Oxfordshire County Council

Pension Fund

Quarterly Investment Report

Q2 2023

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Key Indicators at a Glance

	Index (Local Currency)	Q3 2023	Q3	YTD
Equities			**Total Return**	
UK Large-Cap Equities	FTSE 100	7,608	2.07%	3.82%
UK All-Cap Equities	FTSE All-Share	4,127	1.78%	2.91%
US Equities	S&P 500	4,288	-3.27%	13.51%
European Equities	EURO STOXX 50 Price EUR	4,175	-4.83%	11.51%
Japanese Equities	Nikkei 225	31,858	-3.36%	26.16%
EM Equities	MSCI Emerging Markets	953	-2.85%	2.09%
Global Equities	MSCI World	2,853	-3.36%	11.36%
Government Bonds				
UK Gilts	FTSE Actuaries UK Gilts TR All Stocks	2,895	-0.63%	-4.09%
UK Gilts Over 15 Years	FTSE Actuaries Uk Gilts Over 15 Yr	3,283	-5.69%	-11.13%
UK Index-Linked Gilts	FTSE Actuaries UK Index-Linked Gilts TR All Stocks	3,714	-4.69%	-7.16%
UK Index-Linked Gilts Over 15 Years	FTSE Actuaries UK Index-Linked Gilts TR Over 15 Yr	3,839	-10.67%	-15.87%
Euro Gov Bonds	Bloomberg EU Govt All Bonds TR	208	-2.54%	-0.08%
US Gov Bonds	Bloomberg US Treasuries TR Unhedged	2,155	-3.06%	-1.52%
EM Gov Bonds (Local)	J.P. Morgan Government Bond Index Emerging Markets Core In	128	-3.65%	3.72%
EM Gov Bonds (Hard/USD)	J.P. Morgan Emerging Markets Global Diversified Index	818	-2.23%	1.76%
Bond Indices				
UK Corporate Investment Grade	S&P UK Investment Grade Corporate Bond Index TR	334	-1.01%	1.39%
European Corporate Investment Grade	Bloomberg Pan-European Aggregate Corporate TR Unhedged	219	0.70%	2.69%
European Corporate High Yield	Bloomberg Pan-European HY TR Unhedged	415	3.76%	6.76%
US Corporate Investment Grade	Bloomberg US Corporate Investment Grade TR Unhedged	2,969	-3.37%	0.02%
US Corporate High Yield	Bloomberg US Corporate HY TR Unhedged	2,314	2.21%	5.86%
Commodities				
Brent Crude Oil	Generic 1st Crude Oil, Brent, USD/bbl	95	19.48%	10.94%
Natural Gas (US)	Generic 1st Natural Gas, USD/MMBtu	2.93	32.18%	-34.55%
Gold	Generic 1st Gold, USD/toz	1,848	-6.14%	1.20%
Copper	Generic 1st Copper, USD/lb	374	-8.72%	-1.92%
Currencies				
GBP/EUR	GBPEUR Exchange Rate	1.15	1.44%	2.15%
GBP/USD	GBPUSD Exchange Rate	1.22	-1.12%	0.96%
EUR/USD	EURUSD Exchange Rate	1.06	-2.45%	-1.23%
USD/JPY	USDJPY Exchange Rate	149	12.43%	13.92%
Dollar Index	Dollar Index Spot	106	3.58%	2.56%
USD/CNY	USDCNY Exchange Rate	7.30	6.17%	5.79%
Alternatives				
Infrastructure	S&P Global Infrastructure Index	2,476	-7.27%	-4.04%
Private Equity	S&P Listed Private Equity Index	181	4.75%	18.84%
Hedge Funds	Hedge Fund Research HFRI Fund-Weighted Composite Index	18,215	1.43%	4.27%
Global Real Estate	FTSE EPRA Nareit Global Index TR GBP	3,383	-3.86%	-5.76%
Volatility			**Change in Volatility**	
VIX	Chicago Board Options Exchange SPX Volatility Index	18	-6.31%	-19.15%

Source: Bloomberg. All return figures quoted are total return, calculated with gross dividends/income reinvested and in local currency.

Performance

The Fund fell by -0.3% in the third quarter of 2023 to a value of £3,212m. As can be seen from the previous table, bonds were noticeably weak during the quarter and the major overseas equity markets also fell in local currency terms. In addition, infrastructure assets fell as the rise in bond yields finally impacted valuations. I would also ask you to note the rise in the price of oil and gas over the quarter as this will impact future inflation and was, in part, behind the rise in bond yields (fall in prices). Both have weakened slightly since quarter end.

Much of the underperformance against the benchmark was driven by the poor performance of the Brunel Global Sustainable Equity portfolio which returned -4.2% over the quarter against a 0.7% rise in the MSCI All Countries Global Equity benchmark. The Global High Alpha Equity portfolio also fell by -0.6% underperforming its benchmark by -1.2%. Against this the Fund's Private Equity allocation, both held directly and via Brunel, performed well as did the Private Debt allocation, however, Infrastructure and Secure Income performed more poorly.

Driven partially by this quarter's underperformance, the Fund is now lagging its benchmark over 3-years (by -2.0%); 5-years (by -0.7%) and 10-years (by -0.1%) but the returns of 7.2% per annum over the last 10 years, being above the Fund's actuarial discount rate assumption for future investment returns, will have driven much of the improvement in the funding ratio between the triannual actuarial revaluations.

Comment

The standout feature of the last quarter was the rise in longer duration bond yields. Short duration bonds across the developed world were fairly flat but longer duration bond yields rose (prices fell) particularly in the US. The driver for this was markets realising:

a) that inflation is not beaten yet;

b) that interest rates will stay higher for longer;

c) that greater political uncertainty requires a higher yield premium;

d) that high government debt levels will lead to higher interest charges with greater government bond issuance

e) that Quantitative Tightening removes a major buyer from the bond markets as central banks let their existing holdings of bonds bought during Quantitative Easing mature and fall off their balance sheet.

But, particularly, in the US, it is the continuing strength of the US consumer and hence the US economy which is concerning markets.

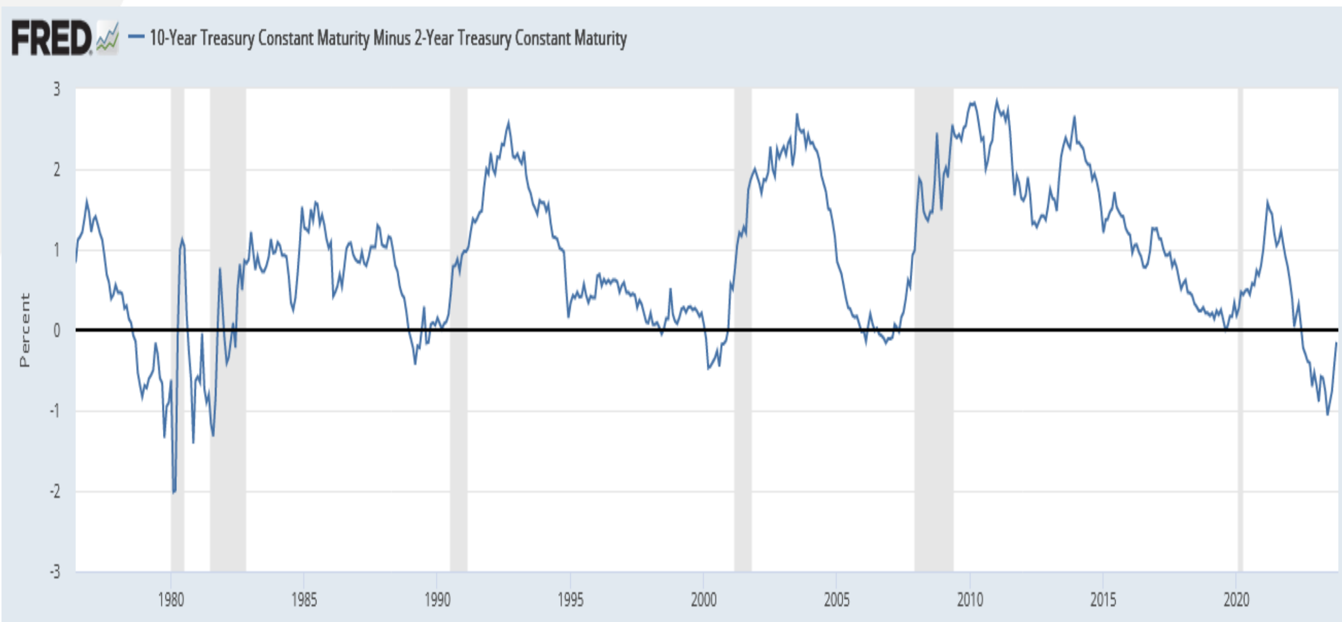
The rise in longer duration bonds meant that we did see a change in the shape of the yield curve over the period and this undermined market sentiment for risk assets towards the end of the quarter leading to a decline in international equity markets over the period.

The situation at the end of the second quarter of 2023 was that both the UK and US had inverted yield curves where short duration bonds were yielding noticeably more than longer duration bonds. This has traditionally been seen as the harbinger of a recession. An inverted yield curve is the market's way of saying that short-term interest rates are peaking because they have risen to an extent that is likely to cause a recession and thereby lead to lower interest rates in the future.

There are two ways a negative yield curve can unwind, either short-term interest rates fall as the economy enters a recession, forcing wages and inflation down and central banks to eventually react to the lower growth profile by cutting interest rates (termed a 'bull flattening' for bond investors) or, for long-term interest rates to rise as markets realise that the economy is not slowing enough to reduce inflation back to target and that rates will therefore either need to rise further or stay higher for longer (a 'bear flattening' for bond investors). Q3 2023 was very much the latter for the US market as the economy has stayed strong despite the sharp rise in interest rates seen over the last 18 months.

The chart below shows the US Treasury 10-year yield minus the 2-year yield. When the line is below zero, 2-year yields are higher than 10-year yields and bond markets are, thereby, predicting a US recession. The shaded areas are actual recessions in the US. As can be seen in the chart, the line only starts to move into positive territory when markets are confident the US economy is about to enter a recession and that interest rate cuts are firmly on the horizon. During the three most recent occasions when this has occurred (1991, 2001 and 2008) the yield curve normalised (long rates higher than short rates) through a fall in interest rates expectations pushing the 2-year bond yield down (bond prices up). As can be seen at the right end of the chart, during Q3 2023, it looks like this line is again reverting to normality with long-term yields moving towards short-term yields but this time it has been driven by a rise in long-term yields. This is not the market predicting an imminent recession and thereby cuts in interest rates, but is driven by the view that inflation is not completely under control in the US and that either interest rates are likely to rise further or stay elevated for longer or both. The market's view during Q3 2023 is that a US recession is not on the horizon.

Chart 1: US yield curve



Source: Federal Reserve Bank of St Louis

This further rise in long-term bond yields, whilst understandable given the strength of the US economy (and the US consumer in particular) acts as a further piece of monetary tightening as it raises the cost of longer term borrowing and does, therefore, increase the likelihood of a recession in 2024.

The US economy has been far stronger than predicted with annualised economic growth hitting 4.9% in Q3 2023, up from 2.1% in Q2, far above expectations at the start of the year. This has been driven mainly by the consumer although there are now signs of some productivity growth. The US consumer is showing remarkable resilience and like Rasputin seems impossible to kill off at present. Nonetheless, recent data does now show the US consumer with a negative savings rate (spending more than they earn) and this cannot continue indefinitely. I think what we are seeing is the effect of using averages for economic data when we increasingly have a bipolar situation with the well off commanding higher pay and supported by resilient equity markets so continuing to spend but the less well off, with less stable employment, struggling to make ends meet however, this element is lost within the data averages.

There now look to be three possible outcomes to the economic situation.

1) The US economy now begins to slow as the interest rate rises seen so far take effect. In this scenario the US Federal Reserve (US Fed) hold rates high throughout 2024 only cutting once they are confident inflation will return to the 2% level and stay there.

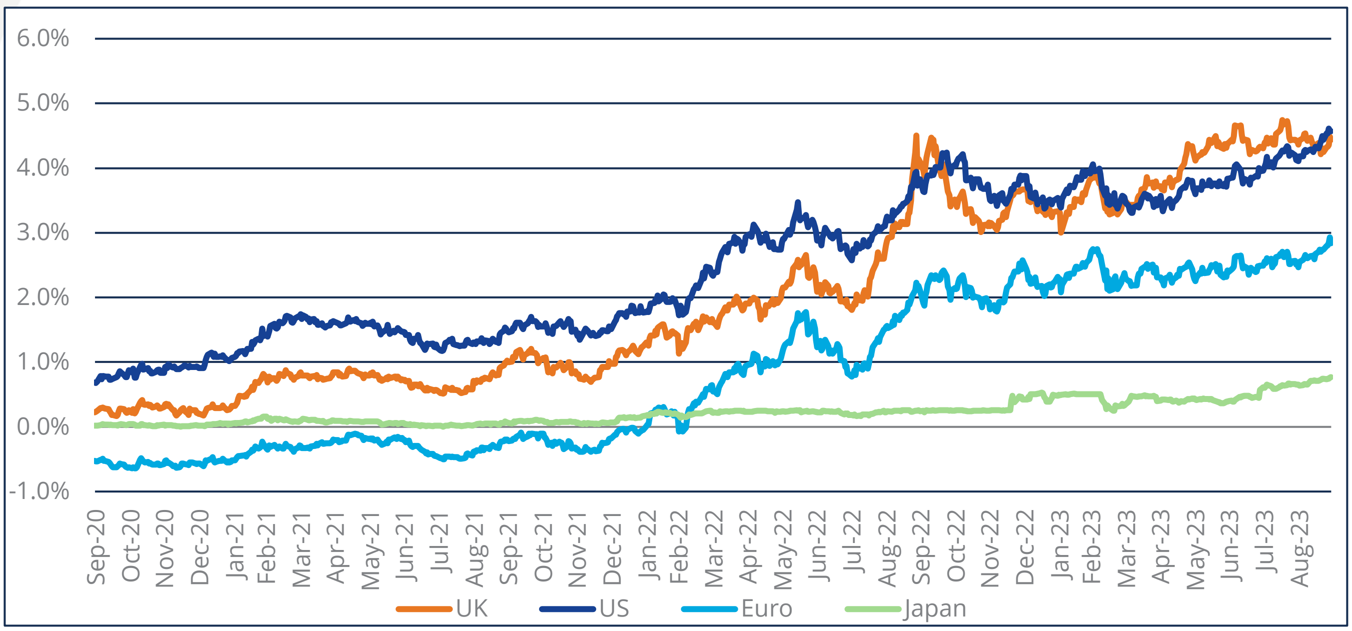
2) Economic growth continues to surprise forcing the US Fed to raise interest rates further. There is then a danger that they are forced into raising rates just as the cumulative effect of the existing interest rate rises hits the economy and forces a sharp slowdown.

3) Something breaks. We saw the effect of the rapid interest rate rises on the regional US banking system in spring of 2022 where a small number of banks holding long-term loans were unable to retain their deposit base as interest rates rose. There will still be other asset owners for whom the rapid rise in interest rates has undermined their investment model. The amount of volatility in long dated bonds is unprecedented. It is quite possible that the US Fed's hand could be forced if markets become particularly stressed. This could be either by a buyers' strike forcing the US Fed to raise rates to get their bond issuance away or by a collapse in a specific segment of the market which causes wider collateral damage and forces the US Fed to cut rates to calm markets. Either of these outcomes would be highly destabilising.

Despite the strong GDP growth in the US, it remains my opinion that there will be a US recession during 2024. It will be difficult for the global economy to show much growth in this scenario, particularly with China encountering structural economic change at the same time.

The chart below shows 10-year Government Bond yields. The weakness of the US 10-year bond in particular is noticeable over the last 3 months driven by the strength of the US economy but 10-year Government Bonds have been weak (yields rising, prices falling) across the spectrum of the developed world over the last six months and now sit at decade high yields.

Chart 2: 10-year Government Bond Yields



Source: Bloomberg. Notes: US Govt 10 Year Yield; UK Govt Bonds 10 Year Yield; Euro Govt Bond 10 Year; Japan Govt Bond 10 Year Yield

Outside of the US, in Europe and the UK we are seeing much greater economic weakness and in the UK's case, more stubborn inflation. Interest rates are having a more obvious effect on consumption in these markets and whilst inflation is falling and may continue to do so in the near term, in the UK in particular, it is unlikely to reach the Bank of England (BoE) target of 2% as an element of the inflation appears more structural.

Markets will be cheered by falling inflation but both core inflation (excluding energy and food) and wage inflation are not consistent with a target for CPI of 2% and whilst interest rates may well have peaked, the market may be too optimistic about the pace at which they will fall from here.

Table 1: Inflation

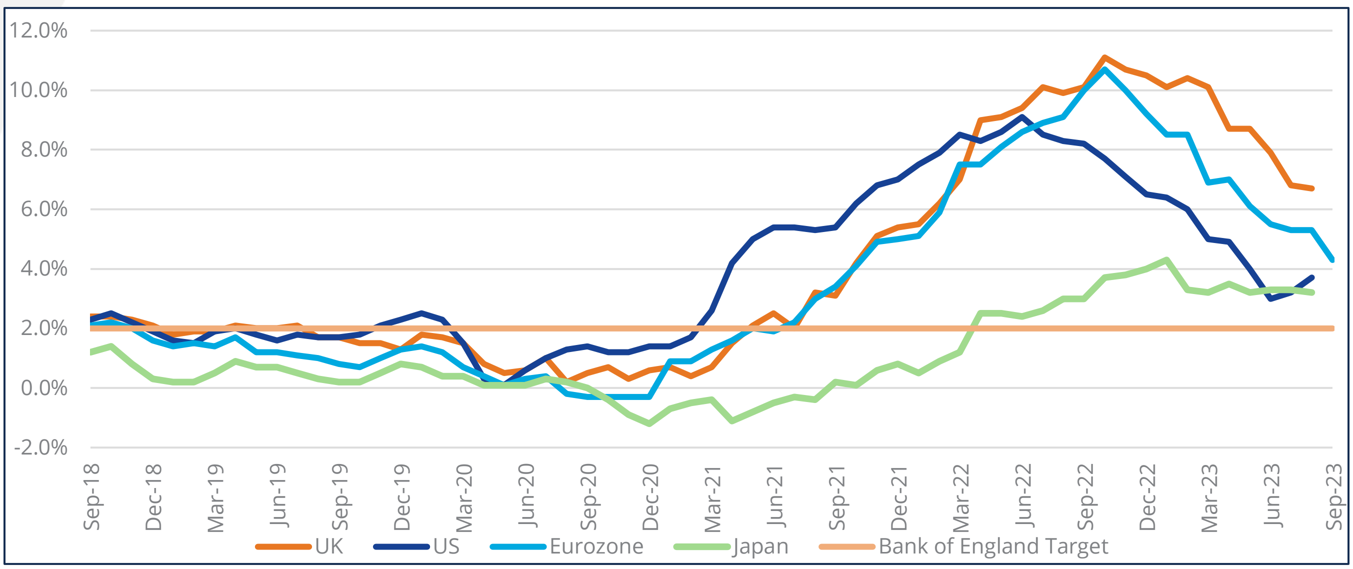
	CPI	Core Inflation	Wage Inflation	Unemployment Rate
US	3.2%	4.1%	4.6%	3.9%
EU	2.9%	5.1%	5.2%	6.0%
UK	4.6%	6.1%	7.9%	4.2%
Japan	3.0%	2.8%	1.2%	2.6%

Source : various

Longer term, it remains my opinion that we are moving into a period of more volatile inflation. The growth rate at which capacity constraints are encountered is lower than was previously thought, this is not helped by an unstable geopolitical situation. The effect of greater volatility in inflation will be felt in interest rates as central banks attempt to fulfil their twin briefs of low inflation and high employment. This is likely to cause shorter business cycles more akin to the 1970's and 1980's than the last two decades.

On a more positive note, long term returns, particularly from bonds, are becoming more attractive and the opportunity to earn a return higher than inflation is again feasible at a level of risk that is potentially acceptable to well-funded LGPS Funds.

Chart 3: Consumer price inflation (CPI)



Source: Bloomberg

Markets

Given the above, my expectation is for interest rates to stay high for the majority of 2024. This continues to make current yields quite attractive, particularly the shorter duration end of the yield curve as short rates are still slightly higher than long rates at present.

In this higher interest rate and slowing economic growth environment I would not expect equities to perform that well, on the one hand they are a partial inflation hedge but when the risks are of a slowing economy and stubborn inflation, the ability to pass costs on to consumers may become constrained.

For Alternatives, it has taken some time to see the effect of interest rate rises on valuations given the illiquid nature of these investments and the opaque nature of pricing but that is now coming through with Infrastructure valuations under some pressure this quarter. I see no rush to increase investments in this area at the current time and remain slightly wary of private equity valuations in particular as the one area where we have yet to see valuations fall but with limited transactions and very little pricing data this gives me little confidence in current valuations. Throughout the last decade an important element of the private equity business model has been the use of cheap debt to leverage up businesses and this will have become more difficult to engineer over the last year.

Inflation is now falling across much of the developed world and with that we should see interest rates nearing a peak, in the US, EU and UK, although I believe any interest rate cuts are unlikely till late 2024 unless economies are much weaker than expected. Because of this, short duration bonds now look attractive with UK Corporate Investment Grade Bond funds with a duration of 2 years or less yielding close to 7%. Because the duration is short these bonds can be held to maturity giving little risk in exchange for a 7% yield. Obviously, such high yield is above the future investment return required by the actuary and is above the return I would expect from other asset classes over the next couple of years. Unfortunately, Brunel does not have an investment offering in this space. I am not yet convinced that inflation is truly under control enough for me to recommend investing into longer duration bonds which is where the Brunel bond offering is.

Table 2: The Fund's current asset allocation against the Strategic Benchmark

Asset class	Asset Allocation as at 31/3/23	Strategic Asset Allocation	Position against the SAA	Deviation in cash terms
Equities	54.3%	**51%**	+3.3%	-£40m
Fixed Interest	13.6%	**16%**	-2.4%	-£12m
Property	7.5%	**8%**	-0.5%	+£44m
Diversified Growth	2.1%	**0%**	+2.1%	
Secure Income	3.8%	**5%**	-1.2%	-£246m
Alternatives	17.1%	**20%**	-2.9%	+£308m
Cash	1.4%	**0%**	+1.4%	-£56m

Figures do not add up due to rounding. These figures are taken from the State Street report.

Points for Consideration

1) **UK Equity Mandate (Brunel):** The Fund is currently invested in UK Equities via an actively managed mandate through Brunel. This mandate is benchmarked against the FT All-Share ex Investment Trusts Index which includes all companies quoted on the UK's main market. The largest companies quoted in the UK are focused around the Oil, Banking and Mining industries with very little exposure to technology companies. This bias means a UK portfolio selected from stocks within the FT All-Share is likely to have some focus on cyclical industries and have relatively high carbon emissions.

   Given the Fund's UK base there is some benefit in holding UK assets but better performance over the long-term with a lower carbon impact is likely to be found in the smaller companies' space and, as such, it would make sense to switch this mandate to the FT 250 or FT Smaller Companies Index. This is highly likely to require a change in managers but, in my opinion, is likely to increase the probability of the portfolio outperforming the benchmark over time.

   Brunel continue to research changing the specification for this mandate. If the mandate is changed it will take time for new managers to be selected and the mandate to be operational.

2) **Sustainable Equities (Brunel):** This portfolio continues to perform poorly has returned -5.6% per annum behind its benchmark over 3-years. This level of underperformance is large given the level of risk taken within the portfolio. The portfolio aims to invest in stocks which make a positive impact on the climate transition. It is true that the timing of the inception of this portfolio in September 2020 was just as Covid and then the Russian invasion of Ukraine

occurred and this lead to the sharp rise in interest rates and the strong performance of energy stocks. It has also meant that the portfolio was built when capital was cheap and freely available and so companies which were growing quickly but not very profitable could get finance based on future profitability. That has now changed, capital is no longer cheap and companies need to show profitability and certainty of cash flows to gain access to debt markets which will have altered the business model of some of the investments made in this portfolio. However, even with accepting the above, I suspect that the manager, having been given a very specific brief for this mandate has less of a focus on valuations than on sustainability criteria and business model. Given the scale of the underperformance and the importance of this portfolio to the Fund (16.2% of investments) it would seem reasonable to challenge Brunel on this portfolio and ask for an updated review of the manager.

3) **Alternative Investments:** The Fund has the opportunity to reallocate to the Alternative investment space with Brunel opening a further window to commit new allocations in April 2024 (cycle 4). In order to review allocations and whether the target weightings in the Fund's Strategic Asset Allocation are being met, it would be useful to review the expected cash distributions from existing holdings and conduct a cash flow analysis of where the Fund is currently and how this will develop into the future. I would expect Brunel to be able to provide the necessary data to conduct this review.

   As part of the decision on whether to commit to cycle 4 of investments into Alternatives, it would be useful to hear Brunel's view on current valuations in the space. I believe that, due to their illiquid nature, some elements of the Alternative space have yet to fully reflect the effect of rising interest rates and bond yields in the valuation of their funds. I would not be surprised to see some weakness in values in the Private Equity space in particular over the next couple of years. The question is whether allocating capital now will allow managers to deploy that capital as prices fall back over the next few years or whether the managers will use any new capital to support existing investments which are struggling with high levels of leverage and the need to refinance their borrowings at today's higher rates?

Market Summary

- Inflation has broadly continued to fall throughout Q3 and whilst the US Fed, European Central Bank (ECB) and BoE all raised interest rates during the quarter, the rate of increase has slowed. With inflation decreasing across the board (with the exception of a slight rebound in the US) it is likely that rates will not increase much further. However, the slow pace of the decline in core inflation, as well as an uptick in the US over the quarter and the risk of renewed energy supply shortages as winter approaches, suggest that rates are likely to remain high for a longer period than previously thought: 10-Year UK rates rose very slightly over Q3 to 4.5%, but US 10-Year rates have risen nearly 1% to 4.6%. Labour markets remain robust, especially in the US (unemployment at 3.8% and job openings up 5.8% Year-on-Year in August) and GDP growth remains slow but largely positive.
- Q3 showed a reversal in the first g=half trend for equities. Global equities (MSCI World) fell -3.4% in local currency terms over the quarter, with Value (-2.5%) proving more resilient than Growth (-5.1%) as a style. Japanese and UK equities were notable exceptions to the downward trend, with Japanese equities returning 2.5% (TOPIX Index) in local currency and UK equities returning 1.8%. Performance in Japanese equities as a whole was largely down to the weakening yen which fell further against the US Dollar, however, large growth stocks were negatively affected by the rising interest rates and yields resulting in a -3.4% performance in the Nikkei 225 Total return. UK equities, due to their energy tilt, benefitted from the rising oil prices caused by Russia and Saudi Arabia's extension of voluntary output cuts. US equities fell (-3.3%) as expectations of near term cuts in rates were disappointed. Bonds continued to face headwinds caused by rising interest rates, with all government bonds performing negatively over the quarter and long dated index-linked down over 10%. Investment grade performed better and spreads over government bond yields remained stable over Q3: European Investment grade indices rose marginally, while the US index fell -3.4%. Tightening spreads and higher carry (coupon) allowed high yield to outperform credit. Interest rate-sensitive alternatives (e.g. Real Estate, Infrastructure) also showed a modest decline.

It is worth highlighting the following themes, impacting investment markets:

- **Core inflation proving sticky, so interest rates may stay higher for longer.** Inflation fell across the board this quarter (barring the US) with UK annual CPI falling to 6.7% in August, compared to 3.7% for the US and 4.3% for the Eurozone in September (UK data for September is not yet available). Core inflation (excluding energy and food prices) has also been falling, but much more slowly. US and Eurozone core inflation are both above headline inflation at 4.1% and 4.5% respectively. This all suggests the high inflation / high rates environment may last for rather longer than previously thought. This was reinforced by the US Fed which revised median expected rates for 2024 and 2025 up by 0.5%.

- **The US Dollar – tension between reserve currency status and ratings downgrade might cause increased FX volatility.** The US Dollar Index (DXY) steadily increased throughout the first 10 months of 2022 (by around 17.5%) on strong economic data and ongoing geopolitical uncertainty. The net result of this is that the US Dollar is the strongest it has been (barring the 2022 peak) since the early 2000s. At the same time, Fitch became the second major ratings agency to downgrade US Treasuries from an AAA to an AA+ over concerns around the extent of the US government debt and deficit as well as political brinkmanship in the debt limiting process. Whilst the move from AAA to AA+ is unlikely to have major impacts in the short-term, it increases the risk of changes in sentiment toward the USD, causing significant volatility.
- **China's weak Covid recovery and ongoing property crisis remove a key engine of global growth.** Low consumption spending and industrial activity as well as the struggling real estate sector are likely to lead to weak Chinese growth. The composite PMI remains above 50 but is decreasing, with the largest fall seen in services. The property market accounts for a quarter of all Chinese economic activity with real estate employing millions and providing the bulk of most people's savings. As the property prices drop, many people's savings have reduced significantly and so spending has decreased. Local governments rely on land sales to developers, which have dropped and local governments are having to cut back on services as a result. Trust companies that invest heavily in development loans are now seeing significant losses too. In short, the size and heavily debt-funded nature of the Chinese housing economy has caused it to spill over significantly into the rest of the economy. This has led Chinese growth to dip below US growth, after having been a leader of global growth since the Global Financial Crisis of 2008/9.
- Global equities fell in Q3, following the rally in the first half of the year. The VIX increased over the quarter from 14 to 18, back towards its 2022 level. The sell-off of global bonds has increased yields and put pressure on risk assets.
  - In the US, the S&P 500 fell by -3.3% and the NASDAQ composite also fell by -4%. Optimism over the end of policy tightening proved premature as inflation actually rebounded slightly this quarter and the US Fed indicated median rates would remain higher than expected through 2024.
  - UK equities increased by 1.8%, outperforming global equities. Inflation fell noticeably from 8.7% in May to 6.7% in August. This is the second quarter of significant falls from the highs of around 11% experienced in 2022. Therefore, after the August hike to 5.25%, the BoE kept the rate unchanged during September. The rising oil price contributed strongly to outperformance given the UK's energy tilt.
  - The Euro Stoxx 50 fell by -4.8% in Q3. Inflation continued to move downwards, aided by the ECB's double hike during the quarter. The ECB began to loosen its hawkish rhetoric as a result. The composite Purchasing Managers Index (PMI) has remained in marginal territory at 48.7 (below 50 equating to an economic contraction).
  - Japanese equities continued their strong run in Q3 (TOPIX returned 2.5%), but large growth companies underperformed, hence the Nikkei returned -3.4%. A weakening Yen has boosted exporters, as the BoJ maintains very accommodative monetary policy with core inflation remaining at 2.7%. The Yen fell a further -3.4% against the USD over the quarter. The extent of its weakening is beginning to cause some concern.
  - Emerging market equities fell by -2.9% as concerns over a more extended period of high US interest rates reduced risk appetites. Political uncertainty in Poland and falling Lithium prices in Chile contributed to the negative performance, but the underwhelming Chinese recovery and resurfacing issues with its housing sector were more significant contributors. Turkey notably outperformed following two rate rises, indicative of a more orthodox policy by the Central Bank.
- Medium and longer term bond yields rose over the quarter, as a result of predictions of more persistent high rates. This resulted in negative performance across the main government bond markets. The inversion of the US yield curve, as measured by the 10-year minus 2-year yields, reduced, ending the quarter at around -50bps, as mid and long term yields rose more than shorter bond yields. August saw Fitch downgrade the US's rating from AAA to AA+ leaving Moody's as the only major rating agency keeping US treasury debt at AAA. Fitch cited the increasing debt and deficit as well as 'erosion of governance' and political partisanship in the debt limiting process. In corporate bonds, high-yield credit outperformed as credit spreads tightened over the quarter.
  - The US 10-year Treasury yield rose in Q3, ending at 4.57% from 3.81%, while the 2-year yield rose from 4.90% to 5.05%. US Fed policy rates rose by 25 basis points to 5.25-5.50% in July.
  - The UK 10-year Gilt yield rose from 4.39% to 4.44% while 2-year yields fell from 5.25% to 4.90% due to an increase in demand in shorter-dated Gilts. BoE policy rates rose from 5% to 5.25% in August.

- European government bonds fell in Q3 as yields rose. Yields rose more in the medium to long-term. German-Italian bond spreads widened as Italian bonds matured and were sold out, Italy's debt continues to grow a considerable amount and the Pandemic Emergency Purchase Program (PEPP) buyback scheme stopped buying new bonds.
- US high-yield bonds outperformed investment grade, returning +2.2% and -3.4% respectively. European high-yield bonds returned +3.8%, outperforming the +0.7% for European investment grade and -1.0% for UK investment grade.

- Energy prices rose during Q3, as gas prices continued to rebound this quarter, although still sharply down from the pre-winter figures. Oil prices were also a major driver as Russia and Saudi Arabias, extended their voluntary output cuts.
  - US gas prices rose 32% in Q3. Prices remain low compared to their 2021/ 2022 peaks.
  - Brent crude oil rose 19.5% over Q3, to $95 per barrel. OPEC production cuts last quarter have now fed through into the price. The US started restocking its Strategic Petroleum Reserve, but slowly. However, it has as little as half of its pre-2022 inventory.
  - Gold and Copper fell -6.1% and -8.7% respectively over Q3. Precious metals prices generally fell, while industrial metals went up. Copper is a notable exception partly due to strong links to the Chinese markets. Gold fell given the high yields available on cash alternatives. Gold and Copper closed Q2 at 1,848 USD/toz and 374 USD/lb, respectively.
- Global listed property continued to decline, with the FTSE EPRA Nareit Global Index falling -3.9% in Q3.
  - The Nationwide House Price Index in the UK has declined after its increase last quarter, with the price index down -4.7% for the quarter, but up +4.5% for the last 12 months.
  - European commercial property has also continued to decline in the face of higher interest rates, with the Green Street Commercial Property Price Index down by -1.4% this quarter and -11% over the past 12 months.
- In currencies, the US Dollar strengthened generally throughout the quarter (DXY +3.6%), strengthening against Sterling, the Euro and the Japanese Yen. UK inflation is now in its second quarter of significant decrease. Bitcoin and Ethereum saw strong loses as the US increased regulation, although Ethereum's proof of stake concept has worked well so far since its introduction.