HEALTH WEALTH CAREER

AVON PENSION FUND

PANEL INVESTMENT PERFORMANCE REPORT QUARTER TO 31 DECEMBER 2018

FEBRUARY 2019

Steve Turner

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- When there is no (or limited) recognised or secondary market, for example, but not limited to property, hedge funds, private equity, infrastructure, forestry, swap and other derivative based funds or portfolios it may be difficult for you to obtain reliable information about the value of the investments or deal in the investments.
- Where the investment is via a fund of funds the investment manager typically has to rely on the underlying managers for valuations of the interests in their funds.
- Care should be taken when comparing private equity / infrastructure performance (which is generally a money-weighted performance) with quoted investment performance (which is generally a time-weighted performance). Direct comparisons are not always possible.

CONTENTS

SECTION 1
EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

This report has been prepared for the Investment Panel of the Avon Pension Fund ("the Fund"), to assess the performance and risks of the investment managers of the Fund.

Fund Performance

- The value of the Fund's assets decreased by £134m over the fourth quarter of 2018, to £4,648m as at 31 December 2018. This decrease was driven primarily by negative returns from both domestic and overseas equities.

Strategy

- Global (developed) equity returns over the last three years were 12.3% p.a., above the assumed strategic return of 8.05% p.a. from the review in April 2017. We remain broadly neutral in our medium-term outlook for developed market equities (over the next one to three years) but have become slightly more positive. Following the sell-off in Q4 18, valuations are more attractive now, the macro environment does not seems to be as bad as previously perceived by the market and the risk of Fed tightening triggering a recession this year is materially lower.
- Emerging market equities have returned 14.8% p.a. over the three-year period. It is above the assumed return of 8.70% p.a. as returns have been reasonably strong and fundamentals have improved. Compared to developed market equities, we continue to be slightly more positive in our medium-term outlook for emerging market equities over the next one to three years. Despite ongoing challenges, long-term economic fundamentals remain solid for emerging markets. Emerging market equities have also become even more attractively valued over the quarter due to the broad sell-off in risk assets and are now below their long-term historical averages.
- UK government bond returns over the three-year period remain materially higher than the long-term assumed strategic returns as investor demand for gilts remains high. Fixed interest gilts returned 7.1% p.a. versus an assumed return of 1.90% p.a. and index-linked gilts returned 9.2% p.a. versus an assumed return of 2.15% p.a. Gilt yields decreased over the quarter, and as a result gilt returns were positive over the period.
- UK corporate bonds returned 4.2% p.a. over the three-year period against an assumed strategic return of 3.25% p.a.
- The three-year UK property return of 7.0% p.a. remains higher than the assumed return of 5.75% p.a.
- Hedge fund returns were negative in Q4 18 and remain below long-term averages and the strategic return of 5.10% p.a., having been affected by low cash rates. Active managers in general have struggled to generate meaningful returns in recent years.
- The Fund's currency hedging policy was negative overall for Fund performance, since Sterling depreciated against the US Dollar, the Euro and the Japanese Yen over the quarter.

EXECUTIVE SUMMARY

Managers

- Manager total returns over the quarter were on the whole negative, with the weakest performance coming from the overseas Developed Market Equity managers. The Fund's three Diversified Growth Fund ("DGF") strategies also posted negative returns, but provided protection during the equity market downturn and fulfilled their role within the Fund's overall investment strategy. Over Q4 18, the Fund's overall equity portfolio fell by c.10.6% whereas the overall DGF portfolio decreased in value by c.3.8% (based on changes in asset values over the quarter), illustrating the protection offered by the DGF managers during the volatile market environment. The Fund's Property and Infrastructure mandates generated positive absolute returns over the quarter.
- Absolute returns over the year to 31 December 2018 were mixed across the Fund's investment managers. The majority of mandates posted negative absolute returns, with the UK Socially Responsible Investing ("SRI") strategy and one of the emerging market equity mandates delivering the largest negative returns over the period.
- In terms of relative performance, out of the active equity managers, only the defensive active emerging market equity manger outperformed.
- The Fund's DGF and Multi-Asset Credit ("MAC") mandates delivered material underperformance versus their respective total return targets over the one year period.
- Over the three-year period all mandates with a three-year track record (except Aberdeen Standard Investments) produced positive absolute returns. The majority of active funds underperformed their benchmarks over the period, with only the UK Property and Infrastructure mandates generating positive relative returns. The Fund of Hedge Funds and UK Property mandates achieved their performance objectives, net of fees.

Key Points for Consideration

- In November 2018, the unconstrained active UK equity mandate was terminated with the proceeds allocated to the Brunel active UK Equity strategy.
- In November 2018, the Aberdeen Standard Investments mandate was terminated with the proceeds allocated to the Fund's two other DGF mandates.

EXECUTIVE SUMMARY
MANAGER INFORMATION

Manager	Type	Mandate	Research Rating	Short Term Performance (1 year)	Long Term Performance (3 year)	ESG	Page
Brunel	**Passive**	**Global Low Carbon Equities**	N/A	N/A	N/A	P1	*23*
BlackRock	**Passive**	**Global Equities**	A	✓	✓	P2	*24*
BlackRock	**Passive**	**Corporate Bond**	A	✓	✓	N	*24*
BlackRock	**Passive**	**LDI**	A	✓	✓	N	*24*
Brunel	**Active**	**UK Equities**	N/A	N/A	N/A	-	*25*
Jupiter	**Active**	**UK Equities**	B	✕	✕	2	*26*
Jupiter	**Active**	**Global Sustainable Equities**	N	N/A	N/A	N	*28*
Schroder	**Active**	**Global Equities**	B+	✕	✕	2	*29*
Genesis	**Active**	**Emerging Market Equities**	A	✕	✕	3	*30*
Unigestion	**Active**	**Emerging Market Equities**	R	✓	✕	N	*31*

Meets criteria	✓	**A or B+ rating; achieved performance target**
Partially meets criteria	-	**B, N or R rating; achieved benchmark return but not performance target**
Does not meet criteria	✕	**C rating; did not achieve benchmark**

Focus Points

- All active equity managers have underperformed their benchmarks over the longer-term. In some cases this can be explained by the managers' style biases underperforming the wider marker, for example Unigestion has a low-volatility bias, which although has helped over the recent period, will be expected to underperform in the rising market that we have seen over the longer period
- A general lack of exposure to value stocks has benefitted the Fund over the one-year period.
- Schroders has announced that Nicky Richards, currently Global Head of Equities, will be stepping down from the role and will be replaced by Rory Bateman, currently Head of UK and European Equities, in March 2019. Despite this change, we are not recommending any actions. See page 29 for further details.

EXECUTIVE SUMMARY
MANAGER INFORMATION CONTINUED

Manager	Type	Mandate	Research Rating	Short Term Performance (1 year)	Long Term Performance (3 year)	ESG	Page
Pyrford	**Active**	**DGF**	R	✕	✕	N	*32*
Ruffer	**Active**	**DGF**	A	✕	N/A	3	*34*
JP Morgan	**Active**	**Fund of Hedge Funds**	B+	✓	✓	4	*36*
Schroder	**Active**	**UK Property**	B	-	✕	3	*39*
Partners	**Active**	**Global Property**	B+	✕	✕	4	*40*
IFM	**Active**	**Infrastructure**	B+	✓	N/A	2	*41*
Loomis Sayles	**Active**	**Multi-Asset Credit**	A	✕	N/A	3	*42*
Record Currency Management	**Active**	**Currency Hedging**	N	N/A	N/A	N	*43*

Meets criteria	✓	**A or B+ rating; achieved performance target**
Partially meets criteria	-	**B, N or R rating; achieved benchmark return but not performance target**
Does not meet criteria	✕	**C rating; did not achieve benchmark**

Focus Points

- Partners' performance target is 10% p.a. and benchmark taken as 8% p.a. (estimated net IRR, in local currency terms).

SECTION 2
MARKET BACKGROUND

MARKET BACKGROUND
INDEX PERFORMANCE

Equity Market Review

Against the backdrop of a perceived global slowdown, trade tensions and concerns over tighter monetary policy, risk assets saw their worst quarter since the end of 2008. The continued weakness of sterling slightly reduced the losses for sterling investors.

UK and overseas equities experienced a tough quarter with domestically focused companies in particular being hurt. Political uncertainty, including an unsuccessful attempt to oust Prime Minister May by her own party, added to the weakness, as chances of a no-deal Brexit have increased. GDP expanded by 1.5% annualised over the third quarter driven by household consumption while business investment dropped. CPI inflation fell to 2.3% at the end of November and the Bank of England kept interest rates at 0.75%.

Within global equity markets, the US economy grew by 3.0% on a quarterly basis over the third quarter and is set to have grown at the same rate in the fourth quarter. While the near-term outlook remains upbeat, expectations of a slowdown in late 2019 are rising, as the US reaches the later stage of the business cycle. The Federal Reserve continued to raise rates in December pushing them to 2.25-2.50%. Growth expectations for the Eurozone continue to weaken amid a slowdown in Germany and France as well as persistent weakness in Italy. Japanese growth expectations have slowed. Trade tensions between the US and China remained unresolved during the quarter even though it now seems more likely that a deal will be struck in 2019. Some emerging markets have been slowing, mostly due to reduced demand from China which has started to feel the impact of tariffs.

Bond Market Review

Nominal yields were down at the shorter end of the curve over the quarter.

The Over 15 Year Gilt Index underperformed the broader global bond market over the quarter, generating a return of 2.6%.

Real yields also fell across the curve over the quarter. This led to the Over 5 Year Index-Linked Gilts Index returning 2.0%.

Credit spreads increased sharply over the quarter, with the sterling Non-Gilts All Stocks Index credit spread ending the quarter at c.1.6% p.a. UK credit assets delivered a nil return over the quarter.

Currency Market Review

Over the quarter, sterling depreciated against the dollar by 2.3%, against the euro by 0.8% and against the Japanese yen by 5.7%.

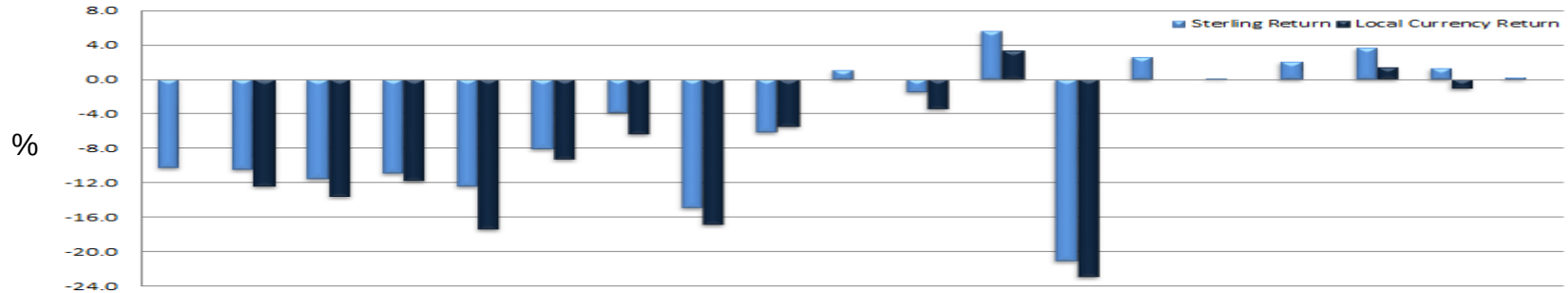
Commodity Market Review

Commodity performance was poor over the quarter with losses in all sectors, except precious metals due to its safe haven characteristics. Energy led the losses, declining by almost 34% while industrial metals fell by 7%. The softer economic outlook is leading to concerns that global consumption might come out lower than expected next year and this has hit energy and industrial metals especially hard. For oil, unexpected waivers on sanctions on Iran eased the fears of imminent supply constraints.

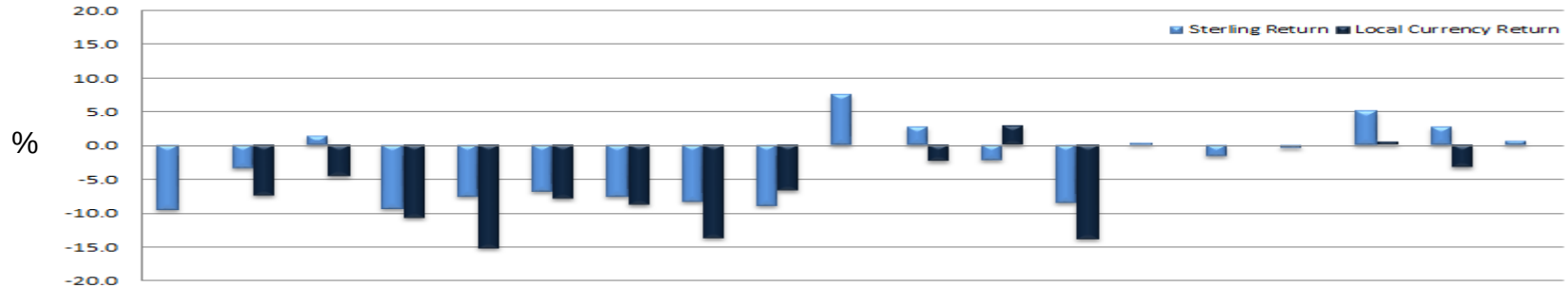
Source: Thomson Reuters Datastream.

MARKET BACKGROUND
INDEX PERFORMANCE

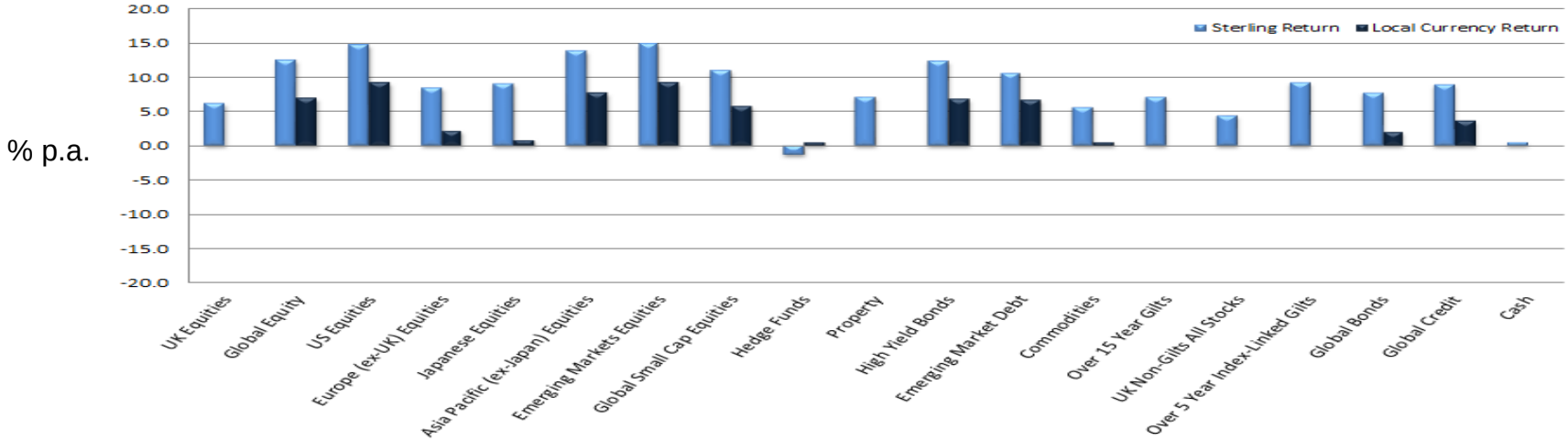
Return over the 3 months to 31 December 2018



Return over the 12 months to 31 December 2018



Return p.a. over the 3 years to 31 December 2018



Source: Thomson Reuters Datastream.

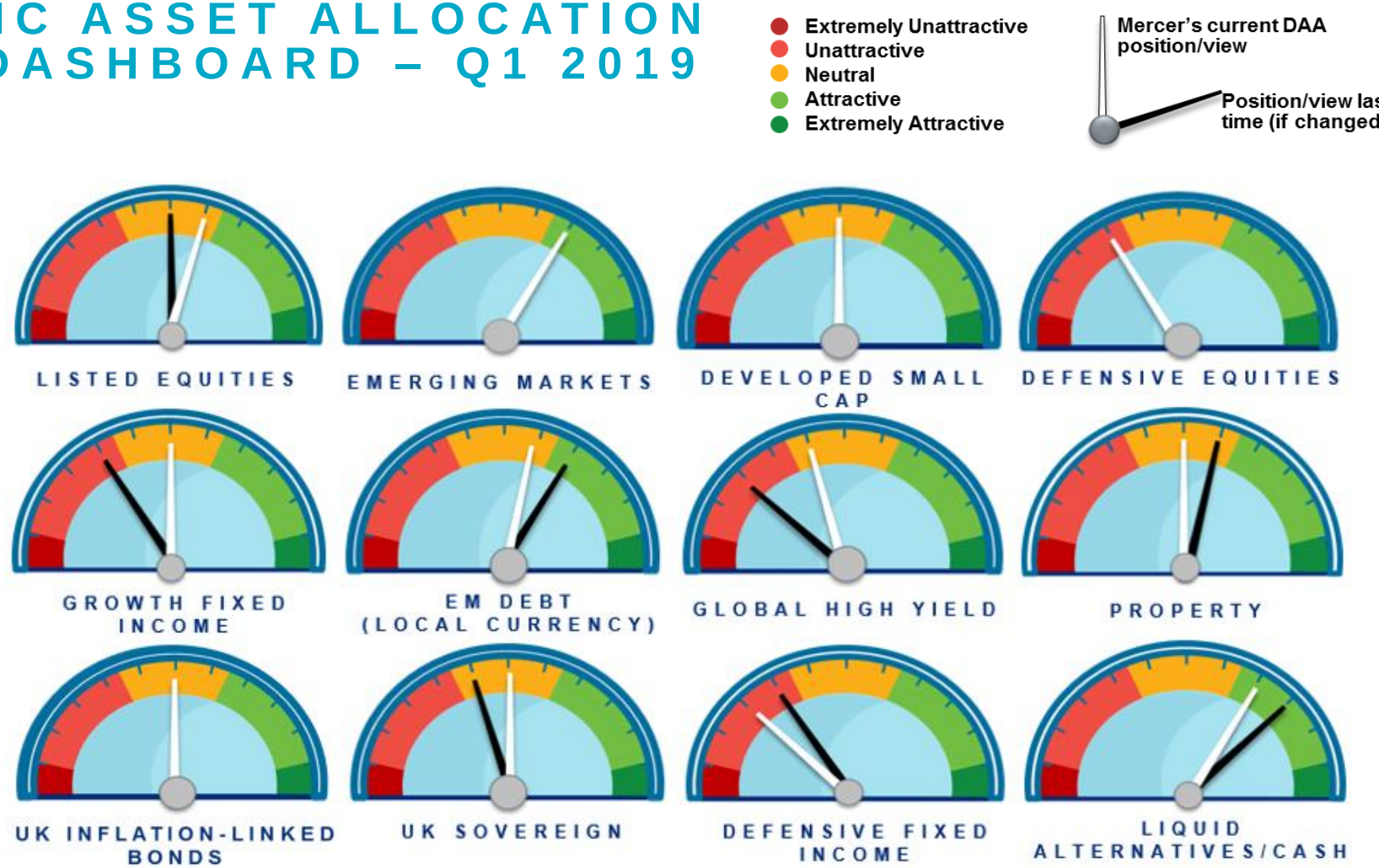
SECTION 3
STRATEGIC ASSUMPTIONS

MARKET BACKGROUND
INDEX PERFORMANCE VERSUS STRATEGY

Asset Class	Strategy Assumed Return % p.a.	3 year Index Return % p.a.	Comment
Developed Equities (Global) (FTSE All-World Developed)	8.05	12.3	*Remains ahead of the assumed strategic return. This has decreased from 20.1% p.a. last quarter as the latest quarter's return of -11.2% was materially lower than the 8.6% return of Q4 2015, which fell out of the 3 year return.*
Emerging Market Equities (FTSE AW Emerging)	8.70	14.8	*The three year return from emerging market equities has decreased from 17.5% p.a. last quarter, as the return of -3.9% over Q4 2018 was lower than the return for the quarter that fell out of the period (3.1%). The three year return is above the assumed strategic return.*
Diversified Growth	6.95 (Libor + 4% / RPI + 5%)	6.0 (4.5 / 8.1)	*DGFs are expected to produce an attractive return over the long term but with lower volatility than equities – this is the basis for the Libor and RPI based benchmarks. Low cash rates means benchmark has underperformed the long term expected return from equity, but recent higher inflation means RPI benchmark has outperformed. An absolute strategic return of 6.95% p.a. has been used, along with the specific manager targets for comparison. During periods of strong equity returns we would expect DGFs to underperform equities.*
UK Gilts (FTSE Actuaries Over 15 Year Gilts)	1.90	7.1	*UK gilt returns remain considerably above the long term strategic assumed return as yields remain low relative to historic averages. Over the last quarter, returns were positive for nominal gilts and index linked gilts as yields fell. Corporate bond returns are broadly in line with the strategic assumed return.*
Index Linked Gilts (FTSE Actuaries Over 5 Year Index-Linked Gilts)	2.15	9.2	
UK Corporate Bonds (BofAML Sterling Non Gilts)	3.25	4.2	
Fund of Hedge Funds (HFRX Global Hedge Fund Index)	5.10	-1.2	*Hedge fund returns were negative this quarter and remain below long term averages and the strategic return, as they are affected by low cash rates. It should be noted that the index includes a wide variety of strategies that may have had very divergent returns.*
Property (IPD UK Monthly)	5.75	7.0	*Actual property returns continue to be ahead of the expected returns. Slowing rental growth post-Brexit has meant fundamentals have weakened and a more cautious outlook may be required. Nevertheless, property returned 1.1% over the fourth quarter of 2018.*
Infrastructure (S&P Global Infrastructure)	6.95	12.3	*The infrastructure three year return is above the strategic return. This performance was in part driven by currency as sterling depreciated against the US dollar and euro over the last three years. Returns of this index have been largely driven by currency moves. The 100% hedge in place for the infrastructure mandate removes the currency effect from the actual returns earned. This is also true for the global property mandate with Partners.*

Source: Thomson Reuters Datastream. Returns are in sterling terms.

DYNAMIC ASSET ALLOCATION (DAA) DASHBOARD – Q1 2019



The charts above summarise Mercer's views on the medium term (1-3 years) outlook for returns from the key asset classes. These views are relevant for reflecting medium term market views in determining appropriate asset allocation. We do not expect the Scheme to make frequent tactical changes to their asset allocation based upon these views.

SECTION 4
FUND VALUATIONS

FUND VALUATIONS
VALUATION BY ASSET CLASS

Asset Allocation							
Asset Class	Start of Quarter (£'000)	End of Quarter (£'000)	Start of Quarter (%)	End of Quarter (%)	Target Strategic Benchmark (%)	Ranges (%)	Difference (%)
Developed Market Equities	1,790,290	1,587,452	37.4	34.2	34.0	29 - 39	+0.2
Emerging Market Equities	224,816	214,209	4.7	4.6	6.0	3 - 9	-1.4
Diversified Growth Funds	605,788	582,786	12.7	12.5	15.0	10 - 20	-2.5
Fund of Hedge Funds	231,734	231,533	4.8	5.0	5.0	0 - 7.5	0.0
Property	440,154	450,262	9.2	9.7	10.0	5 - 15	-0.3
Infrastructure	318,714	328,989	6.7	7.1	5.0	0 - 7.5	+2.1
Multi-Asset Credit	477,807	466,241	10.0	10.0	11.0	6 - 16	-1.0
Corporate Bonds	80,258	80,345	1.7	1.7	2.0	No set range	-0.3
LDI*	497,558	628,409	10.4	13.5	12.0	No set range	+1.5
Cash (including currency instruments)	114,646	77,488	2.4	1.7	-	0 - 5	+1.7
Total	**4,781,764**	**4,647,715**	**100.0**	**100.0**	**100.0**		**0.0**

Source: Investment Managers, Mercer. Green numbers indicate the allocation is within tolerance ranges, whilst red numbers indicate the allocation is outside of tolerance ranges.
* Valuation includes mark-to-market value of equity protection strategy.

- Invested assets decreased over the quarter by £134m due to negative returns from domestic and overseas equities in particular. All of the asset classes remain within their tolerance ranges.

FUND VALUATIONS
VALUATION BY MANAGER

Manager Allocation						
Manager	**Asset Class**	**Start of Quarter (£'000)**	**Cashflows (£'000)**	**End of Quarter (£'000)**	**Start of Quarter (%)**	**End of Quarter (%)**
Brunel	Global Low Carbon Equities	532,884		472,992	11.1	10.2
BlackRock	Global Equities	451,513		399,349	9.4	8.6
BlackRock	Corporate Bonds	80,258		80,345	1.7	1.7
BlackRock	LDI*	497,558		628,409	10.4	13.5
Brunel	UK Equities	-	176,737	170,763	0.0	3.7
TT International	UK Equities	195,422	-176,737	655	4.1	0.0
Jupiter	UK Equities	200,748		179,756	4.2	3.9
Jupiter	Global Sustainable Equities	10,652		9,434	0.2	0.2
Schroder	Global Equities	399,071		354,505	8.3	7.6
Genesis	Emerging Market Equities	110,373		104,077	2.3	2.2
Unigestion	Emerging Market Equities	114,443		110,133	2.4	2.4

Source: Investment Managers, Mercer. Totals may not sum due to rounding.
* Valuation includes mark-to-market value of equity protection strategy.

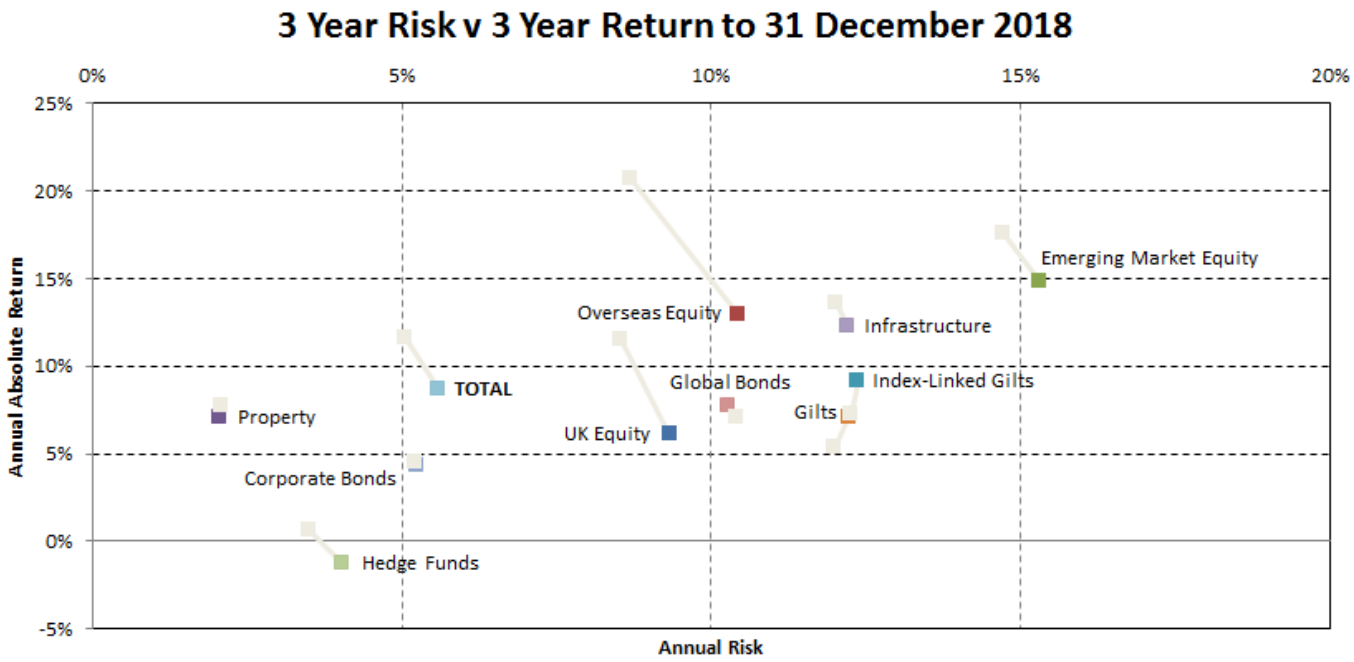
FUND VALUATIONS
VALUATION BY MANAGER CONTINUED

Manager Allocation						
Manager	**Asset Class**	**Start of Quarter (£'000)**	**Cashflows (£'000)**	**End of Quarter (£'000)**	**Start of Quarter (%)**	**End of Quarter (%)**
Pyrford	DGF	139,091	77,000	212,778	2.9	4.6
Aberdeen Standard	DGF	236,975	-230,000	-	5.0	0.0
Ruffer	DGF	229,721	153,000	370,008	4.8	8.0
JP Morgan	Fund of Hedge Funds	231,734		231,533	4.8	5.0
Schroder	UK Property	234,696		238,437	4.9	5.1
Partners	Property	205,458		211,826	4.3	4.6
IFM	Infrastructure	318,714		328,989	6.7	7.1
Loomis Sayles	Multi-Asset Credit	477,807		466,241	10.0	10.0
Record Currency Management	Currency Hedging	29,380	-28,650	-2,101	0.6	0.0
Internal Cash	Cash	85,266		79,589	1.8	1.7
Total		**4,781,764**		**4,647,715**	**100.0**	**100.0**

Source: Investment Managers, Mercer. Totals may not sum due to rounding.
The cashflow column shows only the cash movements within the asset portfolio. It does not include non-investment cash movements such as employer contributions or pension payments made, however these amounts are included in the 'Internal Cash' start and end balance to reflect the asset value position of the total Fund.

SECTION 5
PERFORMANCE SUMMARY

MANAGER MONITORING
RISK RETURN ANALYSIS



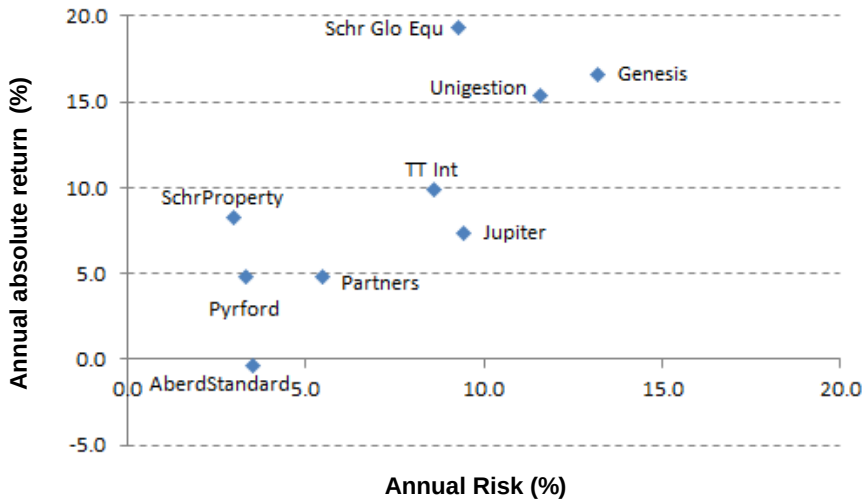
This chart shows the 3 year absolute returns against three year volatility (based on monthly data in sterling terms), to the end of December 2018, for each of the broad underlying asset benchmarks (using the indices set out in the Appendix), along with the total Fund strategic benchmark (using the benchmark indices and allocations from BNY Mellon). We also show the positions as at last quarter, in grey.

Comments

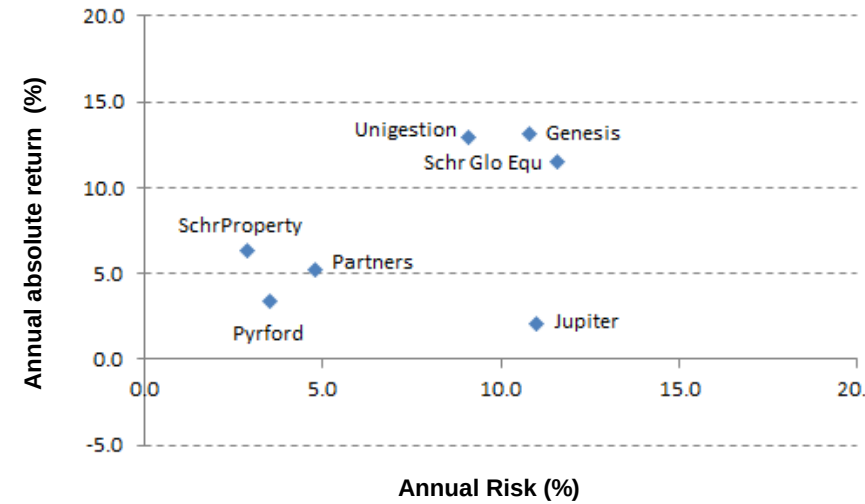
- Changes in observed returns and volatilities over the quarter were limited to some asset classes. Equities saw notable decreases in the three-year returns and increases in the associated volatility.

MANAGER MONITORING
RISK RETURN ANALYSIS

3 year Risk vs 3 year Return to 30 September 2018



3 year Risk vs 3 year Return to 31 December 2018



Comments

- The equity mandates saw their three-year return decreasing more significantly over the quarter.

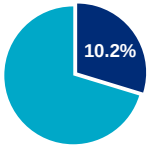
MANAGER MONITORING
MANAGER PERFORMANCE TO 31 DECEMBER 2018

Manager/ Asset Class	3 Months			1 Year			3 Year			3 Year Performance Target (% p.a.)	3 Year Performance vs Target
	Fund (%)	B'mark (%)	Relative (%)	Fund (%)	B'mark (%)	Relative (%)	Fund (% p.a.)	B'mark (% p.a.)	Relative (% p.a.)		
Brunel Passive Low Carbon Equity	-11.2	-11.2	0.0	N/A	N/A	N/A	N/A	N/A	N/A	-	N/A
BlackRock Equities	-11.6	-11.8	+0.2	-2.1	-2.1	0.0	11.3	11.1	+0.2	-	N/A
BlackRock Corp Bonds	-0.4	-0.5	+0.1	-4.0	-4.1	+0.1	6.5	6.4	+0.1	-	N/A
BlackRock LDI	1.5	1.5	0.0	9.8	9.8	0.0	9.9	10.0	-0.1	-	N/A
TT International ***	-6.1	-5.2	-0.9	-3.8	-1.5	-2.3	6.2	7.8	-1.5	+3-4	Target not met
Jupiter UK Equity	-10.5	-10.2	-0.3	-11.5	-9.5	-2.2	2.1	6.1	-3.8	+2	Target not met
Jupiter Glb Sust Equity	-11.4	-10.6	-0.9	N/A	N/A	N/A	N/A	N/A	N/A	+2-4	N/A
Schroder Equity	-11.2	-10.6	-0.7	-3.9	-3.3	-0.6	11.5	12.5	-0.9	+4	Target not met
Genesis	-5.6	-5.2	-0.4	-11.0	-8.9	-2.3	13.1	15.1	-1.7	-	Target not met
Unigestion	-3.8	-5.3	+1.6	-0.5	-9.3	+9.7	12.9	14.7	-1.6	+2-4	Target not met
Pyrford	-1.7	1.8	-3.4	-0.9	7.9	-8.2	3.4	8.2	-4.4	-	Target not met
Aberdeen Standard ***	-2.4	1.3	-3.6	-5.3	5.8	-10.5	-2.0	5.6	-7.2	-	Target not met
Ruffer	-4.6	1.5	-6.0	-6.0	5.8	-11.2	N/A	N/A	N/A	-	N/A
JP Morgan	-3.0	1.3	-4.2	1.4	5.1	-3.5	2.6	4.3	-1.6	-	Target not met
Schroder Property	0.7	0.9	-0.2	6.6	6.5	+0.1	6.3	6.4	-0.1	+1	Target not met
Partners Property *	1.0	2.5	-1.5	6.8	10.0	-2.9	5.2	10.0	-4.4	-	Target not met
IFM	0.8	1.2	-0.4	15.1	4.5	+10.1	14.8 **	3.9 **	+10.4 **	-	N/A
Loomis Sayles	-2.4	1.2	-3.6	-4.4	4.8	-8.8	N/A	N/A	N/A	-	N/A

- Source: Investment Managers, Mercer estimates.
- **Returns are in GBP terms**, consistent with overall fund return calculations before currency hedging is applied, **except for JP Morgan, Partners and IFM, whose performance is shown as IRR in local currency terms**.
- In the relative performance columns, returns in blue text exceeded their respective benchmarks, those in red underperformed, and black text shows performance in line with benchmark.
- In the table above, and throughout this report, relative returns have been calculated geometrically (i.e. the portfolio return is divided by the benchmark return) rather than arithmetically (where the benchmark return is subtracted from the portfolio return).
- In the table above, Partners performance is measured against an IRR target of 10% p.a.
- A summary of the benchmarks for each of the mandates is given in Appendix 1.

* Performance to 30 September 2018 as this is the latest date that this is available to.
** Performance is shown since inception.
*** Performance for TT and Aberdeen Standard shown to 31 October 2018 as that is the closest month end to termination. 3 months performance represents performance over October 2018.

SECTION 6
MANAGER PERFORMANCE



BRUNEL – PASSIVE GLOBAL LOW CARBON EQUITIES
£473.0M END VALUE *(£532.9M START VALUE)*

Item Monitored	Outcome
Mercer Rating	N/A
Performance Objective *In line with the benchmark*	Too early to determine

Manager Research and Developments

- Mandate was initiated in July 2018. LGIM is the underlying manager.
- The fund returned -11.2% over Q4 2018, broadly in line with its benchmark.

Reason for investment

To provide asset growth as part of a diversified equity portfolio and to provide a decarbonised equity portfolio.

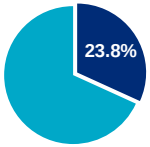
Reason for manager

- Investment made via the Brunel pool

Sector Allocation

Information Technology	19.2
Financials	17.4
Industrials	13.0
Health Care	12.9
Consumer Discretionary	12.8
Consumer Staples	8.2
Energy	4.7
Materials	3.4
Communication Services	3.0
Other	5.4

As at 30 September 2018.



BLACKROCK – PASSIVE MULTI-ASSET & LDI (POOLED EQUITIES & QIF)

£1,108.1M END VALUE *(£1,029.3M START VALUE)* *(INC. EQUITY PROTECTION STRATEGY)*

Item Monitored	Outcome	
Mercer Rating	●	A (no change over period under review). ESGp2 for equities
Performance Objective *In line with the benchmark*	●	Portfolios performed broadly in line with their benchmarks over three years

Manager Research and Developments

- Equities returned -11.6% and Corporate Bonds returned -0.4% over Q4, performing broadly in line with their benchmarks as expected, whilst returns over one and three year periods were within the tracking error ranges. Further, the LDI portfolio returned 1.8%. The LDI benchmark return has been assumed to be equal to the LDI fund return.

Reason for investment

To provide asset growth as part of a diversified portfolio

Reason for manager

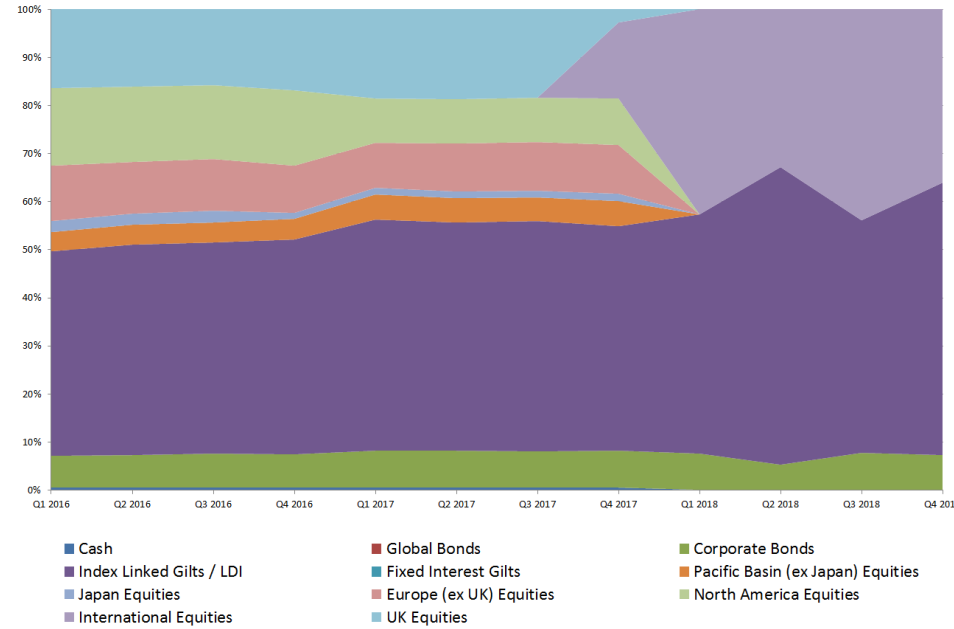
- To provide low cost market exposure across multi asset classes
- Provide efficient way for rebalancing between bonds and equities within a single portfolio

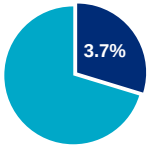
Performance

	Quarter (%)		1-Year (%)		3-Year (% p.a.)	
	Fund	Benchmark	Fund	Benchmark	Fund	Benchmark
Equities	-11.6	-11.8	-2.1	-2.1	11.3	11.1
Corporate Bonds	-0.4	-0.5	-4.0	-4.1	6.5	6.4
LDI*	1.5	1.5	9.8	9.8	9.9	10.0

* LDI performance reflects legacy index-linked gilt holidings prior to 30 June 2017 and QIF holdings thereafter. Equity protection strategy performance is not reflected.

Asset Allocation





BRUNEL – ACTIVE UK EQUITIES
£170.8M END VALUE *(£0.0M START VALUE)*

Item Monitored	Outcome	
Mercer Rating	N/A	Baillie Gifford Invesco Aberdeen Standard
Performance Objective *In line with the benchmark*		Too early to determine

Manager Research and Developments

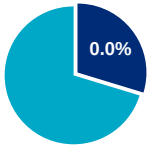
- Mandate was initiated in November 2018. Aberdeen Standard, Baillie Gifford and Invesco are the underlying managers.

Reason for investment

To provide asset growth as part of a diversified equity portfolio

Reason for manager

- Investment made via the Brunel pool



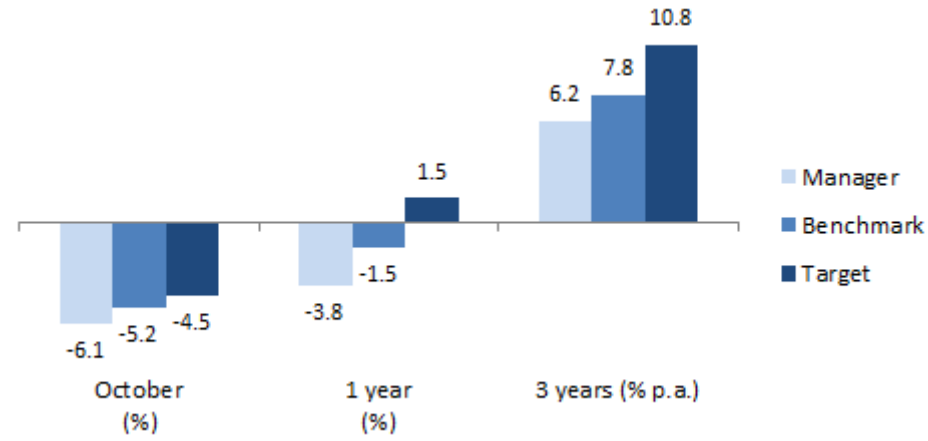
TT INTERNATIONAL – UK EQUITIES (UNCONSTRAINED) (SEGREGATED)
£0.0M END VALUE *(£195.4M START VALUE)*

Item Monitored	Outcome
Mercer Rating	B (no change over period under review). ESG3
Performance Objective *Benchmark +3-4% p.a.*	Underperformed benchmark by 1.5% p.a. over three years

Manager Research and Developments

- The strategy was terminated over Q4 18 with proceeds allocated to the Brunel UK Active Equity strategy.
- Performance is shown to 31 October 2018.
- In October, the mandate returned -6.1%, underperforming its benchmark. The strategy finished behind its benchmark due to underperformance in the Financials, Consumer and Utilities sectors. Security selection detracted from performance with ConvaTec, a Medical equipment company , being the largest detractor after releasing disappointing results,
- In the Financials sector, the portfolio suffered from being underweight HSBC, which rose after a set of strong results.

Performance

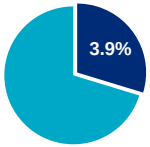


Reason for investment

To provide asset growth as part of a diversified equity portfolio

Reason for manager

- Favoured the partnership structure that aligns manager's and Fund's interests
- Focussed investment activity and manages its capacity
- Clear, robust stock selection and portfolio construction



JUPITER ASSET MANAGEMENT – UK EQUITIES (SRI) (SEGREGATED)
£179.8M END VALUE *(£200.7M START VALUE)*

Item Monitored	Outcome
Mercer Rating	B (no change over period under review). ESG2
Performance Objective *Benchmark +2% p.a.*	Underperformed benchmark by 3.8% p.a. over three years
Tracking error was 4.6% p.a. – *source: Jupiter*	Number of stocks: 55

Manager Research and Developments

- Jupiter underperformed its benchmark over the quarter by 0.3%.
- Keller Group's share price fell significantly over the quarter following a decision to place its operations in the Asia Pacific region under review. Victrex declined after a very strong period of share price performance as fears mounted over the stage of the global industrial cycle. The overweight allocation to these names had a negative impact on the portfolio.
- Jupiter underperformed the benchmark by 2.2% over the year and by 3.8% p.a. over the three years to 31 December 2018.
- Jupiter has outperformed the wider UK equity market in only 2 out of the last 12 quarters. Whilst the lack of exposure to the oil and gas sector amidst the rise in oil prices can help explain this, the degree of the underperformance does also raise questions about Jupiter's stock-picking capabilities over recent years.

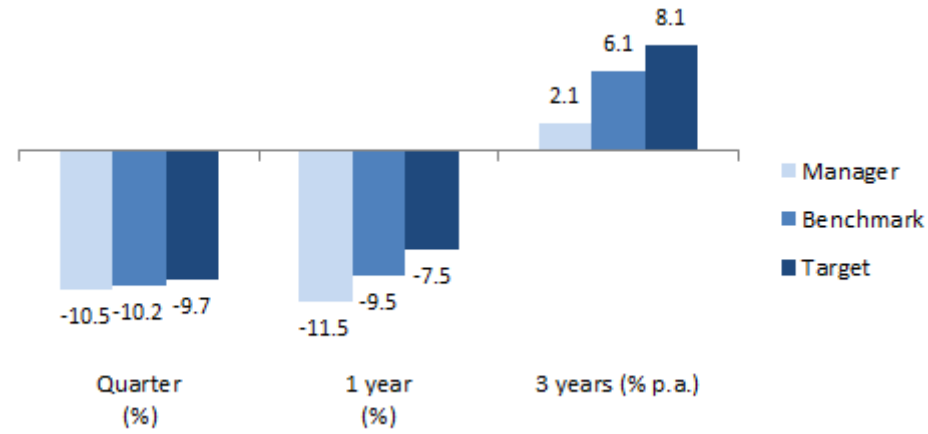
Reason for investment

To provide asset growth as part of a diversified equity portfolio and to provide a specific SRI allocation

Reason for manager

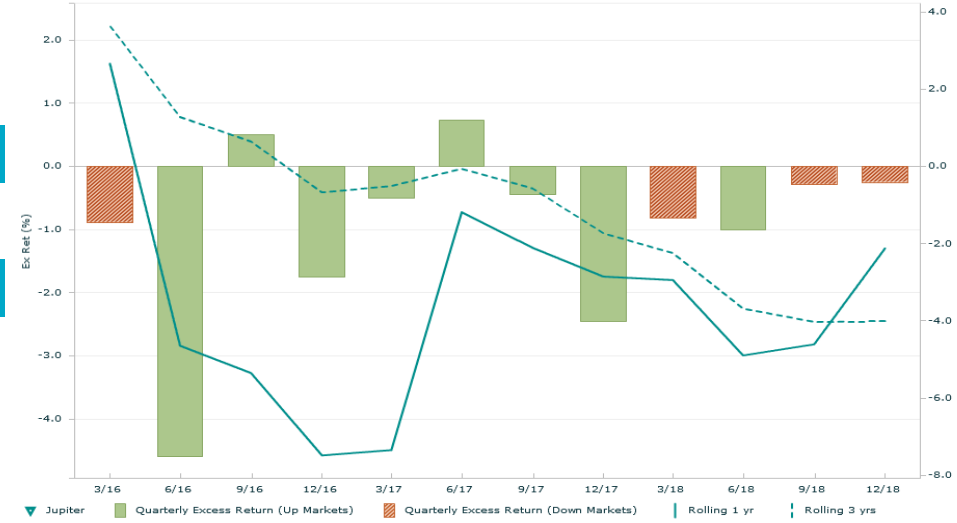
- Clear and robust approach to evaluating SRI factors within the investment process
- Dedicated team of SRI analysts to research SRI issues and lead engagement and voting activities
- Corporate commitment to SRI investment approach within a more mainstream investment team

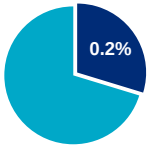
Performance



Rolling relative returns

Quarterly Excess Return vs. FTSE All Share with rolling 1 and 3 yr lines in GBP (after fees) over 3 yrs ending December-18





JUPITER ASSET MANAGEMENT – GLOBAL SUSTAINABLE EQUITIES (POOLED)
£9.4M END VALUE *(£10.7M START VALUE)*

Item Monitored	Outcome
Mercer Rating	N (no change over period under review)
Performance Objective *Benchmark +2-4% p.a.*	Too early to determine

Manager Research and Developments

- Mandate was initiated in June 2018.
- The fund returned -11.4% over Q4 2018, underperforming the benchmark return of –10.6%.

Reason for investment

Modest initial allocation to provide an indication of the typical performance of sustainable equities.

Reason for manager

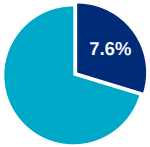
- Preference for global sustainability approach rather than negative screen approach due to integration of ESG factors into investment process
- Global approach provides access to a large universe of stocks to select from
- Clear investment philosophy and portfolio construction reflects team's highest conviction ideas

Sector Allocation

Industrials[1]	36.1%
Financials	20.5%
Technology	10.1%
Health Care	7.5%
Consumer Goods	7.1%
Basic Materials	5.2%
Utilities	3.4%
Consumer Services	3.3%
Telecommunications	1.1%
	94.4%
Cash	5.6%
Total	100.0%

[1]*Includes general electronic equipment, medical equipment and consumer financial stocks (16.62%).*

Source: Jupiter.
As at 31 December 2018.



SCHRODER – GLOBAL EQUITY PORTFOLIO (SEGREGATED)
£354.5M END VALUE *(£399.1M START VALUE)*

Item Monitored	Outcome	
Mercer Rating	●	B+ (no change over period under review). ESG2
Performance Objective *Benchmark +4% p.a.*	●	Underperformed benchmark by 0.9% p.a. over three years

Three year tracking error was 2.1% p.a. – *source: Mercer*

Manager Research and Developments

- The fund has underperformed the benchmark by 0.7% over the quarter, by 0.6% over the year and by 0.9% p.a. over the three years to 31 December 2018.
- Not holding stocks in real estate and utilities weighed down most on returns, along with the portfolio's positions in consumer discretionary. Healthcare holdings proved to be more resilient. From a regional perspective, the North America exposure was the largest detractor, while the UK and Pacific ex Japan exposure added value. Alcoa and Occidental (OXY) were the largest stock specific detractors over the quarter with the largest contributors being AIA and HDFC.
- Schroders has announced that Nicky Richards, currently Global Head of Equities, will be stepping down from the role and moving into a part-time "Senior Advisor" position. Rory Bateman, currently Head of UK and European Equities, will take over as Global Head of Equities from March 2019. Schroders has said they have started the recruitment process for a new Head of UK and European equities. Bateman does not have any portfolio management responsibilities. Bateman has been at Schroders since 2008 having previously been an analyst and portfolio manager at Goldman Sachs. He initially worked as a European equity portfolio manager at Schroders, progressing to Head of UK and European Equities in 2013. We have viewed his management and leadership capabilities positively, and suspect he will be well suited to the role. We do not have any concerns over this change.

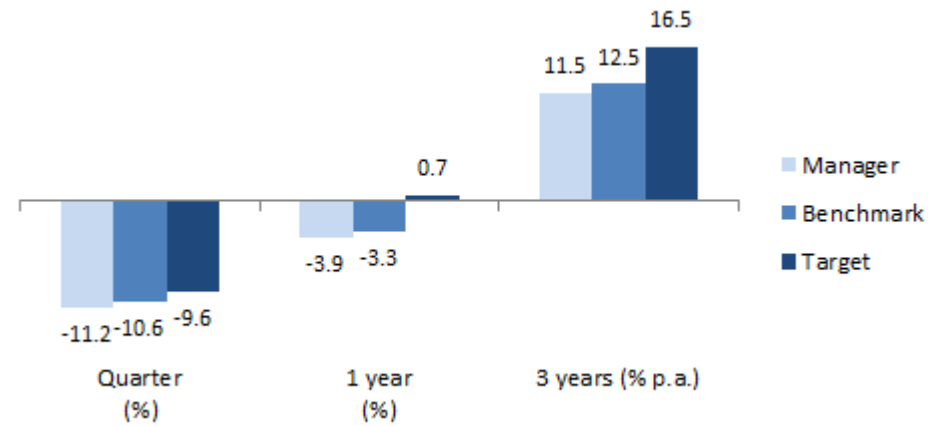
Reason for investment

To provide asset growth as part of a diversified equity portfolio

Reason for manager

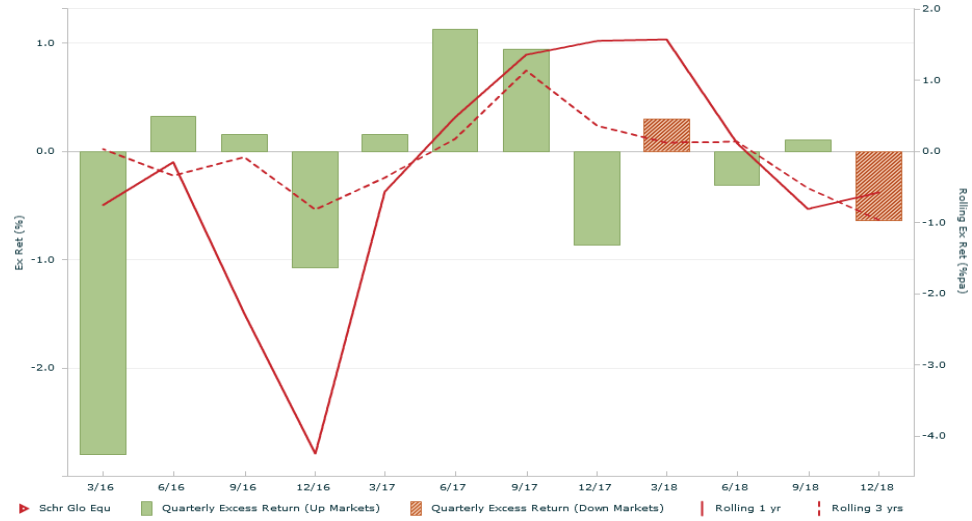
- Clear philosophy and approach
- Long term philosophy aligned with Fund's goals, commitment to incorporating ESG principles throughout the investment process
- Evidence of ability to achieve the Fund's performance target

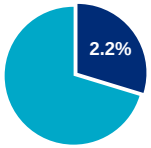
Performance



Rolling relative returns

Quarterly Excess Return vs. MSCI AC World with rolling 1 and 3 yr lines in GBP (after fees) over 3 yrs ending December-18





GENESIS ASSET MANAGERS – EMERGING MARKET EQUITIES (POOLED)
£104.1M END VALUE *(£110.4M START VALUE)*

Item Monitored	Outcome	
Mercer Rating		A (no change over period under review). ESG3
Performance Objective *Benchmark*		Underperformed benchmark by 1.7% p.a. over three years
Three year tracking error was 3.5% p.a. – *source: Genesis*		Number of stocks: 115

Manager Research and Developments

- The fund has underperformed by 0.4% over the quarter, by 2.3% over the year and by 1.7% p.a. over the three years to 31 December 2018.
- Regionally, Brazil was the largest contributor to returns over the quarter, whilst China was the largest detractor. The largest stock specific contributors were Linx and Garanti Bank from Brazil and Turkey respectively, whilst the largest detractor was the Chinese Internet company 58.com. In terms of sectors, Financials was the largest contributor, whilst Communications was the largest detractor.
- Given the types of quality, growth companies Genesis favours, we would normally expect them to do better in flat or down markets and struggle in environments where markets rise. Therefore, Q4 weak relative performance was disappointing.
- Our researchers met with Genesis in November 2018 to discuss this strategy. Despite the recent underperformance, we believe this remains an appealing strategy with a portfolio management team that has the investment acumen to deliver attractive investment returns. Whilst we may have expected outperformance over the year given market returns were negative, it is important to note that the majority of the underperformance came in the first three quarters of the year, which is what we would anticipate in an environment where cyclical areas of the market are being rewarded. However, the strategy did not provide as much downside protection during the market sell-off in Q4 2018 as may have been expected.

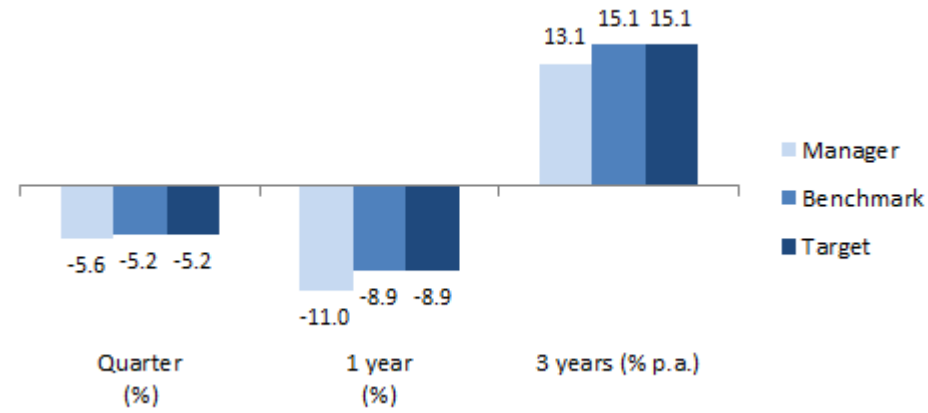
Reason for investment

To provide asset growth as part of a diversified equity portfolio

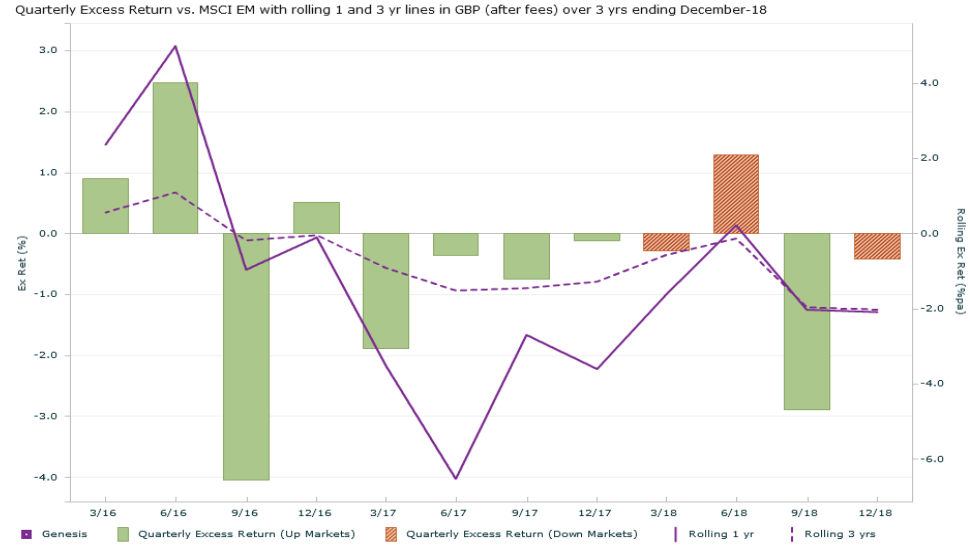
Reason for manager

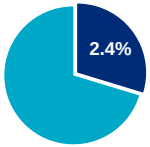
- Long term investment approach which takes advantage of evolving growth opportunities
- Niche and focussed expertise in emerging markets
- Partnership structure aligned to delivering performance rather than growing assets under management

Performance



Rolling relative returns





UNIGESTION – EMERGING MARKET EQUITIES (POOLED – SUB-FUND)
£110.1M END VALUE *(£114.4M START VALUE)*

Item Monitored	Outcome
Mercer Rating	R (no change over period under review)
Performance Objective *Benchmark +2-4% p.a.*	Underperformed benchmark by 1.6% p.a. over three years
Three year tracking error was 6.9% p.a. – *source: Unigestion*	Number of stocks: 96

Manager Research and Developments

- The fund has outperformed by 1.6% over the quarter and by 9.7% over the year, but underperformed by 1.6% p.a. over the three years to 31 December 2018.
- The fund outperformed over October and December. The relatively strong performance of the Telecoms and Banks sectors added value in October, as did the underweight to Media. Performance in December was supported by being underweight Retailing and Technology, and overweight Telecoms and Autos. Stock selection was also positive, with good stock picking in Energy, Transportation and Insurance.
- Volatility since inception is 13.4%, lower than the index (16.6%) and consistent with the strategy's objectives (and bias to quality and large- or mega-cap stocks).
- The fund uses a defensive, high quality, low volatility approach, which should outperform in times of market volatility, but underperform in upward markets. In this respect, relative performance was strong in Q4 2018, as it was in the previous quarter.

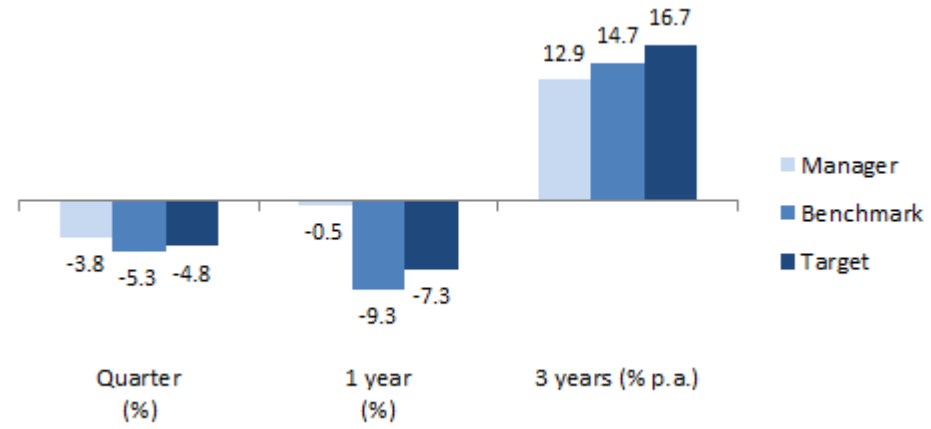
Reason for investment

To provide asset growth as part of a diversified equity portfolio

Reason for manager

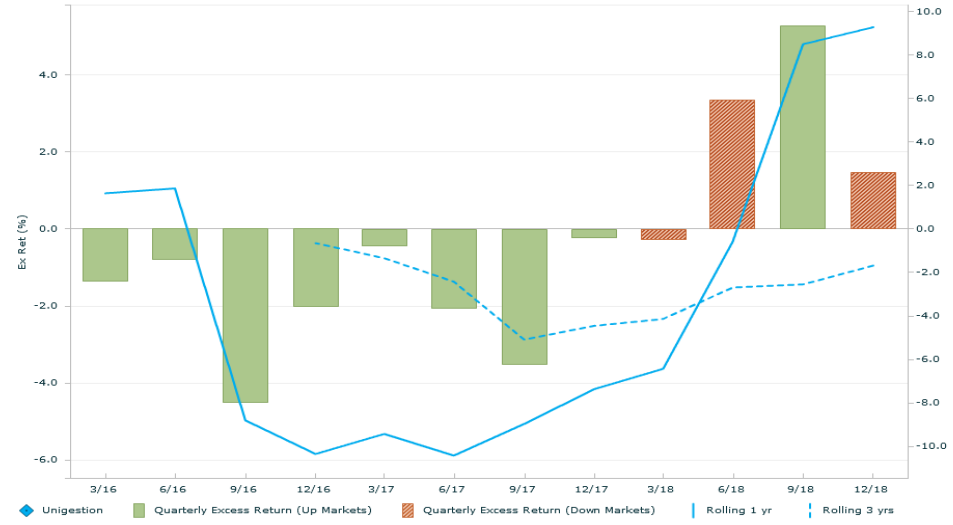
- Risk-based active management approach
- Aim for lower volatility than the MSCI Emerging Markets Index
- Combine fundamental and quantitative analysis

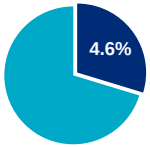
Performance



Rolling relative returns

Quarterly Excess Return vs. MSCI EM (Free) (Net) with rolling 1 and 3 yr lines in GBP (after fees) over 3 yrs ending December-18





PYRFORD – DGF (POOLED)
£212.8M END VALUE *(£139.1M START VALUE)*

Item Monitored	Outcome
Mercer Rating	R (no change over period under review)
Performance Objective *RPI +5% p.a.*	Underperformed objective by 4.4% p.a. over three years

Manager Research and Developments

- The fund has underperformed its objective (RPI + 5% p.a.) over the quarter by 3.4%, by 8.2% over the year and by 4.4% p.a. over three years.
- The defensive positioning was beneficial due to the market volatility seen over the quarter. The key driver for the portfolio over the quarter was the bond allocation with both UK bonds (+0.3%) and overseas bonds (+1.0%) posting positive returns. Finally the overall effect of currency hedging was marginally positive over the quarter.
- Strategic allocation of the portfolio remained unchanged over the quarter.
- Pyrford continues to adopt a defensive stance by owning short duration securities in order to protect the capital value of the portfolio from expected rises in yields.

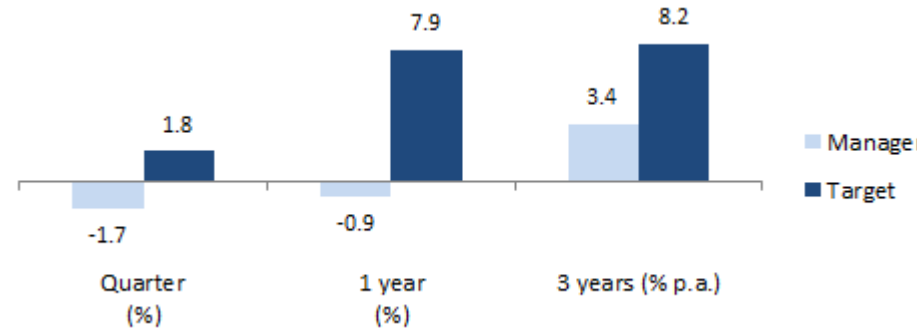
Reason for investment

To provide equity like return over the long term but with a lower level of volatility

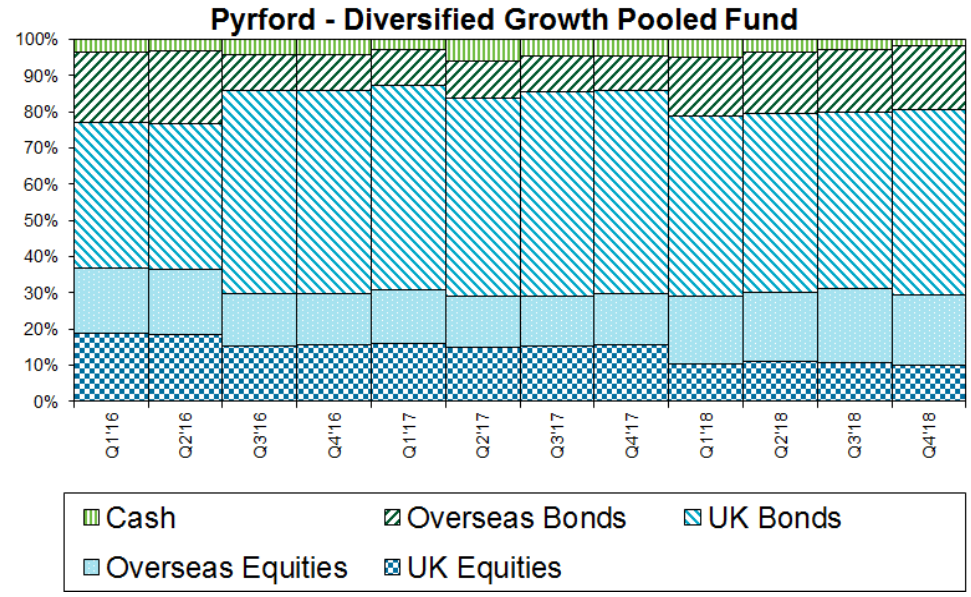
Reason for manager

- Asset allocation skill between equities, bonds and cash
- Fundamental approach to stock selection

Performance



Asset Allocation



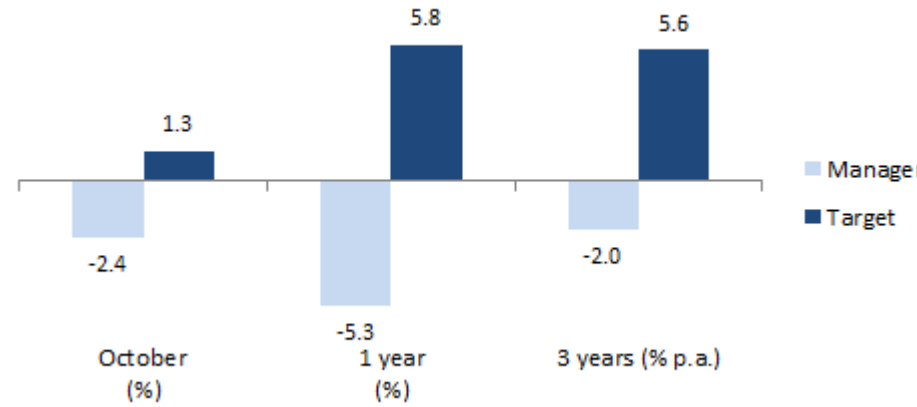
ABERDEEN STANDARD – DGF (POOLED)
£0.0M END VALUE *(£237.0M START VALUE)*

Item Monitored	Outcome
Mercer Rating	B+ (no change over period under review). ESG4
Performance Objective *Cash +5% p.a.*	Underperformed objective by 7.2% p.a. over three years

Manager Research and Developments

- The strategy was terminated over the quarter with proceeds split between the Fund's other DGF strategies managed by Pyrford and Ruffer.
- Performance shown to 31 October 2018.
- In October, the mandate returned -2.4%, underperforming its benchmark.

Performance

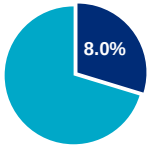


Reason for investment

To provide attractive absolute returns over the long term

Reason for manager

- Diversification from equities
- Exposure to relative value strategies and different approach to Pyrford's largely static asset allocation investment strategy



RUFFER – DGF (POOLED)
£370.0M END VALUE *(£229.7M START VALUE)*

Item Monitored	Outcome
Mercer Rating	A (no change over period under review). ESG3
Performance Objective *Cash +5% p.a.*	Underperformed objective by 11.2% p.a. over the year

Manager Research and Developments

- Ruffer delivered a performance of -4.6% over the quarter, against a benchmark of 1.5%, and a performance of -6.0% over the year, against an objective of 5.8%.
- Losses for the quarter were largely driven by the equity exposure. The strategy's equity allocation was focused on cyclicals and financials, which fell as much, if not more than the broader equity indices. Index-linked bonds and equity protection provided only muted protection amidst the wider market volatility. One of Ruffer's more traditional diversifiers – gold – provided strong returns and helped protect over Q4.
- Ruffer continues to be defensively positioned with 64% of the portfolio allocated to defensive assets (index-linked gilts, gold and gold equities, cash and illiquid strategies and options). However, these defensive assets did not offer the protection over Q4 18 that may have been anticipated, as the index-linked bonds and equity protection failed to provide much of an offset to the losses stemming from the strategy's equity exposure.
- Ruffer's primary focus remains capital preservation and to not lose money in any twelve-month period. Therefore, whilst recent performance is somewhat disappointing, it should be noted that 2018 was only Ruffer's third calendar year loss in almost quarter of a century.

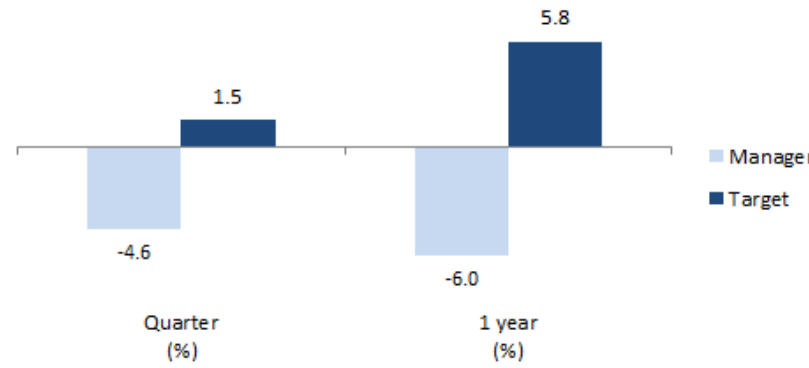
Reason for investment

To provide equity like return over the long term but with a lower level of volatility

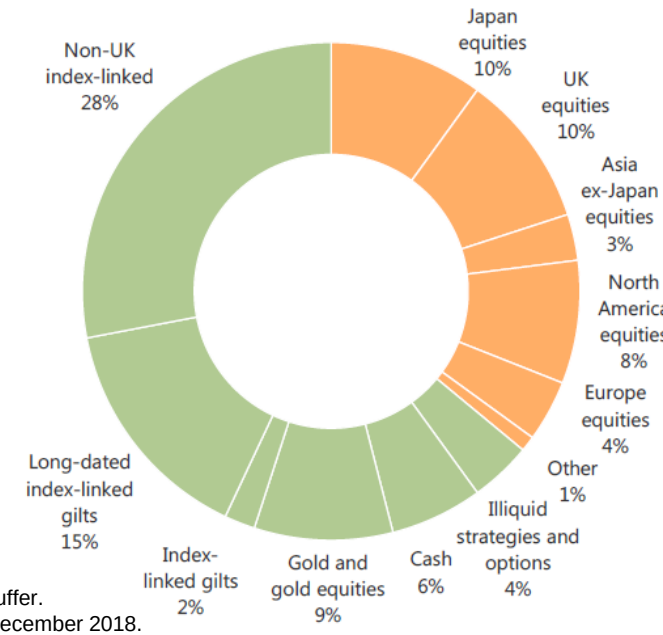
Reason for manager

- Experience and insights of the investment team
- Focus on capital preservation
- Dynamic allocation between risk and defensive assets depending on market conditions

Performance



Sector Allocation

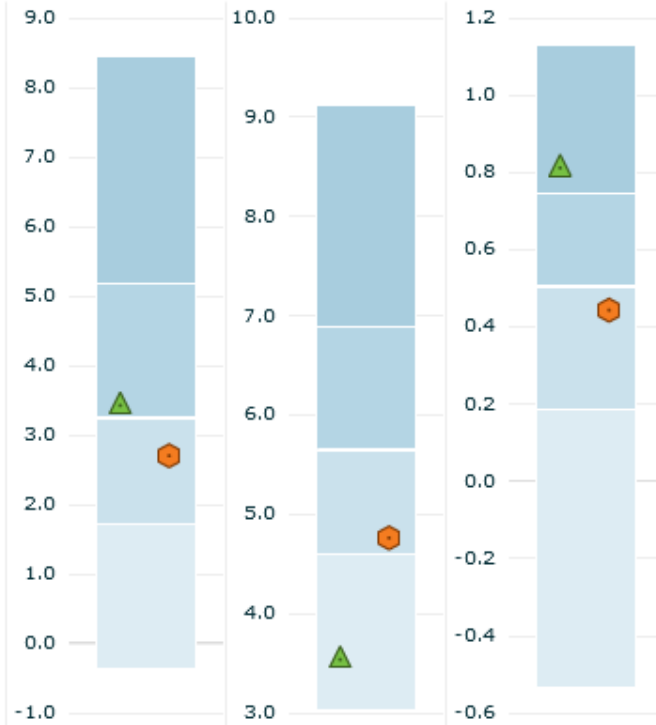


Source: Ruffer.
As at 31 December 2018.

DGF MANDATES

Performance characteristics vs. BofAML LIBOR 6 month average UK in GBP (after fees) over 3 yrs ending December-18

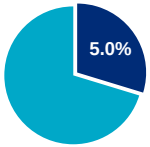
Comparison with the International Multi-asset GBP (Net) universe (Actual Ranking) (quarterly calculations)



	Ret (%pa)	Std Dev (%pa)	IR
Pyrford DGF	3.4 *(22)*	3.5 *(39)*	0.8 *(9)*
Ruffer DGF	2.7 *(28)*	4.8 *(33)*	0.4 *(26)*
95th Percentile	8.4	9.1	1.1
Upper Quartile	5.2	6.9	0.7
Median	3.3	5.6	0.5
Lower Quartile	1.7	4.6	0.2
5th Percentile	-0.4	3.0	-0.5
Number	44	44	44

Commentary

- Over the three years to 31 December 2018, Pyrford outperformed the Ruffer pooled fund by 0.7% p.a.
- Pyrford is slightly above the median of the DGF universe for performance, whilst Ruffer is below that level. It should be noted that this universe is very diverse in styles.
- This performance was achieved with a volatility of 3.5% p.a. by Pyrford, while Ruffer had a volatility of 4.8% p.a.
- Pyrford was less volatile than most managers in the universe, while Ruffer was in the third quartile of the universe.
- The information ratio (a measure of risk adjusted returns) for Pyrford was in the upper quartile of the universe, whereas for Ruffer was around the median level.
- The information ratio (IR) measures the amount of 'information' that the manager can extract from the market. Expressed in another way this is the amount of excess return generated per unit of risk or tracking error added. The IR is therefore a measure of the skill of the manager. If the IR is large and it is measured over a reasonable period of time, then this is an indication that the manager has some skill in managing money. Mercer defines the IR as the annualised excess return divided by the annualised tracking error.



JP MORGAN – FUND OF HEDGE FUNDS
£231.5M END VALUE *(£231.7M START VALUE)*

Item Monitored	Outcome
Mercer Rating	B+ (no change over period under review). ESG4
Performance Objective *Cash +3% p.a.*	Below target over three years (in USD)

Item	
Number of funds	31 (as at 30 November 2018)

Strategy	Contribution to Performance over the Quarter in USD (%)
Relative Value	0.15
Opportunistic/Macro	-0.42
Long/Short Equities	-2.68
Merger Arbitrage/Event Driven	-0.21
Credit	0.27
Total	**-3.0 (including cash and fees)**

In USD terms, the fund return was -3.0% over Q4 (below benchmark). This return was above the wider hedge fund indices, discussed over the next two pages.

Reason for investment

To reduce volatility of the Growth portfolio and increase diversification

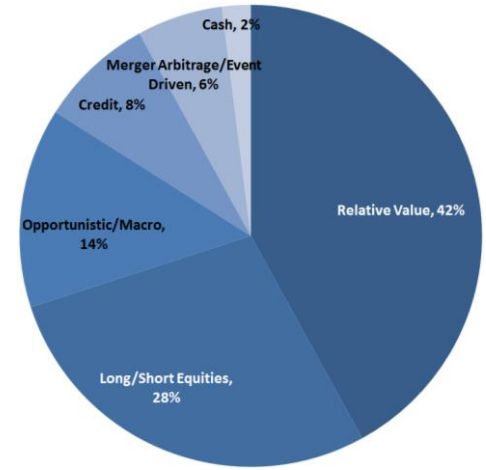
Reason for manager

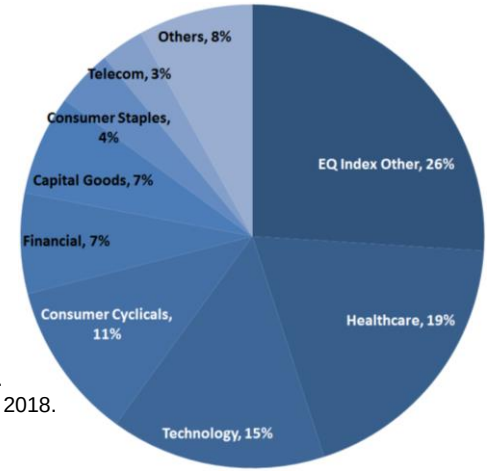
- Niche market neutral investment strategy
- Established team with strong track record
- Complemented other funds in the portfolio

Performance (GBP, JP Morgan return converted from USD)

Last Quarter	-0.6%	Target	0.9%
Last Year	7.6%	Target	3.6%
Last 3 Years (p.a.)	7.7%	Target	3.5%

Portfolio Composition and Equity Sector Allocation

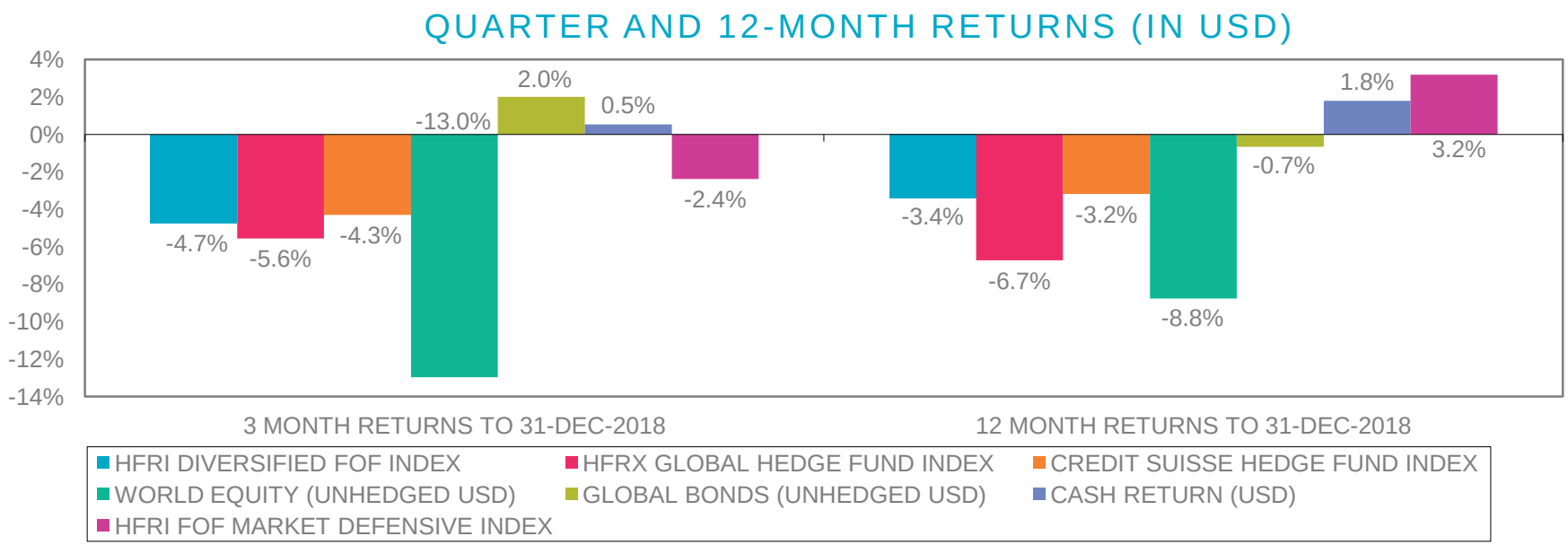




Source: JP Morgan.
As at 30 November 2018.

HEDGE FUND COMMENTARY – Q4 2018

- Hedge funds were able to grind out positive returns during most of the year's volatility, though they weren't immune to the broad market declines witnessed in the 4th quarter. While the average portfolio of hedge funds declined for the quarter and year, they still served to reduce drawdowns and add value over a traditional stock/bond mix, outperforming a naïve 60/40 asset allocation with a fraction of the volatility.
- A hedge fund portfolio's ability to diversify traditional risk factors is often best illustrated during difficult periods for broad markets. As witnessed over the past year, hedge funds have continued to serve as a diversifier, earning positive returns during up markets and capturing only a fraction of broad market declines. In the current environment of increased market volatility, reduced liquidity and uncertain returns from traditional risk assets, we are pleased that the value proposition for hedge funds has remained largely intact. We note, however, that hedge funds will likely continue to lag in strong risk-on periods and generally require healthy market liquidity in order to add value and avoid forced de-risking.



Returns are in USD. Source: Source: Credit Suisse Hedge Index LLC.

HEDGE FUND COMMENTARY – Q4 2018

Relative Value (42%)

- Equity Market Neutral ("EMN") strategies declined for the quarter and year. Over 2018, those strategies fell by 1.0%.
- Convertible arbitrage declined 3.5% on the year. Most of the difficulty came in Q4, as convertible bond valuations retraced materially . Following material issuance for most of the year, the primary market was muted late in Q4 amidst equity market instability.

Long/Short Equities (28%)

- Long/Short Equity strategies declined for the quarter and year, falling 6.9% over the year.
- Long/Short Equity strategies trailed the hedge fund group for the year, primarily impacted by Q4 drawdowns. Directional strategies unsurprisingly performed worse, though a mixed alpha generating and strained liquidity environment proved difficult for many hedged strategies as well.
- While overall security selection opportunities became more limited as correlations increased in Q4, sector rotation still offered a healthy opportunity set for many strategies. The dispersion of manager returns was notably wide during the year.

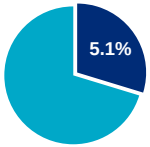
Opportunistic / Macro (14%)

- Macro strategies generated varied returns for the quarter and year.
- Discretionary strategies posted slight gains, earning 0.5% for the year. Positive performance was generated on the back of rate and currency positioning.
- Systematic strategies, however, generated losses, declining 6.0% during 2018, as market inflection points proved challenging for many trend followers.

Merger Arbitrage / Event Driven (6%)

- Event Driven and Distressed strategies posted mixed results for the year.
- Merger Arbitrage led the way, earning 3.2% during 2018. The strategy was boosted by the 2nd largest annual deal volume on record and a number of successful deal completions, as well as the overall relative value positioning of the strategy.
- More directionally-oriented event strategies, however, produced modest losses in 2018, with distressed strategies declining 1.6%. Spread widening and market sensitivity overcame progress in many restructuring and liquidation situations.

Returns are in USD. Source: Source: Credit Suisse Hedge Index LLC.



SCHRODER – UK PROPERTY FUND OF FUNDS
£238.4M END VALUE *(£234.7M START VALUE)*

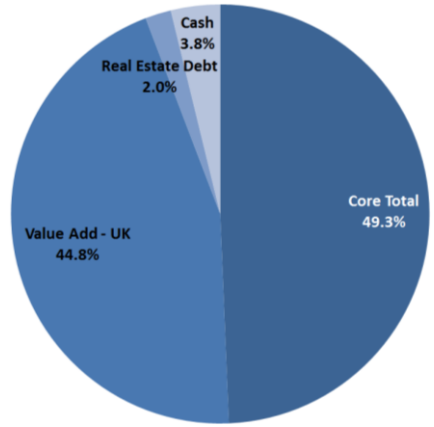
Item Monitored	Outcome
Mercer Rating	B (no change over period under review). ESG3
Performance Objective *Benchmark +1% p.a.*	Underperformed benchmark by 0.1% p.a. over five years

Manager Research and Developments

- The fund underperformed the benchmark over the quarter. UK Retail Warehouse Fund was the strongest detractor, with valuation falls reflective of further distress in the retail sector.
- Over the five year period, the fund has delivered a slight underperformance of 0.1% p.a. versus its benchmark. Value add strategies continue to be the largest contributor.
- There were c. £1.0m of purchases in the final quarter, with c. £640k invested in Income Plus Real Estate Debt Fund and £400k invested in Multi-Let Industrial PUT. A further £2.0m of Standard Life Pooled Pension Property Fund was sold in Q4, continuing the reduction in exposure to this underperforming holding.

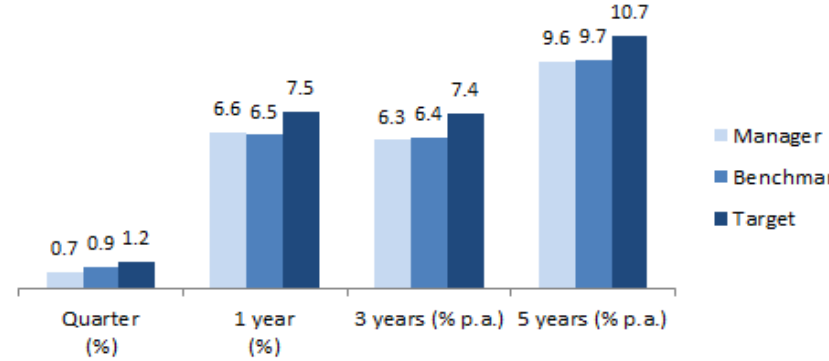
Manager and Investment type splits

Top 5 Holdings	Proportion of Total Fund (%)
Industrial Property Investment Fund	15.7
Metro Property Unit Trust	9.9
L&G Managed Property Fund	9.7
Hermes Property Unit Trust	9.6
BlackRock UK Property Fund	9.1

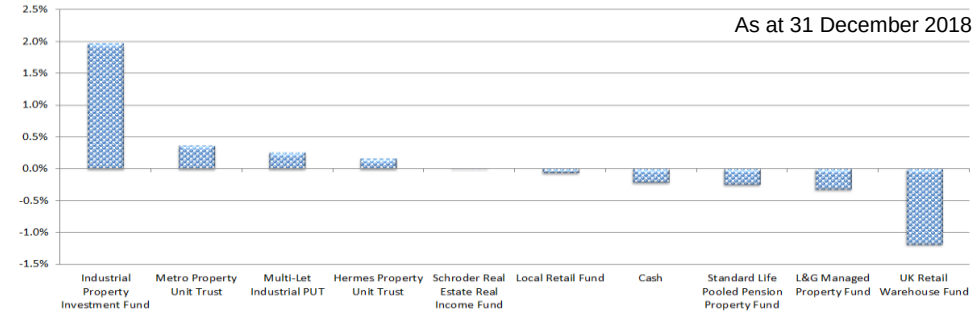


As at 31 December 2018

Performance



Top 5 Contributing and Detracting Funds over 12 Months

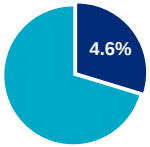


Reason for investment

To reduce volatility of the Growth portfolio and increase diversification

Reason for manager

- Demonstrable track record of delivering consistent above average performance
- Team though small is exclusively dedicated to UK multi-manager property management but can draw on extensive resources of Schroder's direct property team
- Well structured and research orientated investment process



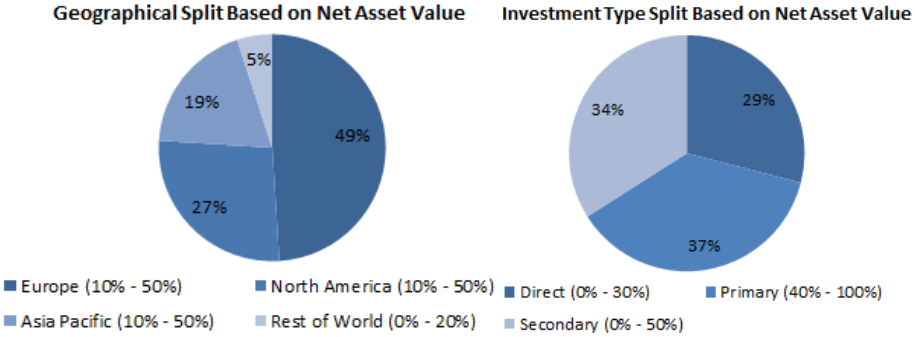
PARTNERS – OVERSEAS PROPERTY
£211.8M END VALUE *(£205.5M START VALUE)*

Item Monitored	Outcome
Mercer Rating	B+ (no change over period under review). ESG4
Performance Objective *IRR of 10% p.a.*	IRR since inception to 30 September 2018 at 7.2% p.a. (in local currency) is below target of 10% p.a.

Manager Research and Developments (Q3 2018)

- The portfolio delivered a net return of -1.0% over Q1 2018 for USD programmes in local currency, and 1.3% for EUR programmes, versus the target of c. 2.5%.
- Partners' drawdowns are made gradually over time, and the Fund is not yet fully invested. As a result of the volatile timing of cash flows for such investments, such as the initial costs of purchasing and developing properties, focus should be on longer term performance. Their IRR from inception to 30 September 2018 at 7.2% p.a. (in local currency) is below their target of 10% p.a.; over the three years to 30 September 2018 IRR was 5.2% p.a. (in local currency terms).
- Over Q3, the allocation to Europe decreased (from 50% to 49%), with North America increasing (from 26% to 27%) and Asia Pacific remaining at 19%. These remain within the guidelines.
- Note that Partners are rated B+ for global real estate, but A for secondary global real estate (as a result of their private equity skill set).

Geographical and Investment type splits as at 30 September 2018



Portfolio update to 30 September 2018

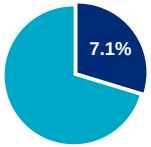
Partners Fund	Total Drawn Down (£m)	Total Distributions (£m)	Net Asset Value (£m)	Since Inception Net IRR (local currency)
Global Real Estate 2008	30.98	29.61	9.59	5.0
Real Estate Secondary 2009	19.63	17.61	13.36	9.3
Asia Pacific and Emerging Market Real Estate 2009	17.69	14.22	7.74	2.5
Distressed US Real Estate 2009	14.08	17.45	4.51	8.5
Global Real Estate 2011	25.10	21.30	17.11	9.3
Direct Real Estate 2011	11.44	9.14	8.04	6.6
Real Estate Secondary 2013	11.72	8.22	11.62	18.4
Global Real Estate 2013	89.78	8.25	107.16	7.3
Real Estate Income 2014	20.65	4.04	20.90	3.3
Asia Pacific Real Estate 2016	4.89	1.00	6.62	17.3
Total	**245.94**	**130.82**	**206.65**	**7.2**

Reason for investment

To reduce volatility of the Growth portfolio and increase diversification

Reason for manager

- Depth of experience in global property investment and the resources they committed globally to the asset class
- The preferred structure for the portfolio was via a bespoke fund of funds (or private account) so the investment could be more tailored to the Fund's requirements



IFM – INFRASTRUCTURE (POOLED)
£329.0M END VALUE *(£318.7M START VALUE)*

Item Monitored	Outcome	
Mercer Rating	●	B+ (no change over period under review). ESG2
Performance Objective *Cash +2.5% p.a.*	●	Outperformed objective by 10.1% over the year (in USD)

Item	
Number of holdings	15

Manager Research and Developments

- Over the quarter the fund returned 0.8% in US Dollar terms, against Avon's performance objective of 1.2% (cash + 2.5% p.a.).
- IRR since inception on 1 June 2016 is 14.8%. Please note that this is still early in the life of the fund.
- During the quarter, IFM completed two acquisitions: a 37.5% stake in GCT Global Container Terminals, an operator of four container terminals in Canada and the US, as well as a 50% stake in Impala Terminals, a diversified portfolio of base metal terminal infrastructure assets located in Peru, Spain and Mexico.
- The pooled fund also received income of $153.9m over the quarter amid major dividend distributions from Mersin International Port, Manchester Airports Group and Colonial Pipeline Company.

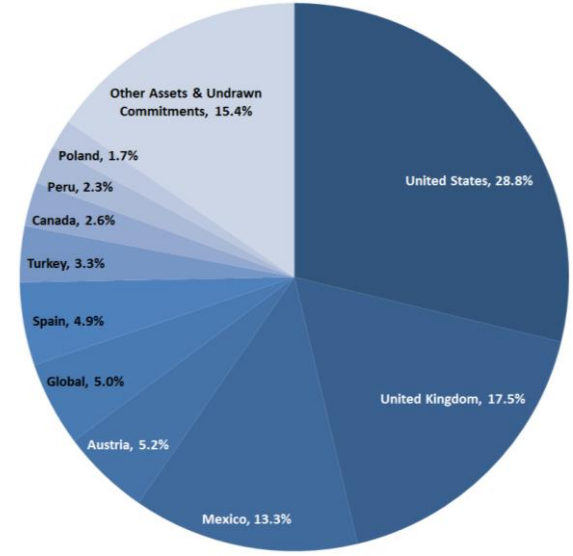
Reason for investment

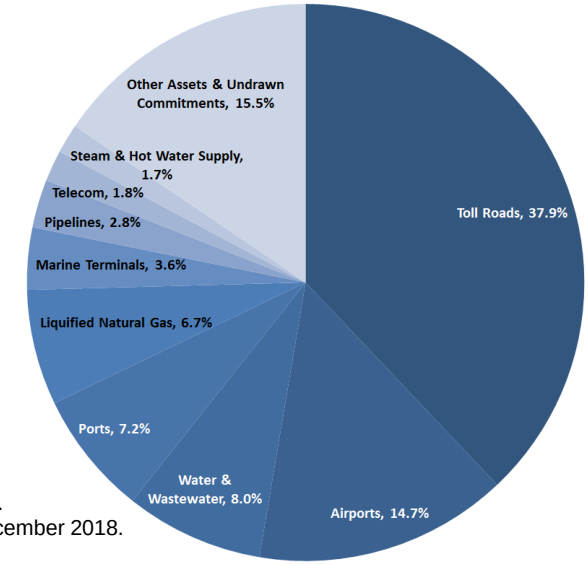
To reduce volatility of the Growth portfolio and increase diversification

Reason for manager

- Invests in core infrastructure assets in countries with established regulatory environments and strong rule-of-law
- Seeks to invest in assets with strong market positions, predictable regulatory environments, high barriers to entry, limited demand elasticity and long lives

Geographical and Sub-Sector Allocation





Source: IFM.
As at 31 December 2018.

LOOMIS SAYLES – MULTI-ASSET CREDIT (POOLED)
£466.2M END VALUE *(£477.8M START VALUE)*

Item Monitored	Outcome
Mercer Rating	A (no change over period under review). ESG3
Performance Objective *Cash +4% p.a.*	Too early to determine

Manager Research and Developments

- Loomis delivered a performance of -2.4% over the quarter, against an objective of 1.2%. Over the year, the fund returned -4.4%, materially underperforming its objective.
- Despite the US/China trade tensions resulting in most US dollar-denominated EM assets posting negative returns for the quarter, within the portfolio, EM issues contributed marginally to performance. Securitised assets also bolstered performance over the quarter with exposure to asset-backed securities in particular having a positive impact on the portfolio's performance. Global investment grade corporate bonds underperformed treasuries during the quarter as spreads widened. Despite stable earnings, credit markets underperformed as trade dispute concerns, slowing global growth and rate hike expectations dampened investor sentiment. Investment grade corporate selections detracted from performance, with energy and financial issues having the largest negative impact. Likewise, global high yield corporate bonds weighed on performance as spreads meaningfully widened during the quarter.
- In general, the high yield exposure was the largest contributor to quarterly underperformance. Over 2018 as a whole, the strategy has been hurt primarily by the EM exposure which has suffered on the back of US dollar strength and increased volatility.
- The overall duration of the portfolio rose to 5.7 years.

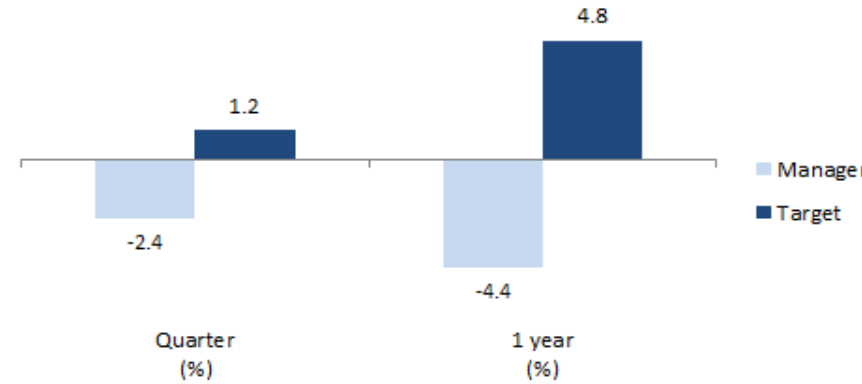
Reason for investment

To be a diversified return seeker within the Fund's fixed income portfolio

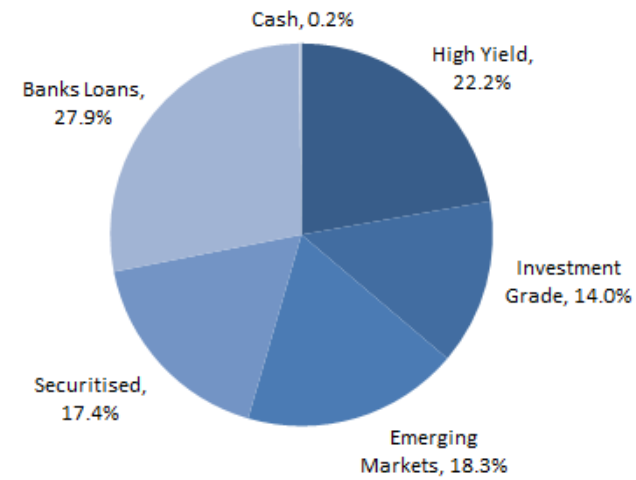
Reason for manager

- Core low to moderate risk Multi-Asset Credit option
- Depth and breadth of fundamental credit analysis

Performance



Sector Allocation



Source: Loomis Sayles.
As at 31 December 2018.

RECORD – CURRENCY HEDGING (SEGREGATED)
£-2.1M END VALUE *(£29.4M START VALUE)*

Item Monitored	Outcome
Mercer Rating	N (no change over period under review)
Performance Objective *N/A*	In line with the 50% hedging position

Manager Research and Developments

Over the quarter, sterling depreciated against the dollar by 2.3%, against the euro by 0.8% and against the Japanese yen by 5.7%.
(These currency exchange movements are based on end of day pricing, which may not tie in precisely with the pricing points used by Record).

The Fund's policy is to passively hedge 50% of currency exposure on developed global equities (dollar, euro and yen), and 100% on the hedge fund, global property and infrastructure mandates.

Performance for each of these separate accounts is shown to the right; as expected, performance for the passive mandate has been broadly in line with the (informal) 50% benchmark; where this differs from the movement in currency rates this relates to the timing of the implementation trades (2pm) and the currency rates quoted (4pm fix).

Reason for investment

To manage the volatility arising from overseas currency exposure, whilst attempting to minimise negative cashflows that can arise from currency hedging

Reason for manager

- Straightforward technical (i.e. based on price information) process
- Does not rely on human intervention
- Strong IT infrastructure and currency specialists

Currency Hedging Q4 2018 Performance (£ terms)

Passive Developed Equity Hedge

Currency	Start Exposure (£)	End Exposure (£)	Currency Return (%)	50% Benchmark Return (%)	Record Hedge Return (%)	Net Return (%)
USD	806,481,513	794,176,374	2.39%	(1.43%)	(1.42%)	0.96%
EUR	165,537,252	154,567,183	0.77%	(0.23%)	(0.21%)	0.57%
JPY	94,546,203	96,731,636	6.00%	(2.80%)	(2.74%)	3.20%
Total	**1,066,564,968**	**1,045,475,193**	**2.44%**	**(1.35%)**	**(1.34%)**	**1.09%**

Passive Hedge Fund Hedge

Currency	Start Exposure (£)	End Exposure (£)	Currency Return (%)	100% Benchmark Return (%)	Record Hedge Return (%)	Net Return (%)
USD	232,553,183	231,159,101	2.39%	(2.86%)	(2.87%)	(0.45%)
Total	**232,553,183**	**231,159,101**	**2.39%**	**(2.86%)**	**(2.87%)**	**(0.45%)**

Passive Property Hedge

Currency	Start Exposure (£)	End Exposure (£)	Currency Return (%)	100% Benchmark Return (%)	Record Hedge Return (%)	Net Return (%)
USD	27,544,473	24,721,606	2.39%	(2.86%)	(2.89%)	(0.47%)
EUR	180,934,264	182,811,407	0.77%	(0.49%)	(0.46%)	0.35%
Total	**208,478,737**	**207,533,014**	**1.00%**	**(0.81%)**	**(0.79%)**	**0.25%**

Passive Infrastructure Hedge

Currency	Start Exposure (£)	End Exposure (£)	Currency Return (%)	100% Benchmark Return (%)	Record Hedge Return (%)	Net Return (%)
USD	152,448,618	149,292,893	2.39%	(2.83%)	(2.84%)	(0.46%)
EUR	26,219,669	48,733,538	0.77%	(0.47%)	(0.57%)	0.21%
Total	**178,668,287**	**198,026,431**	**2.20%**	**(2.47%)**	**(2.49%)**	**(0.30%)**

APPENDIX 1
SUMMARY OF MANDATES

SUMMARY OF MANDATES

Manager	Mandate	Benchmark	Outperformance Target (p.a.)
Brunel	Passive Global Low Carbon Equity	MSCI World Low Carbon	-
BlackRock	Passive Global Equity	MSCI World	-
BlackRock	Passive Corporate Bond	iBoxx £ Non-Gilts Over 15 Years	-
BlackRock	Matching (Liability Driven Investing)	Return on liabilities being hedged	-
Brunel	Active UK Equities	FTSE All Share	+2%
Jupiter Asset Management	UK Equities (SRI)	FTSE All Share	+2%
Jupiter Asset Management	Global Sustainable Equities (SRI)	MSCI AC World	+2-4%
Schroder	Global Equities (Unconstrained)	MSCI AC World	+4%
Genesis	Emerging Market Equities	MSCI Emerging Markets IMI TR	-
Unigestion	Emerging Market Equities	MSCI Emerging Markets NET TR	+2-4%
Pyrford	Diversified Growth Fund	RPI +5% p.a.	-
Ruffer	Diversified Growth Fund	3 Month LIBOR +5% p.a.	-
JP Morgan	Fund of Hedge Funds	3 Month LIBOR +3% p.a.	-
Schroder	UK Property	IPD UK Pooled	+1%
Partners	Overseas Property	Net IRR of 10% p.a. (local currency)	-
IFM	Infrastructure	6 Month LIBOR +2.5% p.a.	-
Loomis Sayles	Multi-Asset Credit	3 Month LIBOR +4% p.a.	-
Record	Passive Currency Hedging	N/A	-
Cash	Internally Managed	7 Day LIBID	-

APPENDIX 2

MARKET STATISTICS INDICES

MARKET STATISTICS INDICES

Asset Class	Index
UK Equities	FTSE All-Share
Global Equity	FTSE All-World
Overseas Equities	FTSE World ex UK
US Equities	FTSE USA
Europe (ex-UK) Equities	FTSE W Europe ex UK
Japanese Equities	FTSE Japan
Asia Pacific (ex-Japan) Equities	FTSE W Asia Pacific ex Japan
Emerging Markets Equities	FTSE AW Emerging
Global Small Cap Equities	FTSE World Small Cap
Hedge Funds	HFRX Global Hedge Fund
High Yield Bonds	BofA Merrill Lynch Global High Yield
Emerging Market Debt	JP Morgan GBI EM Diversified Composite
Property	IPD UK Monthly Total Return: All Property
Infrastructure	S&P Global Infrastructure
Commodities	S&P GSCI
Over 15 Year Gilts	FTA UK Gilts 15+ year
Sterling Non Gilts	BofA Merrill Lynch Sterling Non Gilts All Stocks
Over 5 Year Index-Linked Gilts	FTA UK Index Linked Gilts 5+ year
Global Bonds	BofA Merrill Lynch Global Broad Market
Global Credit	Barclays Capital Global Credit
Eurozone Government Bonds	BofA Merrill Lynch EMU Direct Government
Cash	BofA Merrill Lynch United Kingdom Sterling LIBOR 3 month constant maturity

These are the indices used in this report for market commentary; individual strategy returns are shown against their specific benchmarks.

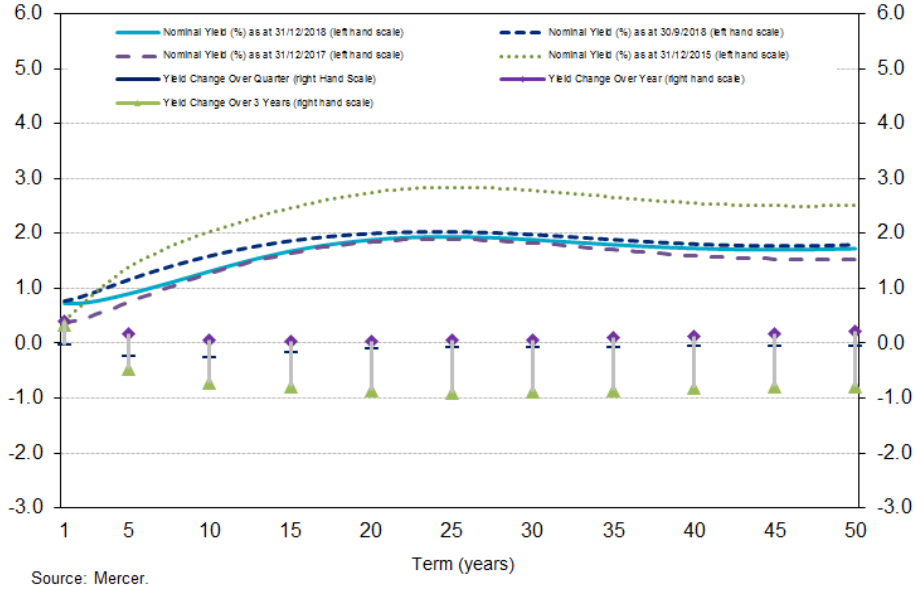
APPENDIX 3
CHANGES IN YIELDS

CHANGES IN YIELDS

Asset Class Yields (% p.a.)	31 Dec 2018	30 Sep 2018	31 Dec 2017	31 Dec 2016
UK Equities	4.46	3.80	3.59	3.47
Over 15 Year Gilts	1.76	1.86	1.68	1.76
Over 5 Year Index-Linked Gilts	-1.58	-1.49	-1.66	-1.66
Sterling Non Gilts	2.75	2.63	2.17	2.29

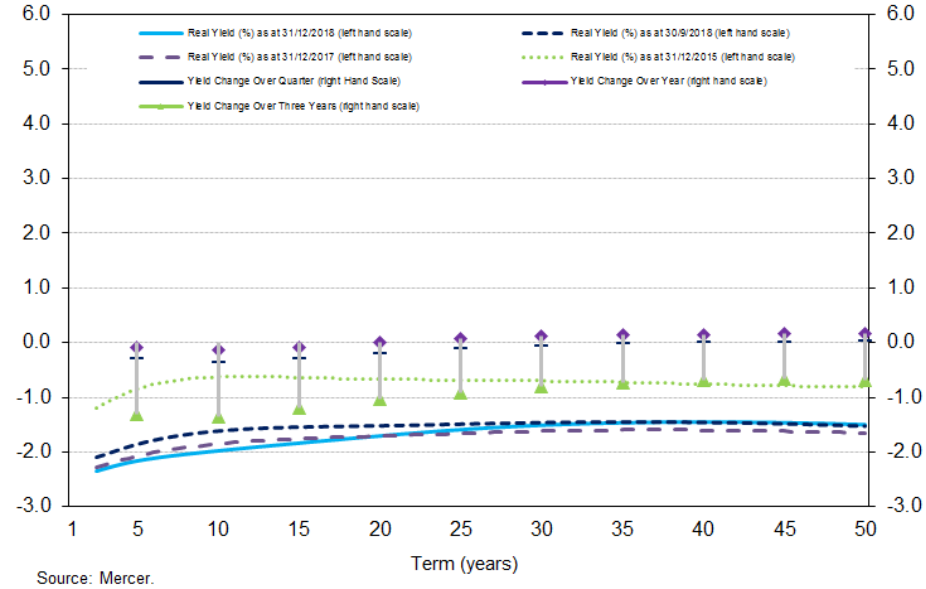
- Nominal yields were down at the shorter end of the curve over the quarter.
- The Over 15 Year Gilt Index underperformed the broader global bond market over the quarter, generating a return of 2.6%.
- Real yields also fell across the curve over the quarter. This led to the Over 5 Year Index-Linked Gilts Index returning 2.0%.
- Credit spreads increased sharply over the quarter, with the sterling Non-Gilts All Stocks Index credit spread ending the quarter at c.1.6% p.a. UK credit assets delivered a nil return over the quarter.

Nominal yield curves



Source: Mercer.

Real yield curves



Source: Mercer.

APPENDIX 4

GUIDE TO MERCER RATINGS

GUIDE TO MERCER RATINGS

INTRODUCTION

This is a guide to the investment strategy research ratings (herein referred to as rating[s]) produced by Mercer's Investments business (herein referred to as Mercer). It describes what the ratings are intended to mean and how they should and should not be interpreted.

If you have any questions or would like more information about specific topics after reading this guide, please contact your Mercer consultant or click "Contact us" on our website www.mercer.com.

WHAT DO MERCER'S RATINGS SIGNIFY?

Mercer's ratings signify Mercer's opinion of an investment strategy's prospects for outperforming a suitable benchmark over a time frame appropriate for that particular strategy (herein referred to as outperformance). The rating is recorded in the strategy's entry on Mercer's Global Investment Manager Database (GIMD™) at www.mercergimd.com.

Mercer's ratings are normally assigned to investment strategies rather than to specific funds or vehicles. In this context, the term "strategy" refers to the process that leads to the construction of a portfolio of investments, regardless of whether the strategy is offered in separate account format or through one or more investment vehicles. There are exceptions to this practice. These are primarily in real estate and private markets where the rating is normally applied to specific funds.

WHAT DO MERCER'S RATINGS NOT SIGNIFY?

This section contains important exclusions and warnings; please read it carefully.

Past Performance

The rating assigned to a strategy may or may not be consistent with its past performance. While the rating reflects Mercer's expectations on future performance relative to a suitable benchmark over a time frame appropriate for the particular strategy, Mercer does not guarantee that these expectations will be fulfilled.

Creditworthiness

Unlike those of credit rating agencies, Mercer's ratings are not intended to imply any opinions about the creditworthiness of the manager providing the strategy.

Vehicle-Specific Considerations

As Mercer's ratings are normally assigned to strategies rather than to specific investment vehicles, potential investors in specific investment vehicles should consider not only the Mercer ratings for the strategies being offered through those investment vehicles but also any investment vehicle-specific considerations. These may include, for example, frequency of dealing dates and any legal, tax, or regulatory issues relating to the type of investment vehicle and where it is domiciled. Mercer's ratings do not constitute individualized investment advice.

Management Fees

To determine ratings, Mercer does not generally take investment management fees into account. The rationale for this is that, due to differing account sizes, differing inception dates, or other factors, the fees charged for a specific strategy will vary among clients. Potential investors in a specific strategy should therefore consider not only the Mercer rating for that strategy but also the competitiveness of the fee schedule that they have been quoted. The area of Alternative Investments is an exception — Mercer follows market practice for "Alternatives" and rates strategies on a net of fees basis.

Operational Assessment

Mercer's research process and ratings do not include an evaluation of a manager's custodian, prime brokerage, or other vendor relationships, or an assessment of the manager's back office operations, including any compliance, legal, accounting, or tax analyses of the manager or the manager's investment vehicles. Research is generally limited to the overall investment decision-making process used by managers. In forming a rating, Mercer's investment researchers do not generally perform corporate-level operational infrastructure due diligence on a manager and do not perform financial or criminal background checks on investment management staff. Unless Mercer's investment researchers are aware of material information to the contrary (such as a view expressed by a manager's auditors or Mercer Sentinel®; see section 9), they assume that the manager's operational infrastructure is reasonable. Operational weaknesses that Mercer's investment researchers discover during their analysis of the four factors outlined in section 4 will be noted and, where appropriate, taken into account in determining ratings.

FACTORS CONSIDERED IN FORMING A RATING

In order to determine the rating for a particular strategy, Mercer's investment researchers review the strategy on the basis of four specific factors — idea generation, portfolio construction, implementation, and business management — each of which is assigned one of four scores: negative, neutral, positive, or very positive.

Mercer believes that idea generation, portfolio construction, and implementation are the main components of every investment process. These factors are defined as:

Idea generation encompasses everything that the investment manager (herein referred to as manager) does to determine the relative attractiveness of different investments.

Portfolio construction refers to the manner in which the manager translates investment ideas into decisions on which investments to include in a portfolio and what weightings to give to each of these investments.

Implementation refers to the capabilities surrounding activities that are required to achieve the desired portfolio structure.

Mercer believes that managers that do these activities well should have above-average prospects of outperformance. However, Mercer also believes that to remain competitive over longer periods, managers must be able to maintain and enhance their capabilities in these three areas. To do this, managers need to have significantly strong business management, which is the fourth factor Mercer assesses.

Business management refers to the overall stability of the firm, firm resources, and overall operations.

The four factors above apply to most product categories that Mercer researches. Variations on these factors are used in some product categories. Examples here include passive strategies, liability driven investment and private markets.

A strategy's overall rating is not determined as a weighted average of the four factor scores, and no prescribed calculations are made to arrive at the four-factor score or the overall rating. Instead, for each strategy, Mercer's investment researchers identify which factors Mercer believes are most relevant to a manager's investment process and place weight on the factors accordingly. Example considerations include:

- Mercer's confidence in the manager's ability to generate value-adding ideas.
- Mercer's view on any specified outperformance target.
- The opportunities available in the relevant market(s) to achieve outperformance.
- An assessment of the risks taken to try to achieve outperformance.
- An assessment of the strategy relative to peer strategies.
- An assessment of the manager's business management and its impact on particular strategies.

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MERCER RATING SCALE

Ratings	Rationale
A	Strategies assessed as having “above average” prospects of outperformance
B+	Strategies assessed as having “above average” prospects of outperformance, but which are qualified by at least one of the following: ▪ There are other strategies that Mercer believes are more likely to achieve outperformance ▪ Mercer requires more evidence to support its assessment
B	Strategies assessed as having “average” prospects of outperformance
C	Strategies assessed as having “below average” prospects of outperformance
N/no rating	Strategies not currently rated by Mercer
R	The R rating is applied in three situations: ▪ Where Mercer has carried out some research, but has not completed its full investment strategy research process ▪ In product categories where Mercer does not maintain formal ratings but where there are other strategies in which we have a higher degree of confidence ▪ Mercer has in the past carried out its full investment-strategy research process on the strategy, but we are no longer maintaining full research coverage

The above definitions apply to the majority of product categories researched by Mercer. However for some product categories the rating scale reflects Mercer’s degree of confidence in a manager’s ability to achieve a strategy’s stated aims. Examples of where this applies include low volatility equities, cash, passive, liability driven strategies and DC specific solutions.

SUPPLEMENTAL INDICATORS

Provisional (P)

If the Mercer strategy rating is followed by a (P) - for example, A (P) or B+ (P) - the rating is “provisional” - that is, there is temporary uncertainty about the rating, but it is expected that this will soon be resolved. For example, should two managers announce a merger, but without further details, this uncertainty may be highlighted by modifying the rating strategies for one or both of those firms - for instance, from A to A (P). (P) indicators are intended to be temporary and should normally last for no more than two weeks. As soon as the temporary uncertainty has been resolved, or if it becomes apparent that this uncertainty is unlikely to be resolved quickly, the (P) indicator will be removed and the rating confirmed or changed, or the strategy will be assigned the indicator “watch” (W).

Watch (W)

If the Mercer strategy rating is followed by a (W) – for example, A (W) or B+ (W) - the rating is “watch” - there is some uncertainty about the rating and resolution is not expected soon, but Mercer believes there is a low probability that the resolution of this uncertainty will lead to a change in the strategy’s rating. (W) indicators are typically issued when there is an expectation of long-term uncertainty surrounding the rating - for example, a change, or potential change, in a manager’s ownership.

Specifically Assigning (P) and (W) Supplemental Indicators

(P) and (W) indicators are assigned - and removed - by the regular ratings review process described earlier; however, there are circumstances where organizational or reputational issues that affect a manager warrant the specific assignment of a (P) or (W) indicator to an existing rating. In such circumstances, the decision to apply - or remove - a (P) or (W) indicator is taken by two senior members of the leadership group of the Manager Research team. These occasions are rare, and the relevant investment researchers will contribute to any discussions before a (P) or (W) indicator is assigned or removed.

High Tracking Error (T)

If the Mercer strategy rating is followed by a (T) — for example, A (T) or B+ (T) — the strategy is considered to have the potential to generate a tracking error substantially higher than the average for the relevant product category. In this context, “tracking error” refers to the variability of performance relative to the nominated benchmark for the strategy. A strategy may be assigned the (T) indicator because the potential for high tracking error has been demonstrated by the strategy’s past performance and/or because the nature of the investment process is such that a significantly higher than average tracking error could be expected. The absence of a (T) following a rating does not guarantee that the strategy’s tracking error will not be higher than the average for the relevant product category.

NICHE STRATEGIES

Mercer categorize a limited number of strategies as Niche. The Niche categorization is applied to strategies that are perceived as highly differentiated. Mercer does not have specific rules as to what characterizes a Niche strategy but examples might include strategies where a manager is seeking to exploit anomalies not generally recognized by other market participants. It might also be applied to strategies with a short track record and/or limited assets under management.

RESEARCH INDICATIONS – INDICATIVE VIEW

For strategies where Mercer has conducted some initial research, we may apply Mercer Research Indications. Mercer's Research Indications are an indication of whether a strategy merits deeper / further due diligence. This indication is shown by an assigned indicative view, identified as a colour. A Research Indication does not necessarily result in future research. All Research Indications are assigned as R rating.

- Red – further research has "below average" prospects of resulting in an investable rating.
- Amber – further research has "average" prospects of resulting in an investable rating.
- Green – further research has "above average" prospects of resulting in an investable rating.

An investable rating is defined as an A or B+.

OPERATIONAL RISK ASSESSMENTS

Mercer Sentinel, a division within Mercer, undertakes operational risk assessments (ORAs) on managers, most often on behalf of clients. These ORAs assess managers' operations and implementation risk profiles and cover some of the areas mentioned in section 3, as well as other areas related to operational risk. ORAs are undertaken separately from the Manager Research process; however, the results are shared with the Lead Researcher for the manager. A Mercer Sentinel ORA that concludes with an unsatisfactory rating (namely, a "Review" rating) for a manager will result in an immediate (P) rating for all that manager's relevant rated strategies. Discussions will follow and any subsequent change in investment rating will be ratified by the standard Manager Research process. Contact your Mercer consultant for more information.

ENVIRONMENTAL, SOCIAL, AND CORPORATE GOVERNANCE RATINGS

Mercer also assigns ratings to strategies that represent Mercer's view on the extent to which environmental, social and corporate governance (ESG) and active ownership practices (voting and engagement) are integrated into the manager's investment process and decision-making across asset classes. ESG factors are incorporated into the investment process on the basis that these issues can impact revenue, operating costs, competitive advantage, and the cost of capital. During discussions with managers about ESG integration, Mercer assesses the use of ESG information to generate outperformance.

ESG Rating Scale	
ESG1	The highest ESG rating is assigned to strategies that Mercer believes to be leaders in integrating ESG and active ownership into their core processes, and that provide clear evidence that ESG overall, or a particular ESG theme, is core to idea generation and portfolio construction.
ESG2	The second highest rating is assigned to strategies that, in Mercer's view, include ESG factors as part of decision making, with a strong level of commitment made at a firmwide level and some indication that data and research are being taken into account by the managers in their valuations and investment process.
ESG3	The penultimate rating is assigned to strategies for which, in Mercer's view, the manager has made some progress with respect to ESG integration and/or active ownership, but for which there is little evidence that ESG factors are taken into consideration in valuations and investment process.
ESG4	The lowest ESG rating is assigned to strategies for which, in Mercer's view, little has been done to integrate ESG and active ownership into their core process.

For passive strategies, Mercer applies an ESGp1 through to ESGp4. There are two key distinctions between ESG ratings for passive and active strategies. First, for passive, the bulk of the focus is on voting and engagement practices. Second, most of Mercer's analysis focuses on firm-wide levels of commitment rather than at the individual strategy level.

RATINGS REVIEW COMMITTEES

Mercer has a process for reviewing and ratifying the ratings proposed by individual investment researchers. For most product categories, strategy ratings are reviewed regularly by one of several RRCs that operate within Mercer. These committees are composed of professionals from Mercer's investment research and consulting groups who draw on research carried out by Mercer investment researchers and consultants. The role of the RRCs is to review this research from a quality control perspective and ensure consistency of treatment across strategies within a product category.

For certain asset classes, ratings will not have been reviewed by an RRC; however, the rating will have been reviewed by at least two suitably qualified investment researchers or consultants other than the recommending researcher. An R rating will not necessarily have been reviewed by an RRC but will have been subject to Mercer's standard peer review process.

CONFIDENTIALITY OF MERCER'S RATINGS

Mercer's ratings, along with all other information relating to Mercer's opinions on managers and the investment strategies they offer, represent Mercer's confidential and proprietary intellectual property and are subject to change without notice. The information is intended for the exclusive use of the parties to whom it was provided by Mercer and may not be modified, sold, or otherwise provided, in whole or in part, to any other person or entity (including managers) without Mercer's prior written permission.

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