APPENDIX 2

MJ HUDSON Allenbridge

Fourth Quarter 2022 Investment Report

PREPARED FOR:

Derbyshire County Council Pension Fund: Pensions and Investment Committee Meeting

MARCH 2023

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Investment Report for Derbyshire County Council Pension Fund

This report has been prepared by Anthony Fletcher "External Investment Advisor" of Derbyshire County Council Pension Fund (the Fund). At the request of the Pension and Investment Committee the purpose of the report is to fulfil the following aims: -

- Provide an overview of market returns by asset class over the last quarter and 12 months.
- An analysis of the Fund's performance by asset class versus the Fund specific benchmark for the last quarter and the last 12 months.
- An overview of the economic and market outlook by major region, including consideration of the potential impact on the Fund's asset classes.
- An overview of the outlook for each of the Funds asset classes for the next two years; and recommend asset class weightings for the next quarter together with supporting rationale.

The report is expected to lead to discussions with the in-house team on findings and recommendations as required. The advisor is expected to attend quarterly meetings of the Pensions and Investment Committee to present his views and actively advise committee members. To the extent this report contains advice it is intended as strategic advice to inform the investment strategy statement rather than investment advice.

Meeting date 8th March 2023
Date of paper 15th February 2023

1. Market Background (Fourth quarter 2022)

After months of falling equity and bond markets the fourth quarter saw a change in direction with positive returns from most markets. The trigger for the change seems to have been the third monthly decline in the US inflation rate, which has led forecasters to suggest that the US Fed will be less aggressive with rate hikes and some even going as far to suggest rate cuts could be on the horizon. Despite the market optimism the global economy continues to weaken, inflation remains uncomfortably high, the war in Ukraine continues and central banks have increased interest rates and remain hawkish confirming that they will continue to fight inflation even at the cost of lower growth. The Fed, the BoE and the ECB all increased interest rates by 0.75% in October and again by 0.5% in December. The BoE also started its QT programme and in December the BoJ announced its first change in monetary policy, increasing the target yield for 10 year JGB's from 0.25% to 0.5%.

As can be seen in table 1, in Sterling terms over 3 months to the end of December global equities were up 2.2%. The range of returns was quite wide with the UK and Europe up over 8% and the US down 0.5%, the main driver of the relative performance was the sectoral split of the indices with the US "big tech" names delivering poor returns. This compares to a broad based -7.3% return from global equities over twelve months, with only the FTSE All share achieving a meagre +0.3% return. Most bond market returns were also positive over the quarter with non-government bonds delivering the best returns as both yields fell and spreads narrowed. Over twelve months all bond markets delivered huge negative returns, with the highest duration government bond markets delivering the worst returns. Stability returned to the UK Gilt market with the replacement of Liz Truss and Kwasi Kwarteng by the more fiscally prudent Rishi Sunak and Jeremy Hunt. 2022 was truly an "annus horribilis" for bond investors especially in the UK with possibly the worst returns for a lifetime. Property markets had a very poor quarter with both UK and Global property markets delivering negative returns dragging the annual return into negative territory. Returns from other real and private market assets like Private Equity and Infrastructure were positive over the quarter and the year.

At the Chinese Communist party congress in October, President Xi tightened his grip on power and secured himself another historic, un-opposed and previously unconstitutional in the post Mao period, third term as President. In December China finally and with immediate effect ended its Zero covid policy.

The US dollar weakened by around 8% against all major currencies over the quarter but remains more than 8% stronger since the beginning of the year. Commodity prices were mixed, oil and gas prices continued to fall from their post invasion peak in the second quarter on a milder European winter, higher inventories and falling demand. The prices of oil, gas and electricity are still considerably higher than they were at the end of 2021. Industrial commodity and metals prices continued to rise from their lows in the summer and were given a boost by China's re-opening.

The continued strength of market performance into the new year has surprised me. Interest rates are higher and while headline inflation appears to have peaked, I believe the current level of optimism could lead to a renewed bout of volatility later in the year as central banks continue to tighten monetary conditions and if inflation remains sticky in the second half of 2023 as the benefit of base effects start to fade.

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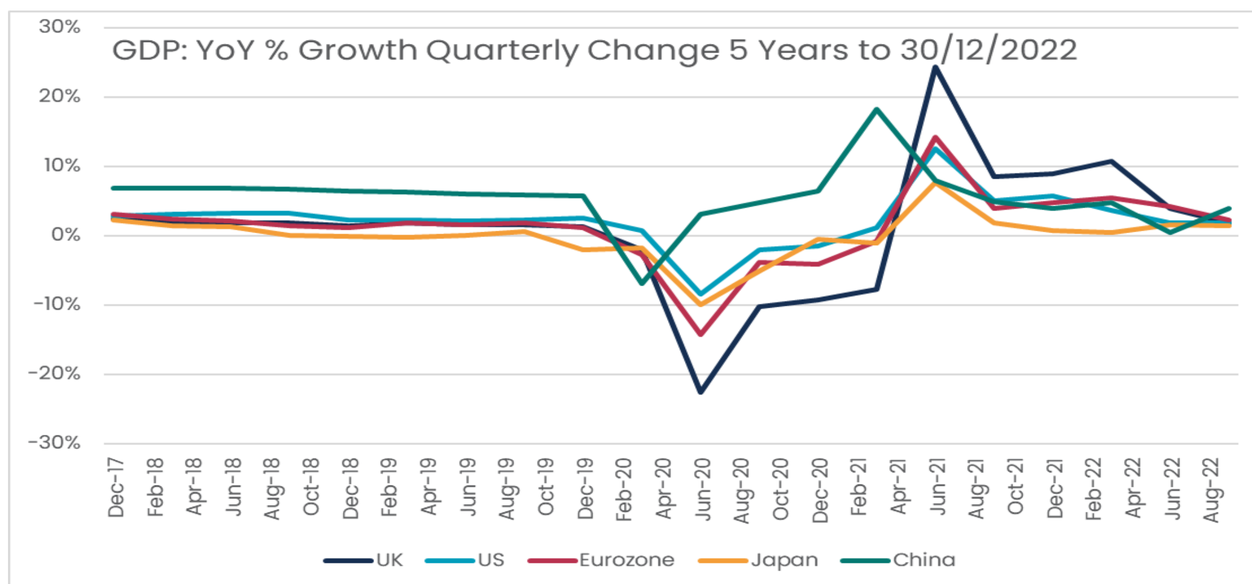
Chart 1: - Annualised rates of quarter on quarter GDP growth.



Source: - Bloomberg

Table 1, below shows the total investment return in pound Sterling for the major asset classes, using FTSE indices except where noted; for the month of January 2023 and the 3 and 12 months to the end of December 2022.

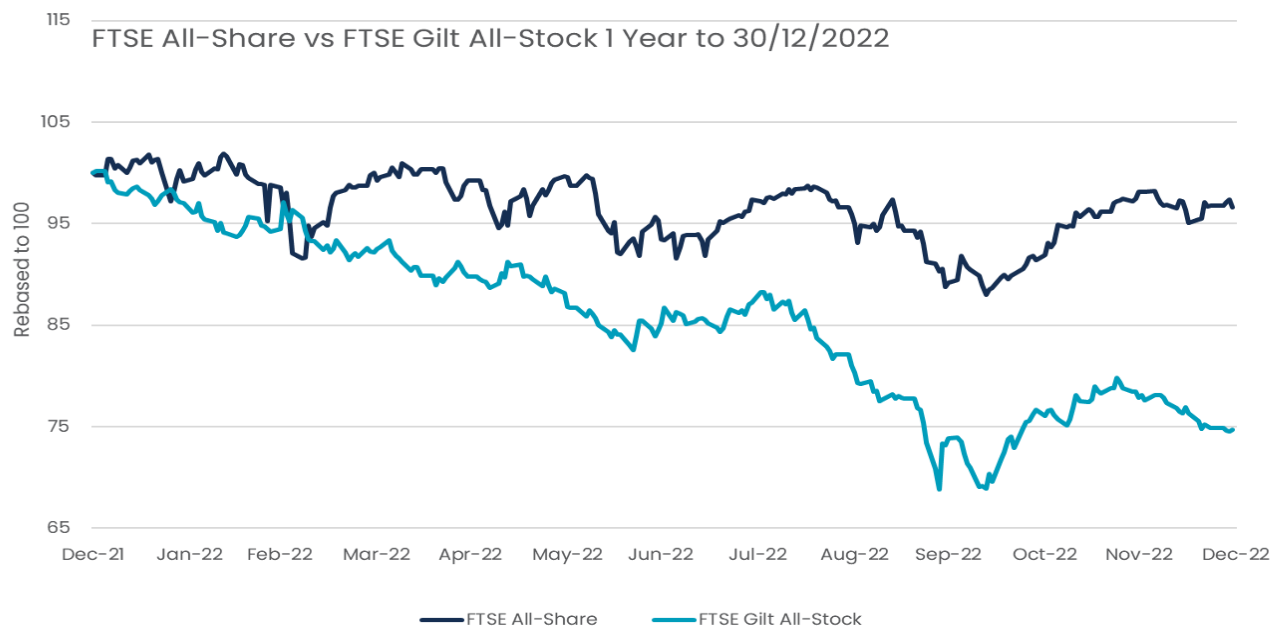
% TOTAL RETURN DIVIDENDS REINVESTED

MARKET RETURNS

		Period end 31st December 2022	
	January 2023	**3 months**	**12 months**
Global equity FTSE All-World	+4.6	+2.2	-7.3
Regional indices			
UK All Share	+4.5	+8.9	+0.3
North America	+4.2	-0.5	-8.8
Europe ex UK	+6.7	+8.3	-9.4
Japan	+3.4	+4.8	-4.8
Emerging	+4.6	+0.7	-6.5
UK Gilts - Conventional All Stocks	+2.8	+1.7	-23.8
UK Gilts - Index Linked All Stocks	+3.2	-6.0	-33.6
UK Corporate bonds*	+4.1	+7.2	-19.5
Overseas Government Bonds**	+1.8	-0.5	-12.3
UK Property quarterly^	-	-10.7	-6.1
Sterling 7 day SONIA	+0.3	+0.7	+1.4

^ MSCI indices * ICE £ Corporate Bond, UC00; **ICE global government ex UK LOC, N0L1

Chart 2: - UK bond and equity market returns - 12 months to 31st December 2022



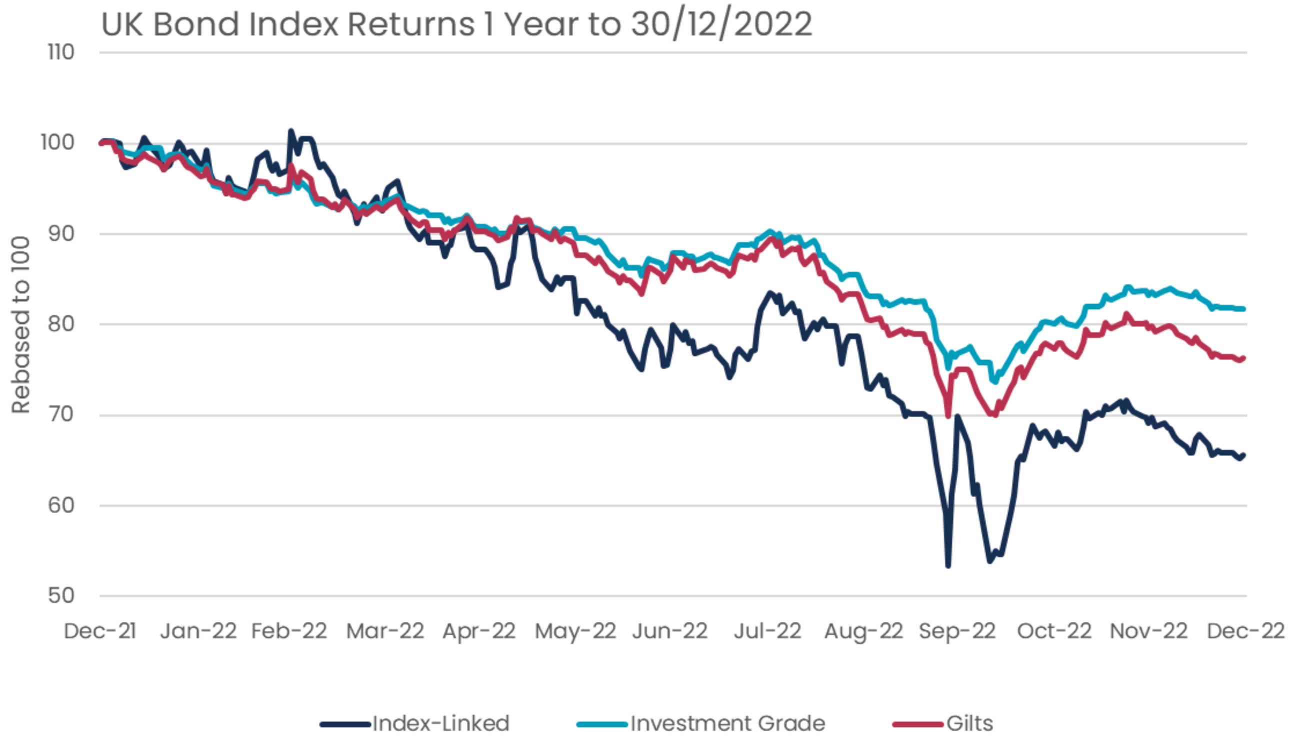
Source: - Bloomberg

Table 2: - Change in Bond Market yields over the quarter and 12 months.

BOND MARKET % YIELD TO MATURITY	30th September 2022	31st December 2022	Quarterly Change %	31st December 2021	Current 15th February 2023
UK GOVERNMENT BONDS (GILTS)					
10 year	4.09	3.67	**-0.42**	0.98	**3.48**
30 year	3.83	3.95	**+0.12**	1.13	**3.87**
All Stocks ILG	-0.15	+0.24	**+0.99**	-2.60	**+0.33**
OVERSEAS 10 YEAR GOVERNMENT BONDS					
US Treasury	3.80	3.83	**+0.03**	1.52	**3.83**
Germany	2.11	2.56	**+0.45**	-0.18	**2.47**
Japan	0.25	0.42	**+0.17**	0.07	**0.50**
NON-GOVERNMENT BOND INDICES					
Global corporates	5.28	5.10	**-0.18**	1.86	**4.93**
Global High yield	9.79	8.86	**-0.93**	4.73	**8.24**
Emerging markets	7.82	6.99	**-0.83**	4.05	**6.98**

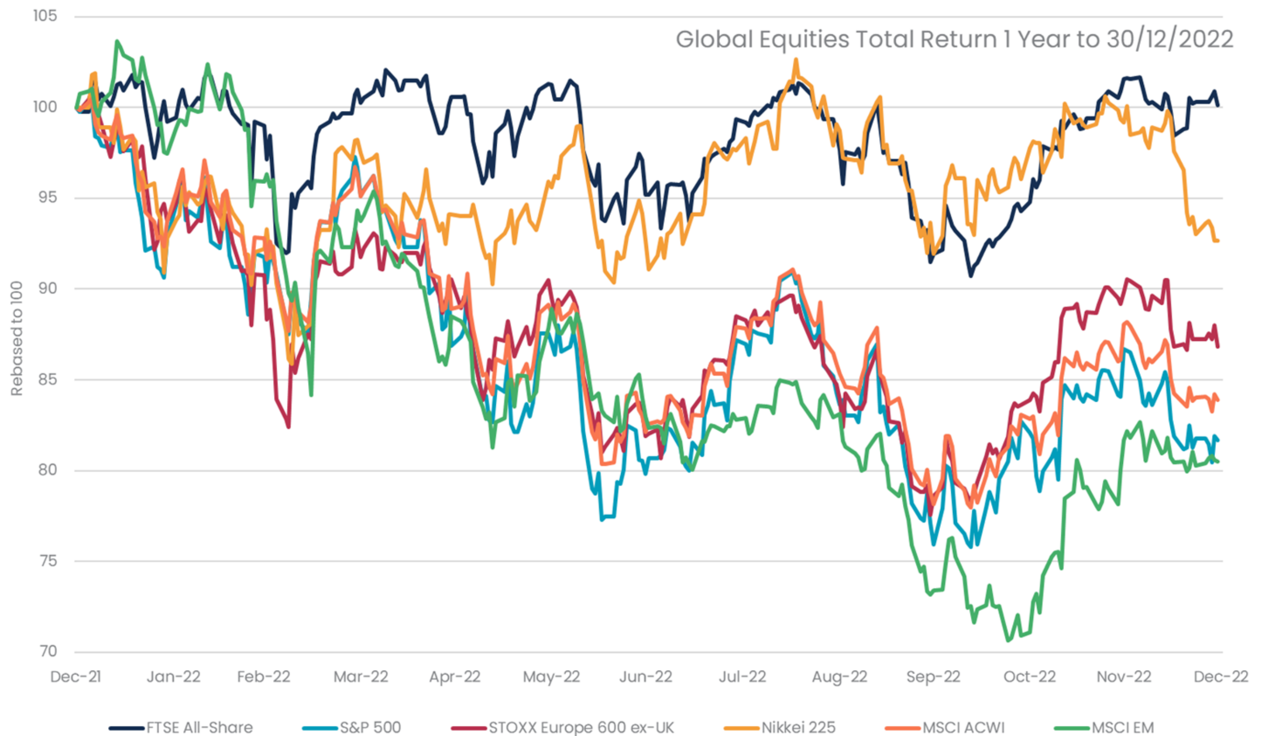
Source: - Trading economics and ICE Indices G0LI, G0BC, HW00, EMGB, 15th February 2023.

Chart 3: - UK Bond index returns, 12 months to 31st December 2022



Source: - Bloomberg

Chart 4: - Global equity market returns in local currency, 12 months to 31st December 2022



Source: - Bloomberg

Recent developments (January and up to 17th February 2023)

The markets continue to believe the central banks are less hawkish but quarter to date the US Fed has increased rates by 0.25% to 4.75% and the BoE and the ECB have increased rates by 0.5% to 4% and 3% respectively. All these major central banks have indicated that they are not about to end the tightening of monetary policy in light of still high inflation, tight labour markets and reasonably resilient consumer spending.

The decision by China to abandon its zero covid and lock down policies has already resulted in a marked uptick in that regions' activity. I believe it is likely that the same surge in "animal spirits" the desire to spend on getting out and the return to freedom of movement, could lead to a sharp untick in spending and the start of higher inflation just as it did in the developed world when those economies re-opened in 2021.

At the moment the markets are determined to see both good and bad economic news as good news for markets. The bad news because it will bring an early end to the tightening cycle and the good news as a sign that things are starting to get better. Since October equity markets have rallied 10 to 15% in local currency terms, as a result a lot of good news is already in the price. I'm not sure how long this can continue for but I believe that markets are likely to be more volatile going forward.

2. Investment Performance

Table 3 shows the performance of the Derbyshire Pension Fund versus the Fund specific benchmark for the quarter and year to 31st December 2022. Over 12 months, Growth assets underperformed whereas Income and Protection assets outperformed. All the individual active Growth asset managers underperformed their respective benchmarks, with the exception of the US and UK over 3 months and the US and Private Equity over 12 months.

Over 10 years the Fund has achieved a total return of 7.4% per annum, net of fees.

Table 3: - Derbyshire Pension Fund and Benchmark returns

% TOTAL RETURN (NET) 31ST DECEMBER 2022	3 MONTHS		12 MONTHS	
	Derbyshire Pension Fund	**Benchmark**	**Derbyshire Pension Fund**	**Benchmark**
Total Growth Assets	**+3.8**	**+4.0**	**-7.3**	**-5.0**
UK Equity	+9.3	+8.9	-1.2	+0.3
Total Overseas Equity	**+2.0**	**+2.7**	**-11.1**	**-6.6**
North America	-0.3	-1.5	-7.6	-8.8
Japan	+4.1	+4.8	-9.1	-4.8
Emerging markets	+0.8	+0.7	-12.5	-6.7
Global Sustainable Equity	+1.9	+2.5	-12.6	-7.1
Global Private Equity	+2.4	+2.8	+6.2	-6.1
Total Protection Assets	**+1.7**	**+0.2**	**-22.2**	**-25.1**
UK & Overseas Government	+3.9	+1.7	-20.8	-23.8
UK & Overseas Inflation Linked	-2.7	-6.0	-27.8	-33.6
Global Corporate bonds	+4.9	+5.1	-19.0	-17.3
Total Income Assets	**-1.0**	**-3.2**	**+1.5**	**-1.0**
Multi-asset Credit	+2.8	+2.7	-1.4	+0.5
Infrastructure	+2.2	+1.2	+8.8	+3.4
Property (all sectors)	-7.7	-11.8	-4.0	-7.2
Internal Cash	+0.5	+0.7	+0.9	+1.4
Total Fund	**+2.1**	**+1.5**	**-7.6**	**-7.7**

Total fund value on 31st December 2022 £5,809 million

At the end of December, the Fund was broadly neutral growth assets, within equity the Fund was underweight Global sustainable with a small overweight to the UK and a residual position in US Equity. The Fund was also 3% underweight protection assets and 1% overweight income assets relative to the strategic benchmark. Over the fourth quarter of 2022, the Fund outperformed with both

asset allocation and stock selection decisions making a positive contribution. The overweight allocation to Income assets made the largest contribution.

Over 3 years to the end of December, each of the broad asset categories in the Fund has outperformed the benchmark and the total return of the whole Fund, net of fees was +3.2% p.a. compared to the benchmark return of +2.5% p.a.

Growth assets – Equity performance

Total growth asset aggregate performance in the fourth quarter and year as whole was lower than the strategic benchmark. Only the UK and North American equity portfolios delivered an outperformance their indices over 3 months and only North America and global private equity outperforming over twelve months.

Over 10 years growth assets have returned on average 9.3% p.a. compared to 8.9% p.a. for the benchmark.

Protection assets - Fixed Income Performance

The Fund remains underweight its allocation to UK government bonds and has less interest rate sensitivity than the benchmark. As a result, the government bond portfolio significantly outperformed the benchmark over 3 and 12 months. Over one quarter and the year, the global corporate bond managers underperformed their benchmark.

Over 10 years protection assets have on average returned +1.7% p.a. compared to the benchmark return of +1.6% p.a.

Income assets – Property, Infrastructure and MAC

Over the quarter, the combined portfolio of income assets has outperformed the benchmark, with all 3 asset classes outperforming their respective indices. Over 12 months a better period for measuring returns both property and Infrastructure outperformed while the MAC portfolio underperformed.

Over 10 years Income assets have on average returned 9.7% p.a. compared to the benchmark return of 4.2% p.a.

3. Economic and Market outlook

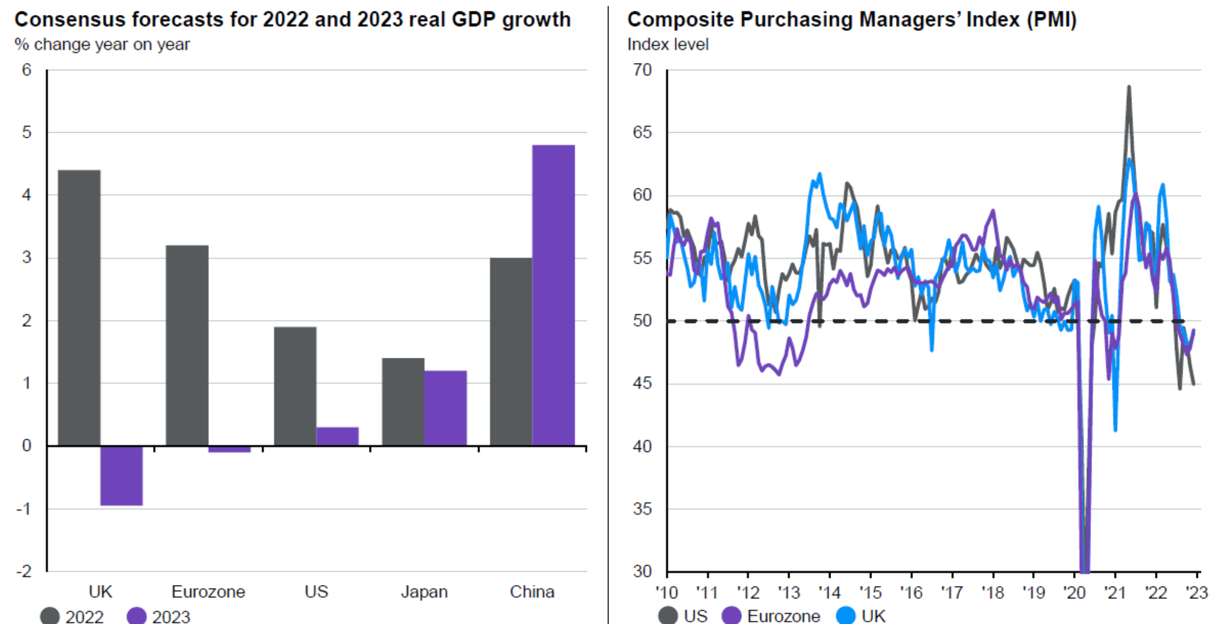
Economic outlook

There is no doubt from the macro-economic data that the outlook for the global economy has been worsening. Growth is widely expected to slow to very low levels over the next 12 months but with most economies managing to avoid a recession. The exceptions are Europe which is forecast to achieve almost no growth this year and the UK which is widely expected to fall into recessionary territory at some point. In the other direction China is expected to rebound strongly from its zero covid policy. The concern I have is how inflationary is the Chinese re-opening likely to be, both domestically as consumer activity increases and internationally as the demand for globally resourced raw materials increases as manufacturing production returns to normal.

Inflation remains my main concern, does it get out of hand in China as it did in the developed economies during the re-opening rebound? In the developed economies how much gets passed through into core goods and services will determine how long it remains high and how long the central banks need to keep tightening monetary policy. As chart 6 below shows labour markets remain tight with job vacancies and private sector pay awards at a high levels, labour unrest is not being experienced just by the UK.

While the outlook for economic growth has worsened the expected recession has been widely forecast by the markets. Equity markets believe that the sell off last year pre-empted this economic weakness hence their optimism in the face of a worsening economic outlook.

Chart 5: - Consensus GDP forecasts and PMI's (leading indicators of growth)



Source: - JPMorgan Asset management January 2023

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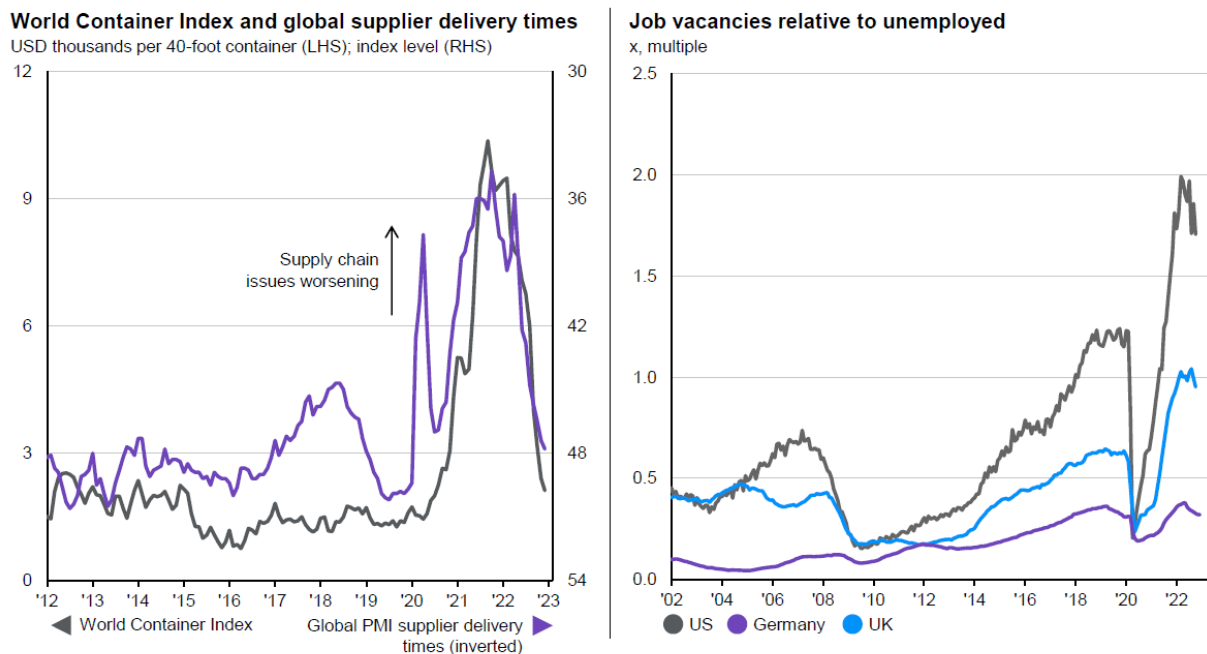
Inflation

It looks as though the surge in inflation rates may have passed. In the US the rate of headline inflation has been falling since the summer and it has been falling in the UK and Europe since October. The only major economy where inflation is still rising at the moment is Japan, while the current rate is only 4%, this is the highest recorded rate of inflation in 31 years. As I mentioned last time the general causes of inflation are a longer than necessary period of easy monetary policy, combined with a surge in goods and then services prices as the post covid recovery took hold and then the invasion of Ukraine. The regional variations have been caused by supply chain disruption, the availability of workers, resilient sources of energy and the strength of the US dollar. The recent falls have been driven mainly by falling demand for energy as consumption has been cut and the milder European winter.

As can be seen in chart 6 there is further good news on supply chain disruption and shipping costs and this could be further eased by the complete re-opening of the Chinese economy. On the other hand, the right hand side of chart 6 shows that the availability of workers remains a problem especially in the US and the UK.

Chart 6: - Global supply chains and job vacancies



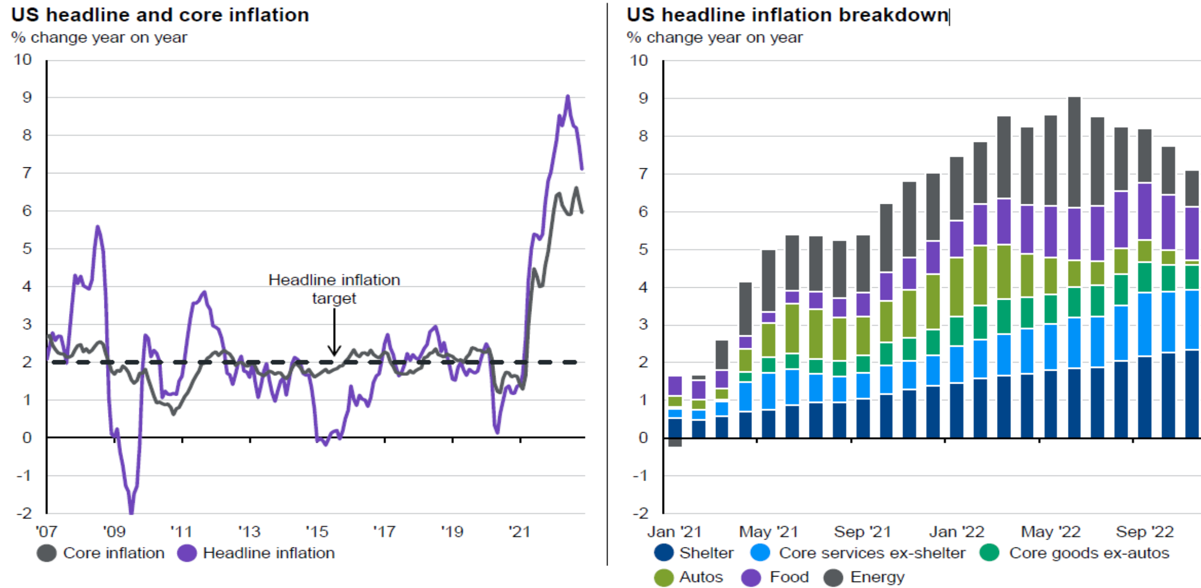
Source: - JPMAM January 2023

While oil and gas and wholesale electricity prices have fallen, they are still in the case of oil and gas 10% and 20% higher and electricity prices are roughly 50% higher than they were before the invasion of Ukraine. Industrial commodity prices have started to rise from their lows in the summer of 2022 and the price of food and wages have continued to rise as higher energy costs work their way through the economy.

The left hand side of Chart 7 shows how, even as headline inflation falls, core inflation can remain stubbornly high. The right hand side shows the components of that make up headline inflation and

suggests that even as headline inflation falls due to lower energy prices, core inflation may remain high after the base effects of higher energy prices drop out of the indices in the first half of 2023.

Chart 7: - US headline and core inflation and the components of headline inflation.

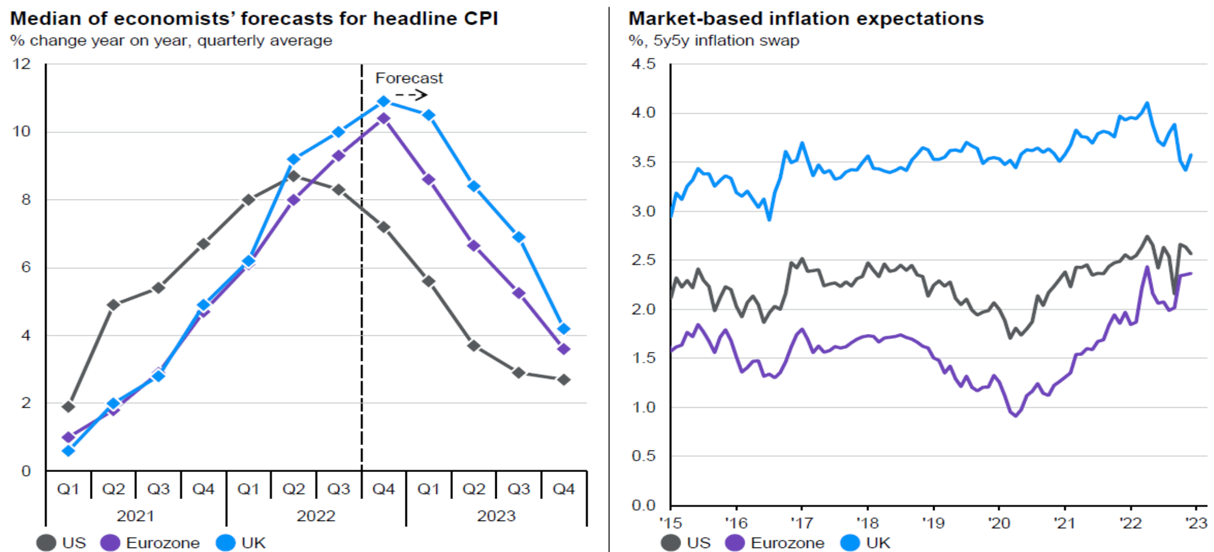


Source: - JPMAM January 2023

Chart 8 shows that economists expect inflation to fall over the whole of 2023, but then to settle at levels above central bank's target rates. The bond markets also seem to expect over the long term that levels of inflation will be higher than they were before covid and the invasion of Ukraine.

I believe the period of low inflation following the global financial crisis (GFC) is behind us and inflation rates could return to levels we were more familiar with before the GFC and this may require higher levels of interest rates and a more conservative monetary policy approach from central banks.

Chart 8: - Economists' median forecasts of headline CPI, in the US, UK and Europe and market forward looking inflationary expectations.

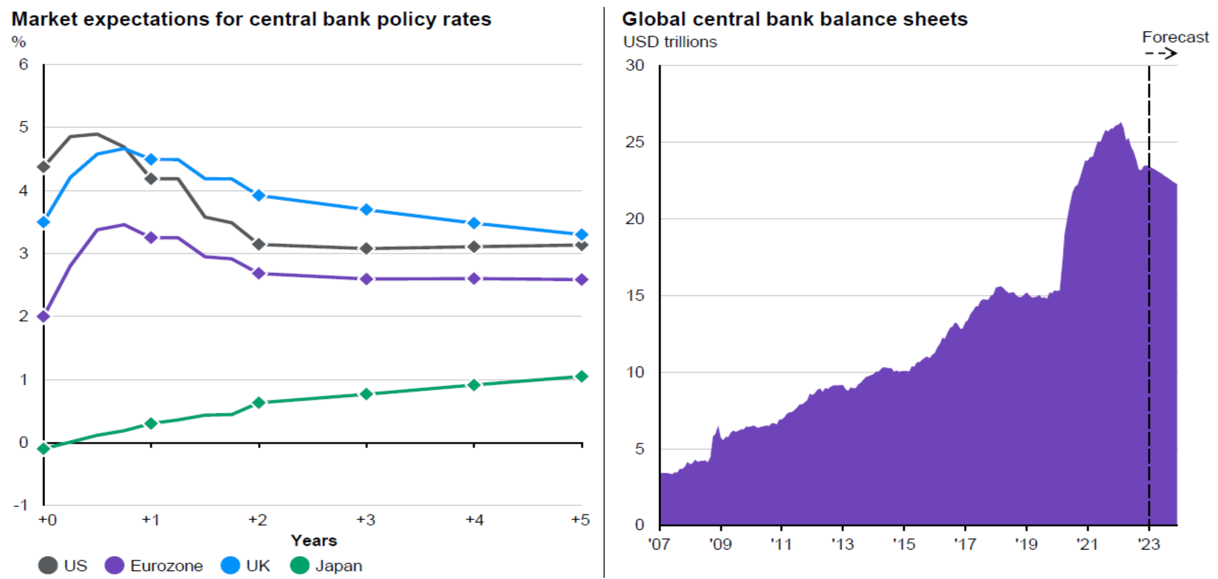


Source: - JPMAM January 2023

Central Banks

After the aggressive interventions over the last 8 months, it appears that central banks have returned to business as usual. Rates are still rising but not in such a way that they are too much of a surprise for the markets. At their most recent meetings the Fed only increased rates by 0.25% and the BoE and the ECB increased rates by 0.5%. Unlike many market participants I expect interest rates to continue to rise and along with QT these policies are likely to have a further tightening effect on monetary policy. I also believe that later in the year core inflation may become the problem causing rates to stay higher for longer than the markets expect.

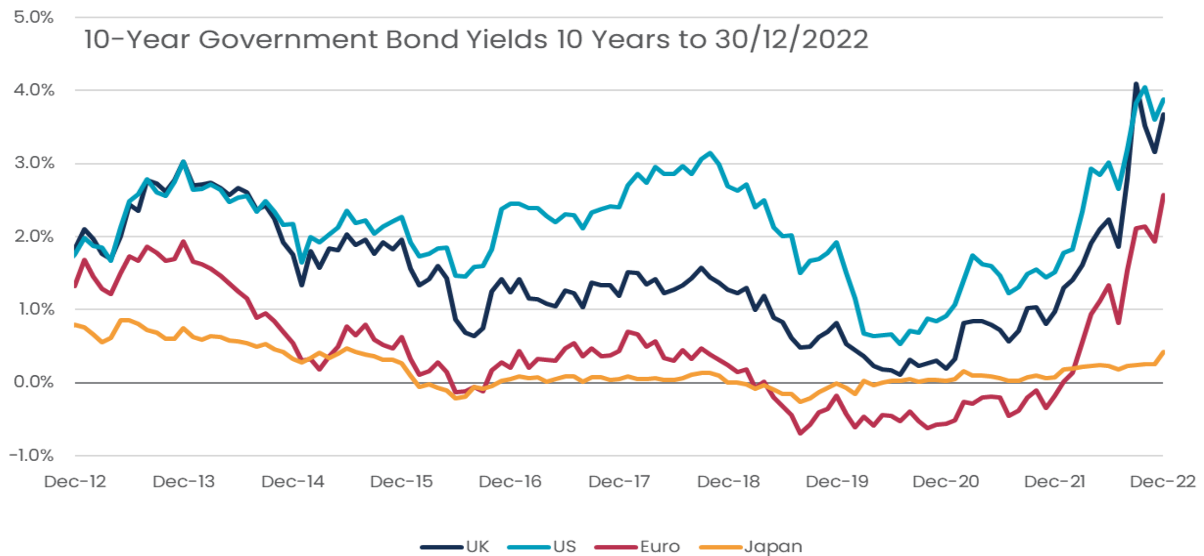
Chart 9: **-** Market expectations for Central bank policy rates balance sheet reduction.



Source: - JPMAM January 2023

Government bonds

Chart 10: - Government bond yields, last 10 years.



Source: - Bloomberg

As can be seen in chart 10, 10 year government bond yields in Germany and Japan are higher than they were at the end of the third quarter, whereas in the US and UK they are about the same. With the exception of Japan, government bonds yields are at their highest level for 10 years. The shape of the yield curve has also changed with 10 year yields unchanged to slightly lower whereas 2 year bond yields are higher. The increase in short dated yields reflects the recent increases in central bank policy rates and the unchanged longer dated yields the belief of the bond markets that a recession and falling interest rates are now more likely. While I accept that the current shape of the curve maybe maintained for the rest of year, as can be seen in table 6 below I expect that interest rates and government bond yields have further rise in 2023.

The factors leading to higher yields have not changed. A return to more normal levels of interest rates, inflation and bond yields, as the global economy moves away from the need of emergency low interest rates to support the recovery from the GFC and the covid pandemic. Increased primary supply of bonds as governments fund their budget deficits and secondary supply from central banks as they sell back to the market their stock of QE acquired bonds. Finally, and specifically in the UK, lower demand for gilts from corporate pension funds as their LDI strategies will be less levered and because, higher yields have lowered their liabilities.

I believe government bonds have become cheaper and the investment opportunity needs to be considered in the context of the risks the Fund needs to take. However, I accept that relative to other opportunities, government bonds may not yet be cheap enough to merit an increased strategic allocation, but like non-government bonds, they may already be cheap enough to consider tactically increasing exposure.

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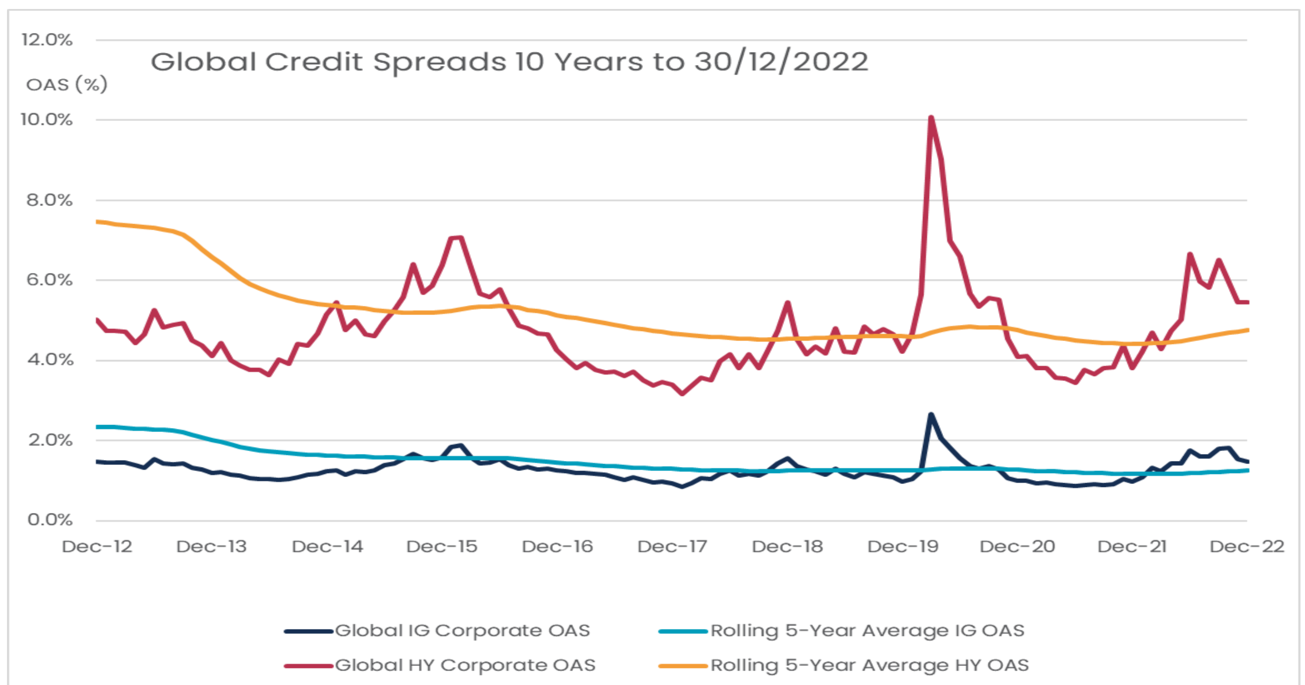
Non-government bonds

Chart 11 below, shows the excess yield spread for both investment grade non-government and high yield bonds to the end of the quarter. As can be seen from the chart spreads narrowed over the quarter and this has continued year to date. Despite the fall in spread, I still believe the total yield of investment grade non-government bonds may be high enough to compensate for their interest rate sensitivity and may be cheap enough to consider increasing exposure. I still believe that high yield bonds and loans owned as part the Multi-asset Credit allocation can deliver better returns. These assets have much lower interest rate sensitivity (duration), much higher yields, and because many have floating rather than fixed coupons, they can continue to benefit from rising interest rates and the monthly carry provides an attractive source of income.

High yield assets are more sensitive to the economy, so the expected slowdown in economic growth has increased the risk of default especially for more leveraged parts of the economy. However, I still expect Multi-asset Credit funds with their mix of low duration bonds and floating rate loans to outperform both government and investment grade non-government bonds. Provided the pace of downgrades and defaults does not increase significantly, as the key to success with this asset class, is picking managers with the skill to avoid defaults.

Chart 11: - Credit spreads, extra yield over government bonds, last 10 years.

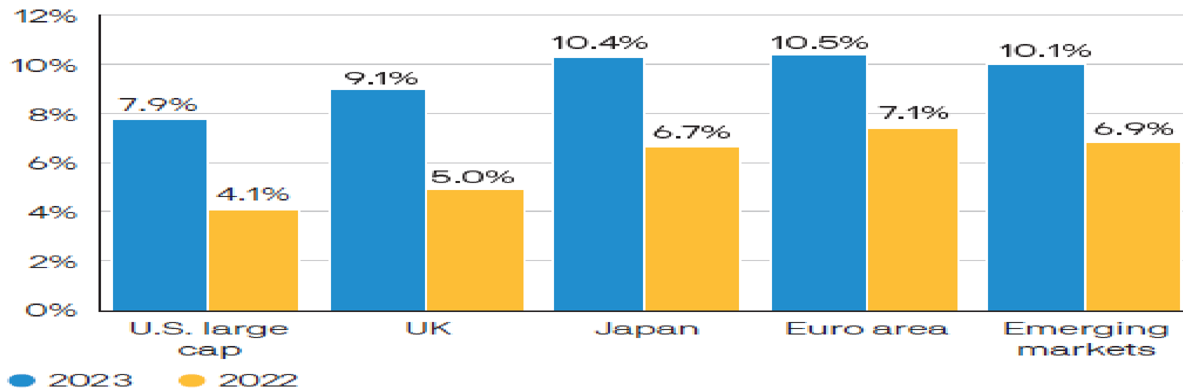


Source: - Bloomberg

Equities

As mentioned last time and shown in chart 12, medium to long term return expectations for equity markets have been revised much higher since the summer of 2022. However, for the markets to hold on to the positive returns achieved since October and throughout 2023, a number of economic outcomes need to be confirmed, sustainably falling inflation and a moderate recession to name just two. While I believe in a moderate recession, I am less certain about inflation continuing to fall in the second half of the year and if inflation doesn't fall, central banks are likely to continue to hike rates beyond the level currently priced into market expectations.

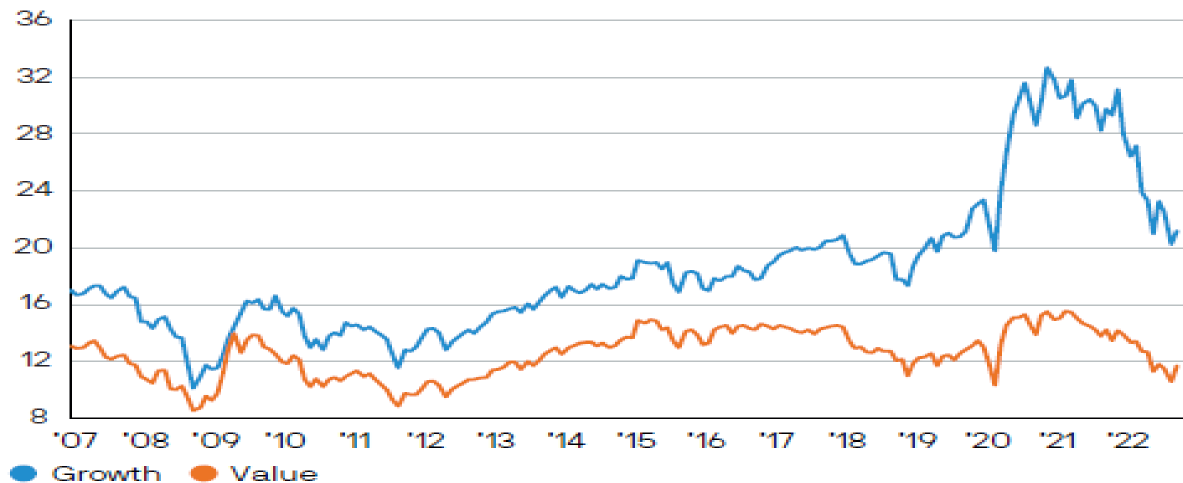
Chart 12: - JPMAM Long term capital market return forecasts, regional equity indices



Source: J.P. Morgan Asset Management; data as of September 30, 2022. Please note that we changed our forecasting methodology for MSCI China this year, now treating the market as an asset whose local currency is CNY. The change in our emerging market equity returns reflects this change.

By the end of September 2022, global equity markets had declined around 20% to 25% from their peak in local currency terms. Historically, following this level of decline, stock markets have tended to be higher a year later. There have been two exceptions since 1950: the 2008 financial crisis and the bursting of the dot-com bubble in 2000. While there are few macro-economic parallels with 2008, the valuation especially of the US big tech growth stocks which led the post covid rally and the decline in prices in 2022 is still not especially cheap by historical standards. Value stocks, however, are now quite reasonably valued compared with history as chart 13 suggests.

Chart 13: - MSCI World Growth and Value indices, forward price to earnings ratio, multiple.



Source: - JPM Asset Management., January 2023

Another risk to equities is that consensus 12-month forward earnings expectations shown in chart 14 below may still be too high. A recession for instance could lead to a period of negative earnings growth and at the very least is likely to result in further reductions in earnings expectations.

The issue with the current level of equity markets is the other way round to where we were in the summer of 2022. At that time, it was probably fair to say that equities were "over sold" having aggressively responded to the "unexpected" tightening by central banks. I now believe they are "over bought" on mis-placed optimism that central banks will not increase rates as much as previously expected. I do not believe the markets will give back all their recent gains but I do feel in the short term equity prices could be lower and if interest rates and bond yields increase as I expect over the rest of the year growth stocks will remain under pressure.

GDP

Table 4 shows the consensus forecasts for GDP growth in calendar 2022 and 2023 and my expectations in November 2022 and January 2023.

Table 4: - GDP forecasts - Consensus versus Advisor expectations.

% CHANGE YOY								
	2022				2023			
	NOVEMBER		JANUARY		NOVEMBER		JANUARY	
	Consensus	AF	Consensus	AF	Consensus	AF	Consensus	AF
US	1.8	**1.5**	2.0	**2.1**	0.2	**0.5**	0.3	**0.5**
UK	4.2	**3.0**	4.2	**4.0**	-0.9	**-1.0**	-1.0	**-1.0**
Japan	1.5	**1.4**	1.2	**1.1**	1.4	**1.2**	1.2	**1.2**
EU	3.1	**2.0**	4.1	**1.9**	0.1	**-0.5**	0.2	**-0.5**
China	3.2	**4.0**	2.9	**2.9**	4.5	**4.5**	4.6	**5.0**
SE Asia	5.5	**5.5**	5.6	**5.5**	4.2	**4.2**	4.2	**5.0**

Source: - Consensus Economics January 2023

Between November and January consensus forecasts for GDP growth in 2022 have been revised higher as actual growth outcomes have been better than expected. At the moment the consumer has remained willing to spend their savings accumulated during the Pandemic and / or to increase borrowing to consume despite higher prices for goods and services. The consensus has maintained its more pessimistic outlook for growth in 2023. I remain more negative for Growth in the UK and Europe than I do for the USA and the rest of the world.

Following the abrupt end to China's Zero Covid policy in December 2022, I expect growth in China and it's hinterland to rapidly increase. The same factors of unfettered ability to spend, pent-up demand to get out and do things and meet people and the savings accumulated during lock downs will drive consumer activity. It will be interesting to see if it also drives inflation to much higher levels just as it did in the USA, UK and Europe

The Chinese economy only grew by 2.9% in calendar 2022, slowing from a 3.9% annual growth rate in the third quarter. Industrial output slowed in the seven months to December and retail sales remained weak, both the result of China's covid restrictions. The economy missed it's official target of around 5.5%, 2022's 2.9% growth rate was the second slowest pace since 1976. China's leaders are set to announce the target for growth in 2023 at their annual parliamentary meeting in March.

In the US, the third quarter annualised growth rate was revised higher from +2.6% to + 3.2% and the advance report of fourth quarter annualised growth was +2.9%. Growth for the calendar year 2022 was reported at +2.1%. In the fourth quarter, consumer spending only increased by 2.1%, compared to 2.3% in the third quarter. While spending on goods increased slightly this was offset by larger falls in spending on services. Inventories increased, adding to growth as companies sought to increase

stocks of petroleum, coal products and chemicals at lower prices. Net trade also fell with imports falling faster than exports. Higher interest rates are also caused investment to decline as companies reduced equipment spending and residential investment continued to contract, falling by more than 25% over the last year.

The UK economy expanded 0.4% year-on-year in the last quarter of 2022, the weakest performance since the first quarter of 2021. Industrial production fell 4.2%, marking a fifth consecutive quarterly decline, growth in construction fell to 5.1% vs 6.3% in the third quarter and services output slowed to 1.2% from 3.2%. Growth in calendar 2022, was a respectable 4%, but this follows a record 7.6% growth in 2021. Despite two strong years of recovery from covid the UK economy is still 0.8% smaller than it was before the pandemic. The most recent monthly data, shows that the UK economy narrowly avoided a recession over the last 6 months of 2022. The Bank of England's latest forecasts predict very low growth over the next 12 months with a reasonable likelihood of at least 2 quarters of negative growth.

Preliminary data showed that the Japanese economy grew by +0.2% in the fourth quarter of 2022, recovering from a revised -0.3% contraction in the third quarter. Private consumption picked up after tough border controls were lifted despite headwinds from surging living costs. Government spending accelerated slightly. Net trade contributed positively with exports continuing to increase but the largest contribution to trade came from falling imports. Business investment also fell slightly. Falling imports and investment activity may not be a positive leading indicator for Japan's future growth prospects. Growth in the calendar year was +1.1%, slowing from +2.1% in 2021.

Eurozone quarterly economic growth was confirmed at a meagre +0.1% in the fourth quarter of 2022, down from +0.3% expansion in the third quarter. The main reasons for the slow down were higher inflation and rising borrowing costs, and bottlenecks caused by China's zero covid policy but also by the war in Ukraine. Both of which continue to have a significant impact principally on Germany's manufacturing supply chains. GDP grew in the Netherlands, Spain and France, but contracted in Germany and Italy. On a yearly basis, Euro Area economic growth slowed to +1.9% during the fourth quarter, the weakest rate of expansion since the 2020/21 recession.

Consumer Price Inflation

Table 5 shows the consensus forecasts for Consumer Price Inflation in calendar 2022 and 2023 and my expectations in November 2022 and January 2023.

Table 5: - Consumer Price Inflation forecasts - Consensus versus Advisor expectations

% CHANGE YOY								
	2022				2023			
	NOVEMBER		JANUARY		NOVEMBER		JANUARY	
	Consensus	AF	Consensus	AF	Consensus	AF	Consensus	AF
US	8.1	**8.0**	8.0	**8.0**	4.1	**4.3**	3.8	**4.0**
UK	8.9	**10.0**	9.0	**10.0**	7.1	**7.0**	7.2	**7.0**
Japan	2.3	**1.5**	2.4	**1.5**	1.7	**1.9**	1.9	**1.9**
EU	8.6	**9.2**	10.0	**9.2**	6.1	**6.5**	6.4	**6.8**
China	2.2	**2.2**	2.0	**2.2**	2.4	**2.4**	2.3	**3.0**
SE Asia	4.9	**4.9**	4.8	**4.9**	3.9	**3.9**	3.9	**4.2**

Source: - Consensus Economics January 2023

The consensus forecasts for inflation in 2022 have not materially changed since November. As mentioned last time I do not know what the peak rate of inflation will be, and while it is likely to be high it will be lower in the first half of 2023 as base effects from the huge increases seen in the first half of 2022 drop out of the index. I still expect inflation may be higher than the consensus for 2023 because the prices of goods were beginning to fall in the second half of 2022. Also, later in the year we will be able to see just how much of 2022's food, energy and labour price inflation has become permanent and in the core data. I continue to believe there will be marked regional differences in the rate of inflation. It will be interesting to see if China's re-opening proves to be just as inflationary as the experience of the US, UK and Europe.

The global goods supply chain continues to improve but again it will be interesting to see how much of China's production finds its way into the domestic and regional economy, rather than being sent to the US and Europe helping to further ease supply chain induced price rises. The offset to these higher inflationary risks is the weakness of growth forecasts for the developed economies which could lead to lower inflation as discretionary consumption is reduced.

In the medium to long term, I believe the period of low inflation is behind us and we should be prepared for the level and range of inflation that was "normal" before the global financial crisis.

The annual rate of US inflation slowed slightly to 6.4% in January from 6.5% in December, continuing a falling trend from 9.1% in the summer and the lowest reading since October 2021. Despite the fall in the index most of the key components important for discretionary spending increased. Food price increases were still above 10%, the cost of shelter increased +7.9% and energy prices were +8.7%. On the other hand, the cost of used cars and trucks, one of the major post covid drivers of inflation, fell by -11.6%, and both fuel oil and electricity price increases slowed

significantly. US core CPI also fell by 0.1% to 5.6%, the core rate of CPI peaked in September at 6.6%.

Annual inflation in the UK fell to 10.1% in January from 10.5% in December, this marks the third consecutive monthly decline in the rate of CPI, from the peak of 11.1% in October. The rate of increase of most components fell with the largest contribution coming from transportation costs. Increases in the cost of eating out, clothing and furniture also slowed. In contrast, inflation continues to accelerate the most for housing and utilities, with the greatest change in pace coming from healthcare and alcoholic beverages and tobacco. The core rate of CPI also decreased from 6.3% to 5.8%.

The estimated rate of inflation in the Euro Area fell to an eight-month low of 8.5% in January from 9.2% in December. This is likely to be revised as the German statistical office had to delay the release of its own figures due to technical issues with data processing. At the country level inflation slowed in Italy, Ireland and the Netherlands, but edged higher in Spain and France. In terms of components energy prices and services inflation rose at a slower pace, while costs increased faster for food, alcohol & tobacco and non-energy industrial goods. Core inflation which excludes prices of energy, food, alcohol and tobacco remained steady at its highest level of 5.2%.

The annual CPI inflation rate in Japan increased to 4.0 % in December 2022, the highest since January 1991 mainly due to higher imported raw commodities prices, made worse by the weakness of the Japanese yen. Upward price pressures came from all components, with energy prices showing the biggest increases, followed by water and food prices. The annual rate of core CPI also increased by 4.0%, to the highest rate since December 1981.

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4. The outlook for the securities markets

Bond Markets

In table 6, below I have set out my expectations for 3 month SONIA interest rates and benchmark 10 year government bond yields, over the next 6 and 12 months. They are not meant to be accurate point forecasts, more an indication of the possible direction of yields from February 2023.

Table 6: - Interest rate and Bond yield forecasts

%	CURRENT	SEPTEMBER 2023	MARCH 2024
UNITED STATES			
3month SONIA	4.86	5.5	5.25
10 year bond yield	3.74	5.25	5.0
UNITED KINGDOM			
3month SONIA	4.20	5.0	5.0
10 year bond yield	3.42	4.75	4.5
JAPAN			
3month SONIA	-0.03	0.0	0.0
10 year bond yield	0.50	0.50	0.50
GERMANY			
3month SONIA	2.35	3.5	3.5
10 year bond yield	2.42	3.75	3.5

Source: - Trading Economics; 15th February 2023

In December the Fed, BoE and ECB all raised rates by 0.5%, and in its first move for a very long time on interest rates, the Bank of Japan (BoJ) raised the ceiling for 10 year government bonds from 0.25% to 0.5% but left the overnight rate unchanged. In February the US Fed only increased rates by 0.25% whereas the BoE and the ECB increased rates by 0.5%. The US Central bank has the benefit of significantly lower and falling inflation to enable it to moderate the size of their increases, whereas the BoE and the ECB still have more to do to tackle their much higher levels of inflation.

The US, UK and German government bond yield curves are all inverted, in other words 10 year yields are lower than 2 year yields. In contrast following the BoJ's decision to allow 10 year JGB yields to rise, its yield curve has steepened dramatically. As mentioned in my last report an inverted yield curve indicates that bond investors are expecting a recession that leads to falling interest rates. Indeed, the equity markets are also expecting lower rates, because of the risk of recession. But herein lies the problem this is the old model; central banks have made it clear that they are fighting inflation and even if it increases the risk of recession they will keep raising rates until they have inflation under control. Hence, I believe there is room for disappointment, leading to higher bond yields as interest rates rise, especially if I am correct about the "stickiness" of inflation in the second half of 2023.

UK Government bond yields have moved in a sideways range between 3% and 3.5% since my last report and are currently close to the top of that range. Over the rest of 2023 I still expect yields to rise as interest rates continue to be increased. However, in 12 months' time slower growth and lower inflation could mean that bond yields start to fall even if there have been no cuts in interest rates. As a result, it would be reasonable to expect low and possibly negative returns from government bonds in the short term. However, Protection assets and especially Index Linked Gilts and corporate bonds have become much more attractive as a medium to long term investment.

As usual in table 7 below I have updated the data and recalculated my estimates of the total return impact of rising yields for government and non-government bond indices based on their yield and interest rate sensitivity (Duration) over 3 and 12 months. The estimates show that in the short term there is still very little income protection even for small increases in yield even at today's lower level of duration in government bonds, but over the medium term spreads are sufficiently wide that investment grade non-government and high yield bonds may be attractive providing the risk of default does not increase significantly.

Table 7: - Total returns from representative bond indices

INDEX	YIELD TO MATURITY %	DURATION YEARS	YIELD INCREASE %	% TOTAL RETURN, HOLDING PERIOD	
				3 MONTHS	12 MONTHS
All Stock Gilts	3.69	9.7	0.5	-3.9	-1.2
All Stocks Linkers	0.33	13.4	0.5	-6.6	-6.4
Global IG Corporate	4.93	6.1	0.5	-1.8	+1.8
Global High Yield	8.24	3.7	0.5	+0.2	+6.4

Source: - ICE Indices 15th February 2023

Bond Market (Protection Assets) Recommendations

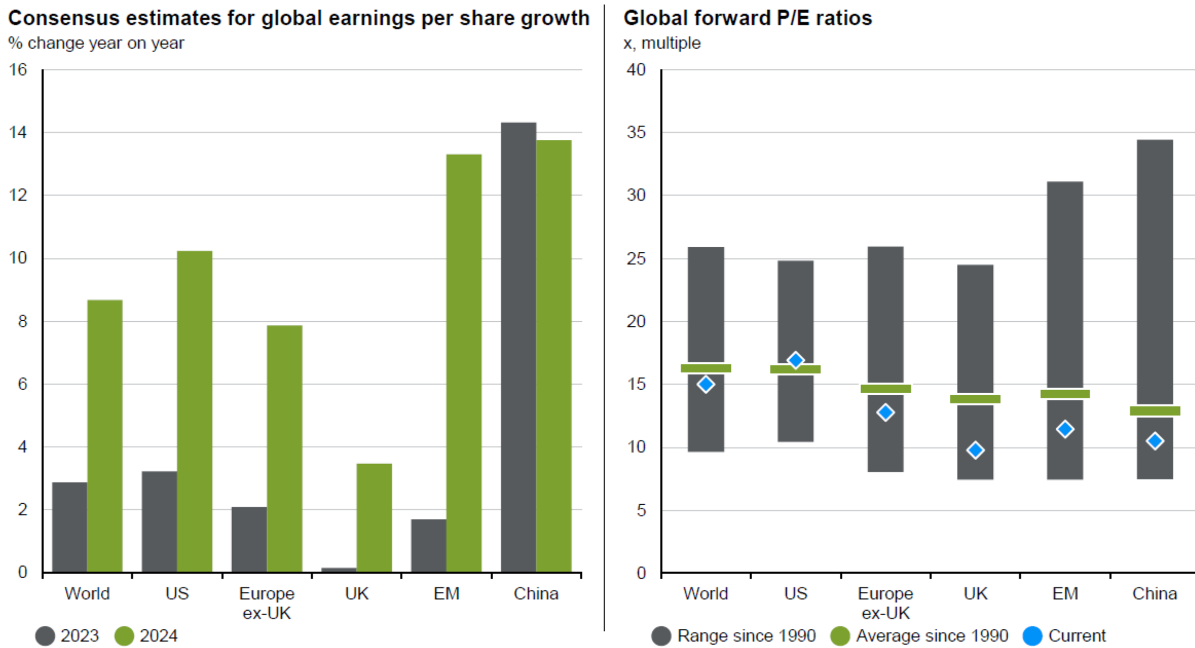
I am not proposing any further changes to the Protection asset allocation. In my last report I suggested increasing the investment grade corporate bond allocation from underweight to neutral along with the Index Linked Gilt allocation. I also suggest remaining 1% underweight conventional gilts to reflect my negative shorter term outlook for interest rates and bond yields.

The extra yield spread available from corporate bonds has narrowed somewhat but it is currently still wider than it has been for some years and the total yield remains attractive. Falling demand and potential increased supply of Index Linked Gilts has further increased the real yield available, from around zero in my last report to +0.33% currently. As I mentioned last time this means that for the first time in more than 10 years long term investors can receive a small positive risk free rate of real return and thereby genuine protection against inflation.

Equity Markets

Chart 14 below, left hand side, shows the consensus earnings per share growth estimates, for 2023 and 2024. The right hand side shows, the current forward looking estimates of the price / earnings (P/E) ratio of the same market indices compared to the range and the average since 1990, except for China where the data only goes back to 1996, provided by JP Morgan Asset Management.

Chart 14: - LHS - Earnings per Share estimates, RHS - Price/Earnings Ratios, since 1990, China 1996



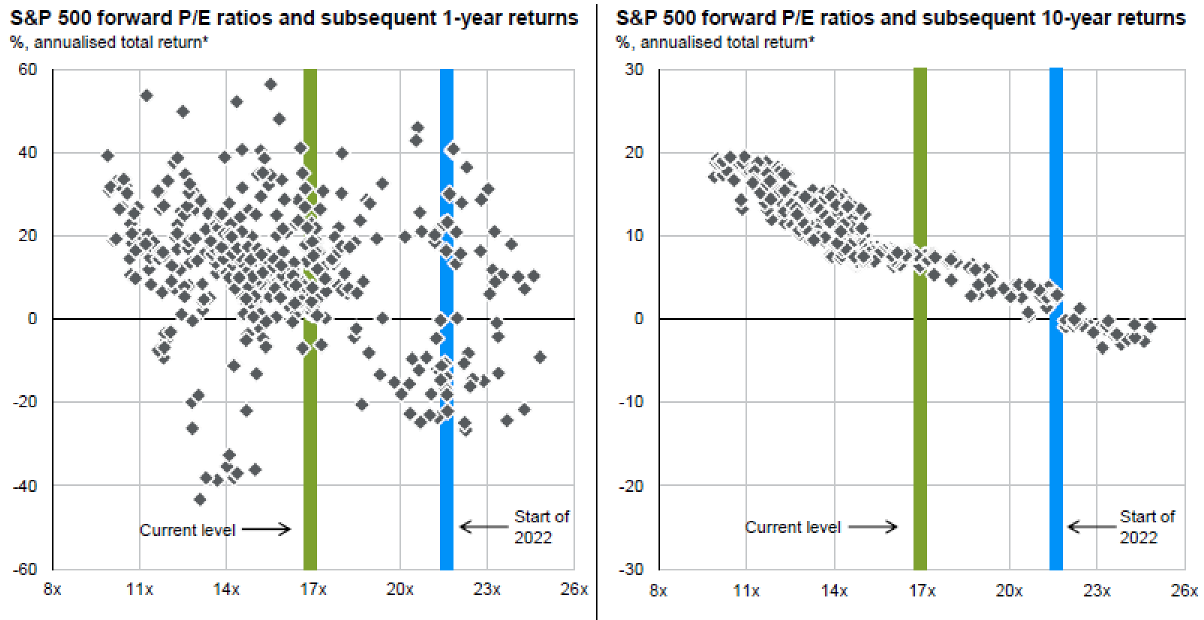
Source: - JPM Asset Management, December 2022

The left-hand side of chart 14 shows the new earnings expectations for 2023 and 2024, since my last report all regional earnings expectations for 2023 have again been revised lower by around 2% and by almost 4% in the case of the US. As analysts reflect on the increased chances of recession and worsening global economic outlook in 2023, as a result these forecasts are more realistic than the optimistic numbers we saw in the summer of 2022. The 2024 forecasts reflect the usual positive expectations of this optimistic group of people. The right hand chart shows the P/E ratio has become somewhat more expensive over the quarter as a result of the rally in equity markets since October 2022 and has gone some way to offsetting the “cheapness” of valuations following the sharp sell-off in equities over the 12 months to October 2022. Having said that the below average valuations outside the US remain attractive to where they were at the start of 2022.

In my last report I mentioned that JP Morgan Asset Management’s long-term capital markets return assumptions had been revised higher as a result of the sell-off in markets. This remains the case and chart 15 below appears to provide some support for this in terms of the level of valuation using the P/E ratio. What the chart suggests is that in the US market, there is no relationship between the forward looking P/E and the subsequent 1 year return of the market. However there does seem to be a

relationship in the level of P/E's and the subsequent 10 year returns. At least in the period since 1988 the chart suggests that the lower the P/E at the start the better the annual total return over the next 10 years. The results look similar for other regional market indices.

Chart 15: - US equity valuations using forward looking P/E ratios and subsequent annual returns.



Source: - JPM Asset Management., December 2022

The sell off in equity markets to the summer of 2022 and the evidence presented above suggests that the medium term outlook for equity returns may have improved. Valuations appear more reasonable and earnings estimates may be more realistic, but the market has rallied somewhat since October. Inflation may have peaked but it remains high and central banks have made it clear that interest rates will continue to rise, even if it is a slower pace and even if it risks a recession. Hence, I remain cautious on equity markets, especially in the more interest rate sensitive "growth sectors" in the short term at least. I also believe future volatility may be higher, which suggests investors need to see meaningful "cheapness" in asset prices before committing new capital especially when bonds are looking much better value than they have done in a very long time.

Equity Market (Growth Assets), Recommendations

I have not changed my suggestions for how the growth asset allocation of the Fund should be distributed. The relative performance of bonds and equity over the last quarter and the more attractive relative value of some sectors of the bond markets have led me to suggest that the Fund should consider a 1% underweight position in Growth assets. Given the legacy nature of the US equity position I would suggest that the Fund should sell this position and use the money to top up the Investment grade credit allocation to neutral from underweight.

In the last quarter the Fund also had a legacy overweight's in UK equity and an underweight to Global sustainable equity due to risk and performance concerns with the managers selected to run the strategy. For now, I am happy to remain underweight global sustainable equity and overweight UK

equity due to relative valuations and because I believe interest rates will continue to rise for some time increasing the pressure on "growth equity sectors" which are more highly represented in the global sustainable strategy than they are in the UK equity indices.

Income Assets

Once again, I have made no changes to the allocation to Income Assets funding the 2% over allocation to MAC 1% each from Growth and Protection Assets. Spreads have narrowed since the end of the third quarter but the overall yield available combined with the low duration and floating rate nature of many of the asset classes suggests to me that MAC remains attractive, relative to longer duration assets in a rising interest rate environment.

As mentioned, before over the long term I would like to see the direct property allocation increase funded using net sales from the in-direct exposure. However, at the moment I believe there is an opportunity for the Fund to take advantage of distressed selling by other investors to increase its exposure to in-direct property funds at a discount to NAV and thereby increase the overall property exposure to neutral.

Asset Allocation

The asset allocation set out in table 8 below, shows the Strategic Asset Allocation Benchmark and my suggested asset allocation weights relative to this benchmark as of the 18th November 2022 and 15th February 2023. These allocations represent an ideal objective for the Fund based on my expectations for economic growth and market performance, but they do not take into consideration the difficulty and costs in reallocating between asset classes and the time needed by the In-house Team, their Pooling partner and investment managers to find correctly priced assets for inclusion in the Fund.

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Table 8: - Recommended asset allocation against the Strategic Benchmark.

The 2 righthand columns show my suggested allocations relative to the new strategic benchmark that came into effect on the 1st January 2022.

% ASSET CATEGORY	NEW DERBYSHIRE STRATEGIC WEIGHT 1ST JANUARY 2022	ANTHONY FLETCHER 18TH NOVEMBER 2022	ANTHONY FLETCHER 15TH FEBRUARY 2023
Growth Assets	**55**	**-1.0**	**-1.0**
UK Equity	**12**	**+1.0**	**+1.0**
Overseas Equity	**43**	**0**	**0**
North America	**0**	**0**	**0**
Japan	5	**0**	**0**
Emerging markets	5	**0**	**0**
Global Sustainable	**29**	**-2**	**-2**
Private Equity	4	**0**	**0**
Income Assets	**25**	+2	+2
Property	9	**0**	**0**
Infrastructure	**10**	**0**	**0**
Multi-asset Credit	6	+2	+2
Protection Assets	**18**	**-1**	**-1**
Conventional Gilts	6	**-1**	**-1**
UK index Linked	6	**0**	**0**
US TIPS	0	**0**	**0**
Investment grade credit	6	**0**	**0**
Cash	2	**0**	**0**

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Appendix

References

Source material was provided by, including but not limited to, the following suppliers: -

- Derbyshire Pension Fund, PEL performance services
- FTSE and ICE Indices
- JP Morgan, Asset Management
- Bank of England, UK Debt Management Office, UK OBR, UK Treasury, ONS
- US Bureau of Labour Statistics, US Commerce Dept. The US Federal Reserve.
- Bank of Japan, Japan MITI
- ECB, Eurostat
- Bloomberg, FactSet, Markit and Trading Economics
- Financial Times, Daily Telegraph, Wall Street Journal, New York Times, Washington Post

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