Quarterly Funding & Investment Report

End September 2021

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Prepared for: North Yorkshire Pension Fund
Prepared by: Aon
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Agenda Item 10

QAS Institute and Faculty of Actuaries
Quality Assurance Scheme

For professional clients only

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At a glance…

A high level summary of your investments and funding

At a glance…

Funding

The funding level has fallen over the quarter (down by 0.9%), and the surplus has reduced (by c. £20m), primarily due to slightly lower returns on assets relative to the expectation. The funding level remains above the funding level at the 2019 valuation.

Asset Allocation and Implementation

A number of short/medium term changes to the asset allocation have been agreed by the Committee in light of the recently agreed long-term investment strategy, a number of implementation actions have taken place over Q3

Performance

The Fund underperformed the composite benchmark over the quarter. Performance is ahead of the composite benchmark over the 1 and 3 year periods to 30 September 2021.

Market Background and Investment Outlook

Fears over a slowing pace of economic growth and rising inflation reduced investor optimism over a continued robust global economic recovery. Major central banks also indicated that they have started to consider curbing their quantitative easing programmes to combat rising inflation.

Bond yields rose over the quarter, most markedly in emerging markets, on the back of global inflation fears. The US Federal Reserve (Fed) brought forward projections for a rate rise to 2022 and indicated that asset purchases could be scaled back from as early as November. The Bank of England also suggested that a UK interest rate rise was on the cards.

Longer-term supports for the US equity market, key to the health of most global equity portfolios, are fraying. Medium-term concerns are also on the rise and we have downgraded our stance. Some loss of market altitude is becoming more likely over the coming year or two.

Key actions

1. The Committee to receive training on Global Property as an asset class and consider possibility of a future strategic allocation within the Fund – covered under a separate report

Key Stats

Assets

£4,807m

Assets increased by £1,232m since last valuation

£3,575m at 2019 valuation

Funding level

130%

Funding increased by 16% since 2019 valuation

114% at 2019 valuation

Return on Assets Since 2019 Valuation

+12.9% pa

Current Assets Expected Return (10 year p.a.)

+5.1%

0.5% decrease since 2019 valuation

5.6 % at 2019 valuation

Long-term Strategy Expected Return (10 year p.a.)

+5.5%

0.1% decrease since 2019 valuation

5.6% at 2019 valuation

Discount rate

4.0%

0.2% decrease since 2019 Valuation

4.2% at 2019 valuation

Current Assets Value at Risk (1 Year 1 in 20)

£925m

Long-term Strategy Assets Value at Risk (1 Year 1 in 20)

£915m

Estimated Total Employer cost

14.2%

Estimated Total Employer cost decreased by 4.4% since 2019 valuation

18.6% at 2019 valuation

Funding

A review of your funding position and contributions

Funding position – ongoing funding target

Funding level

129.5%

at end September 2021

Down from 130.4% at end June 2021 but remains up from 114.4% at 31 March 2019

Surplus

£1,095.5m

at end September 2021

Down from £1,115.9m at end June 2021 but remains up from £449.8m at 31 March 2019

Comments

The funding level has deteriorated very slightly since the previous quarter, and the surplus has reduced, primarily due to slightly lower returns on assets relative to the expectation.

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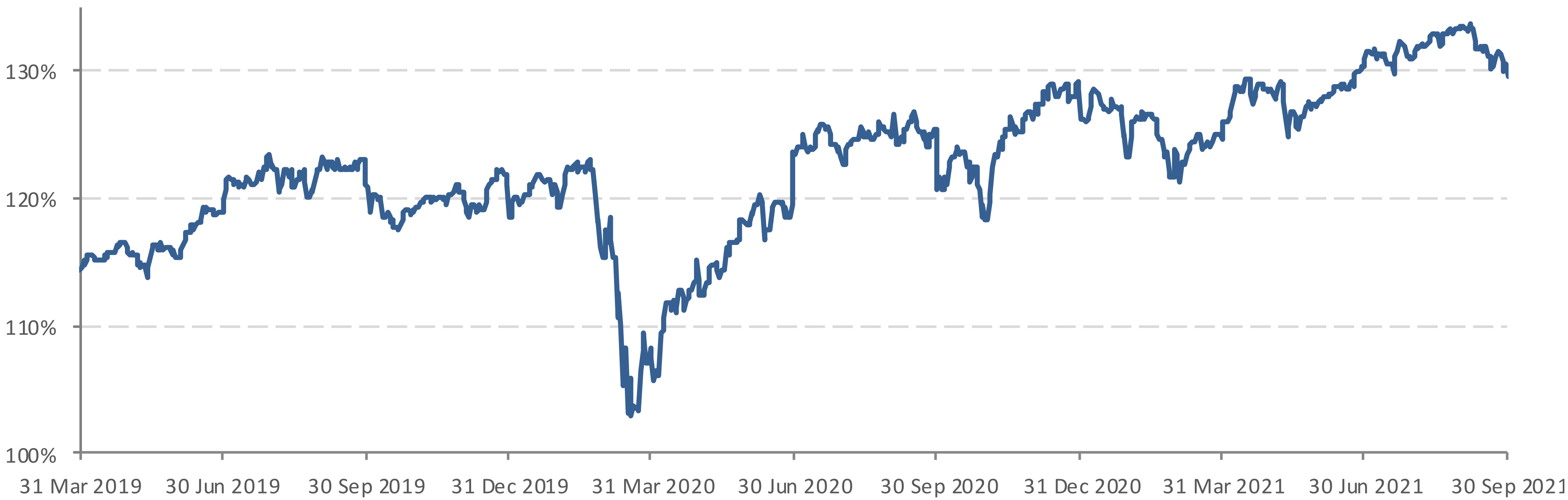
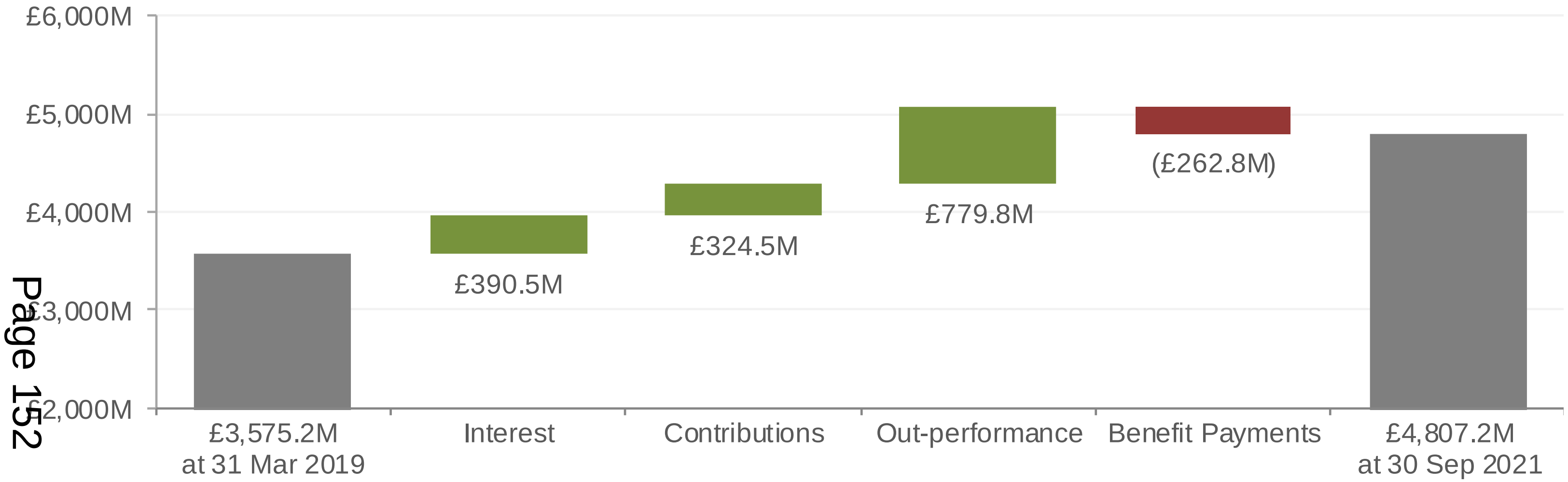
Change to funding level since valuation at 31 March 2019



Analysis – ongoing funding target

Reason for change since 31 March 2019 – Asset Attribution



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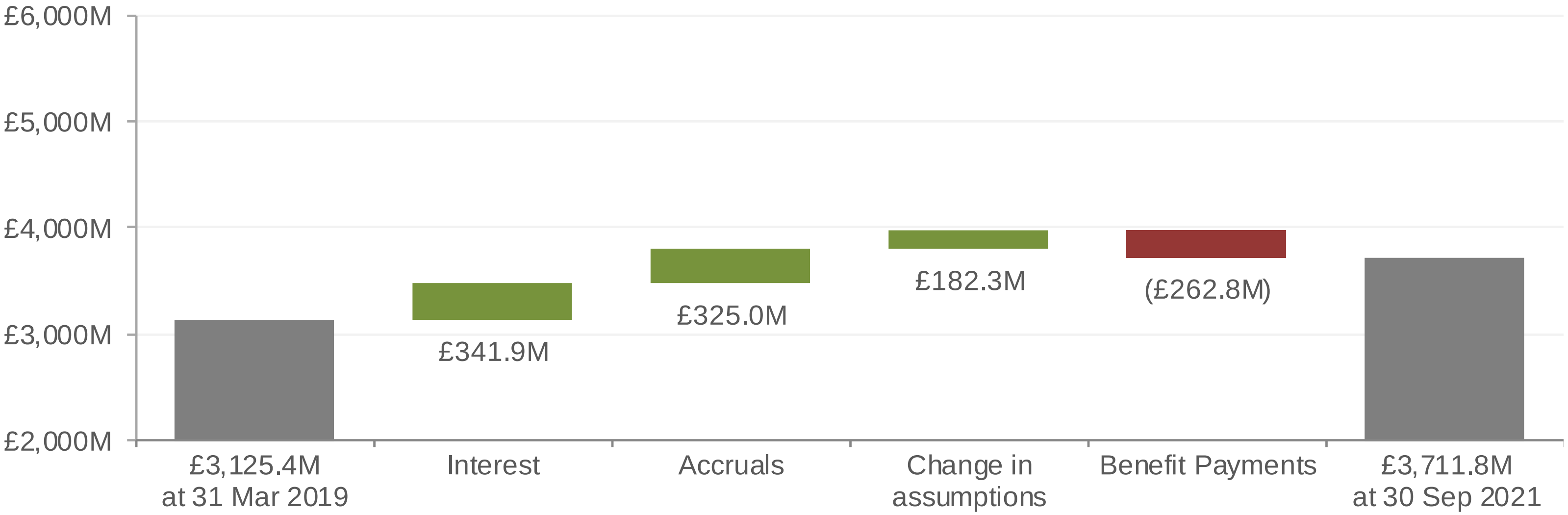
Reason for change since 31 March 2019 – Liability Attribution



Comments

Since the valuation the surplus has increased by £645.7M. This has been primarily driven by an increase in asset values.

Aggregate Employer contributions – ongoing funding target

Total employer contribution rate

14.2%

at end September 2021

Up from 14.0% at end June 2021 but down from 18.6% at 31 March 2019.

Employer cost of accrual

22.3%

at end September 2021

Same as 22.3% at end June 2021 but up from 20.2% 31 March 2019

Comments

The cost of accrual is unchanged since the last quarter but is higher than at the 2019 valuation due to the fall in net discount rate.

However, the surplus has decreased over the quarter which has resulted in a small increase in the total employer contribution rate.

Notes

Cost of accrual includes allowance for McCloud/cost management costs in line with the overall allowance in the 2019 valuation of 0.9% of pay.

The total employer contribution rate quoted above is based on the average total employer contribution rates across the Fund. Individual employer contributions can be very different to the average figure across the Fund shown above depending on their own characteristics, membership profile and funding target. The individual employer contributions will next be reviewed at the triennial valuation at 31 March 2022.

Asset allocation

A review of your strategic asset allocation

Asset allocation – Q3 2021

Asset Group	Manager	Valuation (£m)	Current allocation	Long-term strategy	Difference	Rebalancing Range	Possible action
		30 September 2021					
Equities		**2,613.4**	**54.4%**	**50.0%**	**+4.4%**		
	BCPP UK equity	184.6	3.8%	4.0%	-0.2%	TBC	
	BCPP Global Equity	1,303.5	27.1%	28%	-0.9%	+/- 5%	
	Baillie Gifford LTGG	844.2	17.6%	18%	-0.4%	+/- 3%	
	Dodge & Cox	278.7	5.8%	0.0%	+5.8%		
	Fidelity	2.4	0.1%	0.0%	0.1%		
Absolute Return		**337.1**	**7.0%**	**0.0%**	**+7.0%**	**TBC**	
	Newton Real Return	174.2	3.6%				
	Leadenhall Remote Risk	58.1	1.2%				
	Leadenhall Diversified	54.5	1.1%				
	Leadenhall Nat Cat	50.3	1.0%				
Property		**304.4**	**6.3%**	**7.5%**	**-1.2%**	**TBC**	
	Hermes	37.3	0.8%				
	L&G	78.3	1.6%				
	Threadneedle	188.8	3.9%				

Source: BNYM, Aon. Note: Numbers may not sum due to rounding.

Asset allocation – Q3 2021 (cont'd)

Asset Group	Manager	Valuation (£m)	Current allocation	Long-term strategy	Difference	Rebalancing Range	Possible action
			30 September 2021				
Infrastructure		**34.1**	**0.7%**	**10.0%**	**-9.3%**	**TBC**	
	BCPP Infrastructure 1A	18.6	0.4%				
	BCPP Infrastructure 1B	15.5	0.3%				
Private Credit		**91.8**	**1.9%**	**5.0%**	**-3.1%**	**TBC**	
	BCPP Private Credit	16.4	0.3%				
	Arcmont	37.2	0.8%				
	Pemira	38.1	0.8%				
Non-Investment Grade Credit		**292.7**	**6.1%**	**5.0%**	**+1.1%**	**TBC**	
	PIMCO	292.7	6.1%				
Investment Grade Credit		**352.2**	**7.3%**	**7.5%**	**-0.2%**	**TBC**	
	BCPP Investment Grade Credit	352.2	7.3%				
Gilts		**750.9**	**15.6%**	**15.0%**	**+0.6%**	**TBC**	
	M&G	12.2	0.3%				
	BCPP Index Linked Bonds	738.7	15.4%				

Source: BNYM, Aon. Note: Numbers may not sum due to rounding.

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Asset allocation – Q3 2021 (cont'd)

Asset Group	Manager	30 September 2021					
		Valuation (£m)	Current allocation	Long-term strategy	Difference	Rebalancing Range	Possible action
Cash		**30.8**	**0.6%**	**0.0%**	**+0.6%**	**TBC**	✓
	Internal Cash	25.4	0.5%				
	Treasury Cash	5.3	0.1%				
Total		**4,807.2**	**100.0%**	**100.0%**			

Source: BNYM, Aon. Note: Numbers may not sum due to rounding.

Investment strategy update

Decisions taken at the September Pension Fund Committee meeting:

- The Pension Fund Committee agreed to invest 7% of the Fund in Border to Coast's Listed Alternatives fund (with delegated authority given to the Treasurer to make the final decision in consultation with the Chair of the Committee)
- Equity allocations and ranges agreed;
  - 28% Border to Coast Global Alpha with a range of +/- 5%
  - 4% Border to Coast UK Alpha (TBC)
  - 18% Baillie Gifford LTGG with a range of +/- 3%

Implementation actions over Q3 2021:

- The investment with Veritas was terminated:
  - The proceeds were reinvested in Border to Coast's corporate bond fund up to the target weighting of 7.5%
  - The remaining balance of the proceeds were invested into PIMCO's diversified income fund
- The UK government bond mandate with LGIM was terminated:
  - The remaining equity protection and conditional currency hedging arrangements with LGIM expired in July 2021
  - The released collateral were reinvested into Border to Coast's Index Linked Bonds fund
- The M&G mandate was terminated:
  - Where possible, the assets were transferred into Border to Coast's Index Linked Bonds fund
  - The proceeds of remaining assets were reinvested into Border to Coast's Index Linked Bonds fund

Transitions and cashflows

The following rebalancing activities took place over the quarter:

- £160m was invested in the Border to Coast's corporate bond fund.
- £95m was invested in the PIMCO's diversified income fund.
- 340m was invested in the Border to Coast's Index Linked Bonds fund.
- £287m of assets was transferred from M&G into Border to Coast's Index Linked Bonds fund.
- Border to Coast made eleven Infrastructure capital calls in the quarter totalling £11m and five Private Credit capital calls totalling £7m.

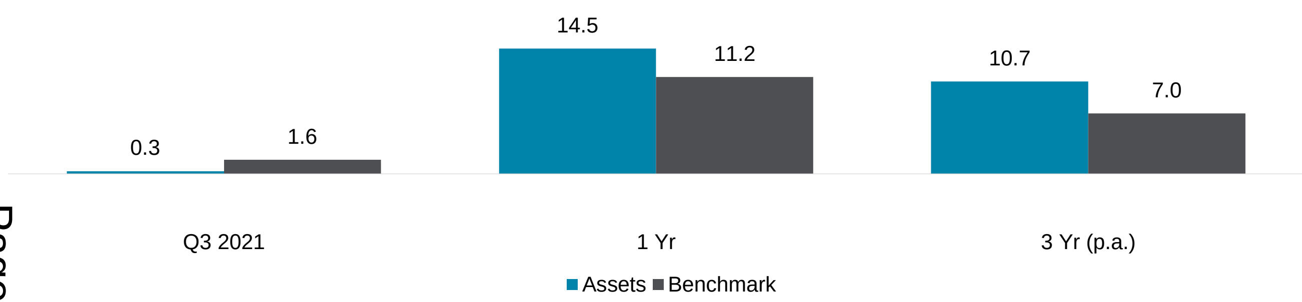
- £266m was disinvested from Veritas.
- £195m was disinvested from LGIM.
- £95m (in addition to the £287m assets transfer) was disinvested from M&G.
- £45m was disinvested from Treasury Cash fund along with the cash proceeds from the other disinvestments to cover the investments and capital calls made above in the quarter.

Fund performance

A review of your investment performance

Total Fund performance – Snapshot

Fund performance & benchmark



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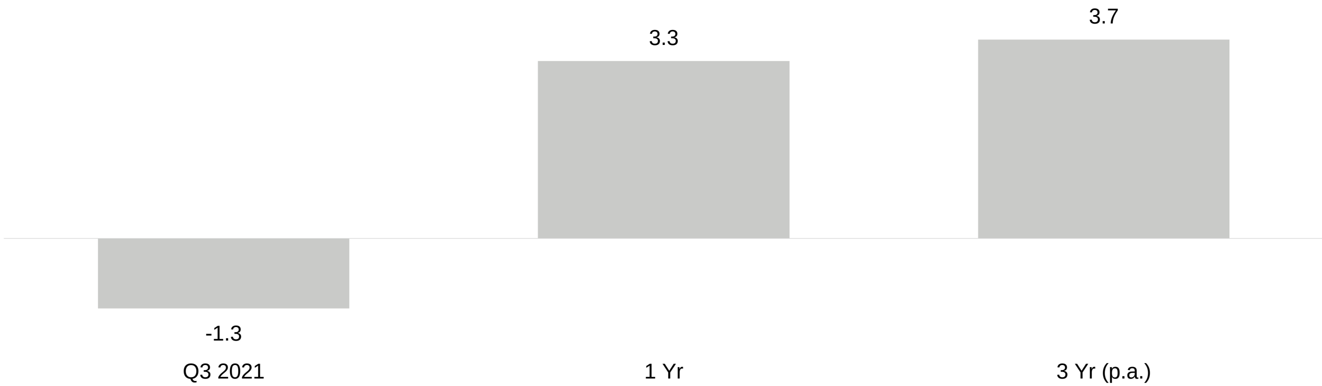
Relative performance

Relative Return (%)



Source: BNYM, Aon

Quarterly (relative)

-1.3%

The Fund underperformed the benchmark returning 0.3% vs 1.6% over the quarter.

3 year (relative)

+3.7%

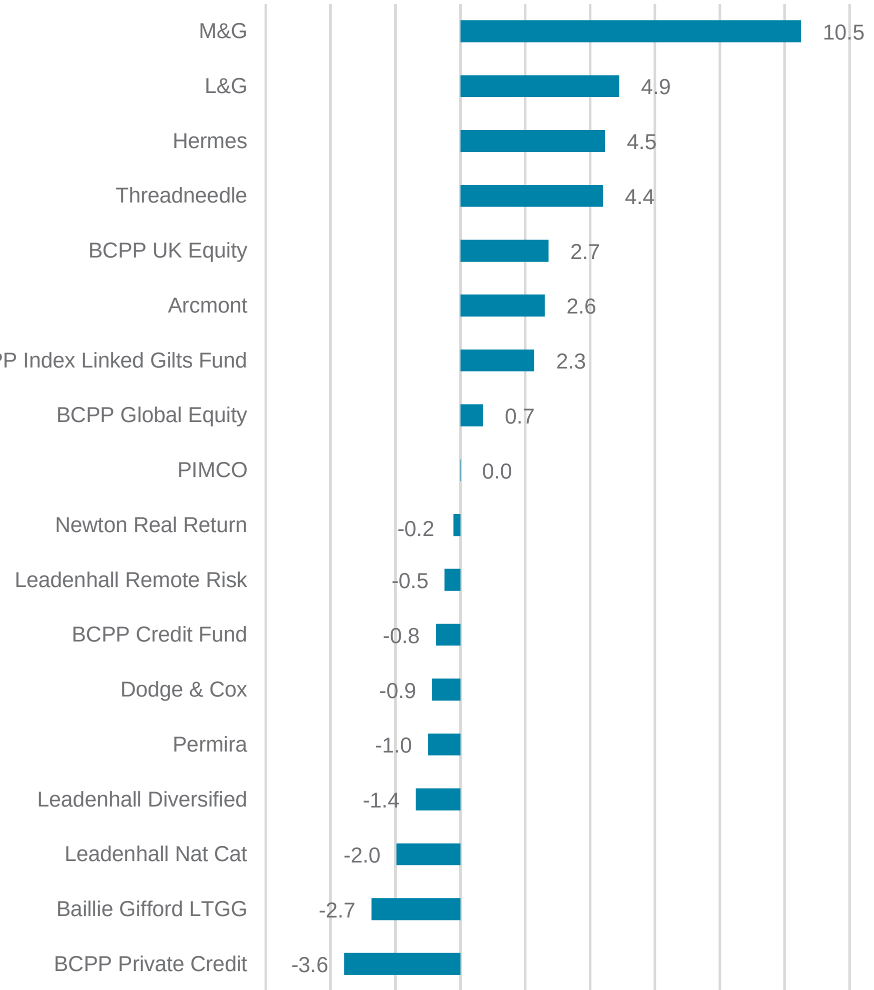
Over 3 years the Fund has outperformed the benchmark returning 10.7% vs 7.0%.

Comments

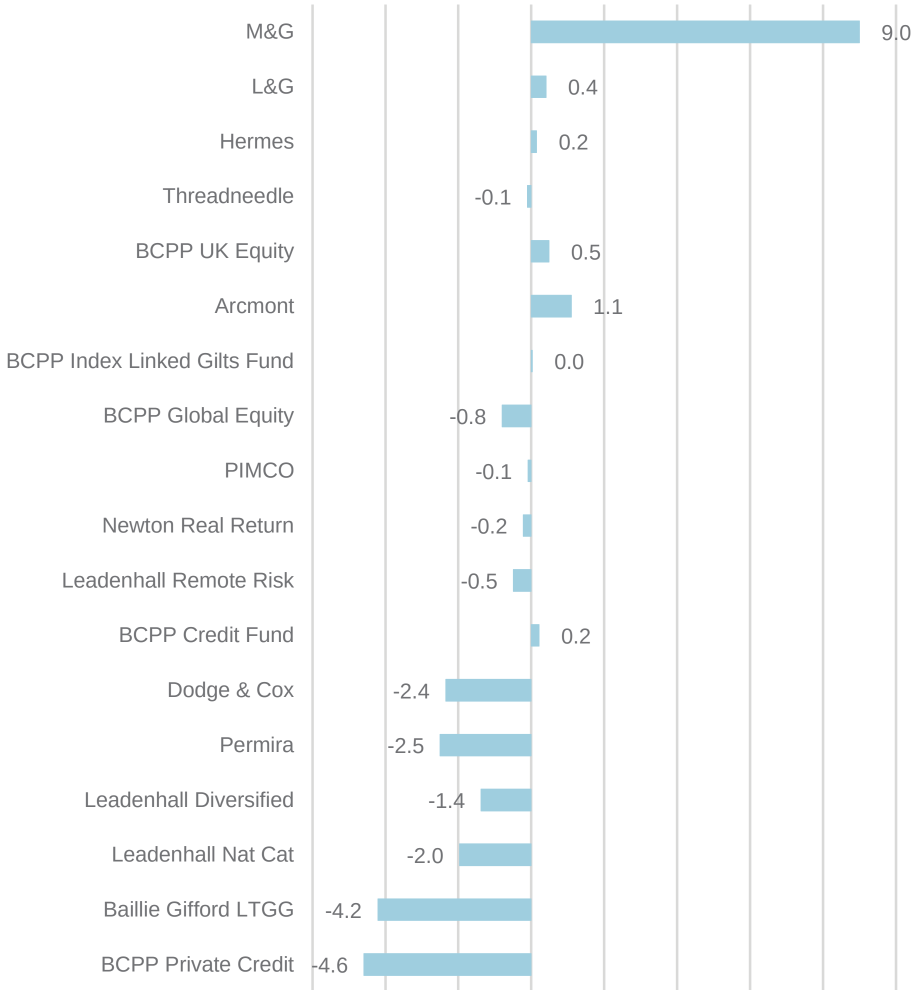
Total Fund performance is behind the composite benchmark over the quarter but ahead of the compositive benchmark over 1 year and 3 year periods to 30 September 2021.

Manager performance – Quarter Snapshot

Absolute performance



Relative performance



Source: BNYM, Managers, Aon.
Note: BCPP Infrastructure returns not shown during initial investment drawdown phase. BCPP private credit returns are shown, but are subject to performance impact from initial drawdown phase.

Manager performance – Longer term

	1 Year (%)			3 Years (% p.a.)			Since inception		
	Perf	B'mark	Rel	Perf	B'mark	Rel	Perf	B'mark	Rel
Equity									
UK Equity									
BCPP UK Equity	33.9	27.9	+6.0	-	-	-	7.3	5.0	+2.3
Global Equity									
BCPP Global Equity	30.5	22.7	+7.8	-	-	-	14.9	15.6	-0.7
Baillie Gifford LTGG	21.6	22.7	-1.1	33.1	11.8	+21.3	18.9	10.1	+8.8
Dodge & Cox	38.2	22.7	+15.5	8.5	11.9	-3.4	9.5	12.0	-2.5
Absolute Return									
Diversified Growth									
Newton Real Return	9.1	0.0	+9.0	6.9	0.4	+6.5	3.9	0.4	+3.5
Insurance-Linked									
Leadenhall Remote Risk	2.5	0.0	+2.5	3.0	0.3	+2.7	2.8	0.4	+2.4
Leadenhall Diversified	-0.3	0.0	-0.3	0.3	0.3	0.0	0.5	0.4	+0.1
Leadenhall Nat Cat	-6.1	0.0	-6.1	-3.7	0.3	-4.0	-2.6	0.4	-3.0
Property									
Hermes	13.2	12.9	+0.3	4.4	4.1	+0.3	7.8	5.9	+1.9
L&G	12.6	13.1	-0.5	3.9	4.0	-0.1	6.9	5.9	+1.0
Threadneedle	12.7	13.1	-0.4	3.8	4.0	-0.2	8.0	5.7	+2.3

Source: BNYM, Managers, Aon.
Note: BCPP Infrastructure returns not shown during initial investment drawdown phase. BCPP private credit returns are shown, but are subject to performance impact from initial drawdown phase.

Manager performance – Longer term (cont’d)

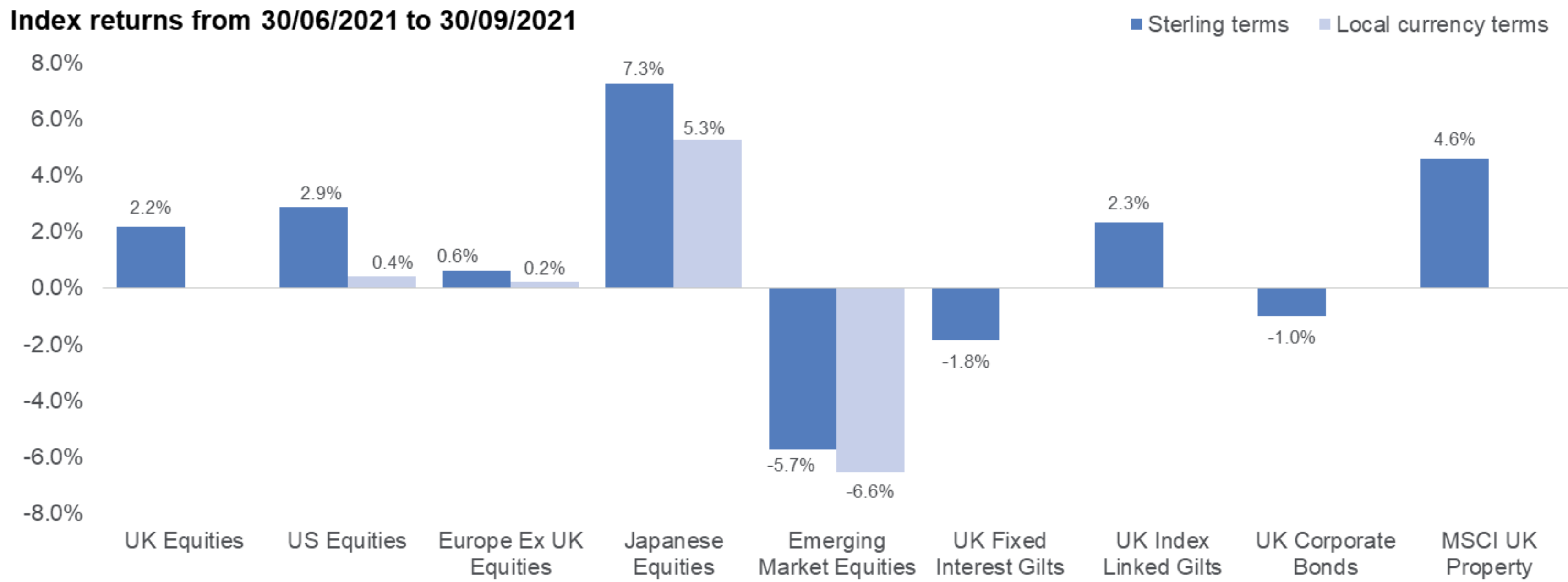
	1 Year (%)			3 Years (% p.a.)			Since inception		
	Perf	B'mark	Rel	Perf	B'mark	Rel	Perf	B'mark	Rel
Illiquid credit									
BCPP Private Credit	-8.8	4.1	-12.9	--	-	-	-8.2	4.1	-12.3
Arcmont	7.8	6.0	+1.8	7.4	6.0	+1.4	7.0	6.0	+1.0
Permira	8.1	6.0	+2.1	5.5	6.0	-0.5	7.7	6.0	+1.7
Investment grade credit									
BCPP Investment Grade Credit	1.1	-0.4	+1.5	-	-	-	1.2	-0.7	+1.9
Non-investment grade credit									
PIMCO	4.8	4.7	+0.1	-	-	-	3.6	3.1	+0.5
Gilts									
M&G	7.8	-1.6	+9.4	10.3	7.2	+3.1	9.4	7.9	+1.5
BCPP Index Linked Bonds	2.9	0.1	+2.8	-	-	-	2.9	0.1	2.8
Total	**14.5**	**11.2**	**+3.3**	**10.7**	**7.0**	**+3.7**	**8.3**	**8.1**	**+0.2**

Source: BNYM, Managers, Aon.
Note: BCPP Infrastructure returns not shown during initial investment drawdown phase. BCPP private credit returns are shown, but are subject to performance impact from initial drawdown phase.

Market background and investment outlook

Aon’s views on the market outlook and snapshot of investment markets and key economic data

Market – Background Q3 2021



Source: FactSet, MSCI (Equities, Property), FTSE (Gilts), iBoxx (Credit)

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Equities

The MSCI AC World index posted a -0.3% return in local terms and a 1.5% return in sterling terms as global equity markets stalled over the quarter amidst growth and inflation worries.

Japanese equities performed the best, returning 5.3% over the quarter in local currency terms and 7.3% in sterling terms. Much of the positive performance occurred after Prime Minister Yoshihide Suga offered to resign, as expectations of economic stimulus rose.

Bonds

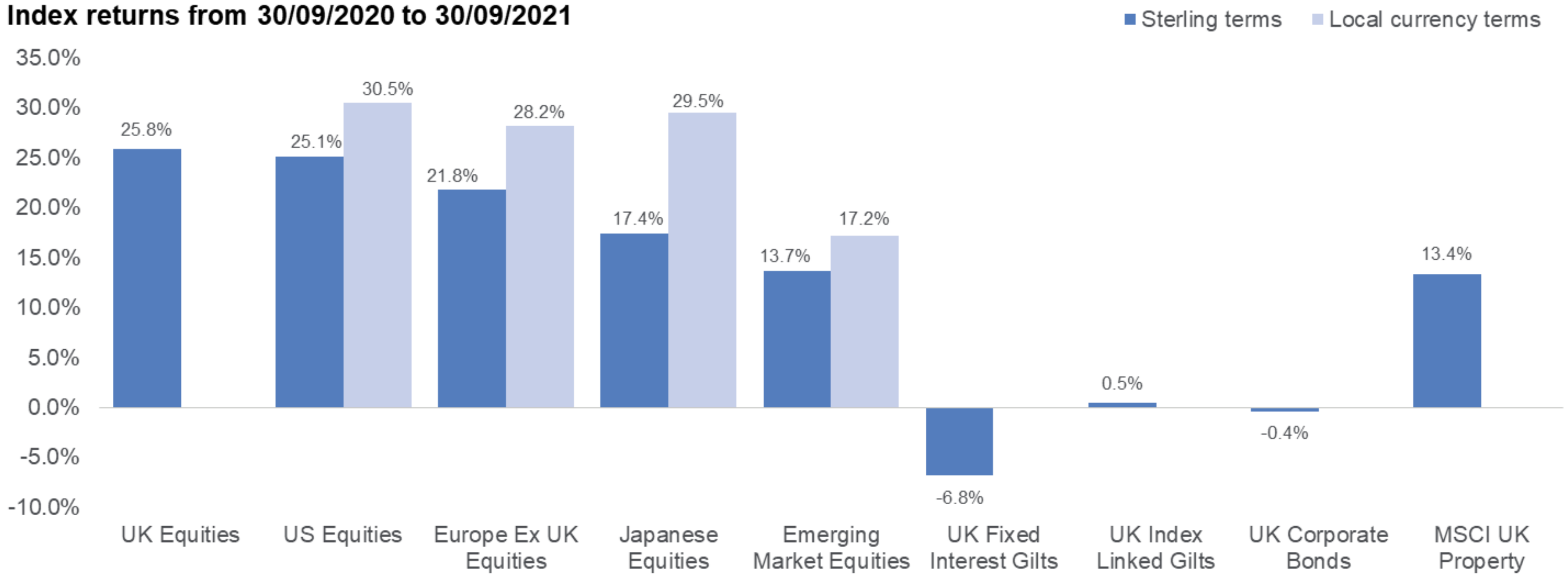
UK investment grade credit spreads were fairly stable, with the return on the iBoxx Sterling Non-Gilt Index falling by 1.0% over Q3, driven by rising government bond yields.

Gilts

Bond yields rose over the quarter, most markedly in emerging markets, on the back of global inflation fears. The US Federal Reserve (Fed) brought forward projections for a rate rise to 2022 and indicated that asset purchases could be scaled back from as early as November. The Bank of England also suggested that a UK interest rate rise was on the cards. Two of its nine-member Monetary Policy Committee voted to end its asset purchases immediately.

The FTSE All Stocks Gilts Index and the FTSE All Stocks Index-Linked Gilts Index returned -1.8% and 2.3%, respectively, as gilt yields rose.

Market – Background 12 month



Source: FactSet, MSCI (Equities, Property), FTSE (Gilts), iBoxx (Credit)

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Equities

Global equities generated strong positive returns over the last twelve months, boosted by optimism over Covid-19 vaccine roll-outs, supportive monetary and fiscal policies and improving economic data. However, fears over the highly infectious Covid-19 Delta variant and rising inflation caused some concern. In Q3 2021, major central banks indicated they had started to consider curbing their quantitative easing programmes and raising policy rates to combat rising inflation.

Bonds

Credit markets benefited from risk-on investor sentiment over the year, with credit spreads continuing to contract to tighter levels. UK investment-grade credit spreads (the difference between corporate and government bond yields), based on the iBoxx Sterling Non-Gilt Index, fell by 39bps to 99bps.

Gilts

Optimism over global economic recovery in the light of several vaccine discoveries and stimulus packages drove global government bond yields higher at the beginning of 2021. However, in Q2 2021, yields fell back as variant virus risks, and worries over a slower pace of global economic recovery arose. Nominal yields then picked up once more over the third quarter, driving the negative performance of UK fixed-interest government bonds. Yields rose on the back of brought-forward interest rate hike expectations against the background of rising inflation and central bank indications that they were considering policy rate increases.

Investment outlook

Global Outlook

Market focus moves to inflation

Covid-19 worries eased in Q3. Though vaccination rates plateaued, deaths and hospitalisations stayed within the limits consistent with continued economic reopening. This should have been a positive development for markets, but gratification was muted by the challenges that have come from economic reopening, especially the sustained rise in inflation being seen everywhere. Higher inflation has largely reflected the effects of pandemic disruptions to supply chains in many industries, including energy, but the problem is that there are no quick fixes. The shortfall between demand and supply has extended to labour markets too, which are now unexpectedly tight. If higher prices of goods spill over into faster wage rises, inflation will likely stay higher for longer. This is feeding concern over central bank responses. Global bond markets have started to price in the risk of earlier interest rate moves, causing yields to reverse earlier declines. Lately, equity markets have also sagged somewhat, from incipient worries over interest rates, cost pressures and a possible slowdown in economic activity.

US inflation trend is worth watching

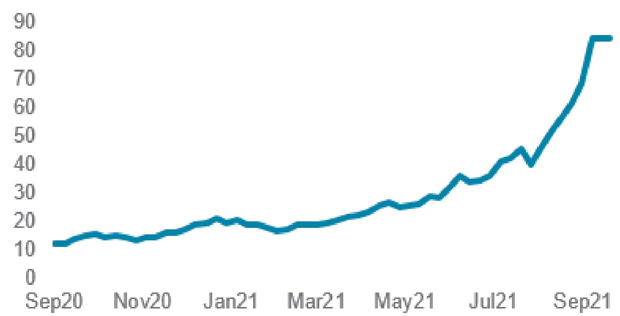
US inflation is the most important trend to watch given the potential effect on US, and therefore, global, interest rates. US headline inflation is now over 5%, but the concern is more over what is bubbling underneath. The worry is on three fronts. First, inflation is broadening, so that more items are showing a higher inflation trend, not the case a few months ago. Second, US house rents are rising steeply, currently up almost 20% on a year ago. As housing is a 30% weighting in the US inflation index and some of it is yet to show through into price indices, inflation could go higher still.

Finally, wages have been rising, now over 4% higher on a year ago and labour shortages are still building. Workers voluntarily quitting jobs recently reached a two decade high (almost 3% of the workforce in September), suggesting high confidence in finding better paid jobs. This is an indication that the wage trend could go much further.

UK inflation pressures are also strong

The UK has its own share of worries over the inflation outlook. Some inflation-causing trends are common, like the global supply chain disruptions, higher crude oil prices or labour shortages. However, the UK (and Europe) has greater dependence on gas for its overall energy needs than the US and European gas prices have risen massively (see chart). This raises energy bills and is lifting consumer prices not just in Q4, but very likely going into 2022 too as price caps on suppliers lift again. The inflation concern for the UK is also accentuated because the economy is having to make adjustments after Brexit which will take time to complete and which, in the interim, contribute to higher labour costs and higher prices.

How European gas prices rose eight fold (€/Mwh)



Investment outlook

Interest rates and gilt yields

Bank of England in a spot

How should the Bank of England react, faced with persistent inflation? It has been keeping interest rates at near zero levels accompanied by a quantitative easing (QE) programme as its pandemic response. Now that the economy is in moderate recovery, ending quantitative easing is warranted, but the case for raising interest rates is more difficult to make. Higher interest rates will not do much to curb the type of inflation we have – gas prices and global supply chain disruption are factors beyond its control. Yet, if inflation is staying well above its 2% target for two years or more, as looks likely, the Bank is under pressure to be seen to do something to defend its target. Markets sense that it may reluctantly have to raise rates. As a result, market pricing has shifted in the past few months, and now suggests a few small interest rate rises may be on their way (see chart). We are less convinced that rate rises are coming quickly, but if we are wrong and rates do go up in this way, it should be interpreted as a symbolic defence of the inflation target rather than an attempt to lower inflation. A key risk comes from rates rising too early. Higher energy costs and raised taxes will slow the UK economy in 2022 so that higher rates might then bring a deeper slowdown.

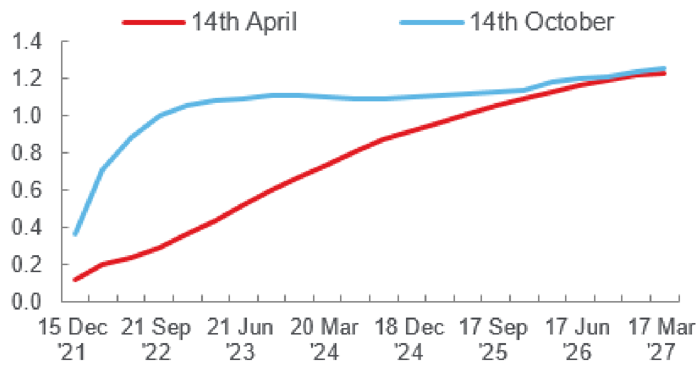
The gilt anomaly in inflation pricing

Gilt yields have jumped again, reversing the yield declines seen through the middle months of 2021. Long-dated yields are currently hovering at this year's March highs, but interest rate concerns could easily take yields higher still.

As always, our key focus from a liability hedging stance is gilt market pricing on implied yield moves in the next few years.

As always, our key focus from a liability hedging stance is gilt market pricing on implied yield moves in the next few years. In fixed gilts, the yield curve is implying some moderate rises which look reasonable. Things look rather more askew for index-linked gilts, where yields have not risen this year at all. The result is that the yield gap between fixed and index-linked gilts (of similar duration), so-called breakeven inflation rates, look too high, especially for the post 2030 RPI reform period. Current high inflation uncertainty cannot explain why RPI inflation should be so expensive for a two or three decade time horizon. Our perspective is that the index-linked gilt market is being distorted by strong inflation-hedging demand and weak index-linked gilt supply. Any quick relief on this front is unlikely, but over time, we would expect such high inflation hedging costs to dip. This inflation pricing anomaly may be insufficient, though, to make it worthwhile to under-hedge. Schemes should always take detailed advice on their circumstances in setting hedging strategy.

Market implied bank rate rises brought forward (%)



Source: FactSet

Investment outlook

Equities

Long-term supports start to fade

There is no doubt that the longer-term performance of the US equity market, often shorthand for global equities given its dominant share of global market capitalisation, has been very impressive, far stronger than most would have expected. Why US equities have done quite as well can be explained retrospectively by the role of some key supports. Three of these appear to have been particularly important: the long-term strength in US profit margins which have raised profits much faster than revenues, the rise in share buybacks which have reduced share count and boosted reported earnings per share, and finally, low interest rates which have left equities looking the better bet versus low yielding bonds for most investors, bringing a valuation gain that has further topped up the market boost from earnings strength. This confluence of supports has lasted over two decades but we see these now starting to fade. Margin gains look harder to come by as labour costs, taxes, import costs and interest rates rise, less offshoring lowers cost-cutting potential and more regulation starts to restrain market growth and high margins. The search for yield is also unlikely to be so intense looking ahead as yields finally end their prolonged slide. However, buybacks are likely to still be an abiding support to earnings per share given cash flow strength, especially in the technology sector.

Less support for the medium-term too

It is not just the long-term outlook for the market that is fraying. The outlook for the next year or two, a period we call a 'medium-term' horizon, is also looking a little more precarious. The key problem is that the inflation persistence noted above is bringing some unwelcome trends – pressure on central banks to raise rates early, a squeeze on corporate profit margins from rising input and labour costs, and the likelihood of an economic slowdown as higher inflation squeezes spending just as pandemic fiscal supports from governments are withdrawn. Given elevated market valuations and consensus expecting still more margin and profit strength (see chart), a gap becomes evident between what is expected and what is realistically achievable. This gap has led us to recently downgrade equities for the medium-term. Over the next 12 to 18 months, it now looks more likely that the market will lose some altitude. This does not necessarily mean large market falls, but it is obvious that even flat markets will shock most investors used to rising markets year in, year out.

The market still expects profit margins to climb further
(MSCI US Index net margins with consensus projection for 2022, %)

Source: Aon, FactSet

Aon’s latest thinking

Our latest investment ideas for you

This quarter we discuss the prospects for global equities, the changing regulatory landscape in China and the breadth of solutions that align with ESG beliefs.

Weaker outlook for equities?

A year after we took a more positive view on global equities based on a vaccine-led recovery, we now think that the outlook is starting to weaken on a medium-term horizon. Inflation persistence is putting pressure on central banks to raise rates early at the same time as corporate profit margins are squeezed by rising costs and government pandemic support is withdrawn.

We often reinforce the importance of portfolio diversification and we think that it is particularly important now that portfolios are positioned to withstand weakening equity prospects.

Regulatory clampdown in China

State regulatory clampdowns across many of China's corporate sectors have caused Chinese equities to fall and rocked investor confidence this year.

Evergrande Group, a large, indebted property developer, is one name to make recent headlines. The impact of a broader property sector slowdown on the Chinese economy keeps us cautious. However, in general, we believe the sectors that are in policymakers' crosshairs are well-signposted in Beijing's long-term development plans and can be navigated by active portfolio management.

Sustainable investing, but not just in equities

Over recent years, the ESG opportunity set has expanded from equities to gilts and more broadly to alternative investments.

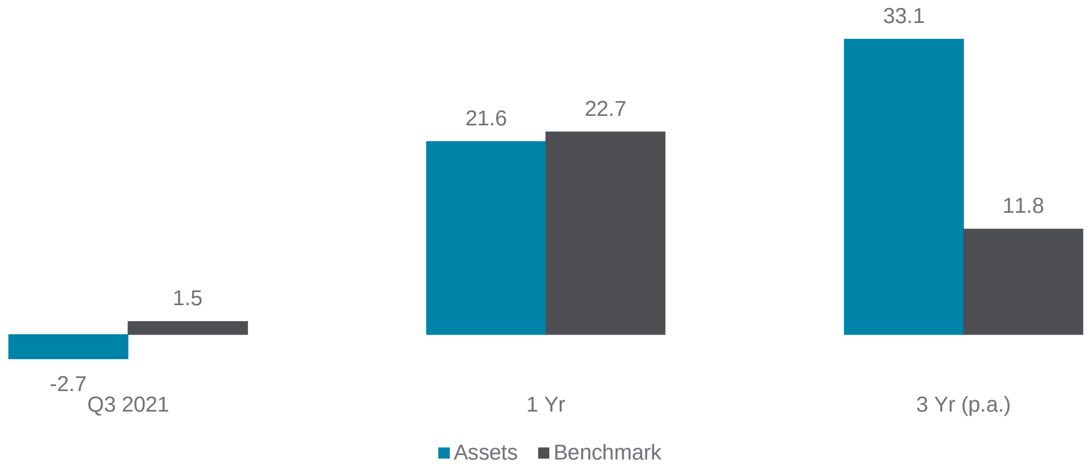
Within credit, increasing issuance of ESG-focussed funds has been met with strong investor demand as the strategic case for active credit strategies remains despite tightening credit spreads across sectors. A popular strategy is multi-asset credit which can serve as a natural de-risking step between equities and investment grade credit.

Manager review

Aon ratings and understanding manager performance

Baillie Gifford - LTGG

Scheme performance & benchmark



Performance comments

Long Term Global Growth underperformed in Q3 2021. Over the 12-month period, the fund underperformed its benchmark by 1.1%. Given the exceptional performance in 2020 and the subsequent rally in value / cyclicals stocks, we see this as a robust outcome. Performance over all longer trailing periods remains outstanding.

The main positive performance contributors over the third quarter of 2021 were Moderna (vaccine sales and broader prospects for mRNA technology), Atlassian (business software; clients increasingly subscription based and moving to a cloud-based architecture) and Dexcom (rapidly increasing demand for its glucose monitoring technology outside the US).

Once again, the main detractors, Alibaba, Meituan and Pinduoduo were all Chinese listed, internet-based businesses where investors have been fearful of further Chinese government intervention. The LTGG team remains committed to its Chinese exposure and believes intervention will remain quite narrowly targeted, however it has sold its remaining positions in TAL Education and NetEase (online gaming).

New and notable

There is no change to our Buy recommendation.

Buy

Reviewed: November 2021

Ratings detail

ODD:	A1 pass	**Risk:**	●●○○
Business:	●●●●	**Perf:**	●●●○
Staff:	●●●●	**Terms:**	●●●○
Process:	●●●○	**ESG:**	Integrated

Key info

Appointed: 29 September 2006

Vehicle: Baillie Gifford Long Term Global Growth (+3% over 5-10yrs)

Mandate: Global Unconstrained Equities

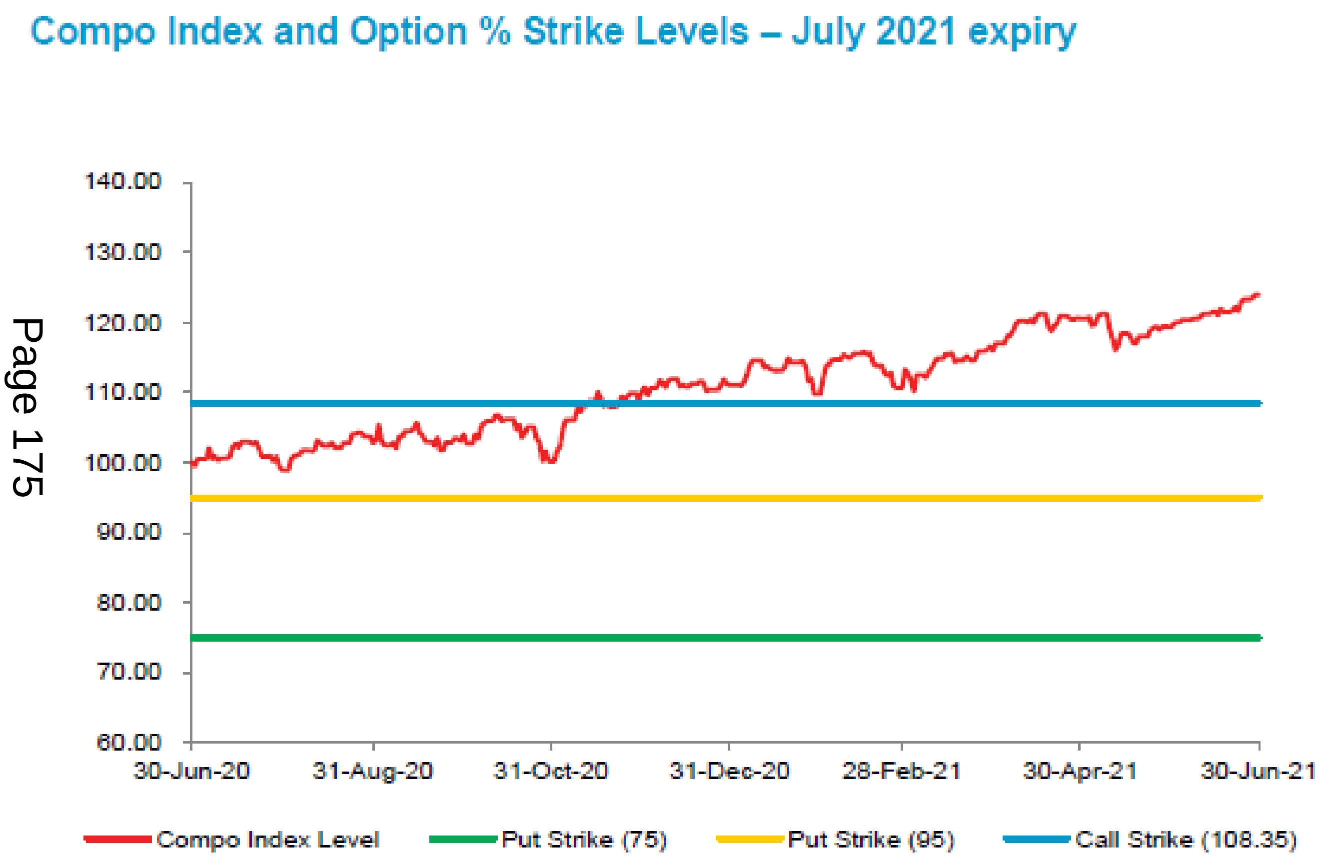
Benchmark: FTSE All World Index from 31 March 2008

Target: To outperform the benchmark by 3% p.a. over rolling three-year periods.

Fee scale: Base fee of 0.30% plus performance fee of 8% on outperformance more than the benchmark (up to a maximum outperformance of 5%) for the period since inception.

Source: BNY Mellon, data for periods longer than 12 months are annualised.

LGIM Equity Protection



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Key info

Expiry: 1 July 2021

Current status: The Committee agreed to let the options expire at 1 July 2021. At the time of expiry, the strategy resulted in the short call options expiring in-the-money, resulting in a pay-out of £67,426,530 by the Fund for a 6 July 2021 settlement date.

To cover this pay-out, LGIM sold all of the Fund's conventional gilt holdings and the shortest-dated index-linked gilt holdings (held with LGIM).

Source: LGIM

Further information

Key reference information about your scheme

Method

The funding update has been prepared in accordance with the framework below.

- This funding update is consistent with the calculations for the formal actuarial valuation as at 31 March 2019. The assumptions used have been modified only insofar as is necessary to maintain consistency with the approach set out in the latest Funding Strategy Statement, reflecting the change in the effective date and in relevant market conditions.
- The funding update is projected from the results of the formal actuarial valuation as at 31 March 2019 and is therefore approximate. Since the update is not based on up-to-date membership data, it becomes more approximate the longer the period of time that has elapsed since the last actuarial valuation.
- The funding update takes account of the following over the period since the last formal actuarial valuation:
  - Cashflows into and out of the Fund estimated based on the 2019 valuation results;
  - Actual price inflation and its impact on benefit increases.
- Demographic experience since the last formal actuarial valuation has been assumed to be in line with the assumptions set out in the 2019 Valuation Report.
- This update is designed to give a broad picture of the direction of funding changes since the actuarial valuation but does not have the same level of reliability as, and therefore does not replace the need for, formal actuarial valuations.
- It does not reflect any changes to assumptions which would be made if a full actuarial valuation were to be carried out to reflect, for example, changes to the investment strategy or economic outlook.
- For the purpose of this funding update, we have used an un-audited value of the assets as at 30 September 2021 provided by the Administering Authority
- The whole of fund total employer contribution rates shown in this funding update allow for a recovery period ending 31 March 2041 and allow for any surplus in excess of 110% to be recovered as set out in the Funding Strategy Statement
- The assumptions used in this funding update are as follows:

	Discount rate	Pay growth	Pension increases
31 March 2019	4.20%	3.35%	2.10%
30 June 2021	4.00%	3.45%	2.20%
30 September 2021	4.00%	3.45%	2.20%

Risk/Return Assumptions

- The table below sets out the asset and liability return assumptions over 10 years, together with the asset allocation and exposures used. These are based on Aon's Capital Market assumptions as at 30 September 2021.

High level asset class	Expected Return (10 year median % p.a.)	Expected Volatility (10 year % p.a.)
Equities	6.3	19.0
Property	5.5	12.6
Infrastructure	7.7	15.8
Illiquid credit	4.3	5.3
Investment grade credit	2.1	8.0
Non-investment grade credit		
- Current allocation (PIMCO)	3.2	9.4
- Long term allocation (High Yield Credit)	3.5	10.1
Absolute Return	3.8	6.0
Gilts	0.4	7.3
Cash	0.8	1.0

Note: all statistics are 10 year median expected returns/volatility of returns.

Correlation Table

High level asset class	Equities	Government Bonds	Liquid inv. grade credit	Absolute return	Infrastructure	Property	Private Credit	Current non-investment grade credit	Long term non-investment grade credit	Cash
Equities	100%	-10%	6%	74%	61%	38%	28%	57%	54%	-3%
Government Bonds		100%	54%	11%	-4%	-2%	5%	-1%	-3%	34%
Liquid inv. grade credit			100%	32%	4%	5%	62%	38%	32%	38%
Absolute return				100%	52%	25%	38%	60%	51%	20%
Infrastructure					100%	19%	13%	25%	20%	0%
Property						100%	26%	24%	27%	4%
Private Credit							100%	62%	64%	23%
Current non-investment grade credit								100%	87%	11%
Long term non-investment grade credit									100%	5%
Cash										100%

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Data and assumptions

Date of calculation	30 September 2021
Number of simulations	5000
Time horizon	10 years
Asset value	£ 4,807,235,599

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- Illiquid Growth is made up of a blend of 37.5% EU and 62.5% US Infrastructure in line with BCPP's mandate.
- Illiquid Credit modelled as combination of Senior Direct Lending (for Arcmont and Permira) and Whole Property Debt (for BCPP).
- Gilts are modelled as a 90% long-duration index-linked gilts and 10% long-duration fixed-interest gilts.
- Property is modelled as UK Property.
- Liquid IG Credit modelled as UK corporate bonds (A-rated with average duration of 10 years)
- Liquid Non-IG Credit modelled as Broad multi asset credit for the Current allocation (PIMCO) and as high yield credit for the long term allocation.
- Absolute Return is modelled as 50% Newton RRF modelled as Capital Preservation DGF, and 50% Leadenhall Insurance Linked Securities modelled as a blend of Aggressive, Conservative and Moderate ILS.
- The Fund has an allocation to Equities which make up 50% of the long term allocation.
- For modelling purposes (and for consistency with the approach taken by the Actuary) we do not allow for any outperformance from active management (alpha).
- We have not allowed for the impact of equity protection on the risk and return of the portfolio
- Equities have been modelled using region splits in line with the long term allocation:

Passive UK Equity	10%
Passive Global Equity (including Emerging Markets)	90%

Key assumptions of the model (1)

▪The purpose of the model is to consider and monitor the return and risk characteristics of the current and long term investment strategy of the Scheme.

–The analysis considers the expected return of the Scheme's investment strategy and the 1-in-20 downside 5th percentile Value at Risk implied by the strategy.

–These metrics are considered as at the stated quarter-end.

▪Investment risk is included in the model outputs but this is not the only risk that the Scheme faces; other risks include covenant risk, longevity risk, timing of member options, basis risks and operational risks.

▪Investment risk has been calculated on an asset only basis.

Key assumptions of the model (2)

- The calculation of portfolio risk is approximate;
  - The calculation considers (5000 stochastic) simulations of returns over a single year of the Scheme's investment strategy.
  - The simulations are constructed using Aon Solution's Asset Model – the details and assumptions of which are outlined in this appendix.
  - The calculation does not take into account any cashflows payable over the year; if cashflows are expected to be material the result is likely to be different.
  - Risks are attributed into the categories outlined in the chart only; the investment strategy may be exposed to further risk categories not shown.
  - The calculation does not take into account longevity risk (i.e. liability values increasing due to members living longer than assumed).
  - Owing to these approximations, a more detailed ALM study is likely to result in a different result to the VaR calculation.
  - Other portfolios with different risk and return characteristics may be available to the Scheme along the journey to full funding.

TAS compliance

This document has been prepared in accordance with the framework below.

This document, and the work relating to it, complies with 'Technical Actuarial Standard 100: Principles for Technical Actuarial Work' ('TAS 100').

The compliance is on the basis that North Yorkshire County Council is the addressee and the only user and that the update and projections in this funding update are for information only and do not contain the information you would need to make a decision on the contributions payable or the investment strategy. If you intend to make any decisions after reviewing this presentation, please let me know and I will consider what further information I need to provide to help you make those decisions.

The presentation has been prepared under the terms of the agreement between the North Yorkshire County Council and Aon Solutions UK Limited on the understanding that it is solely for the benefit of the addressee.

This presentation should be read in conjunction with:

- The report on the most recent actuarial valuation of the North Yorkshire Pension Fund dated 30 March 2020
- The latest Funding Strategy Statement

If you require further copies of any of these documents, please let me know.

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