Appendix 2

MJ HUDSON Allenbridge

Fourth Quarter 2021 Investment Report

PREPARED FOR:

Derbyshire County Council Pension Fund: Pensions and Investment Committee Meeting

MARCH 2022

MJ HUDSON Allenbridge

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 2nd March 2022
Date of paper 11th February 2022

1. Market Background (Fourth quarter 2022)

The fourth quarter saw a continuation of the same themes which dampened third quarter growth. This quarter's less positive factors were inflation shifting from "transitory" to "persistent in the short term" and as the Asia-pacific region continued to deal with the Delta variant, South Africa and Europe had to deal with the new much more infectious Omicron variant. Inflation and Omicron dominated sentiment throughout the period. However, by December a mass booster campaign and the realisation that while Omicron was more infectious than Delta, it is much less potent, producing only a mild infection especially in the vaccinated population, calmed the markets.

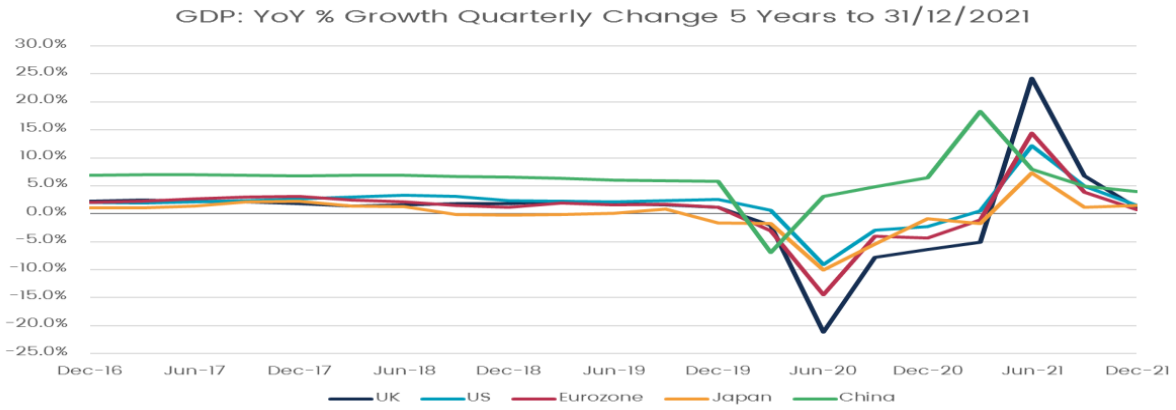
In December the Central Banks response to Inflation was about to become the markets main concern and this has impacted returns and generated volatility in the early part of 2022. In December the Bank of England raised the base rate from 0.1% to 0.25%. But more importantly from the markets perspective the US Fed "pivoted" from promoting easy to neutral monetary policy by openly talking about higher inflation leading to a sooner than expected tightening of monetary policy. Bond yields increased on this news but finished the quarter broadly unchanged, equity markets dipped but finished the quarter higher.

Developed market equity performance was reasonably strong, US markets made new highs and global equities delivered good returns. Emerging Market returns were disappointing, with China's government interventions on covid, in the equity market and the pressure on the property sector finally having an impact, leading to the default of Evergrande. China's weight in emerging market equity indices and its economic importance in the region, led to a wider contagion effect holding back the performance of Asia Pacific in general.

Despite higher inflation data, concerns around Omicron caused long dated UK gilts yields to reverse their sell off in the third quarter, leading to positive returns in the fourth quarter. Global government and non-government bonds produced modest returns with spreads for non-government bonds widening slightly over the quarter.

The rate of global GDP growth continues to slow, but annualised growth rates remain well above the rates seen prior to the pandemic. Higher energy prices and generalised pressure on household spending, compounded by the withdrawal of government support packages and higher taxes are likely to have an impact on discretionary spending over the rest of the year.

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 2022 and the 3 and 12 months to the end of December 2021.

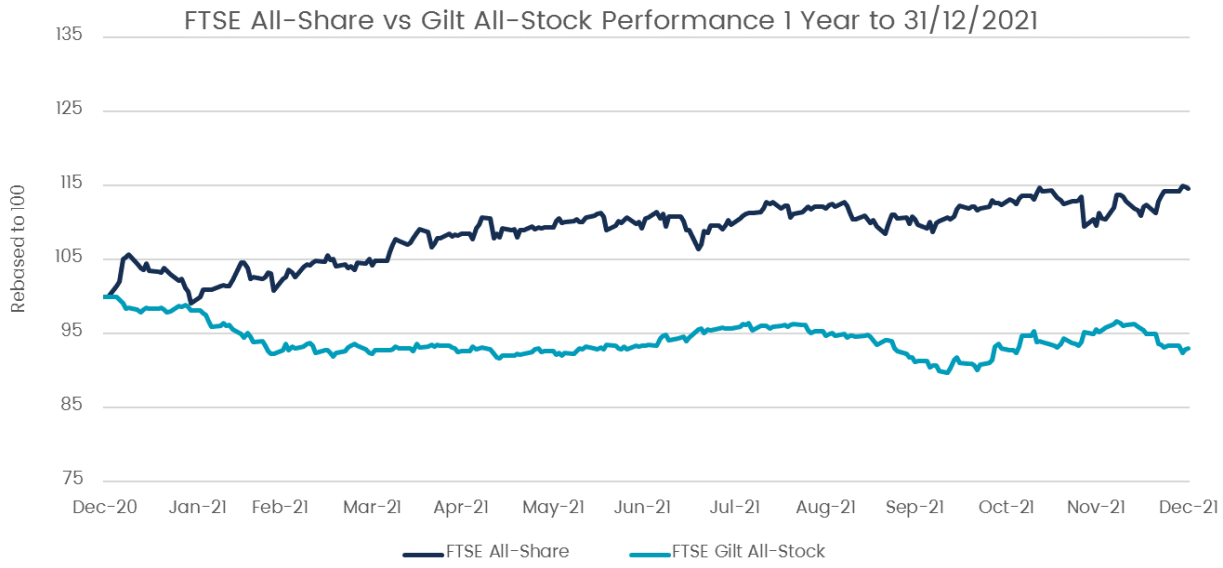
% TOTAL RETURN DIVIDENDS REINVESTED

MARKET RETURNS

		Period end 31st December 2021	
	January 2022	**3 months**	**12 months**
Global equity FTSE All-World	-3.9	6.6	21.2
Regional indices			
UK All Share	-0.3	4.2	18.3
North America	-4.5	9.5	28.1
Europe ex UK	-5.2	5.1	17.3
Japan	-5.0	-4.9	2.5
Pacific Basin	-3.3	-0.7	-0.1
Emerging Equity Markets	0.6	-1.4	0.9
UK Gilts - Conventional All Stocks	-4.0	2.5	-5.3
UK Gilts - Index Linked All Stocks	-2.7	4.7	3.9
UK Corporate bonds*	-3.3	0.6	-3.0
Overseas Bonds**	-1.4	0.0	-2.1
UK Property quarterly^	-	6.1	16.3
Sterling 7 day LIBOR	0.0	0.0	0.0

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

Chart 1: - UK bond and equity market returns - 12 months to 31st December 2021



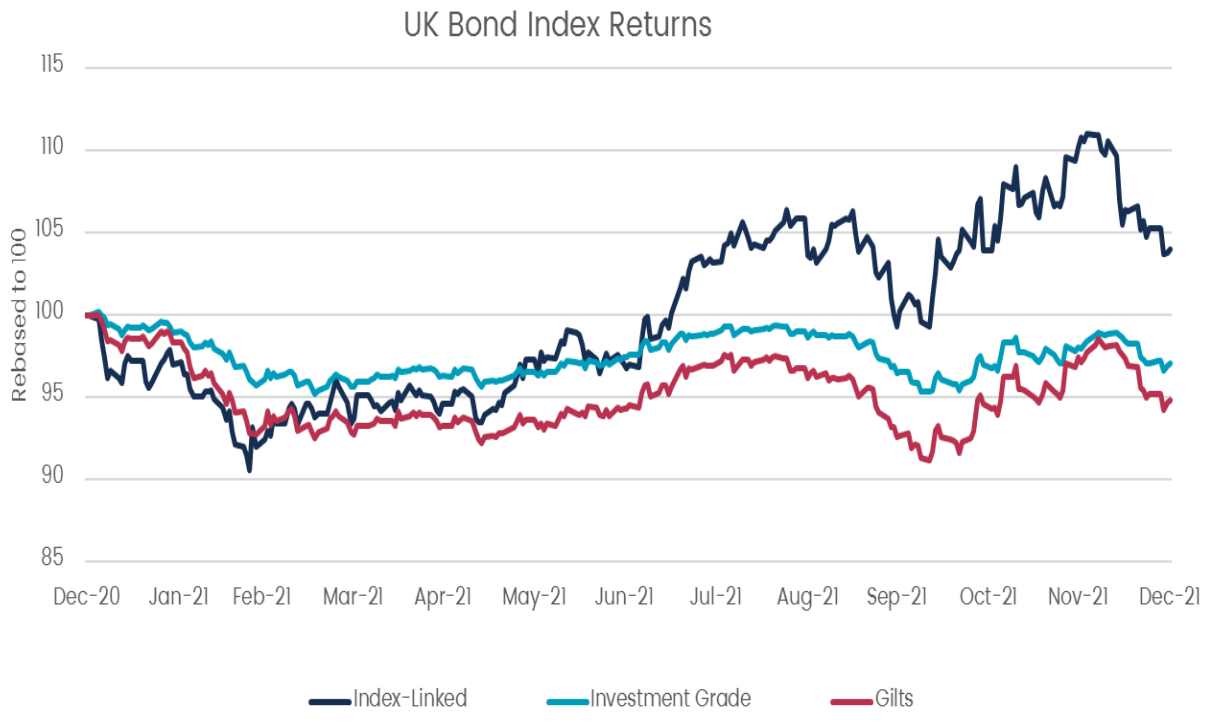
Source: - Bloomberg

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

BOND MARKET % YIELD TO MATURITY	30th September 2021	31st December 2021	Quarterly Change %	31st December 2020	Current 11th February 2022
UK GOVERNMENT BONDS (GILTS)					
10 year	1.02	0.97	**-0.05**	0.20	**1.55**
30 year	1.37	1.12	**-0.25**	0.76	**1.62**
All Stocks ILG	-2.54	-2.59	**-0.04**	-2.53	**-2.27**
OVERSEAS 10 YEAR GOVERNMENT BONDS					
US Treasury	1.49	1.52	**0.03**	0.91	**1.93**
Germany	-0.19	-0.18	**0.01**	-0.58	**0.29**
Japan	0.07	0.07	**0.00**	0.02	**0.22**
NON-GOVERNMENT BOND INDICES					
Global corporates	1.66	1.86	**0.20**	1.35	**2.50**
Global High yield	4.43	4.60	**0.17**	4.32	**5.63**
Emerging markets	3.77	4.05	**0.28**	3.20	**4.67**

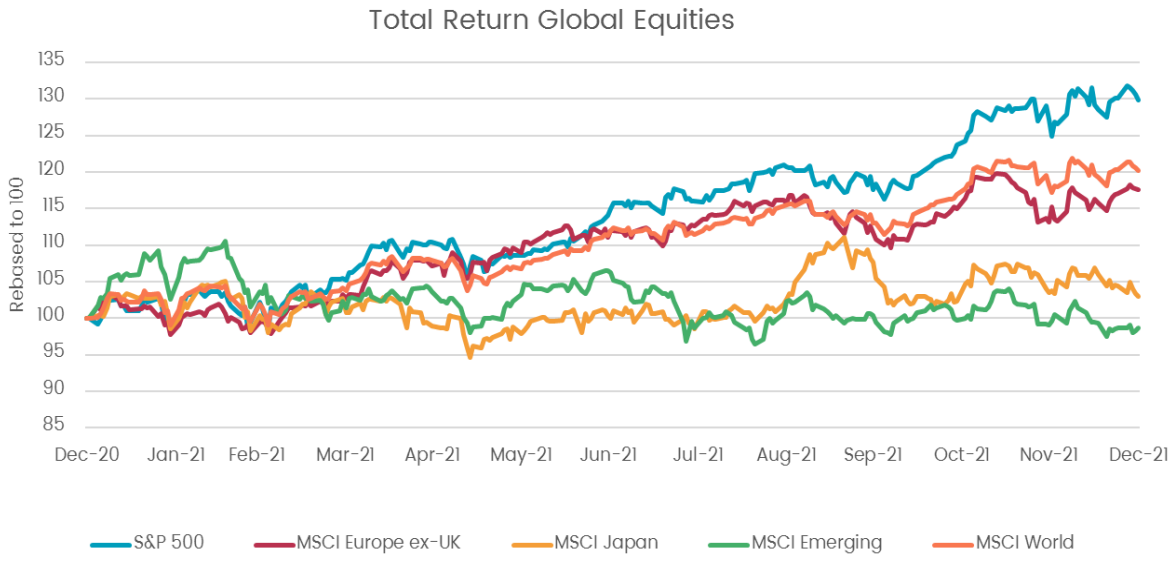
Source: - Trading economics and ICE Indices G0LI, G0BC, HW00, EMGB, 11th February 2022.

Chart 2: - UK Bond index returns, 12 months to 31st December 2021.



Source: - Bloomberg

Chart 3: - Overseas equity markets returns in Sterling terms, 12 months to 31st December 2021



Source: - Bloomberg

Recent developments (January and early February 2022)

After a strong 2021, equity markets were faced with the reality of higher inflation, real concerns about central bank tightening and increased tensions in eastern Europe all of which led to a sharp increase in volatility. Global equity market indices ended January down 3.9%, although emerging markets outperformed, ending the month up 0.6%. Higher oil and gas prices and increased government bond yields saw energy and financial stocks significantly outperform the rest of the market. All bond markets produced negative returns in January with the highest duration sectors delivering the worst returns. As can be see in Table 2 above as of the 11th February, bond yields have continued to rise.

Economic data in developed markets remains strong with activity rebounding from the Omicron induced dip in December. The recovery in Labour markets has been rapid with many economies seeing unemployment rates back to pre-pandemic levels and Job vacancies remaining high.

While Natural gas prices have fallen from their peak in December 2021, Oil prices continue to rise reaching $90 a barrel for the first time since October 2014, driven by falling oil stockpiles in the US and rising political tensions with Russia.

A strong economy, an easing but persistent supply/demand imbalance for goods, a tightening labour market and higher energy prices have all played their part in keeping inflation high.

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 2021. Over 12 months all the broad asset class categories outperformed, but individual manager performance was much more mixed when compared to their respective benchmarks.

Over 10 years the Fund has achieved a total return of 9.3% per annum, net of fees.

Table 3: - Derbyshire Pension Fund and Benchmark returns

% TOTAL RETURN (NET) 31ST DECEMBER 2021	3 MONTHS		12 MONTHS	
	Derbyshire Pension Fund	**Benchmark**	**Derbyshire Pension Fund**	**Benchmark**
Total Growth Assets	**3.9**	**4.0**	**17.4**	**16.5**
UK Equity	3.8	4.2	19.5	18.3
Total Overseas Equity	**3.2**	**3.9**	**13.6**	**15.4**
North America	8.4	9.5	25.6	28.1
Europe	5.3	5.1	17.4	17.3
Japan	-4.6	-4.9	0.7	2.5
Pacific Basin	-1.9	-0.7	0.0	-0.1
Emerging markets	-0.9	-1.4	2.2	0.9
Global Sustainable Equity	5.1	6.6	15.6	21.2
Global Private Equity	9.9	4.5	48.7	19.3
Total Protection Assets	**1.8**	**2.6**	**-0.6**	**-1.0**
UK & Overseas Government	1.3	2.4	-4.1	-5.2
UK & Overseas Inflation Linked	4.1	4.9	4.4	4.2
Global Corporate bonds	0.2	0.3	-2.1	-2.1
Total Income Assets	**3.2**	**2.8**	**9.9**	**8.2**
Multi-asset Credit	0.9	0.5	5.9	4.0
Infrastructure	3.1	0.5	7.1	2.1
Property (all sectors)	5.5	6.7	16.2	17.5
Internal Cash	0.0	0.0	0.1	0.0
Total Fund	**3.2**	**3.4**	**11.6**	**10.9**

Total fund value on 31st December 2021 £6,293 million

The Fund remains overweight growth assets and underweight protection assets relative to the strategic benchmark. Over the fourth quarter of 2021, the Fund slightly underperformed due to a better performance from Government bonds and a sector rotation in equities which had a negative impact

mainly on growth stocks. Over 12 months the Fund is 1.7% ahead of benchmark, all asset classes outperformed but regional equity performance was mixed.

Growth assets – Equity performance

In the 4th quarter of 2021, at the aggregate level, the equity portfolio slightly underperformed its benchmark. Returns were again generally lower and more mixed over 3 months as market returns decelerate after the dramatic rebound as economies re-opened. The underperformance was fairly broad with only the European, Japanese and emerging market portfolios outperforming their benchmarks. Over 12 months the marked underperformers were the US and Global sustainable portfolios with the UK and Private equity portfolios making the largest positive contributions. In absolute terms Japan, Asia Pacific and Emerging equity portfolios delivered very small positive returns. Japan can be explained by the very slow recovery from covid and Asia Pacific and Emerging by the impact of a changed regulatory environment in China and its zero covid policy, and the contagion these policies have caused in the region.

Over 3 years growth assets have delivered an aggregate return of 14.6% p.a., 0.9% more each year than the strategic benchmark, net of fees. While the Asia Pacific and Emerging market equity portfolios delivered solid absolute returns, they underperformed their respective benchmarks. Over 10 years growth assets have returned on average 11.8% p.a. compared to 10.8% p.a. for the benchmark.

Protection assets - Fixed Income Performance

Rising covid infection rates due to the emergence of the Omicron variant and a more relaxed view on inflation from central banks caused bond yields to fall delivering positive returns. This runs against the trend over the year where bond markets sought to price in the strong economic recovery leading to negative returns from the most interest rate sensitive long maturity sectors. 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 underperformed over 3 months but outperformed the benchmark over 12 months. Over 3 years protection assets have delivered 5.1% p.a. 0.2% p.a. more than the benchmark.

Income assets – Property, Infrastructure and MAC

Over the quarter and the year, the combined portfolio of income assets has outperformed the benchmark, mainly due to the strong performance of Infrastructure and MAC. The direct property portfolio underperformed in the short term, mainly due to its underweight allocation. Over 3 years Income assets have on average delivered 6.4% p.a. 1.4% p.a. more than the benchmark.

3. Economic and Market outlook

Economic outlook

The global economy continues to recover from the dislocations caused by the impact of covid and its variants as they migrate around the world. The various responses by governments in different regions are also leading to volatility in output and trade, on balance the expectation is that growth will be lower but stronger in 2022 than it was prior to the pandemic. While fiscal and monetary stimulus is being reduced the positive tailwind of its impact will continue to be felt for some time. Again, while stimulus has not been evenly distributed throughout the economy there is plenty of money available to maintain a higher level of spending and investment from households and industry.

Table 4 below is a "heat map" for the US economy which suggests that the US economy and by extrapolation the developed economies are only "mid cycle" in terms of the potential economic expansion.

Table 4: - Economic cycle indicators – a historical comparison

We Are in the Mid-Stage of the Economic Expansion

	Current	Feb 20	Dec 07	Mar 01
Output Gap	59%	71%	82%	91%
Unemployment Rate	90%	99%	84%	95%
Employment-Population Ratio	52%	85%	83%	100%
Unit Labor Costs	75%	46%	65%	63%
Capacity Utilization	73%	83%	96%	100%
Capex to GDP	61%	86%	77%	99%
Housing Investment to GDP	55%	21%	85%	63%
Nonfinancial Corp Profit Margin	13%	52%	41%	100%
Househld Debt to Income	69%	72%	100%	68%
Household Financial Obligations Ratio	2%	9%	100%	79%
Nonfinancial Corp Debt to Profits	29%	90%	27%	98%
Nonfinancial Corp Interest Coverage	1%	10%	61%	93%
Average	48%	60%	75%	87%

Sources: MacKay Shields, CBO, BLS, BEA, Federal Reserve. Percentile rankings based on historical data since 1960 for most series. Higher percentile rankings associated with late cycle. For three prior recession starts, table displays highest rank for each indicator during year prior to peak.

With the unemployment rate and unit labour costs being the only indicators suggesting possible causes for concern.

The pandemic has caused major changes in the world of work, many employees and employers have decided that they like benefits of a mixed working environment in terms of flexibility and higher productivity. This flexibility may help keep unit labour costs under control and I would suggest that

workers who have decided at the moment not to return to work, may prove to be a potential source of labour, that could return to the workforce if an employer appears flexible enough or if their concern over the risk of covid decreases.

The global economy is still repairing itself after a major exogenous shock which was not the result of systemic or economic crisis. I believe that the inflation and dislocations we are seeing at the moment are likely to be short term rather than persistent in the medium to long term. Covid remains a risk to the recovery just as much as a policy error on the part of the central banks.

Inflation

Developed economies have entered a period of bad news on inflation. I don't want to describe this as "peak inflation" as I do not think we are there yet; I believe that will come between now and the end of the 3rd quarter of 2022. After that I anticipate that inflation could remain higher than we have become used to in the last 10 years but the trend should start to fall. As I have been suggesting for some time the higher inflation, we are experiencing is directly linked to the disruption to global economy caused by the pandemic and the unexpected strength of the recovery in demand for goods as economies re-opened. This has been compounded by the decision by many workers to either temporarily or permanently not return to the workforce and, since last summer, by the large cumulative increases in natural gas prices and more recently oil prices, partly because of demand but also because of the increase in geopolitical tensions in eastern Europe.

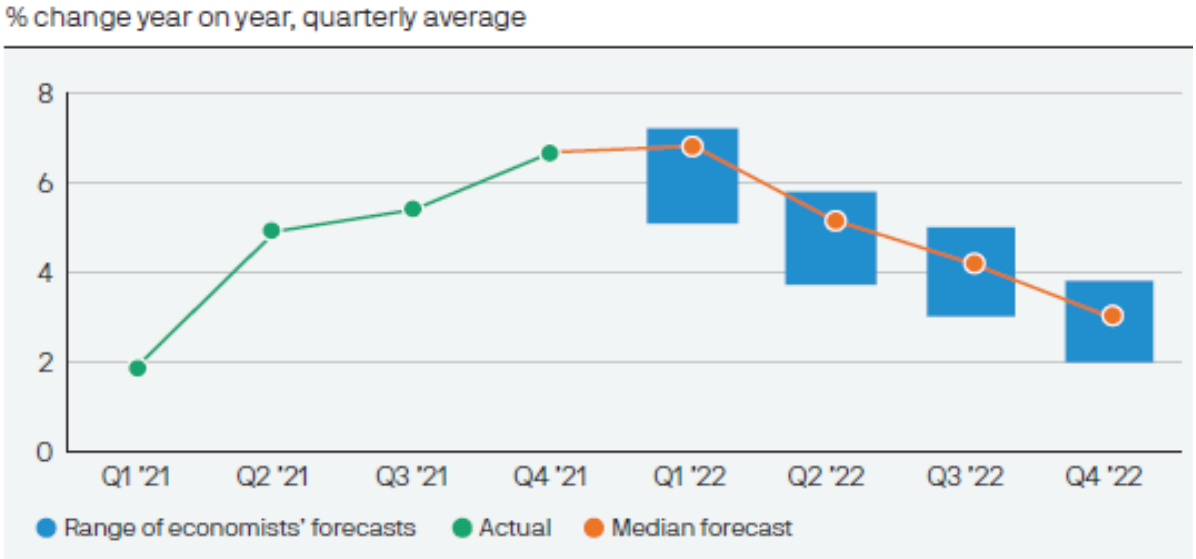
Chart 4: - Inflation – year over year change in selected components of US headline inflation.

Source: - JPMAM December 2021

I anticipate that these factors will be fading later in 2022, see chart 5 below which shows expectations for US headline inflation. If I am wrong on this it will be because wages rise inline or above the rate of inflation. The US is most at risk of this because of its very flexible labour market where workers can be hired and fired at the will of the employer, which is what happened during the pandemic. In the UK many more workers were furloughed but many in leisure and hospitality and those on zero hours contracts are now able to shop around for the best rates of pay. In Europe, because of tighter

employment legislation most workers were retained by their employers so the disruption and pressure on wages is less likely to be lower.

Chart 5: - US headline CPI Inflation expectations.



Source: - JPMAM December 2021

On balance the experience of the last 20 years is that higher inflation reduces discretionary consumption and reduces economic growth. Even if this turns out not to be the case this time round, central banks have made it clear that they intend to tighten monetary conditions and this will likely have the same effect reducing both growth and inflation.

Central Banks

In December the Bank of England raised rates to 0.25% and while the US Fed did not actually increase rates their policy has clearly "pivoted" from easy to tighter monetary policy. In February the BoE raised rates again to 0.5%. The US Fed announced plans to end QE and raise rates in March, and began openly talking about "balance sheet reduction" or QT. While this was readily accepted by the markets as an appropriate response to higher inflation. It has led to a marked increase in short term and to a lesser extent long term bond yields, and the pricing in by the market of as many as seven 0.25% rate increases over the next 12 months. Even the ECB has recognised that the recent inflation data is a concern with Christine Lagarde suggesting at the February ECB press conference that QE in Europe may come to an end sooner than expected. Only the BoJ has stuck to its easy money policy stepping in to keep 10 year government bond yields down when they breeched 0.25% as a result of the global increase in bond yields.

Central banks have been clear that they would not respond to higher growth and inflation until employment had returned to pre-pandemic levels and until December the US Fed had stuck to this message. The US and The UK's central banks now accept that their economies may be approaching full employment. Not because all workers have returned to work but because the number of people willing to re-join the workforce has fallen by personal choice and this is leading to wage cost pressures, which the central banks are keen should not become entrenched.

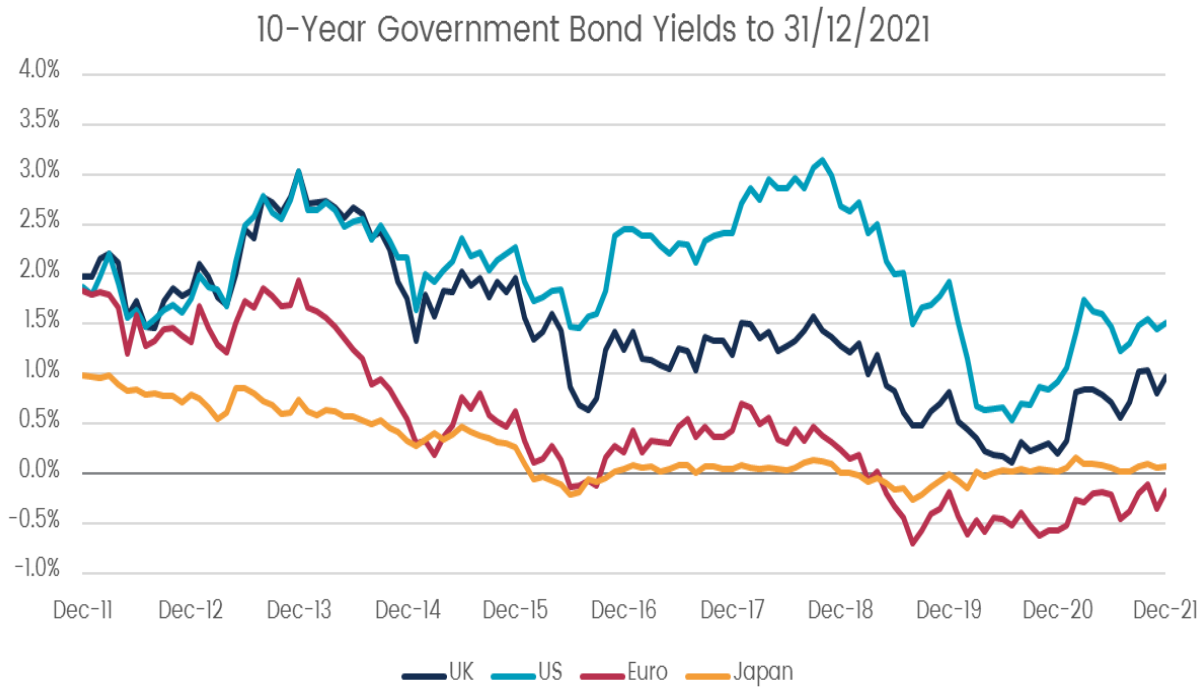
Because I have a more sanguine view of inflation based on longer term expectations, I am concerned that central banks may commit a policy error by raising rates too aggressively and at the same time reducing the size of their balance sheets. If this involves selling bonds back to the market as suggested by the BoE then QT is effectively doubling the monetary tightening impact.

Government bonds

Government bond yields ended the quarter lower or unchanged due to restrictions introduced to tackle Omicron. However, January provided a stark warning to investors that in times of heightened inflationary risks, long duration government bonds may provide less protection to portfolios than in times of recessionary risk. This news should not come as a surprise to readers of this report as I have been predicting a medium term trend to higher government bond yields for some time. As can be seen in Table 2 above, all bond yields have increased since the beginning of the year, but it is the longer duration government and investment grade non-government bonds that have delivered the worst returns.

I have not changed my view that it is highly likely that government bonds could continue to deliver a near zero or even negative returns in the next 12 months. While this is not good news for asset returns, because of the way in which Scheme liabilities are calculated, increases in government bond yields are likely to lead to a reduction in Scheme liabilities, hence improving the funding position.

Chart 6: - Government bond yields, last 10 years.



Source: - Bloomberg

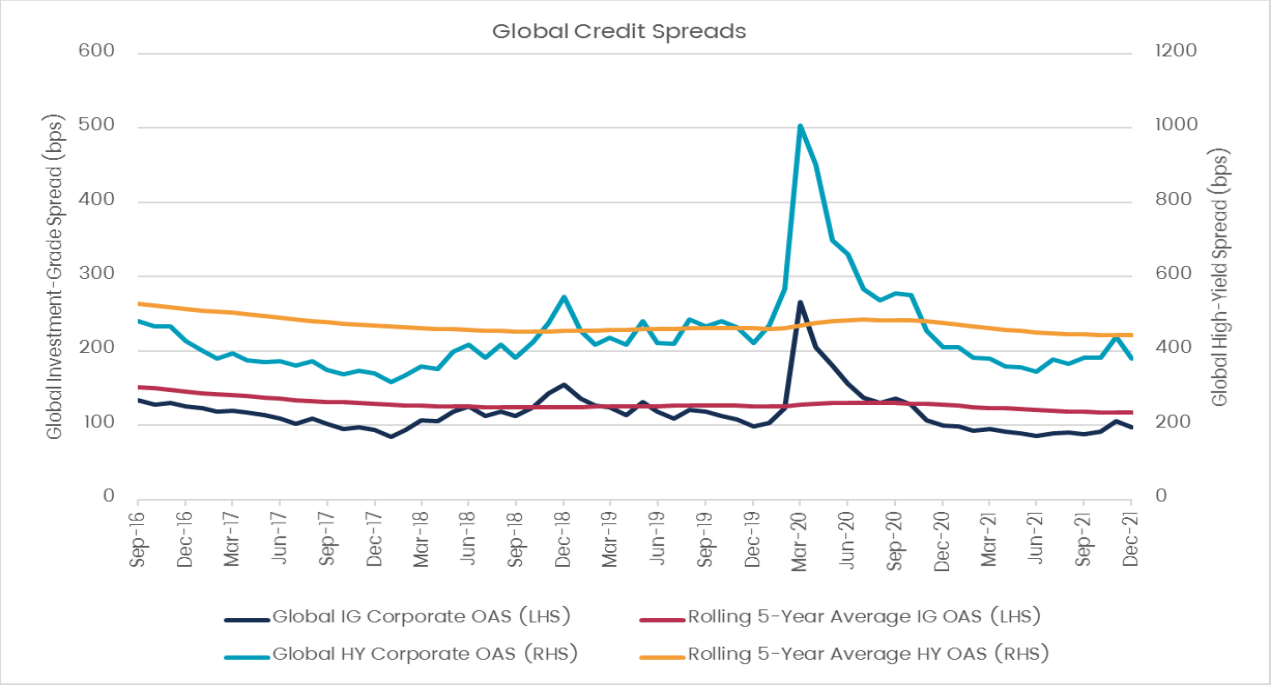
Non-government bonds

Chart 7 below, shows the excess yield spread for both investment grade non-government and high yield bonds. As can be seen from the chart over the fourth quarter of 2021 yield spreads widened compared to earlier in the year but narrowed compared to government bonds in December as government bonds were sold in response to the change in central bank messaging.

As can be seen in Table 2 above, calendar year to date spreads have continued to widen. While longer duration investment grade non-government bonds have matched the negative returns of government bonds, high yield bonds and loans have, because of their lower interest rate sensitivity and higher yields, produced smaller negative returns, outperforming both government and investment grade non-government bonds.

High yield bonds are more sensitive to the economy, so provided the economic growth remains strong these bonds are likely to continue to outperform. Over the next 12 months I 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 avoiding defaults.

Chart 7: - Credit spreads, extra yield over government bonds, last 5 years.

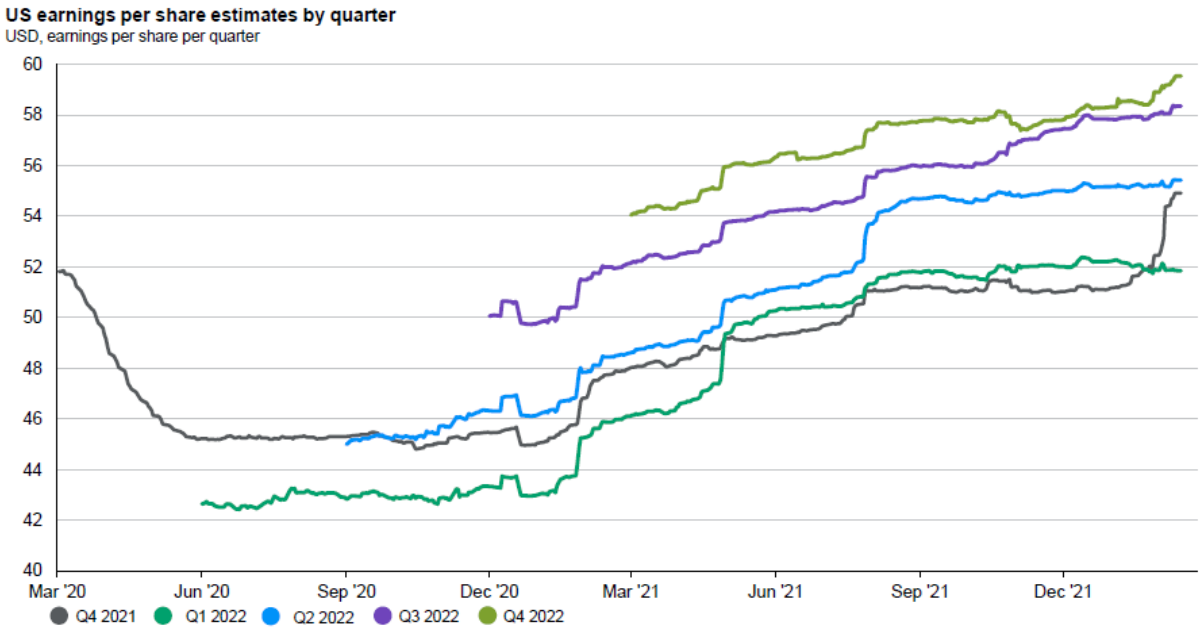


Source: - Bloomberg

Equities

Market returns in the fourth quarter remained mixed as they have done over the year. Developed markets producing solid positive returns but Japan and Emerging equities only small positive and in some cases negative returns. Yet as reported before, despite the supply side issues and the resurgence of covid infection rates, corporate profits have been very strong in 2021. Once again US companies have reported higher than expected earnings and analysts remain positive for the year ahead, see chart 8 below.

Chart 8: - US S&P 500 earnings estimates, continue to be revised higher.

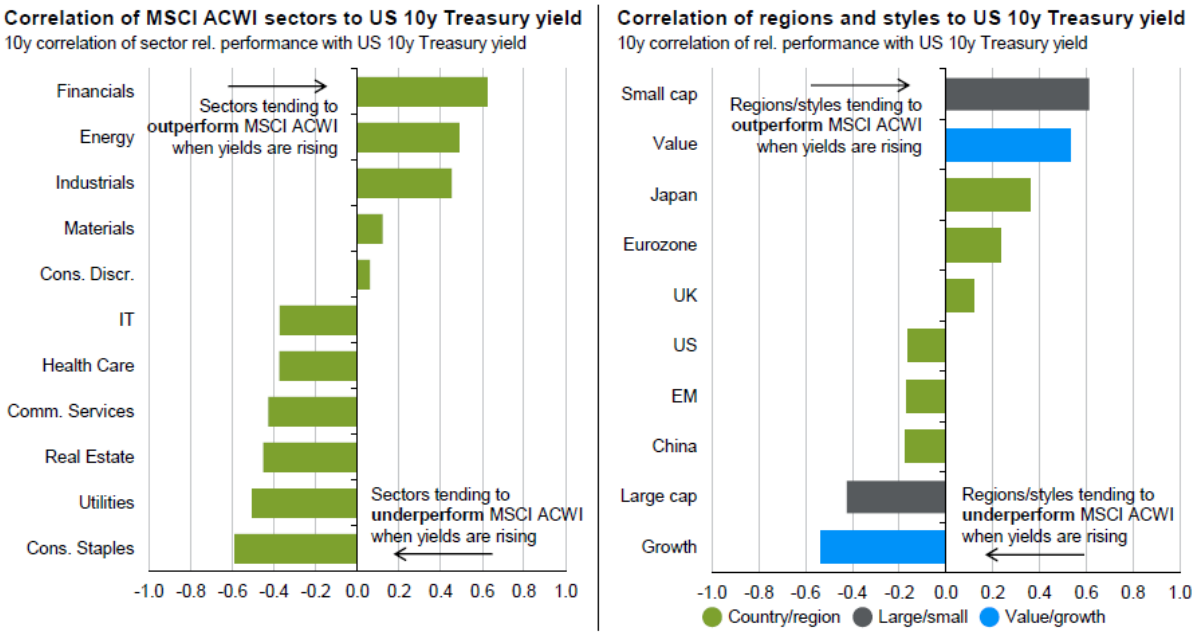


Source: - JP Morgan Asset Management

In January the change in central bank messaging caused a widespread sell off in equity markets and a sharp rotation in sector performance leadership. Just as we saw 12 months ago, growth stocks trading on stretched valuations have come under increased selling pressure, particularly in those sectors that had benefited from changing consumer patterns during the pandemic. Market participants have rotated out of "stay-at-home" stocks, where the revenue growth of the pandemic years is unlikely to be repeated in the future. Equally harmful for sentiment towards growth stocks is the fear of tighter monetary conditions as central banks increase rates. Value stocks are benefiting from the growing conviction that central banks will be able to raise rates materially over the coming year. Financials have done particularly well as they tend to benefit from rising government bond yields. Commodity heavy equity markets like the UK, Latin America and the Middle East outperformed significantly as oil prices have increased significantly on a combination of higher demand and rising geopolitical tensions as Russia continues its "military training exercises" close the Ukrainian border.

While higher inflation and central bank interest rates are clearly bad news for government bond markets, provided inflation is not too high it can be good news for certain equity sectors and country indices and can drive relative performance. Chart 9 below show the correlation between higher bond yields and sector, style and regional equity indices.

Chart 9: - Global Equity Sector, Regional and Investment Style performance variation in a rising US bond yield environment.



Source: - JP Morgan Asset Management January 2022

Looking forward over the next 12 months, I expect to see more general equity market volatility due to macro factors like inflation and interest rates and more stock specific risk as investors focus on stock selection rather than just buying the market.

GDP

Table 5 shows the consensus forecasts for GDP growth in calendar 2021 and 2022 and my expectations in November 2021 and January 2022.

Table 5: - GDP forecasts - Consensus versus Advisor expectations.

% CHANGE YOY						
	2022				2023	
	NOVEMBER 2021		JANUARY		JANUARY	
	Consensus	**AF**	Consensus	**AF**	Consensus	**AF**
US	4.0	**4.4**	3.9	**3.6**	2.6	**2.6**
UK	4.7	**5.0**	4.3	**4.0**	2.2	**2.2**
Japan	3.0	**3.0**	3.1	**2.7**	1.5	**1.5**
EU	4.2	**4.5**	4.0	**3.7**	2.6	**2.6**
China	5.1	**5.6**	5.0	**4.7**	5.3	**5.6**
SE Asia	5.3	**5.5**	5.4	**5.0**	5.2	**5.5**

Source: - Consensus Economics January 2022

Between November and January consensus forecasts for GDP growth in 2022 have been revised lower in all regions. Growth is likely to remain stronger than before the pandemic because as mentioned last time economies still have some capacity to grow in aggregate: As we learn to live with covid the more service driven sectors of the economy will continue to expand. The goods sector is experiencing shorter "supplier delivery times" as global trade flows become less disrupted. Households still have excess savings and at the moment a willingness to consume. And governments have only just started to roll out their longer term plans for economic recovery, infrastructure and carbon transition spending.

On the other hand, monetary policy and financial conditions are being tightened by central banks, governments are reducing covid income support programmes and in some cases increasing taxes. And on top of this energy prices are just the latest pressure increasing the cost of living and real incomes are failing to keep pace with inflation. It is these factors that I believe will have a greater influence in 2022 and this is why I anticipate growth while still stronger than before the pandemic could be lower than the consensus forecast. Like the consensus I believe that rate of growth in 2023 will slow to the long term trend in developed markets and will be lower than it was in emerging economies before the pandemic.

The Chinese economy expanded 4.0% year-on-year in the fourth quarter of 2021, slower than the 4.9% seen in the third quarter. It was the slowest quarterly pace of expansion since Q2 2020, amid multiple headwinds including a property downturn, supply chain issues, and covid outbreaks. The economy grew 8.1% over the calendar year, exceeding the government's target of above 6%. Consumption expenditures contributed 65.4% to the 2021 GDP growth, compared with 54.3% in 2020, surpassing the average level of 60% from 2013 to 2019 providing further evidence of the migration from an export led to a domestic consumption led economy.

The US economy expanded by 5.7% in 2021, the strongest growth rate since 1984, reflecting increases in all major subcomponents, led by personal consumption, non-residential fixed investment, exports, residential fixed investment, and private inventory. Personal consumption was pushed higher by a 4.7% surge in services spending, namely health care, recreation, and transportation as covid restrictions have been removed.

Preliminary estimates showed that the UK economy advanced 6.5% year-on-year in the fourth quarter of 2021, following an upwardly revised 7% annualised growth in the third quarter. Government spending recorded the biggest increase (11.6%), followed by household expenditure (8.9%) and gross fixed capital formation (2.3%). However, business investment declined 0.8%, exports fell 0.6% and imports 5.3%. Over the 2021 calendar year, the economy grew by 7.5%, the highest pace since 1941, despite this the UK's economy was still 0.4% smaller than it was before the pandemic.

The Japanese economy grew 5.4% on an annualised basis in Q4 of 2021, following -3.6% contraction in the third quarter advanced data showed. The sharp rebound marked the strongest pace of expansion since Q4 2020, as Japan's government finally got covid infection rates under control and the rate of vaccination significantly increased. Household consumption and business investment rebounded sharply, quarter on quarter and the balance of trade also improved. In the calendar year the economy grew by 1.9%, but this was still 1% smaller than it was prior to the pandemic.

The Euro Area economy advanced 0.3% in the last three months of 2021, the is the slowest growth in three quarters as the Omicron variant spread across the European continent and restrictions hurt the services sector and labour shortages persisted due to illness or quarantine rules. The German economy was the main laggard, contracting by 0.7%. In Calendar 2021, Eurozone GDP advanced at a record 5.2%, following a 6.4% contraction in 2020. As a result of the fourth quarter's weak growth at the end of December 2021, the Euro-area economy was only 0.2% larger than before the pandemic.

Consumer Price Inflation

Table 6 shows the consensus forecasts for Consumer Price Inflation in calendar 2021 and 2022 and my expectations in November 2021 and January 2022.

Table 6: - Consumer Price Inflation forecasts - Consensus versus Advisor expectations

% CHANGE YOY						
	2022				2023	
	NOVEMBER 2021		JANUARY		JANUARY	
	Consensus	**AF**	Consensus	**AF**	Consensus	**AF**
US	3.7	**4.0**	4.8	**5.0**	2.6	**2.5**
UK	3.7	**3.7**	4.6	**5.0**	2.5	**2.4**
Japan	0.7	**0.8**	0.8	**1.0**	0.7	**0.5**
EU	2.3	**2.5**	2.9	**3.5**	1.8	**1.5**
China	2.1	**2.5**	2.2	**2.5**	2.3	**2.3**
SE Asia	2.5	**2.5**	2.6	**2.8**	2.6	**2.6**

Source: - Consensus Economics January 2022

Once again, the consensus forecasts for inflation in calendar 2022 have been revised higher. I have not changed my view that I expect inflation reports over the next few months will be worryingly high. Due to the economic recovery, base effects from 12 months ago, global supply chain disruption, regional increases in covid infection rates and restrictions "upstream", all of which are extending the period of shortages in the supply of goods, services and workers. Although there is some evidence emerging that "supplier lead times" are shortening as global trade and supplier substitution picks up. Currently it is the sharp increase in global energy prices that is driving inflation higher.

I still believe higher energy costs are more likely to have a negative impact on discretionary consumption, ie lead to lower growth, as incomes fail to keep up with prices. Once we are past the next 12 months, I continue to expect inflation to fall back to a level of 2% to 3% over the medium term somewhat higher than the 1% to 2% we have become accustomed to over the last 10 years, but still low.

The annual inflation rate in the US accelerated to 7.5% in January 2022, the highest since February 1982, due to soaring energy costs, labour shortages, and supply disruptions coupled with strong demand. Energy remained the biggest contributor, with fuel prices surging 40%. Inflation elsewhere was much more muted with shelter up only 4.4% and food 7%. Although prices for new vehicles were 12.2% higher and prices for used cars and trucks remain persistently high +40%, due to supply shortages of new vehicles and covid induced demand for private vehicles over public transport. Excluding volatile energy and food categories, the core inflation rate increased 6%, the highest since August of 1982.

In the UK the annual inflation rate increased to 5.4% in December 2021 (and is expected to be similar in January 2022). It is the highest reading since March 1992 as inflationary pressures persist, namely

rising energy prices, supply chain disruptions and a low base effect from last year. After energy costs the biggest upward contribution came from cost of food and non-alcoholic beverages, restaurants and hotels. Core inflation which in the UK excludes energy, food, alcohol and tobacco prices increased 4.2% year-on-year in December, this is the highest reading since at least 1997.

Annual inflation in the Euro Area edged higher to a fresh record high of 5.1% in January 2022 from 5% in December. Energy prices dominate inflation with an increase of 28.6%. Other sources of inflation were much lower food, alcohol and tobacco 3.6%, services 2.4% and non-energy industrial goods only 2.3%. Core inflation which excludes prices of energy, food, alcohol and tobacco, eased to a 3-month low of 2.3%. The inflation rate remains well above the ECB's target of 2% amid a power crisis in Europe which sent cost of natural gas, coal and electricity sharply higher.

After a long period of deflation in Japan consumer prices rose at an annual rate of 0.8% in December 2021, accelerating from a 0.6% gain a month earlier the 4th straight monthly increase. Just as elsewhere the largest contributions come from energy prices +11% and after that food prices +2.1%. Core consumer prices gained 0.5% year over year, the same as in November, staying at their highest levels in almost 2 years.

4. The outlook for the securities markets

The global economic recovery remains on track but it is slowing from the sharp rebound we saw as lock down measures were eased and economic growth especially in the goods sector started its stuttering recovery. In recent months the leisure and hospitality sectors have also started to recover. But the dislocations in terms of global trade and the availability of workers has led to an uptick in inflation. At the same time the strong demand for oil and gas against a backdrop of poor energy transition planning, the intermittency of renewables, the lack of investment and increased geo-political tensions have compounded the near term outlook for inflation. I believe we are right in the middle of the bad news for inflation. As a result, it is entirely likely that over the next 6 to 12 months, the year over year inflation reports will be higher and this will make equity and bond markets more volatile as they see the inflation data and worry about how the central banks will respond on monetary policy.

In my last report I said that I believed "we are approaching the end of the period of super easy monetary policy in the US and in the UK". Since then, the BoE has raised the base rate twice to 0.5% and the US Fed has announced; that it will bring QE to an end sooner than expected, start increasing interest rates and reducing the size of its balance sheet (QT). Even the ECB has started talking about the early removal of QE. In the space of 3 months the world's most important central banks have moved from an easy monetary policy stance to telling the markets to expect tighter monetary policy in order to tackle inflation. As a result, bond markets are now expecting as many as seven, 0.25% interest rate increases from the US and UK central banks over the next 12 months. Government bond yields have risen and the more interest rate sensitive sectors of the corporate bond and equity markets have been sold and volatility is generally higher.

While the pace of economic growth is expected to moderate it is likely to remain strong due to lingering effects of easy monetary and fiscal policy as well as the recovery from the covid dip. Inflation is increasingly the main concern of markets, with the current inflation scare being caused by dislocations in global goods supply chains, changes in the availability of workers and higher energy prices. All of which are likely to get factored into the reported inflation data over the next 12 to 18 months.

However, I still believe higher inflation is a "tax on growth". The transmission mechanism is the reduction of discretionary spending caused by earnings not keeping up with higher prices. As a result, I expect the higher inflation prints we are likely to see over the next 12 months could be falling back closer to 3% by the end of the year. While this is higher than the 1% to 2% we have become accustomed to over the last 10 years, this is not a cause for concern. If I and long term market inflation expectations are wrong, it will be because earnings manage to keep pace or outpace the rate of inflation.

Higher interest rates and inflation are not necessarily a bad outcome for equity markets, but it could lead to a rotation in those sectors which lead performance, with the more interest rate sensitive "growth" sectors, underperforming the quality and value sectors. Going forward, I expect more subdued returns and greater volatility from equity markets.

Bond Markets

In table 7, 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 2022.

Table 7: - Interest rate and Bond yield forecasts

%	CURRENT	SEPTEMBER 2022	MARCH 2023
UNITED STATES			
3month SONIA	0.25	1.25	2.0
10 year bond yield	1.92	2.25	2.5
UNITED KINGDOM			
3month SONIA	0.60	1.0	1.50
10 year bond yield	1.41	1.75	2.00
JAPAN			
3month SONIA	-0.09	-0.10	-0.10
10 year bond yield	0.19	0.25	0.25
GERMANY			
3month SONIA	-0.64	-0.50	-0.25
10 year bond yield	0.21	0.30	0.50

Source: - Trading Economics; 11th February 2022

As a result of the mixed messaging of the BoE in the fourth quarter of 2021, and despite rising inflation, UK Government bond yields fell, until the MPC meeting in December when the BoE unexpectedly raised the base rate from 0.1% to 0.25%.

Since then, Government bond yields have been rising leading to negative returns. At their February 2022 meeting the BoE increased the base rate to 0.5% with a number of MPC members voting for an increase to 0.75%. The BoE also announced a new policy of Quantitative Tightening (QT). This involves selling back to the market the £20 billion of corporate bonds it has purchased since March 2020, as part of its covid action plan. After redemptions have been taken into consideration this is a net supply to the market from the BoE of £18 billion, or about £850 million a month until December 2023, on top of the net new issuance of corporates and the government. While corporate net supply is expected to be moderate, the same cannot be said for the government.

Outside of the UK, government yields have also risen and curves in US, Europe and Japan have flattened significantly implying that global bond markets expect all the world's major central banks to increase interest rates.

In my last report I said that I expected longer dated government yields to increase and suggested that yield curves could steepen as central bank interest rates would remain anchored until QE programmes were completely ended. However recent evidence has overturned this view and yield curves have

flattened significantly as they try to price in as many as seven, 0.25% rate hikes over the next 12 months.

There are 2 inferences to be taken from this outcome, the 1st is that central banks especially the US Fed and the BoE have pivoted from not being worried about inflation to being very worried about inflation. Hence the markets expectations of a 1.25% increase in base rates over the next 12 months and the rapid increase in short term bond yields. But the 2nd suggests that bond markets still believe that the central bank response will keep longer term inflation under control, hence long term bond yields have risen much less and implied inflation expectations have not changed significantly.

I have not changed my forecasts I still expect government bond yields to rise and interest rate sensitive assets classes to underperform over the medium term.

Bond Market (Protection Assets) Recommendations

In the short term my prediction is that inflation is likely to be higher than expected and economic growth, while moderating. is also likely to remain strong. Central banks are likely to use this opportunity to end super easy monetary policy and begin the process of normalisation of interest rates. This suggests to me that government bond yields can continue to rise and given their long duration, deliver significant negative returns. As a result, I am happy to be underweight protection assets, last quarter I suggested a 2% underweight of conventional gilts, in favour of holding a higher weight in cash. This quarter I would go further and suggest an additional underweight of 2% to investment grade corporates reducing the allocation from 6% to 4% in recognition of the higher interest rate sensitivity and very low spread to governments. I would allocate this to Multi-asset Credit because while high yield spreads are also low, corporate fundamentals remain strong and default rates are likely to remain low. Also, because many of these securities have floating rather than fixed interest rates, they are less interest rate sensitive, which is ideal in a rising yield environment.

I recognise the benefit of holding government bonds as protection against a selloff in equity markets and to match the Scheme's liabilities but at their current low level of yield government bonds neither provide the income they did in the past whilst protection against falling markets is less of a benefit when yields are so low.

I remain uncomfortable with the extremely high duration, negative yield and over-valuation of index linked gilts, and while I have consistently recommended an underweight allocation in the past in the current period of rising inflation, I would not seek to reduce the position further.

As usual in table 8 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 there is very little income protection even for small increases in yield at current durations and spreads.

Table 8: - Total returns from representative bond indices

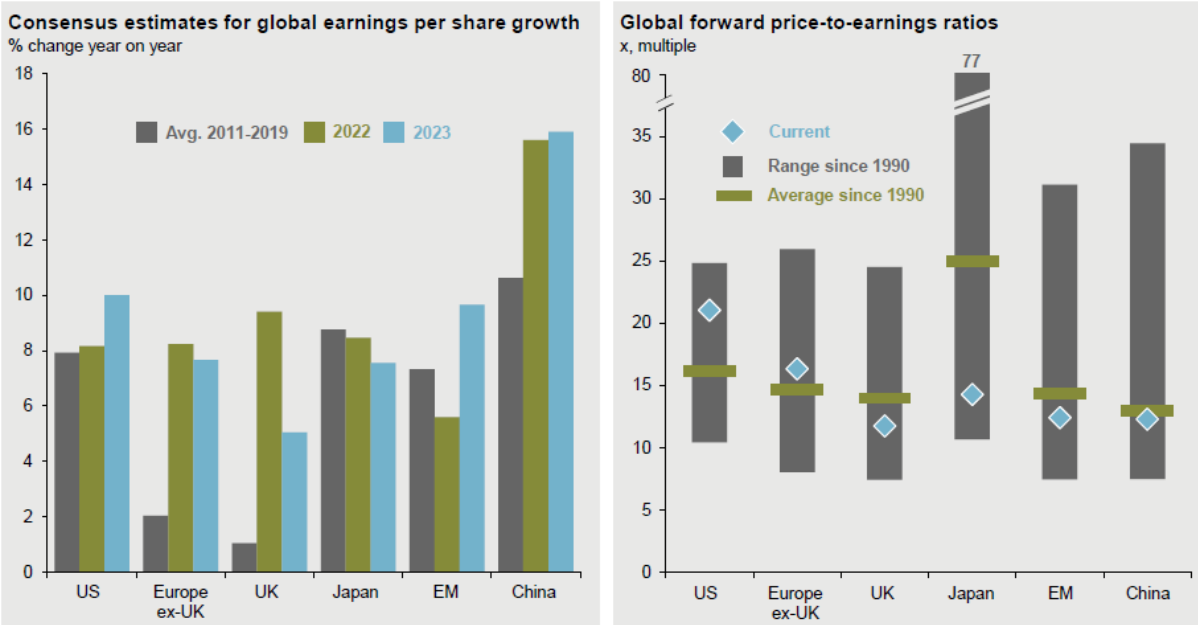
INDEX	YIELD TO MATURITY %	DURATION	YIELD INCREASE %	% TOTAL RETURN, HOLDING PERIOD	
				3 MONTHS	12 MONTHS
All Stock Gilts	1.38	12.3	0.5	-5.8	-4.8
All Stocks Linkers	-2.33	17.3	0.5	-8.6	-8.0
Global IG Corporate	2.72	8.1	0.5	-3.4	-1.3
Global High Yield	5.31	4.1	0.5	-0.7	+3.3

Source: - ICE Indices 4th February 2022

Equity Markets

Chart 9 below, left hand side, shows the consensus earnings per share growth estimates, for 2022 and 2023 compared to the annual average between 2011 and 2019. The right hand side shows, the current forward looking estimates of price / earnings 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 9: - LHS - Earnings per Share estimates, RHS - Price/Earnings Ratios, since 1990, China 1996



Source: - JPM Asset Management., December 2021

Despite the changes in the macro-economic outlook earnings per share forecasts have not changed and analysts are still expecting earnings to be stronger or in-line with the average between 2011 and

2019 despite covid. As has been noted here for some time equity valuations based on the price earnings ratios remain high in the US and low in the UK, Japan and Emerging markets. However, the recent sell-off in China has moved the relative valuation from above to below average.

According to the equity analysts the expansion in the business cycle is currently described as "mid-cycle". If this is the case then earnings can continue to grow and the equity markets can continue to perform well especially those which are pro-cyclical and / or cheap on p/e, valuation basis.

At the moment it is very early in the US earnings reporting season, but once again, many of those companies that have already reported. are outperforming analyst expectations. While the outperformance is more muted than in the 2nd and 3rd quarters, revenues remain well ahead of the 5 year average suggesting that there are strong fundamentals underpinning the outlook for earnings.

On balance I still believe there is upside in equity markets, but the returns will be harder won, with more volatility and lower aggregate returns to those we have seen over the last year. I believe it pays to look at valuations and earnings, both of which suggest to me there are easier gains to be had outside the US. As suggested in my last report, sector leadership has already started to shift with the more interest rate sensitive sectors underperforming less leveraged sectors of the equity markets.

Equity Market (Growth Assets), Recommendations

The first quarter of 2022 is a transition period for the strategic allocation to Growth Assets from the interim benchmark allocation to the new strategic asset allocation. From 1st January 2022 the Fund's Strategic Asset Allocation Benchmark will be as set out in column 2 of Table 8 below. This change will see the complete disinvestment from the direct USA, European and Pacific Basin ex Japan portfolios and a further reduction in the allocation to UK equity, with an increased investment in Global Sustainable Equity. Once the transition is complete the combination of remaining regional and the new global funds will better match the Funds overall desired Strategic Asset Allocation to growth assets. The total allocation to Growth Assets will also fall by 1% in favour of increasing the exposure to Infrastructure in the Fund's Income Asset allocation.

The size of the transition required is so significant that I would not propose making any tactical or temporary changes in the asset allocation. The only suggestion I would make is that if the transition needed to be phased over the quarter, that sales and purchases should be executed in a proportional way. Rather than selling completely out of one region or fund before another.

Income Assets

As mentioned above in protection assets I propose that the allocation to Investment grade corporate bonds should be reduced by 2% and the allocation to MAC be increased by 2%. I suggest this because of the much higher interest rate sensitivity and narrow spread of the asset class. While it would seem counter intuitive to do this, the reason bond yields are rising is because, interest rates are rising, not because the outlook for credit is worsening. The fundamentals of improving growth and low default rates remain positive especially for sub-investment grade credits. Also, MAC Fund managers have the ability to invest in floating rate debt which is a good place to be in a rising interest rate environment.

Looking at the current allocations Infrastructure remains the main underweight and this has slightly increased in January 2022, due the changes in the Fund's strategic allocations. Building the allocation to Infrastructure takes time and at the moment this asset class is attracting strong demand from investors, so I am happy that the IHT is not rushing to increase exposure, the appropriate returns are being sought and investment due diligence is being done.

The performance of the property allocation has proved to be resilient over the last 12 to 18 months despite the impact of covid. As could have been expected the direct property allocation has out-performed the indirect allocation. I would like to see the direct allocation increase funded using net sales from the in-direct exposure, but again as with infrastructure this needs to be done with caution as it is a very long term investment decision, and in the case of property transactions quite expensive.

As noted above in "protection assets" I would suggest a 2% overweight to cash from Gilts because of the extremely low yield and the high duration risk currently attached to the asset class. At the end of January, the Fund was holding over 5% in cash, but more than 3% of this figure is already promised for future private market investments. Given the current valuation of all investment markets I am not in hurry to reduce the cash allocation.

The asset allocation set out in table 9 below, shows the new Interim and New Benchmark and my suggested asset allocation weights relative to this benchmark as of the 12th November 2021 and the 11th February 2022. 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 and their investment managers to find correctly priced assets for inclusion in the Fund.

Table 9: - Recommended asset allocation against the Strategic Benchmark.

The 2 righthand columns show my suggested allocations relative to the interim benchmark that came into effect on the 1st January 2021. I have also included the new strategic benchmark that comes into effect on the 1st January 2022. This change completes for benchmarking purposes the migration to the new allocations of growth assets. Given the magnitude of the changes I do not propose taking a tactical position, other than to note the US remains expensive and the UK cheap on a relative valuation basis.

% ASSET CATEGORY	INTERIM DERBYSHIRE STRATEGIC WEIGHT 1ST JANUARY 2021	NEW DERBYSHIRE STRATEGIC WEIGHT 1ST JANUARY 2022	ANTHONY FLETCHER 12TH NOVEMBER 2021	ANTHONY FLETCHER 11TH FEBRUARY 2022
Growth Assets	**56**	**55**	**0**	**0**
UK Equity	**14**	**12**	**0**	**0**
Overseas Equity	**42**	**43**	**0**	**0**
North America	6	**0**	**0**	**0**
Europe ex UK	4	**0**	**0**	**0**
Japan	5	5	**0**	**0**
Pacific ex Japan	2	**0**	**0**	**0**
Emerging markets	5	5	**0**	**0**
Global Sustainable	16	**29**	**0**	**0**
Private Equity	4	4	**0**	**0**
Income Assets	**24**	**25**	**0**	**+2**
Property	9	9	**0**	**0**
Infrastructure	9	**10**	**0**	**0**
Multi-asset Credit	6	6	**0**	**+2**
Protection Assets	**18**	**18**	**-2**	**-4**
Conventional Gilts	6	6	**-1**	**-2**
UK index Linked	6	6	**-1**	**0**
US TIPS	0	0	**0**	**0**
UK corporate bond	6	6	**0**	**-2**
Cash	2	2	**+2**	**+2**

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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