Appendix 1

West Midlands Pension Fund

Asset allocation and investment performance report
Quarter to 31 March 2018

Jill Davys – Assistant Director – Investment and Finance

West Midlands Pension Fund

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Contents

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Further information

Our investment strategy
http://www.wmpfonline.com/Investments

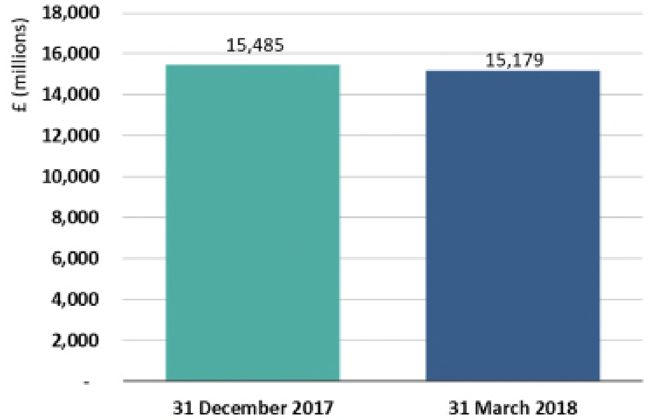
Our Environmental, Social and Governance beliefs
www.wmpfonline.com/ri

Our Fund's website
www.wmpfonline.com

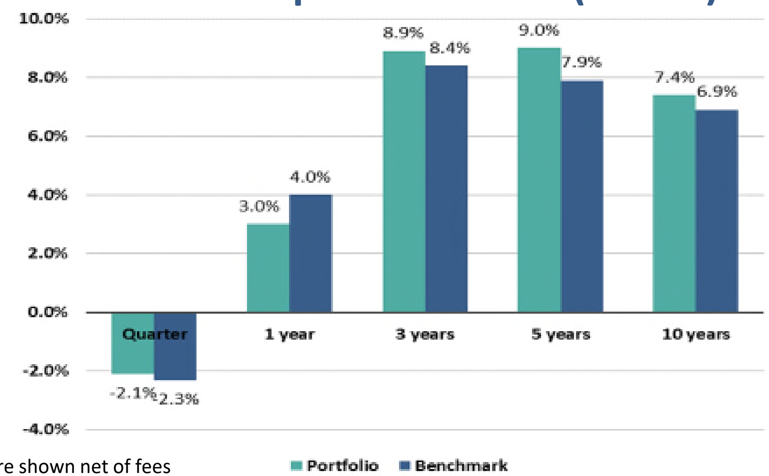
West Midlands Pension Fund

Executive summary

Total market value



Total Fund performance[1] (in GBP)



[1] Returns are shown net of fees

Market summary

- Equity markets fell during the quarter as markets experienced a correction in February
- Long-term government bond yields rose in the UK and US amid expectations for higher growth and inflation
- US rates increased by 0.25% to 1.75% as the economic outlook strengthened. The UK base rate remained at 0.5%.
- Sterling continued to strengthen against the US dollar as the Bank of England suggested it could raise interest rates faster than previously anticipated

Performance summary

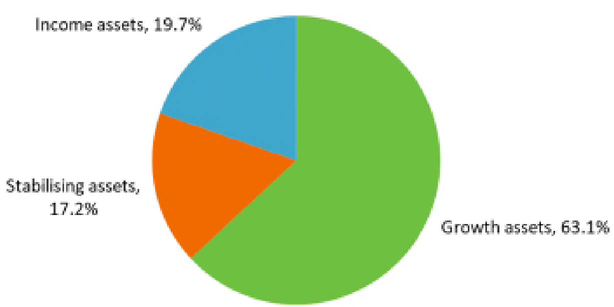
- The Fund returned -2.1% during the quarter, moderately outperforming its benchmark by 0.2%. Over the 12 months the Fund underperformed its benchmark by 1.0%.
- The Fund's growth assets (in particular, private equity and, to a lesser extent, special opportunities) contributed to the quarterly outperformance, which was boosted by the positive contribution from the passive currency hedge.
- Over the longer term, 3, 5 and 10 years the Fund has met or exceeded its performance target of being 0.5% above the benchmark.

Executive summary

West Midlands Pension Fund

Asset allocation

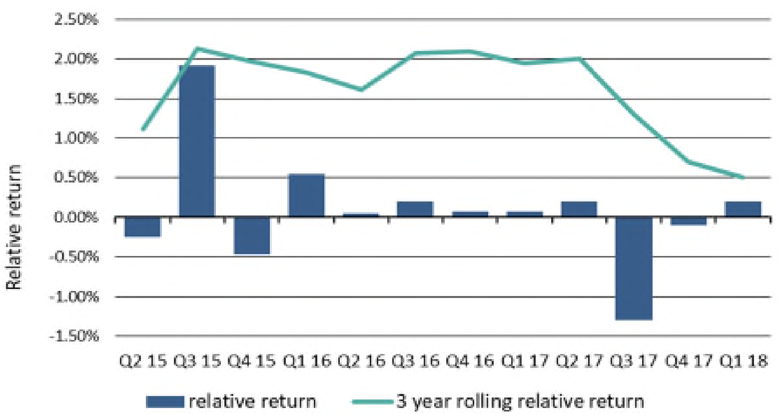
Asset class	Value (£m)	Fund allocation (%)	Policy target (%)	Difference (%)
Quoted equities	8,161	53.8	48.0	5.8
Private equity	1,201	7.9	10.0	-2.1
Special opportunities	215	1.4	2.0	-0.6
Total growth assets	9,577	63.1	60.0	3.1
UK gilts	167	1.1	2.0	-0.9
Index linked gilts	774	5.1	5.0	0.1
Cash	952	6.3	2.0	4.3
Corporate bonds	396	2.6	2.0	0.6
Cashflow matching fixed interest	322	2.1	3.0	-0.9
Total stabilising assets	2,611	17.2	14.0	3.2
Specialist fixed interest	169	1.1	3.5	-2.4
Emerging market debt	616	4.1	3.5	0.6
Property	1,206	7.9	10.0	-2.1
Insurance linked funds	386	2.5	3.0	-0.5
Real assets and infrastructure	614	4.0	6.0	-2.0
Total income assets	2,991	19.7	26.0	-6.3
TOTAL	15,179	100.0	100.0	0.0



Quarterly Fund activity

- The Fund's overseas passive equity portfolios were restructured during the quarter to create a Global (ex UK) portfolio in preparation for the transition to LGPS Central and a Dividend Growth Factor fund.
- To reduce its overweight exposure to growth assets (and equities in particular) the Fund allowed its equity index futures positions to mature in March, which returned £438.4 million to the Fund.
- An additional £100 million investment was made with an existing insurance linked fund manager to reduce the Fund's underweight exposure to the portfolio and to take advantage of the higher premiums that are forecast.
- A large number of distributions resulted in a net disinvestment from the private equity portfolio (growth assets) of £50.4 million.
- The Fund's cash position was overweight at the quarter end with the Fund actively seeking opportunities to deploy this capital in income assets and made a £72m investment into an infrastructure fund at the start of April.

Rolling relative quarterly performance history



Main report

Objectives

The primary objective of the Fund is to provide pension and lump-sum benefits for members on their retirement and/or benefits on death, before or after retirement, for their dependents, on a defined benefits basis.

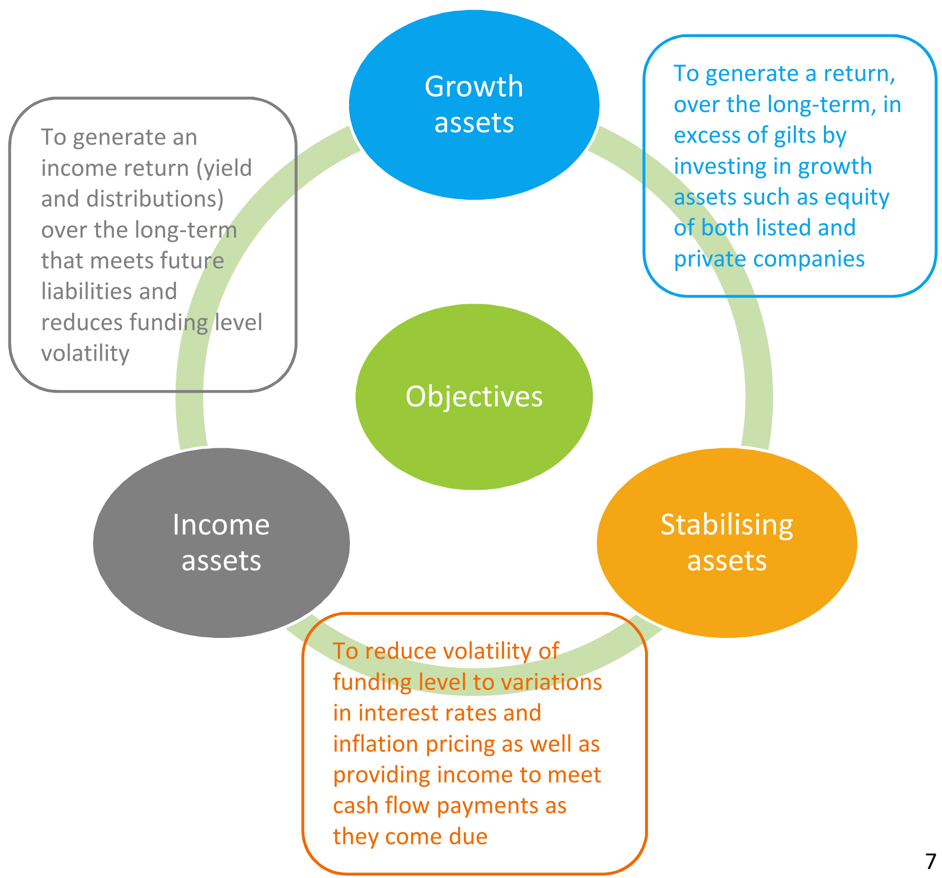
The Pensions Committee aims to fund the Fund in such a manner that, in normal market conditions and within a reasonable period, all accrued benefits are fully covered by the value of the Fund's assets and that an appropriate level of contributions is agreed by the employers to meet the cost of future benefits accruing. For employee members, benefits will be based on service completed but will take account of future salary increases. In addition, the Fund has the following objectives:

- To be a leading performer in the LGPS sector
- To provide excellent customer service
- To achieve target investment returns
- To ensure the solvency of the Fund and its ability to pay pensions

In aiming to be a leading performer within the LGPS the Fund is striving to achieve a fund management capability of institutional standard.

The Committee has translated its objectives into a suitable strategic investment allocation benchmark (SIAB) and structure for the Fund taking into account both the Fund’s liability structure and the objectives set out above.

The key building blocks of the Fund’s SIAB are shown below.



Fund values and allocation

West Midlands Pension Fund

Asset allocation[1]

Asset class	Value (£m)	Fund allocation %	Policy target %	Difference %	Change from previous quarter %
Growth					
Quoted equities	8,161	53.8	48.0	5.8	-4.9
Private equity	1,201	7.9	10.0	-2.1	-0.2
Special opportunities	215	1.4	2.0	-0.6	0.0
Total growth assets	**9,577**	**63.1**	**60.0**	**3.1**	**-5.1**
Stabilising					
UK gilts	167	1.1	2.0	-0.9	0.0
Index linked gilts	774	5.1	5.0	0.1	0.1
Cash	952	6.3	2.0	4.3	4.0
Corporate bonds	396	2.6	2.0	0.6	0.0
Cashflow matching fixed interest	322	2.1	3.0	-0.9	-0.1
Total stabilising assets	**2,611**	**17.2**	**14.0**	**3.2**	**4.1**
Income assets					
Specialist fixed interest	169	1.1	3.5	-2.4	0.0
Emerging market debt	616	4.1	3.5	0.6	0.1
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Real assets and infrastructure	614	4.0	6.0	-2.0	0.0
Total income assets	**2,991**	**19.7**	**26.0**	**-6.3**	**1.0**
TOTAL	15,179	100.0	100.0	-	-

[1] A detailed Fund asset allocation is shown in Appendix 1

Allocation comment

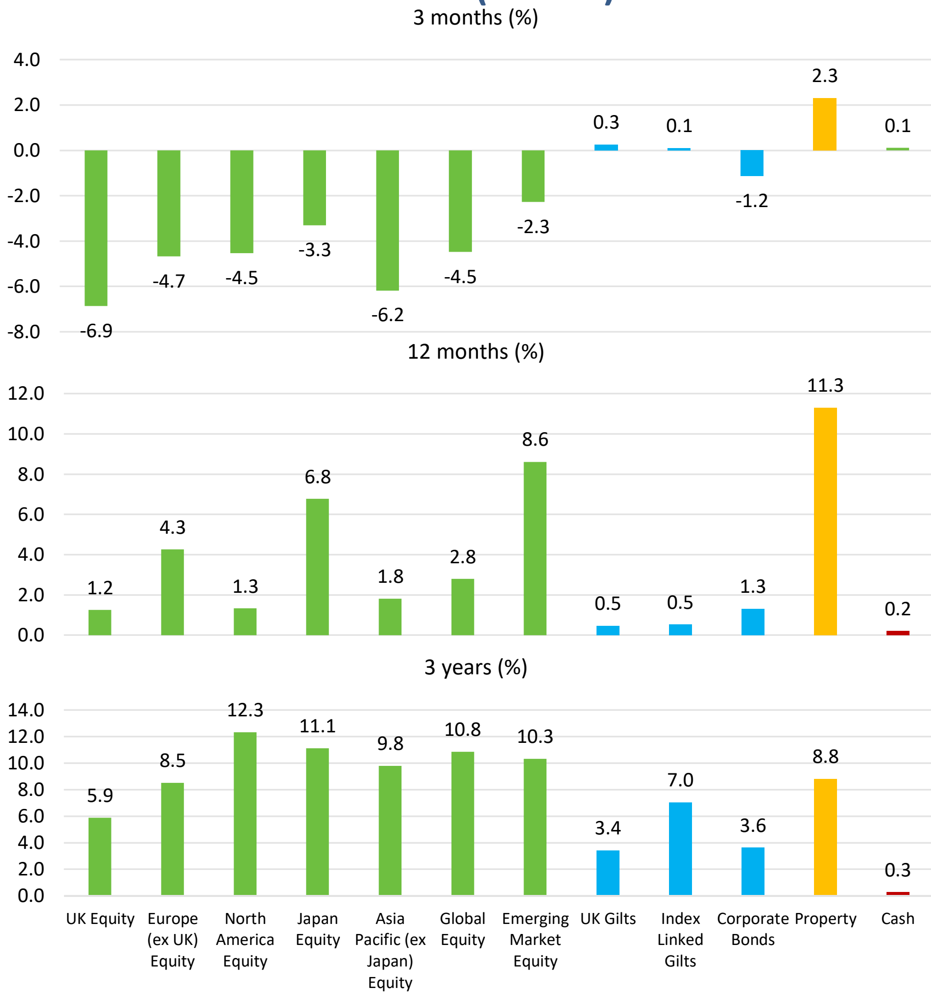
As at 31 March 2018 the Fund was moderately overweight in growth assets. The overallocation to quoted equities was reduced during the quarter as the Fund sought to reduce its overall risk. This was achieved by allowing the Fund's emerging market and European equity index futures positions to mature midway through March 2018.

The Fund was also overweight in stabilising assets at the quarter end. This was due to an overweight position in cash following the expiry of the equity index futures contracts. There was a corresponding underweight position in income assets.

The Fund's asset allocation target portfolio aims to increase income assets and reduce stabilising assets. The Fund is actively pursuing further opportunities in infrastructure (having invested £75m at the start of April) and direct property investments. In addition it has identified a multi-asset credit manager for a potential £150 million investment, which will form part of the 'specialist fixed interest' segment of income assets.

Market review

Returns for world markets (in GBP) to 31 March 2018



Equities

After a strong start to the year global equity markets experienced a correction in February, resulting in the first negative quarter for global equities in over two years. Investor concerns over US inflation were exacerbated in March as trade tensions escalated between China and the US. UK equities were negatively impacted by an appreciation in the value of sterling relative to the dollar (a significant proportion of the revenue of major FTSE companies) while European markets suffered from contagion from the US. Emerging markets outperformed their developed counterparts driven by the weaker dollar and steady economic growth in China.

Property

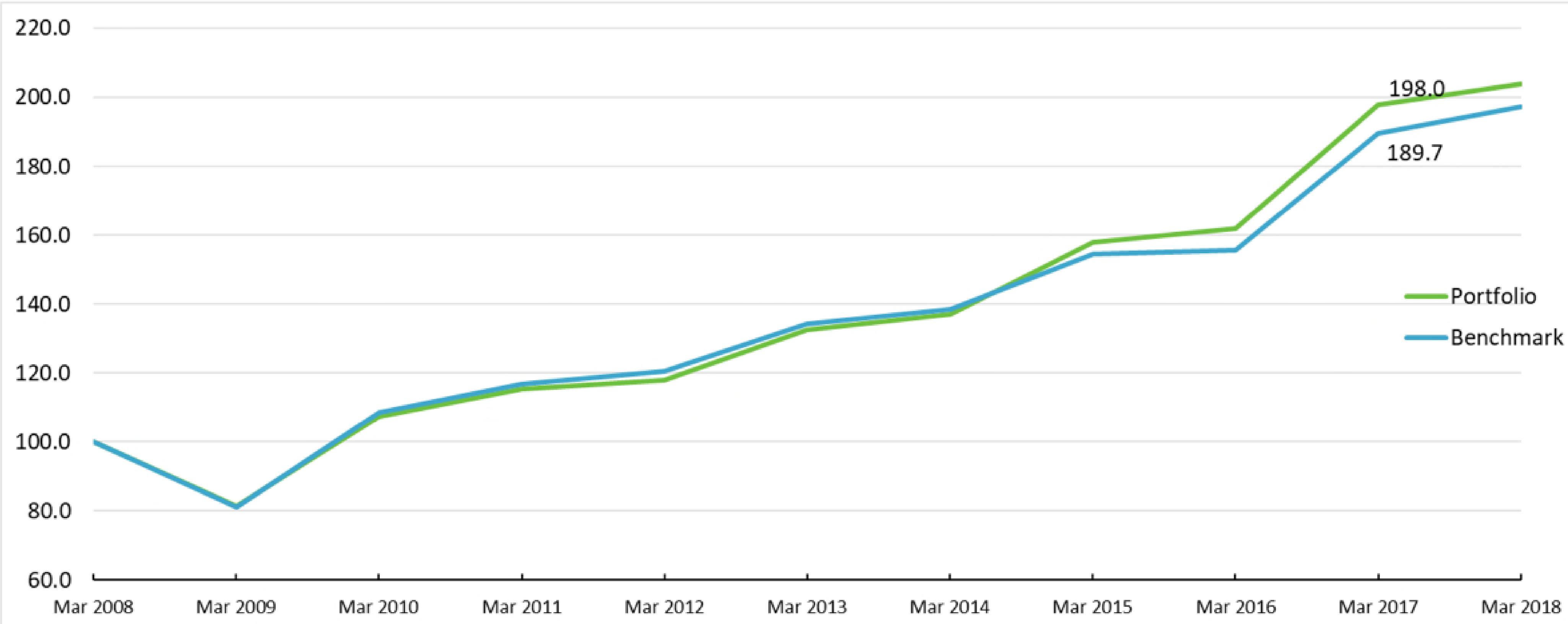
The UK property market performed steadily during the quarter, mirroring the steady growth experienced in the broader UK economy. However, Retail continued to underperform other sectors as investor sentiment remained negative. This was a reflection of very weak fundamentals and a number of high profile failures and restructurings. Industrials continued to be the favoured sector of the property industry, further reducing yields in this sector, while Offices were robust, reflecting high demand from occupiers which has resulted in rents in some cities being pushed to new highs.

Fixed interest

The Bank of England maintained the base rate at 0.50% during the quarter but intimated that it was likely to raise rates faster than expected. The 10-year UK gilt yield rose from 1.19% to 1.35%. In the US, the Federal Reserve raised interest rates by 0.25% to 1.75% as the economy continued to strengthen, which contributed to a rise in the 10-year US Treasury yield from 2.41% to 2.74%. Global risk aversion resulted in the underperformance of investment grade corporate bonds relative to sovereign debt as credit spreads widened.

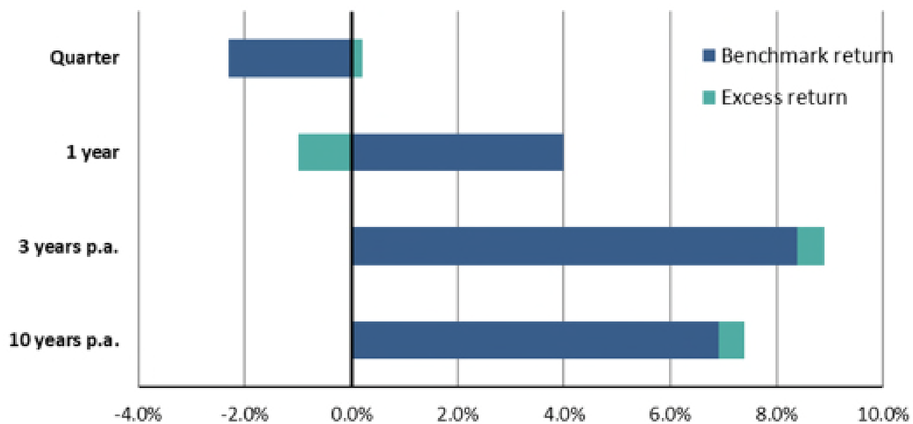
Fund performance review

Long-term returns (in GBP; rebased at 100 at 31 March 2008)



Fund performance review

Benchmark and excess returns to 31 March 2018



	Quarter (%)	1 year (%)	3 years p.a. (%)	10 years p.a. (%)
Benchmark return	-2.3	4.0	8.4	6.9
Excess return	0.2	-1.0	0.5	0.5
Total absolute return	**-2.1**	**3.0**	**8.9**	**7.4**

Source: Portfolio Evaluation Ltd

Fund performance commentary

The Fund moderately outperformed its benchmark by 0.2% during the quarter. Despite generating a negative return (resulting from a decline in global equity markets over the period), growth assets were the largest contributor to performance with private equity and the special opportunities portfolio both yielding positive returns and outperformance. The Fund's passive currency hedge also aided performance and protected the Fund from the appreciation in sterling over the quarter.

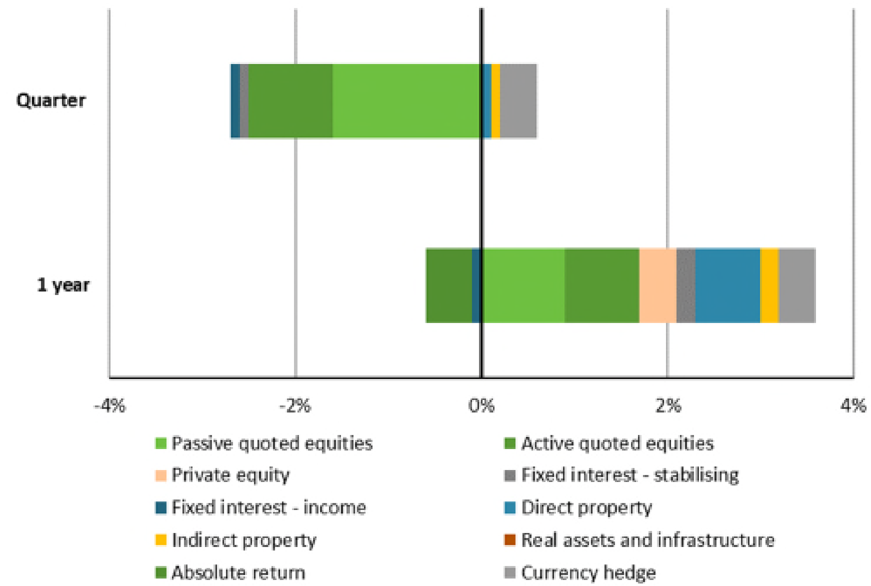
Over the 12 month period the Fund returned 3.0%, underperforming its bespoke benchmark by 1.0%. Income assets were the largest detractors from performance with underperformance from the infrastructure & real assets and insurance linked portfolios. The latter was affected by a number of natural disasters during 2017 significantly impacting on performance, although the opportunity was taken to add to holdings in this area in anticipation of a stronger market in 2018.

The Fund returned 8.9% p.a. for the three years to 31 March 2018 compared to the benchmark of 8.4%. Strong outperformance from the real assets & infrastructure and emerging market debt portfolios were key contributors to performance over the period.

The Fund benefited from its stock lending programme over the year by £2.7m.

Fund performance review

Absolute performance attribution to 31 March 2018



Absolute performance attribution	Quarter	1 year
Passive quoted equities	-1.6	0.9
Active quoted equities	-0.9	0.8
Private equity	0.0	0.4
Fixed interest – stabilising	-0.1	0.2
Fixed interest – income	-0.1	-0.1
Direct property	0.1	0.7
Indirect property	0.1	0.2
Real assets and infrastructure	0.0	0.0
Absolute return	0.0	-0.5
Currency hedge	0.4	0.4
Total absolute return	**-2.1**	**3.0**

Source: Portfolio Evaluation Ltd

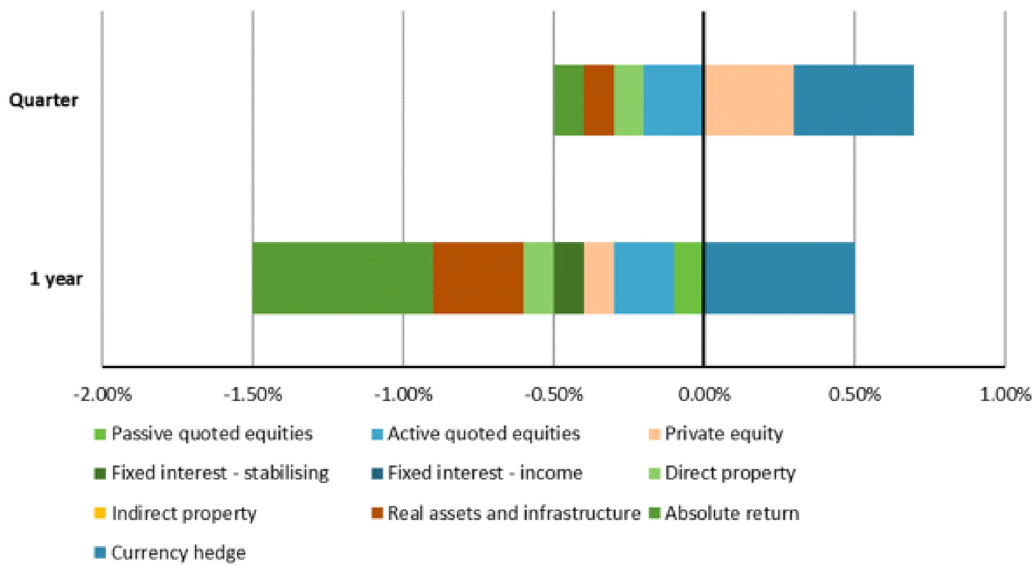
Note that the table above shows the weighted contribution of each asset class to the Fund’s absolute return.

Quoted equities were the largest factor in the Fund’s negative performance over the quarter following the decline in global equity markets during February 2018. This underperformance was offset to a certain degree by the positive contribution made by the Fund’s currency hedge, which achieved its objective of protecting the Fund from adverse currency movements.

Over the 12 months to 31 March 2018 all asset classes made a positive contribution to performance with the exception of absolute returns, which suffered from losses in the insurance linked segment as a result of several natural disasters in 2017, and the income element of the fixed interest portfolio. Quoted equity markets were the largest contributor to absolute performance as global equity markets generally made gains despite the retrenchment in February 2018.

Fund performance review

Relative performance attribution to 31 March 2018



Relative performance attribution	Quarter	1 year	Benchmark
Passive quoted equities	0.0	-0.1	Listed equivalent
Active quoted equities	-0.2	-0.2	Listed equivalent
Private equity	0.3	-0.1	FTSE All World + 2% pa
Fixed interest – stabilising	0.0	-0.1	Blended benchmark
Fixed interest – income	0.0	0.0	Blended benchmark
Direct property	-0.1	-0.1	IPD Properties Annual
Indirect property	0.0	0.0	CPI + 6% pa
Real assets and infrastructure	-0.1	-0.3	CPI + 4% pa
Absolute return	-0.1	-0.6	LIBOR + 3-4% pa
Currency hedge	0.4	0.5	
Total relative return	**0.2**	**-1.0**	

Source: Portfolio Evaluation Ltd

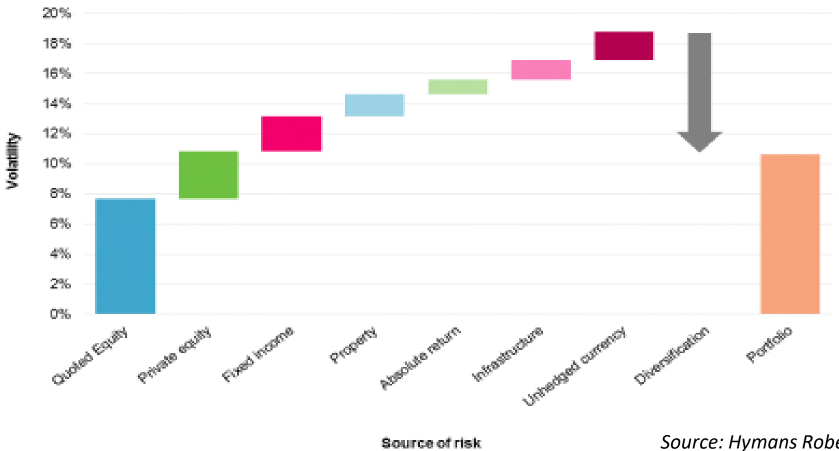
Note that the table above shows the weighted contribution of each asset class to the Fund's relative return.

During the quarter the private equity portfolio and the Fund's currency hedge offset underperformance from active quoted equities, where both the in-house portfolio and the external manager underperformed the benchmark. Despite achieving flat performance, the private equity portfolio outperformed its benchmark, which is based on global equity markets.

Underperformance in the absolute return portfolio (in particular, the insurance linked component) was the largest detractor from performance over the 12 months following a series of major hurricanes and wildfires. Again, the Fund's currency hedge proved beneficial to the Fund's relative return.

Fund risk review

Total 1 year Fund risk



Source: Hymans Robertson

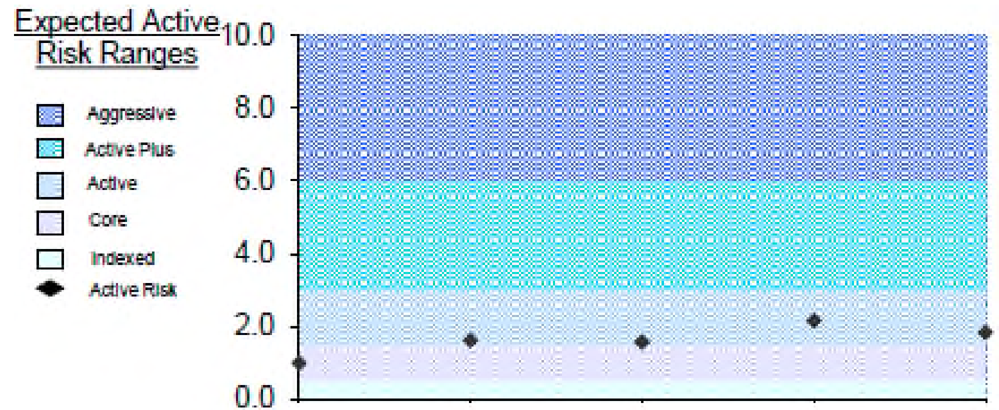
Fund risk commentary

The total one-year Fund risk chart depicts the expected 12-month volatility of the Fund’s assets. The chart shows the largest contributors to risk continue to be the Fund’s equity and private equity holdings. The contribution to expected risk made by unhedged currency has fallen by approximately 50% since the Fund launched its passive currency hedging programme. Conversely, the risk contribution from the Fund’s absolute return portfolio has marginally increased following significant losses experienced in the insurance linked segment of the portfolio.

The ex-post active risk analysis demonstrates that the total Fund has taken minimal active risk. This is in keeping with the Fund’s asset allocation, which has a significant amount of assets in passive index funds which typically exhibit minimal tracking error. Historically, the Fund’s alternative portfolios (in particular, private equity and infrastructure & real assets) have exhibited more aggressive active risk, although this has generally reduced in recent years. The Fund’s currency hedging programme has also contributed to a lower level of active risk.

Fund ex-post active risk analysis

West Midlands Pension Fund



	1 Yr	3 Yr	5 Yr	10 Yr	Dec 96
Active Risk	1.0	1.6	1.6	2.2	1.8
Portfolio Risk	5.1	6.5	6.1	8.5	10.0
Benchmark Risk	4.8	6.7	6.3	9.6	10.6

Source: Portfolio Evaluation Limited

Currency hedging

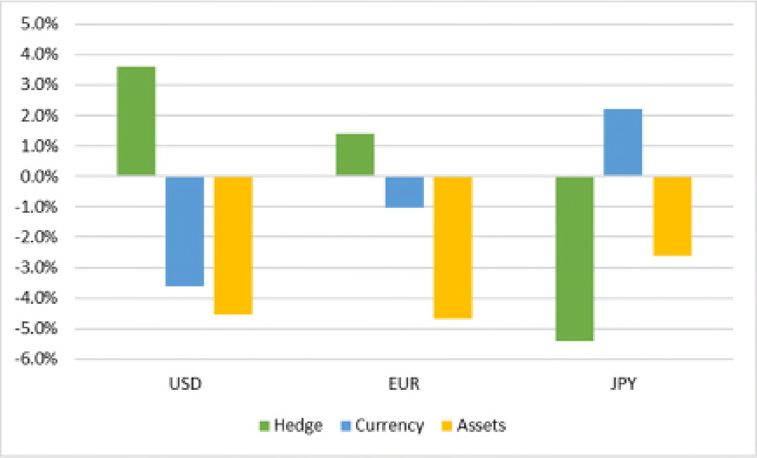
Policy and Implementation

Having benefitted from the weakness of sterling during 2016/17, the Fund entered into a passive currency hedging programme managed by HSBC in September 2017 to protect returns in sterling terms and to reduce currency risk within the investment portfolio. The hedge is applied to Fund's overseas quoted equity portfolios with a hedge ratio of 50% based on the strategic weights for each region. To manage costs and complexity the Fund is only hedging its currency exposure in terms of Japanese yen, euros and US dollars. Proxies are used for other currencies: for example, the US dollar is used as a proxy for emerging market currencies. The hedge is rebalanced on a monthly basis to reflect changes in market values and is rolled forward on a quarterly basis, at which point the Fund realises any profit or loss.

Transactions and Performance

The Fund rolled the currency hedge in March 2018 for an additional quarter; in doing so, the Fund realised a gain of £36.7 million, which was predominantly attributable to the pound's appreciation against both the US dollar and the euro during the first quarter of 2018.

Overall the currency hedge proved beneficial during the quarter, delivering an additional 0.4% to the Fund's total return, and provided an effective cushion against sterling strength and the fall in the US equity market, which decreased by 4.5% in sterling terms over the period. The chart below illustrates the effectiveness of the hedge in offsetting losses arising from adverse movements in currencies and asset values:



The pound's appreciation against all three currencies during the latter half of March resulted in an unrealised mark-to-market (MTM) gain of £44.6 million at the quarter end.

Environmental, social and governance

West Midlands Pension Fund

Corporate voting summary – 3 months to 31 March 2018

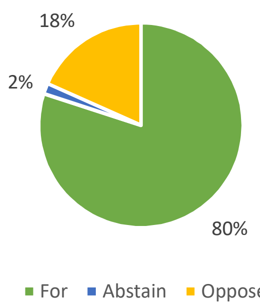
	UK			Overseas				
Number of companies voted at	54			354				
Total number of votes	661			3,710				
	For	Against	Abstain	For	Against	Abstain	Non-voting	Withhold
% of resolutions	80	18	2	52	25	17	4	1

Figures might not sum to 100% owing to rounding errors;
Data on % of resolutions for Overseas companies excludes resolutions concerning the frequency with which US companies put remuneration reports to AGM vote (the Fund always votes "annual")

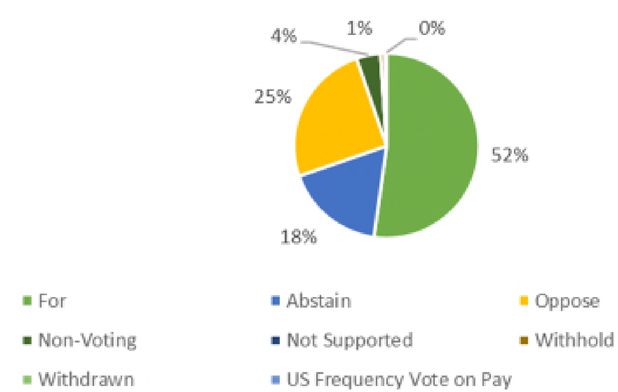
During the quarter the Fund voted at a total of 408 company meetings – 54 UK, 69 European, 58 North American, 60 Japanese, 136 Asia (excluding Japan), 2 Australasian/ South African and 29 in the rest of the world. During this period there were 51 meetings where the Fund supported all the resolutions put forward by companies.

Approximately 39% of the resolutions were not supported by the Fund. The largest number of resolutions that were opposed concerned the re-election of directors (usually voting against non-independent non-executive directors where the Fund or its advisors do not see sufficient independent oversight on a company board) and remuneration.

UK corporate voting



Overseas corporate voting



Environmental, social and governance

Engagement summary

The Fund's engagement strategy is to engage with its investee companies and other key stakeholders through partnerships and on its own. The Fund aims to protect and increase shareholder value by engaging on a range of financially material ESG investment factors.

Engagement via the Local Authority Pension Fund Forum (LAPFF):

Through LAPFF, the Fund engaged with 21 companies during the quarter. Most engagements concerned climate change issues. An alert regarding the remuneration policy at Tesla Inc was issued, owing to concerns with the CEO's potential awards. Summary data are presented here.

Engagement via the Principles for Responsible Investment (PRI):

Through the PRI and the CA100+, the Fund is currently a support investor to two engagement topics, each of which concerns a number of holdings. One topic is cyber security risk, where the Fund has led on engagements at two UK banks. A second topic is climate change risks and the Fund has joined the Climate Action 100+ (CA 100+) which aims to engage with the c100 most impacted companies on the governance, strategy and disclosure of climate risk management. The cyber and climate change engagements progressed during the quarter in review with meetings held with all target companies.

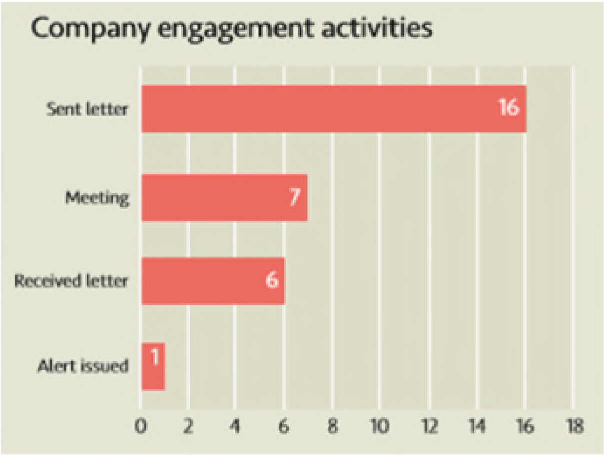
Other engagement:

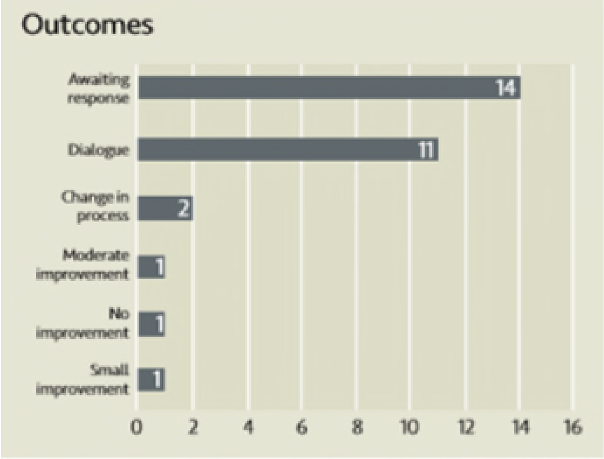
The Fund has engaged with a UK media company for some years over CEO succession. During the quarter in review, this succession risk crystallised and the Fund met with the Chairman to discuss the succession plan and its relation to company strategy.

Elements of the day-to-day implementation of the Fund's Responsible Investment Framework – which was updated at the March 2018 Pensions Committee meeting – have been delegated to LGPS Central from April 2018.

West Midlands Pension Fund

LAPFF Data





West Midlands Pension Fund

Appendices

Appendix 1 – Full Fund asset allocation
Appendix 2 – Risk management

Appendix 1 – Full Fund asset allocation

West Midlands Pension Fund

Asset class	Value (£m)	Fund allocation %	Policy target %	Difference %	Change from previous quarter %
UK equities	1,171	7.7	8.0	-0.3	-0.6
Global (ex UK) equities	4,991	32.9	30.0	2.9	-5.5
North America	1,246	8.2	7.5	0.7	-1.3
Europe (ex UK)	1,249	8.2	7.5	0.7	-1.1
Japan	636	4.2	3.75	0.95	-0.5
Pacific (ex Japan)	628	4.1	3.75	1.25	-0.9
Emerging markets	1,232	8.1	7.5	0.6	-1.9
Dividend growth factor equities	245	1.6	N/A	N/A	1.6
US Dividend Aristocrats	99	0.7	-	-	N/A
Europe Dividend Aristocrats	70	0.5	-	-	N/A
Pan Asia Dividend Aristocrats	76	0.5	-	-	N/A
Global equities	1,754	11.6	10.0	1.6	-0.4
Private equity	1,201	7.9	10.0	-2.1	-0.2
Special opportunities	215	1.4	2.0	-0.6	0.0
Total growth assets	**9,577**	**63.1**	**60.0**	**3.1**	**-5.1**
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Total income assets	**2,991**	**19.7**	**26.0**	**-6.3**	**1.0**
TOTAL	15,179	100.0	100.0	-	-

Appendix 2 – Risk management

West Midlands Pension Fund

The Fund is exposed to a number of risks which pose a threat to the Fund meeting its objectives. These risks are set out and monitored as part of a formal risk register. In summary, the principal risks affecting the Fund are as follows:

Funding Risks

a) The risk of a deterioration in the funding level of the Fund. This could be due to assets failing to grow in line with the developing cost of meeting liabilities or economic factors such as unexpected inflation increasing the pension and benefit payments.

The Fund manages this risk by setting a strategic asset allocation benchmark that seeks to achieve the appropriate balance between generating a satisfactory long-term return, while taking account of market volatility and the nature of the Fund's liabilities. It assesses risk relative to that benchmark by monitoring the Fund's asset allocation and investment returns relative to the benchmark. It also assesses risk relative to liabilities by monitoring the delivery of benchmark returns relative to liabilities.

b) The risk of changing demographics such as improvement in longevity and other demographic factors, increasing the cost of benefits.

The Fund monitors this by reviewing mortality and other demographic assumptions which could influence the cost of the benefits. These assumptions are considered formally at the triennial valuation.

c) Systemic risk, i.e., the possibility of failure of asset classes and/or active investment managers results in an increase in the cost of meeting the liabilities.

The Fund mitigates systemic risk through a highly diversified portfolio with exposure to a wide range of asset classes, portfolio holdings and different management styles.

Appendix 2 – Risk management (continued)

Asset Risks

a) Concentration risk that a significant allocation to any single asset category and its underperformance relative to expectation would result in difficulties in achieving funding objectives.

b) Illiquidity risk that the Fund cannot meet its immediate liabilities because it has insufficient liquid assets.

c) Currency risk that the currency of the Fund's assets underperforms relative to sterling (i.e., the currency of the liabilities).

d) Manager underperformance when the fund managers fail to achieve the rate of investment return assumed in setting their mandates.

The Fund manages asset risk as follows:

- It provides a practical constraint on Fund investments deviating greatly from the intended approach by setting itself diversification guidelines.
- By investing in a range of investment mandates each of which has a defined objective, performance benchmark and manager process which, taken in aggregate, constrain risk within the Fund's expected parameters.
- By investing across a range of assets, including quoted equities and bonds, the Fund has recognised the need for some access to liquidity in the short term.
- Robust financial planning and clear operating procedures for all significant activities including regular review and monitoring manager performance.
- The Fund is aware that investing in overseas assets introduces an element of currency risk, but given the level of diversification within the Fund, it is comfortable taking this risk in general but may take action to mitigate potentially significant risks as and when they are identified.
- In appointing several investment managers, the Fund has considered the risk of underperformance by any single investment manager.
- The Fund recognises and measures the liquidity risk of some assets and ensures it has significant liquidity to meet future cash requirements.
- The operator exercises oversight and monitoring over internal and external funds.

Appendix 2 – Risk management (continued)

e) Environmental, social and governance (ESG) risks that are not given due consideration by the Fund or its investment managers. The Fund actively addresses this potential risk through implementation of its Responsible Investment (RI) Framework and its compliance with the UK Stewardship Code for Institutional Investors and engaging with selective investments where appropriate. Both documents are available on the Fund's website.

Operational Risk

a) Transition risk of incurring unexpected costs in relation to the transition of assets among managers.

When carrying out significant transitions, the Fund takes professional advice and considers the appointment of specialist transition managers in order to mitigate this risk.

b) Custody risk of losing economic rights to Fund assets, when held in custody or when being traded.

These risks are managed by:

- The use of a global custodian for custody of assets.
- The use of formal contractual arrangements for all investments.
- Maintaining independent investment accounting records.

c) Credit default with the possibility of default of a counterparty in meeting its obligations. The Fund monitors this type of risk by means of:

- Maintaining a comprehensive risk register with regular reviews.
- Operation of robust internal compliance arrangements.
- In-depth due diligence prior to making any investment.

The Fund monitors and manages risks in all areas through a process of regular scrutiny of its providers and audit of the operations they conduct for the Fund.