post-financial crisis highs, selective participation in higher-quality market segments is preferred with rising rates and weakening economic fundamentals likely to pose further headwinds.

Infrastructure: A standout in a difficult year

Infrastructure has performed better than other asset classes when inflation is high



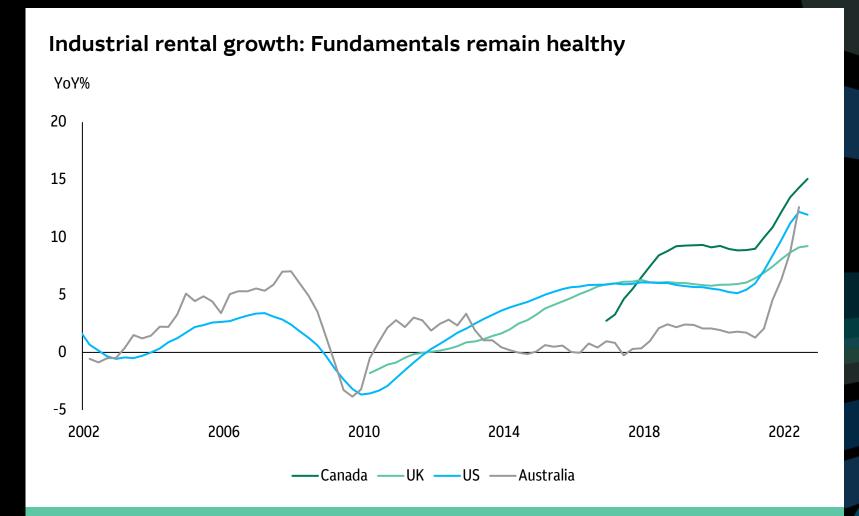


Infrastructure offers defensiveness, a hedge against high inflation, yield, and exposure to structural growth drivers.

In a difficult and volatile 2023, these are traits investors are likely to find attractive.

Sources: Macrobond, Cambridge Associates, Bloomberg Finance LP (June 2022). US equities: S&P 500 Index. Infrastructure: Cambridge Associates Infrastructure Index. Global equities: MSCI World Index. Global bonds: Bloomberg Global Aggregate Index. Analysis conducted from 4Q03 to 2Q22.

Real estate: Financing costs a headwind





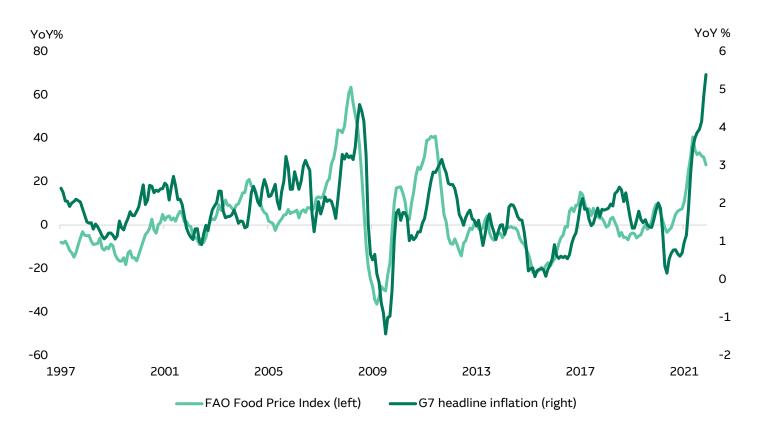
Real estate faces more headwinds in the near term as higher risk-free rates and financing costs are weighing on transactions and valuations.

But rental growth remains solid in sectors with stronger fundamentals (logistics, rental housing) and the increase in building costs should provide downside protection for values.

Sources: CoStar, Jones Lang LaSalle (JLL) (November 2022)

Agriculture: Inflation hedge, yield, and diversification

Food prices correlate strongly with headline inflation





Agriculture offers a hedge against inflation, yield, diversification, and a steady return profile.

Sources: Food and Agriculture Organization (FAO) of the UN; Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES); Macrobond (February 2022).

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Diversification may not protect against market risk.

Fixed income securities and bond funds can lose value, and investors can lose principal, as interest rates rise. They also may be affected by economic conditions that hinder an issuer's ability to make interest and principal payments on its debt. This includes prepayment risk, the risk that the principal of a bond that is held by a portfolio will be prepaid prior to maturity at the time when interest rates are lower than what the bond was paying. A portfolio may then have to reinvest that money at a lower interest rate.

Market risk is the risk that all or a majority of the securities in a certain market - like the stock market or bond market - will decline in value because of factors such as adverse political or economic conditions, future expectations, investor confidence, or heavy institutional selling.

Natural or environmental disasters, such as earthquakes, fires, floods, hurricanes, tsunamis, and other severe weather-related phenomena generally, and widespread disease, including pandemics and epidemics, have been and can be highly disruptive to economies and markets, adversely impacting individual companies, sectors, industries, markets, currencies, interest and inflation rates, credit ratings, investor sentiment, and other factors affecting the value of the Strategy's investments. Given the increasing interdependence among global economies and markets, conditions in one country, market, or region are increasingly likely to adversely affect markets, issuers, and/or foreign exchange rates in other countries. These disruptions could prevent the Strategy from executing advantageous investment decisions in a timely manner and could negatively impact the Strategy's ability to achieve its investment objective. Any such event(s) could have a significant adverse impact on the value and risk profile of the Strategy.

International investments entail risks including fluctuation in currency values, differences in accounting principles, or economic or political instability. Investing in emerging markets can be riskier than investing in established foreign markets due to increased volatility, lower trading volume, and higher risk of market closures. In many emerging markets, there is substantially less publicly available information and the available information may be incomplete or misleading. Legal claims are generally more difficult to pursue.

Currency risk is the risk that fluctuations in exchange rates between the US dollar and foreign currencies and between various foreign currencies may cause the value of an investment to decline. The market for some (or all) currencies may from time to time have low trading volume and become illiquid, which may prevent an investment from effecting positions or from promptly liquidating unfavourable positions in such markets, thus subjecting the investment to substantial losses.

Outlook 2023 Important information

Credit risk is the risk of loss of principal or loss of a financial reward stemming from a borrower's failure to repay a loan or otherwise meet a contractual obligation. Credit risk arises whenever a borrower expects to use future cash flows to pay a current debt. Investors are compensated for assuming credit risk by way of interest payments from the borrower or issuer of a debt obligation. Credit risk is closely tied to the potential return of an investment, the most notable being that the yields on bonds correlate strongly to their perceived credit risk.

Inflation is the rate at which the general level of prices for goods and services is rising, and, subsequently, purchasing power is falling. Central banks attempt to stop severe inflation, along with severe deflation, in an attempt to keep the excessive growth of prices to a minimum.

IBOR risk is the risk that changes related to the use of the London interbank offered rate (LIBOR) or similar rates (such as EONIA) could have adverse impacts on financial instruments that reference these rates. The abandonment of these rates and transition to alternative rates could affect the value and liquidity of instruments that reference them and could affect investment strategy performance.

Deglobalisation is the process of diminishing interdependence and integration between certain units around the world, typically nation-states.

The price-to-earnings (P/E) ratio is the ratio for valuing a company that measures its current share price relative to its per-share earnings.

The **Bloomberg Global Aggregate Index** provides a broad-based measure of the global investment grade fixed-rate debt markets.

The Cambridge Associates LLC Infrastructure Index is a horizon calculation based on data compiled from 93 infrastructure funds, including fully liquidated partnerships, formed between 1993 and 2015The

The **FAO Food Price Index** is a measure of the monthly change in international prices of a basket of food commodities.

The Global Supply Chain Pressure Index (GSCPI) is a new measurement of supply chain conditions, created by the Federal Reserve Bank of New York.

The MSCI World Index is a broad global equity index that represents large and mid-cap equity performance across 23 developed markets countries.

The S&P 500 Index is a stock market index tracking the stock performance of 500 large companies listed on stock exchanges in the United States

The **Total Return Index** is an index that measures the performance of a group of components by assuming that all cash distributions are reinvested, in addition to tracking the components' price movements

Index performance returns do not reflect any management fees, transaction costs or expenses.

Indices are unmanaged and one cannot invest directly in an index.

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