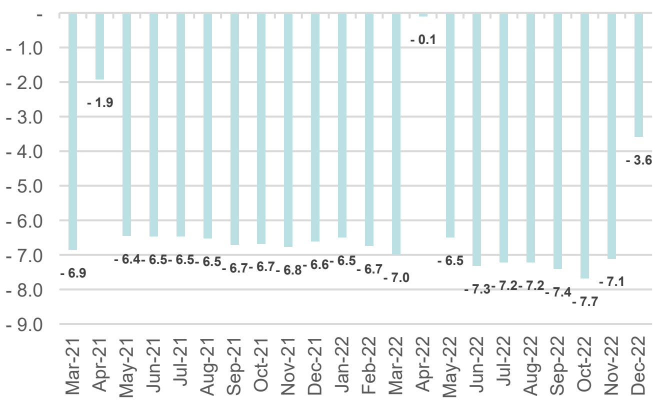
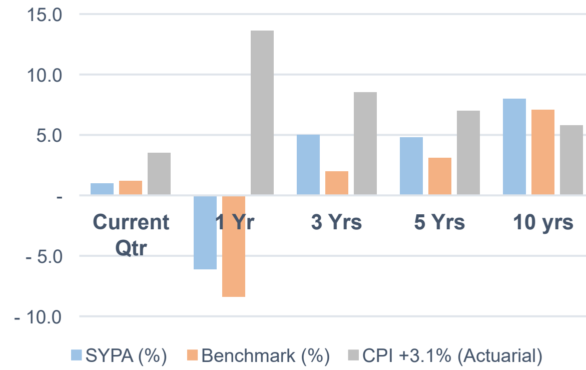
SOUTH YORKSHIRE PENSIONS AUTHORITY

QUARTERLY REPORT TO 31 DECEMBER 2022

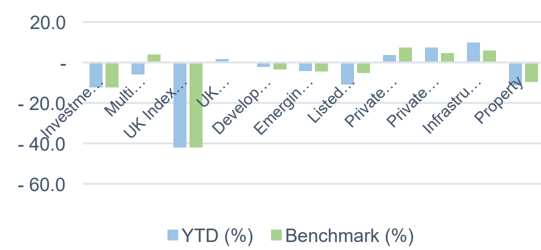
NET CONTRIBUTIONS



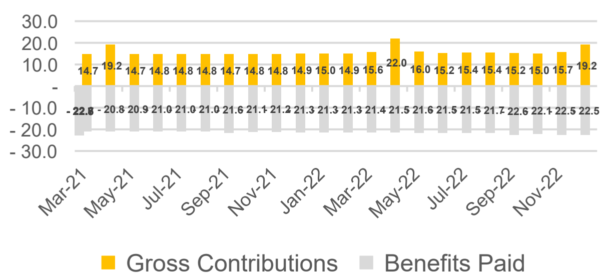
TOTAL FUND RETURN



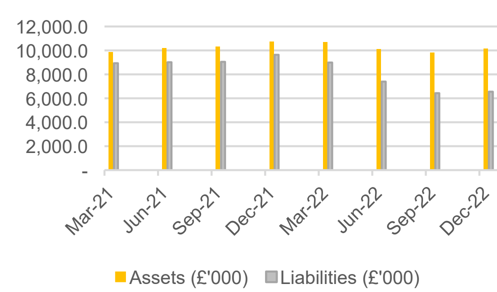
ASSET PERFORMANCE BY TOTAL ASSET CLASS- YEAR TO DATE



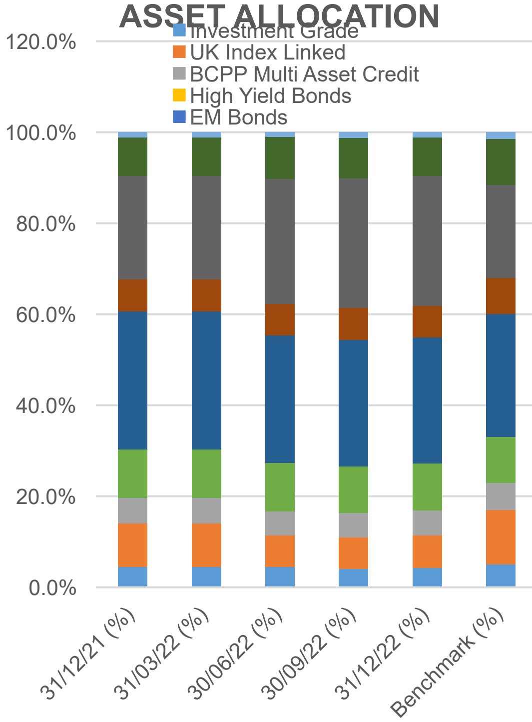
BREAKDOWN OF NET CONTRIBUTIONS



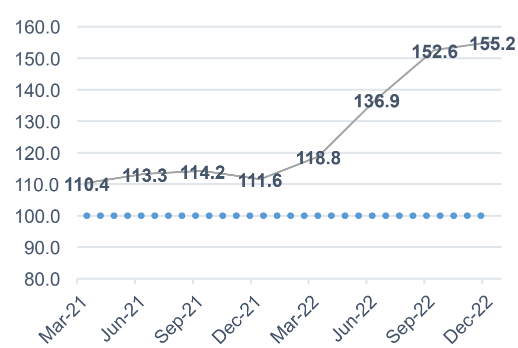
ASSET LIABILITY RATIO SINCE MAR 2021



ASSET ALLOCATION



FUNDING LEVEL %



Market background

Stock markets gained over the final quarter of 2022 as they were boosted by signs that global inflationary pressures may be waning. The US Federal Reserve, ECB and the Bank of England all continued to raise interest rates to tackle high inflation but eased the size of rate hikes in December. Government bond yields rose towards the end of the quarter as major central banks reiterated plans to tighten monetary policy.

UK equities recovered strongly over the quarter as a change of chancellor and prime minister reversed the policies introduced by Liz Truss' government. This also restored stability to UK bond markets. The Bank of England raised rates by 0.75% in November and then 0.5% in December. The FTSE 250 Index which has companies more typically biased towards the domestic economy, outperformed the FTSE 100 index as the dollar weakened over the quarter.

Global equities also rebounded over the quarter. Signs that inflation may have peaked in the US and Europe increased hopes that the current interest rate hiking cycle may be reaching an end. European markets performed particularly well helped by strength in German and Italian equities. US and Asian markets also recovered with China shares starting to surge in November after the Chinese government signalled its decision to relax its strict xero-Covid policy. This was confirmed in December. Emerging markets generally posted strong returns helped by a weaker dollar.

Globally, government bond yields showed a mixed picture. UK government bonds recovered from September's mini-budget after a reversal of policies was announced. US Treasuries also rose although fell in sterling terms as the dollar weakened. European and Japanese bonds declined over the period, with the ECB maintaining its hawkish message and the Bank of Japan announcing a modification to its yield curve control policy Credit spread is the difference in yield between bonds of a similar maturity but with different credit quality. Credit spreads tightened across the quarter on improved risk sentiment and outperformed government bonds.

Sterling investment grade had a better quarter after the reversal of the mini-budget and were boosted by signs that global inflationary pressures may be receding in the US and Europe. High yield bonds also rose significantly in local currency terms.

Market background

Commodity indexes rose over the quarter with higher prices in industrial and precious metals offsetting weaker agriculture prices. Within energy, strong gains for unleaded gasoline and heating oil offset a sharp decline in the price of natural gas.

Real estate returns fell sharply given the weaker economic environment. Three month total return figures turned negative for the first time since the outbreak of the Covid-19 pandemic in 2020. Capital value declines have been the main driver in weaker performance as yields have begun to move out, particularly in lower yielding areas of the market. Industrials were the weakest given that they were coming from a very low yield base, falling 19.4% with residentials being the most resilient, down only 2.6%.

Fund Valuation

as at 31 December 2022

	Sep-22 £m	%	Quarterly Net Investment	Dec-22 £m	%	Benchmark %	Range %
FIXED INTEREST							
Inv Grade Credit - BCPP	396.6	4.0	10.0	427.7	4.3	5	
UK ILGs - BCPP	656.5	6.6	100.0	671.3	6.7	10	
UK ILGs SYPA	40.2	0.4	0.0	35.9	0.4		
MAC - BCPP	520.9	5.3	6.3	551.5	5.5	6	
TOTAL	**1614.2**	**16.3**	**116.3**	**1686.4**	**16.9**	**21**	**16-26**
UK EQUITIES	**1017.6**	**10.2**	**-60.0**	**1044.9**	**10.4**	**10**	**5 _ 15**
INTERNATIONAL EQUITIES							
Developed Market - BCPP	2770.9	27.9	-170.0	2767.0	27.6	27.125	
Developed Market - SYPA	0.0	0.0	0.0	0.0	0.0		
Emerging Market - BCPP	694.7	7.3	0.0	690.7	6.9	7.875	
Emerging Market - SYPA	1.0	0.0	0.0	0.9	0.0		
TOTAL	**3466.6**	**34.9**	**-170.0**	**3458.6**	**34.5**	**35**	**30-40**
LISTED ALTERNATIVES -BCPP	**172.2**	1.7	**-20.0**	**157.0**	1.6	0	
PRIVATE EQUITY							
BCPP	207.4		24.8	242.7			
SYPA	910.5		-11.3	852.0			
TOTAL	**1117.9**	**11.3**	**13.5**	**1094.7**	**10.9**	**7**	**5_9**
PRIVATE DEBT FUNDS							
BCPP	77.0		27.5	111.9			
SYPA	504.1		-13.9	480.3			
TOTAL	**581.1**	**5.9**	**13.6**	**592.2**	**5.9**	**5.5**	**4.5-6.5**
INFRASTRUCTURE							
BCPP	235.8		52.4	306.0			
SYPA	721.7		3.7	712.7			
TOTAL	**957.5**	**9.6**	**56.1**	**1018.7**	**10.2**	**10**	**7_13**
CLIMATE OPPORTUNITIES	**0.0**	**0.0**	**4.2**	**4.2**	**0.0**	**0**	
PROPERTY	**878.0**	**8.8**	**49.9**	**842.4**	**8.4**	**10**	**8_12**
CASH	**130.3**	**1.3**		**115.1**	**1.2**	**1.5**	**0-5**
TOTAL FUND	**9935.4**	**100.0**		**10014.2**	**100.0**	**100**	
COMMITTED FUNDS TO ALTERNATIVE INVESTMENTS	**1685.8**			**1531.5**			

Asset Allocation Summary

We continued to reduce our overweight position to listed equity funds. We sold £230m, £60m from UK equities and £170m from overseas developed equities to fund a £100m investment into Index-Linked Gilts which reduced the underweight position and to fund further drawdowns into private equity, private debt and infrastructure funds. During the quarter we also reduced our weighting to the Listed Alternative fund by £20m to increase the weighting to both the Sterling Investment Grade Credit fund and the Multi Asset Credit fund.

Within the agricultural property portfolio we purchased a £27m holding at Holbeach which created synergies with our existing holdings. There were further drawdowns on the CBRE loans that we have and also into the residential funds that we hold.

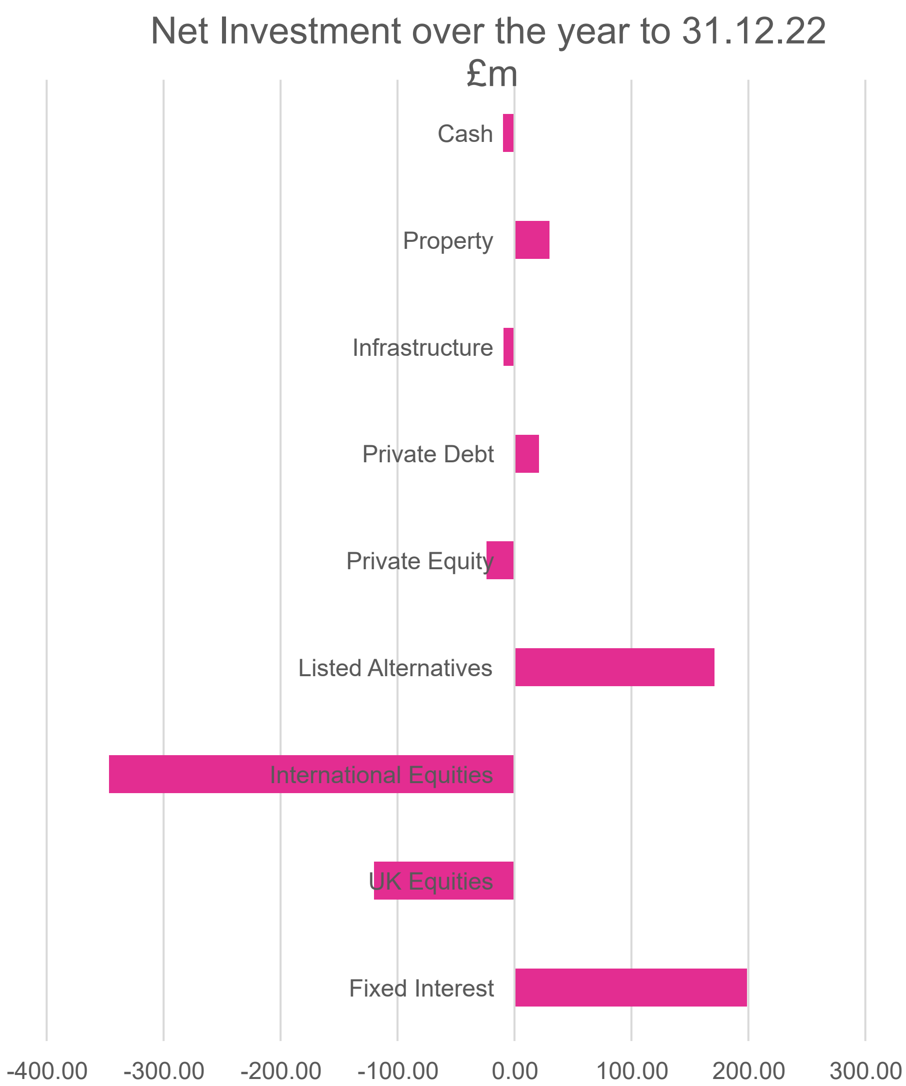
After the trades mentioned above there is now only one category that is outside its tactical range and this is private equity.

Our private equity fund holdings are showing signs of topping out in terms of valuation and we have seen a reduction in weighting to this category. We have been reducing our annual commitment to this category over the last few years and as realisations come through the overall weighting should continue to reduce.

The changes in net investment for the categories over the last year are also shown below. It shows that we have been de-risking the Fund in line with the strategic benchmark

The current Fund allocation can also be seen in the chart below and is shown against the strategic target.

Asset Allocation Summary



Asset Allocation Summary

Strategic vs Current Asset Allocation					
Asset Class	SAA Target	Range	Current Asset Allocation		
	%	%	£m	%	OW/UW
Index Linked Gilts	10	7 - 13	707.2	7.1	-2.9
Sterling Inv Grade Credit	5	4 - 6	427.7	4.3	-0.7
Multi Asset Credit	6	4 - 8	551.5	5.5	-0.5
UK Equities	10	5 - 15	1044.9	10.4	0.4
Overseas Equities	35	30 - 40	3458.7	34.5	-0.5
Private Equity	7	5 - 9	1094.7	10.9	3.9
Private Debt	5.5	4.5-6.5	592.2	5.9	0.4
Infrastructure	10	7 - 13	1018.6	10.2	0.2
Listed Infrastructure	0	0-2	157	1.6	1.6
Climate Opportunities	0	0-2	4.2	0.0	0.0
Property	10	8 - 12	842.4	8.4	-1.6
Cash	1.5	0 - 5	115.1	1.1	-0.4
Total	100		10014.2	100	

OW/UW 'RAG' ratings

Green ratings indicate that current asset allocation is within agreed tolerances

Amber ratings indicate that current asset allocation is beyond 70% of the difference between the maximum/minimum range and the strategic target allocation

Red ratings indicate that current asset allocation is out of range

Performance

as at 31 December 2022

	Qtrly Performance		Financial Y.T.D.	
	SYPA	Benchmark	SYPA	Benchmark
	%	%	%	%
FIXED INTEREST				
Investment Grade Credit - BCPP	6.3	5.7	-12.2	-12.3
UK ILGs	-12.8	-12.8	-41.9	-41.9
Multi Asset Credit - BCPP	4.7	1.6	-5.9	3.8
UK EQUITIES	**8.8**	**8.9**	**1.7**	**-0.2**
INTERNATIONAL EQUITIES				
Developed Market - BCPP	6.0	5.6	-2.1	-3.3
Developed Market - SYPA			-4.7	-8.4
Emerging Market - BCPP	-0.6	0.7	-4.2	-4.3
Emerging Market - SYPA	-4.8	0.7	-1.0	-4.3
TOTAL	**4.7**	**4.6**	**-2.5**	**-3.3**
PRIVATE EQUITY	**-3.3**	**2.4**	**3.5**	**7.4**
PRIVATE DEBT FUNDS	**-0.2**	**1.5**	**7.2**	**4.5**
INFRASTRUCTURE	**0.7**	**1.9**	**9.7**	**5.9**
PROPERTY	**-8.6**	**-9.8**	**-11.2**	**-9.5**
CASH	**0.7**	**0.7**	**1.3**	**1.3**
TOTAL FUND	**1.0**	**1.2**	**-5.2**	**-7.0**

Performance Summary

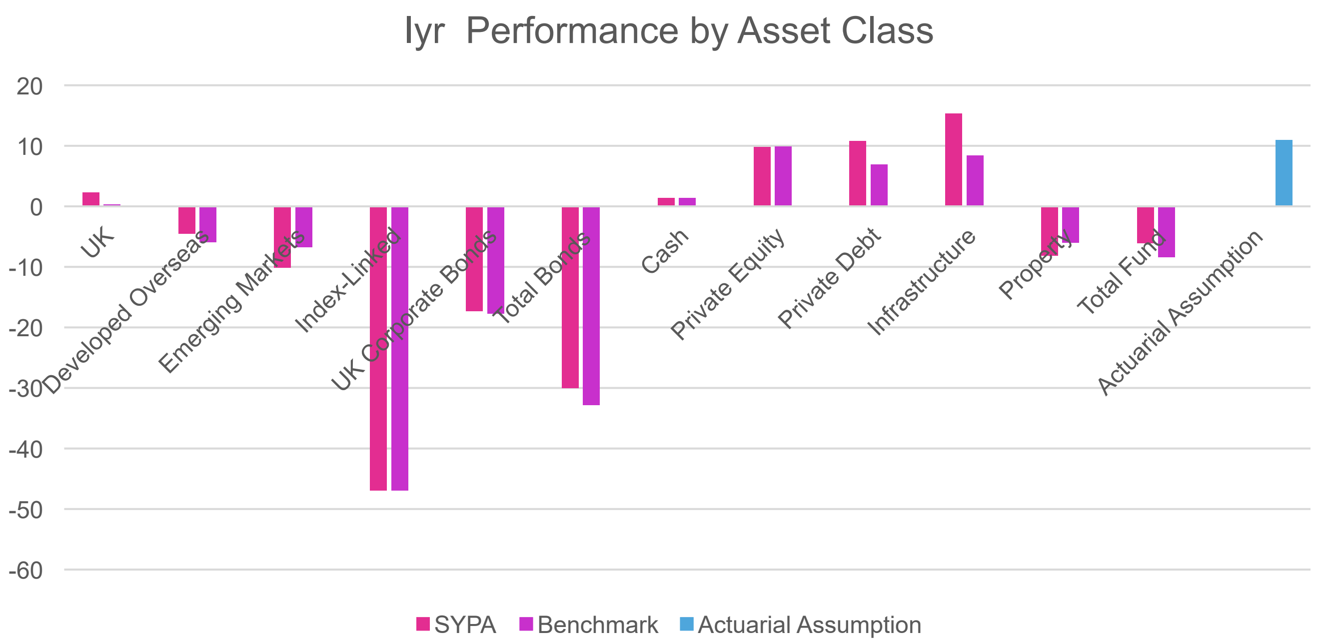
For the quarter to the end of December, the Fund returned 1.0% against the expected benchmark return of 1.2%. Asset allocation decisions taken together added 0.5% and stock selection detracted by 0.8%

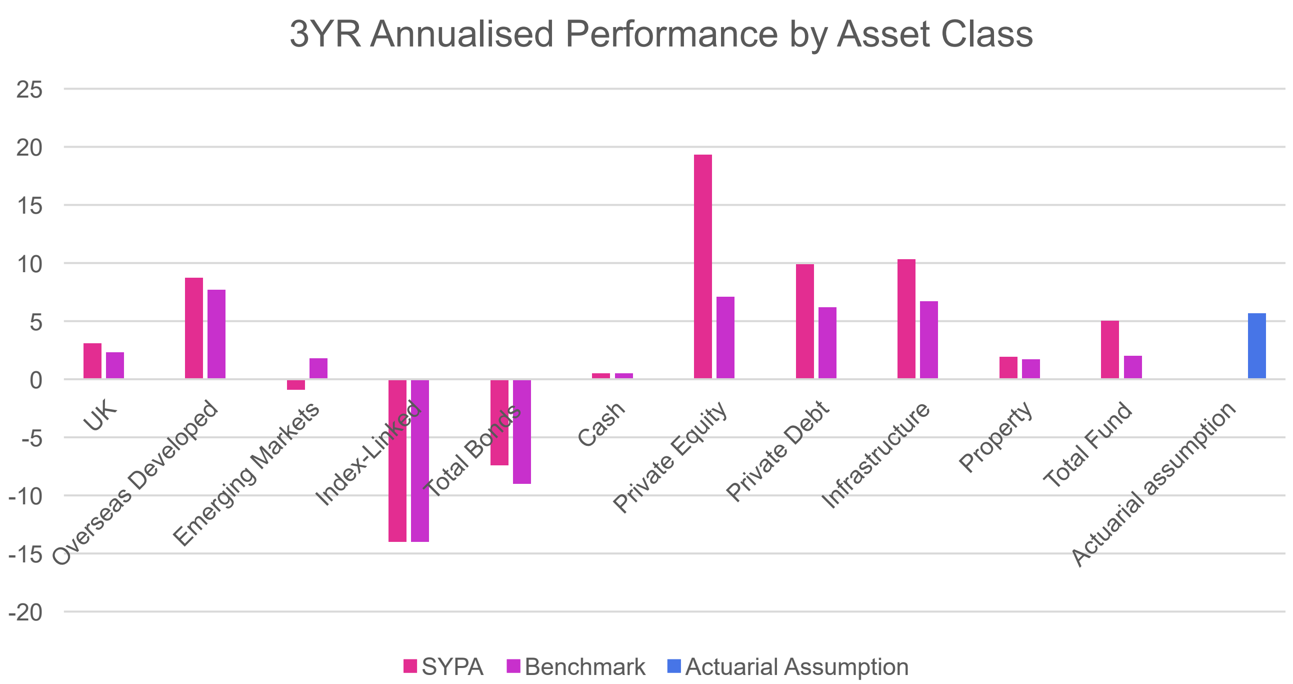
The breakdown of the stock selection is as follows:-

Dev Overseas Equities	**0.1%**
EM Equities	**-0.1%**
Multi asset Credit	**-0.1%**
Private Equity funds	**-0.6%**
Private Debt funds	**-0.1%**
Infrastructure funds	**-0.1%**
Property	**0.1%**

South Yorkshire Pensions Authority

Performance-Medium term





Performance – Border to Coast Funds

The UK equity portfolio showed outperformance of its benchmark this quarter and is now achieving its target return since inception. The portfolio benefited by being underweight real estate where the sharp rise in yields negatively impacted property valuations and by being overweight industrials such as Melrose Industries and Coats which benefitted from global economic recovery post the pandemic lockdown.

The Overseas Developed Market portfolio continued it's steady outperformance with stock selection in all areas being in-line or outperforming the benchmark indices, with Europe ex-UK in particular adding to performance. Strong stock selection within the energy sector across most regions, together with relatively low exposure to Real Estate added to performance. .

The Emerging Market portfolio reversed the performance of last quarter, under-performing the benchmark this quarter by 1.3%, with all three managers underperforming their target index. It is behind the benchmark since inception.

At the start of the quarter the Bank of England intervention and the change in the Prime Minister and moving back to a tight fiscal stance rather than the pro-growth un-funded strategy of the Truss government helped calm the volatility in the bond markets and led to a short lived relief rally in bond prices. As the quarter progressed the prospect of still significant fiscal demands and the commencement of the Bank of England's quantitative tightening programme again put upward pressure on yields, although to a lesser degree than the previous quarter. Medium to long dated yields rose 50 to 60 bps over the quarter and there was a modest reduction in corporate spreads. The increase in gilt yields resulted in a total return of -12.8% for the Index-Linked portfolio compared to the benchmark performance of -12.76%. The portfolio underperformed marginally by being overweight to ultra-long linkers which were the weaker performers.

Interest rates began the quarter elevated but as interest rate expectations fell this was beneficial for the Sterling Investment Grade credit portfolio which outperformed its benchmark by 0.54% with all managers outperforming. From inception all the managers have achieved outperformance of their target.

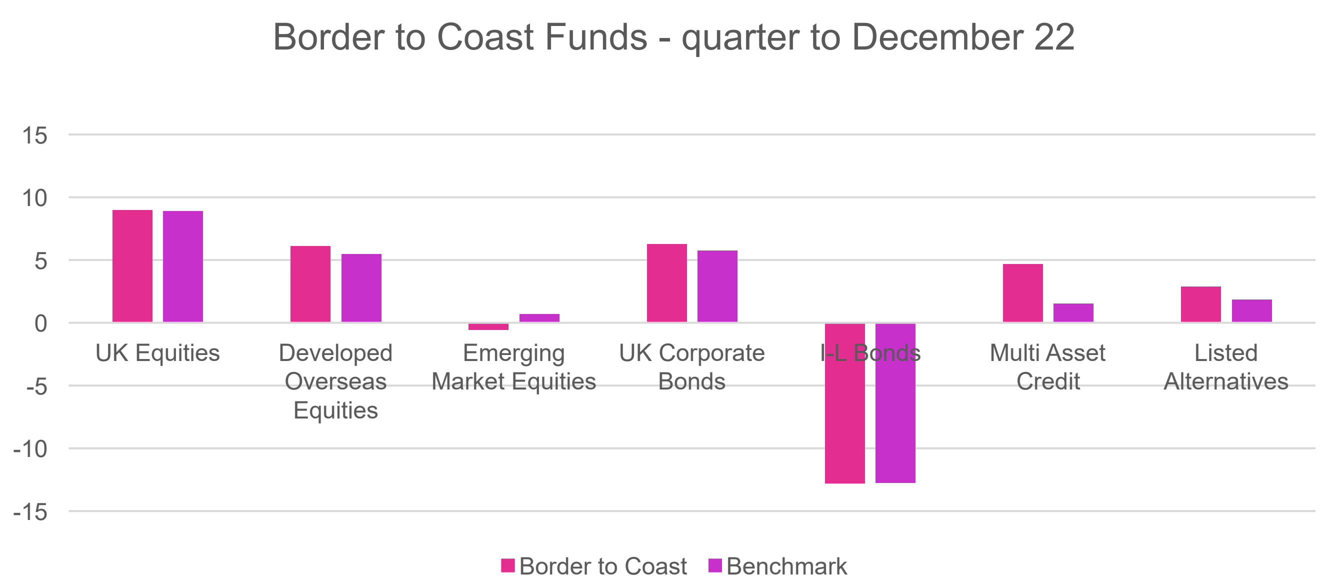
Performance – Border to Coast Funds

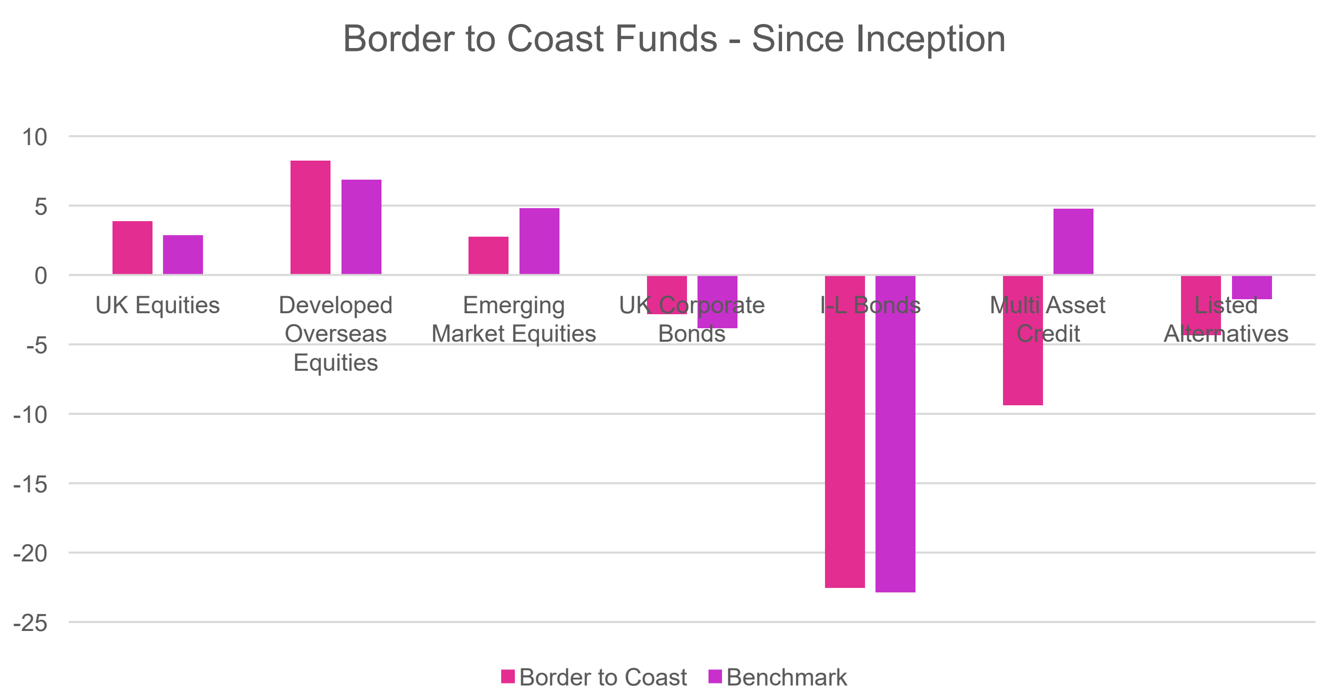
The Multi-Asset Credit fund has an absolute return benchmark and this quarter all the underlying fixed income asset classes experienced strong performance and thus led to outperformance. The stand out area of performance was emerging market debt which gained more than 8% over the quarter as the weakness in the US dollar eased the repayment burden for emerging market debtors. However, it Is still behind target from inception.

The Listed Alternatives fund showed outperformance for the quarter but is still underperforming since inception. The portfolio has a diversified portfolio which includes listed assets in infrastructure, specialist real estate, private equity and alternative credit. Assets with high interest rate sensitivity were adversely impacted earlier in 2022 as rates rose sharply but the manager feels that the portfolio is well positioned going forwards as most of the policy tightening has occurred and their estimates of returns for their largest holdings are well into double-digits.

The charts below show quarterly returns but also the longer term position of each of the Border to Coast funds that we hold.

Performance-Border to Coast Funds





Funding Level

The funding level as at 31 December 2022 is estimated to be 153%

The breakdown is as follows:

Fund's Assets at 31 December	**£10,016**
Funds estimated Liabilities at 31 December	**£6,553**

Caveat

This estimate is calculated on a rollforward basis. This means that there is no allowance made for any actual member experience since the last formal valuation on 31 March 2022

Outlook

The backdrop to growth and inflation has marginally improved, but the global cost of living crisis, and specifically the cost of energy in the UK and Europe continues to be an issue. With the negative economic pressures, the path forward for asset classes remains uncertain.

Central banks are focused on fighting inflation which has led to higher real yields, flatter yield curves and tighter financial conditions which has also given rise to greater market volatility.

Valuations have become more attractive, but the background has become more challenging.

UK Equities

The UK faces a tough year from an economic perspective and does seem to have a structural issue with its labour force where the size of the labour force has not recovered to its pre-Covid levels.in the same way as in other Western economies, and this will lower growth until addressed. However valuations on the stock market look attractive and offer an attractive yield.. Would like to have a fairly neutral weighting

Overseas equities

We expect market conditions to remain volatile. We are now only moderately overweight overseas equities although we are underweight emerging markets relative to our benchmark weighting. Valuations do not look stretched as long as the earnings expectations are met. Will look to continue rebalancing total overseas weighting towards neutral by reducing the developed market portfolio.

Outlook

Bonds

The important factor for bonds is how far central banks will go in their bid to control inflation, when they pivot to easier policy and whether they manage to avoid a deep and prolonged recession. It seems likely that interest rates, and so bond yields, will probably settle at a higher level than we have become used to since the financial crisis. Valuations are looking more attractive than in recent months and the asset class will become more competitive from an income perspective than it has been for many years. We have benefited from being underweight bonds as rates have been increasing but we now see better value in bonds so will be rebalancing into bonds.

Real Estate

UK real estate is now undergoing a broad repricing given the weaker macroeconomic environment. Investors continue to narrow their focus on prime and best-in-class assets, particularly within those sectors that benefit from structural and demographic growth drivers. Secondary assets, and those that do not meet current environmental and occupier criteria, are expected to see much weaker demand from investors.

Prime price is expected to stabilise in 2023 and secondary pricing is expected to see greater capital value declines. Opportunities will arise over the course of 2023, particularly as the path of monetary policy turns more accommodative. Those sectors that benefit from longer-term growth drivers, such as the industrial and living sectors, will see greater demand return and at more attractive pricing levels. The repricing of long-income investments will also provide an attractive opportunity for investors, particularly when yields for gilts and inflation-linked bonds moves lower in line with the expected rate cuts from the Bank of England.

Although our portfolio performance has been hit in the short term due to lower yielding core industrial stock being repriced as the margin between prime yields and the risk-free rate narrows, over the medium term the fundamentals for the sector remain positive.

Outlook

Real Estate cont
After the sales programme we have undertaken our low exposure to offices is a positive but we now need to diversify by increasing the exposure to healthcare, student accommodation, Build to Rent, Retail Parks and Supermarkets. The focus will still be on good quality assets with strong ESG credentials.

Will look to selectively increase our weighting.

Alternatives

The alternative investment market which includes investments within private equity, private debt and infrastructure, have the potential to add value and diversification. They generally generate above market returns and we are looking to add further investments into this asset class with the allocations being weighted more towards private credit which tend to benefit from the linkage to floating rates in a period of rising rates and to infrastructure investments that have a particularly high level of linkage to inflation and have secure income characteristics.

Cash

Cash is now at a level that any further cash requirement will be financed by switching among the asset classes.

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