Royal Borough of Kingston Upon Thames Pension Fund
Threadneedle Pooled Pension Funds

Quarterly Report as at 31 December 2018

Confidential

Contents

Threadneedle Pooled Pension Fund Summary

Threadneedle Pooled Pension Fund	3 Months		6 Months		Year to date		1 Year		3 Years		5 Years	
	Fund %	B'mark %	Fund %	B'mark %	Fund %	B'mark %	Fund %	B'mark %	Fund %	B'mark %	Fund %	B'mark %
Global Select Fund	-12.70	-10.57	-7.97	-5.47	-4.66	-3.27	-4.66	-3.27	12.69	12.53	11.60	10.48
Global Select Fund (Net of Fees)	-12.76	-10.57	-8.11	-5.47	-4.94	-3.27	-4.94	-3.27	12.34	12.53	11.26	10.48

The total value of the Scheme assets as at 31st December 2018 was £169,568,338.99

Source: Columbia Threadneedle Investments, FactSet. Data for periods over one year are annualised. Performance figures are total returns in sterling terms with fund prices calcuated from global close valuations. All performance figures quoted are gross of fees, with the exception of the Property Fund which is net of fees. Pension information sheets for funds managed by Threadneedle Asset Management Limited, and funds managed by other investment managers within the Threadneedle Pooled Pension Funds range, are available on www.threadneedlepensions.co.uk

Fund Information and Performance - Global Select Fund

Fund Information

Fund Manager

William Davies

Fund Manager Inception

17 November 2015

Fund Size

GBP 232,020,882

Fund Launch

August 2005

Contact Details

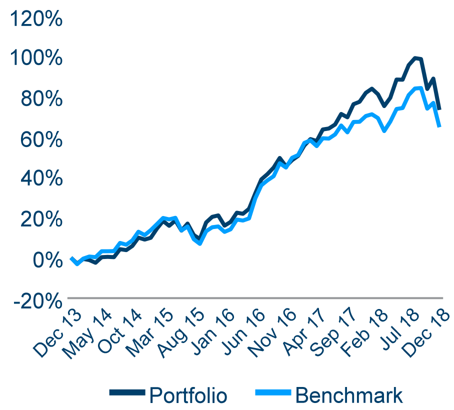
clientservices@columbiathreadneedle.com

Benchmark

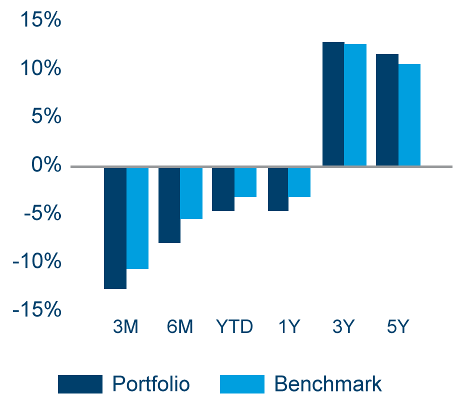
MSCI AC World

Long Term Performance

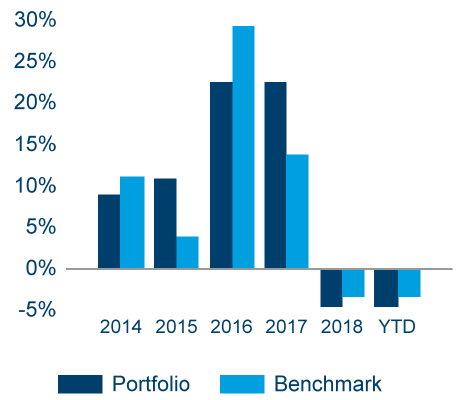
Absolute



Discrete periods*



Calendar Years



*1. Periods over one year are annualised.
2. Benchmark shown is the official benchmark of the portfolio, as detailed on this page

Portfolio Performance					Annualised Performance				Cumulative Performance	
	3M %	6M %	YTD %	1Y %	2Y %	3Y %	4Y %	5Y %	3Y %	5Y %
Portfolio (Gross)	-12.70	-7.97	-4.66	-4.66	8.07	12.69	12.27	11.60	43.11	73.14
Benchmark (Gross)	-10.57	-5.47	-3.27	-3.27	4.93	12.53	10.29	10.48	42.49	64.57
Excess (Arithmetic)	-2.13	-2.50	-1.39	-1.39	3.14	0.16	1.98	1.13	0.62	8.57
Relative	-2.38	-2.64	-1.43	-1.43	2.99	0.14	1.80	1.02	0.44	5.21

Source: FactSet

Executive Summary

Market Background

- The fourth quarter of 2018 was challenging for equities. Against a backdrop of tightening monetary conditions, investors were unsettled by political uncertainty, ongoing trade rhetoric and concerns about the global growth outlook. Plans for increased Chinese economic stimulus, indications of a strong holiday season and trade negotiation arrangements provided some support later. Overall, the MSCI ACWI fell 12.4% in local terms over the quarter.
- North American stocks were central to the decline in markets as risk-off sentiment prompted rotations out of high duration growth stocks. Japan lagged on global growth prospects but emerging markets (EM) outpaced the index on stimulus plans. UK equities outperformed following the chancellor's budget, despite persisting Brexit uncertainty. Meanwhile, Europe lagged following bank downgrades, before recovering as Italy and the EU agreed a new budget deal.
- Utilities, real estate and consumer staples led sector returns as investors sought more defensive sources of growth amid declining bond yields. By contrast, energy lagged as concerns around excess supply escalated.

Activity

- We initiated positions in financial information services provider S&P Global, publishing software company Adobe and consumer credit-rating agency TransUnion. S&P's diversified sources of revenue growth, compelling margin outlook and strong track record of execution leaves it well placed to outperform; and we are positive on Adobe's transition to a subscription-based cloud delivery model, which should enable it to capitalise on enterprises shifting away from legacy solutions. TransUnion's strong competitive position in a global oligopoly should enable it to continue delivering industry-leading organic growth.
- To fund these purchases, we exited investment bank Goldman Sachs. After the stock performed strongly in October, we chose to reallocate capital towards positions with more attractive risk/reward profiles as news flow around the 1Malaysia Development Berhad case escalated.

Performance

- Gross of fees, the fund lagged its benchmark in the fourth quarter. Rotations out of high-duration growth stocks – and the outperformance of cheaper, defensive segments – worked against our investment approach. Indeed, the zero weight in utilities detracted most in terms of allocation, while our energy and healthcare holdings underperformed. By contrast, our industrials underweight added value, as did our positions in financials and industrials.
- Diamondback and Halliburton fell with the wider energy sector as oil prices declined. Diamondback recently acquired Energen; a synergistic move which furthers the consolidation of the Permian Basin. Halliburton, another Permian play, offers a strong business mix, cost advantage and vast logistics network.
- Entertainment software developer Activision Blizzard lagged after producing underwhelming full-year guidance and indicating that some core franchises may face near-term challenges. Our longer-term thesis remains intact.
- Our Asian financials added material value as sentiment towards emerging markets improved. HDFC Bank rallied on prospects of easing regulation following the appointment of a new central bank governor. Bank Rakyat gained as annual loan growth among Indonesian banks reached four-year highs.

Outlook

- We believe that recent market shifts represent opportunity. Resets in the valuations of attractive, secular growth stories makes this backdrop ideal for bottom-up investors capable of identifying long-term winners, trading at below their intrinsic values. While factors such as rising rates, tariffs and technological regulation remain in focus, we believe structural factors promoting a world which is 'lower for longer' remain in place. These include debt, demographics and technological disruption, and should ensure that companies sustaining above-average growth remain attractive. Within this context, we retain our focus on companies with durable competitive advantages, as we believe these support the retention of high or rising returns on capital and earnings growth.

Fund Holdings and Activity

Largest Holdings	Portfolio %
Alphabet Inc	4.72
Amazon.com, Inc.	3.42
Microsoft Corporation	3.21
JPMorgan Chase & Co.	2.93
Alibaba Group Holdings Ltd Sponsored ADR	2.79
Bk Rakyat	2.57
Visa Inc. Class A	2.55
MasterCard Incorporated Class A	2.49
Ping An Insurance	2.38
Centene Corporation	2.32

Ex Post Risk Analysis - 5 Year data	Portfolio	Benchmark
Absolute Volatility	10.52	9.89
Beta	1.01	
Information Ratio	0.35	
Relative Volatility	0.93	
Tracking Error	3.28	

Source: Columbia Threadneedle Investments

Fund Stock and Sector Active Weights

Largest Overweight Holding	Portfolio %	Benchmark %	Difference %
Alphabet Inc.	4.72	1.57	3.14
Bk Rakyat	2.57	0.03	2.53
Alibaba Group Holdings Ltd Sponsored	2.79	0.44	2.36
Centene Corporation	2.32	0.06	2.26
Ping An Insurance	2.38	0.12	2.26
RELX PLC	2.30	0.10	2.20
Unilever PLC	2.31	0.15	2.16
JPMorgan Chase & Co.	2.93	0.81	2.12
HDFC Bank Limited	2.12	0.00	2.12
MasterCard Incorporated Class A	2.49	0.43	2.06

Largest Underweight Holding	Portfolio %	Benchmark %	Difference %
Apple Inc.	0.00	1.88	-1.88
Johnson & Johnson	0.00	0.85	-0.85
Exxon Mobil Corporation	0.00	0.71	-0.71
Berkshire Hathaway Inc. Class B	0.00	0.65	-0.65
Pfizer Inc.	0.00	0.63	-0.63
Nestle SA	0.00	0.61	-0.61
Royal Dutch Shell PLC Class B	0.00	0.61	-0.61
UnitedHealth Group Incorporated	0.00	0.59	-0.59
Verizon Communications Inc.	0.00	0.57	-0.57
Procter & Gamble Company	0.00	0.56	-0.56

Sector	Portfolio %	Benchmark %	Difference %
Communication Services	12.14	8.98	3.16
Consumer Discretionary	11.78	10.39	1.38
Consumer Staples	5.87	8.43	-2.56
Energy	6.29	6.18	0.11
Financials	19.80	17.20	2.60
Health Care	13.24	12.10	1.14
Industrials	9.20	10.28	-1.08
Information Technology	14.80	14.99	-0.56
Materials	4.94	4.97	-0.02
Real Estate	1.58	3.16	-1.59
Utilities	0.00	3.32	-3.32
Cash	0.36	0.00	0.36

Source: Columbia Threadneedle Investments

Corporate Governance and Engagement

Governance and Responsible Investment Update

The following is an excerpt from an article written by Iain Richards (Head of Responsible Investment)

Responsible Investment (RI) has become increasingly important for many asset owners, so what does 2019 hold?

Cloud computing, machine learning and the potential of the, as yet, relatively untapped field of data science have been rapidly moving up the agenda in the investment world. In an industry that is undergoing seismic changes, the capabilities, reach and efficiencies that data science innovation offers have the potential to play an important role.

At a time when demand for ESG integration is growing and confidence in the investment impacts of traditional ESG approaches remains high, data science offers the additional prospect of effectively integrating meaningful non-financial analysis in investment, at scale and with global reach. The vast and growing array of non-financial data, combined with the inputs required for traditional analytics and the importance of timeliness in execution, has seen RI move beyond the point where Excel offers anything other than a superficial solution.

These areas are becoming significant game changers in the industry and will be key focus issues over the course of 2019, particularly for those in the RI industry trying to realise the potential of considering ESG issues in enhancing investment outcomes and performance. The era of forward-looking, evidence-based and actionable analytics is truly on the horizon. This will offer early adopters a real edge in making ESG integration an effective investment reality.

We have been working with clients to show them how evidence-based, quantitatively tested advanced analytics work. Seeing actionable signals that produce forward excess return benefits and which complement, rather than replace, fundamental research and financial analytics has proven persuasive.

Proxy Voting

Columbia Threadneedle Investments votes actively at company meetings, applying principles on a pragmatic basis. We view this as one of the most effective ways of signalling approval (or otherwise) of a firm's governance, management and strategy.

When analysing meeting agendas and making voting decisions, we use a range of research sources and consider various ESG issues. The RI team makes the final voting decisions in collaboration with the firm's portfolio managers and analysts. Votes are cast identically across all mandates for which we have voting authority. All of our voting decisions are available on our website seven days after each company meeting.

Between October and December 2018, we voted at 120 meetings. Of these, 67 were annual general meetings, 49 were special and four were combined annual/special meetings. We cast at least one dissenting vote at 53 (44%) of these meetings.

We voted in 22 separate markets in the fourth quarter. Most meetings were voted in the UK (33) and Australia (15), followed by the US (15), India (10) and China (6). We did not support 108 individual voting items over the quarter; the majority of these related to directors' elections and executive pay.

When deciding whether to support directors' re-elections, we consider several factors. It is critical that boards can effectively scrutinise and challenge management. Therefore, we look for boards to have a suitable level of overall independence, where directors sit on no more than four boards (with more stringent requirements for executives and chairs) and attend, as a minimum, three-quarters of all meetings.

In 2018, we introduced new voting guidelines which have increased our overall level of dissent from directors' re-elections. Where we have concerns with certain actions taken, we will target individual directors. The most common of these relate to executive pay where, if we are withholding support from remuneration items, we will also withhold support from the director that bears responsibility. In most cases, this is the chair of the remuneration committee. Similarly, where a company has a poor level of female representation on its board (the level varies by market), we tend to withhold support from the nomination committee chair.

Proxy Voting and Engagement Case Studies

Notes on some of our engagements over the quarter are shown below.

In December, the RI team joined a meeting led by the European Equity team with **Brenntag**, a German chemical distributor, to discuss issues with the chairman of the board. These issues related to company performance, the effectiveness of the board's oversight of management and succession planning.

While the CEO is considered to remain a strong motivational influence, changes required in moving from a private equity to public equity model were cited as having affected the culture of the wider business. We encouraged a review of the appropriateness of existing incentive models in driving performance and retention, and also of the quality of internal reporting to help monitor performance and deliver synergies following recent acquisitions.

The chairman reported his intention to remain on the board beyond the expiration of his current term (2020) and indicated that, having now left BC Partners, he was spending more time with the CEO and regional heads. We discussed succession planning across the executive given that the CEO's own contract will expire in March 2020. We also discussed the need for oversight of the execution of the company's digital strategy and cyber risks, and recommended enhancements to existing processes.

In January 2018, lens manufacturer **Essilor** agreed to merge with consumer eyewear group Luxottica to create a globally vertically integrated player, EssilorLuxottica. The RI and European equity teams have met with the company regularly around this, with the RI team's meetings focusing on corporate governance and sustainability.

Following the merger, a succession plan for a new company CEO was announced by senior management. In November, Luxottica founder and CEO Leonardo del Vecchio stated in a press interview that he wished Franceso Milleri to become CEO.

Given that this seemingly contradicted the announced plan, we held a call with the company's investor relations team who confirmed that the succession plan was still in place: to begin a formal process of identifying and interviewing internal and external CEO candidates in January 2019 and present a name by the end of December 2020. We gathered more details on the process including the executive search firm and details of the nomination committee members who will make the decision. We will continue to monitor the company.

In November, the RI team met with UK-based pharmaceutical company GlaxoSmithKline (GSK) at the launch event of the Access to Medicine index. The index ranks 20 of the world's largest research-based pharmaceutical companies on the basis of how they make their products more accessible in low and middle-income countries.

GSK came top of the index, judged on the following technical areas:

- Management: access strategy is linked to business rationale, management incentives are linked to long-term objectives
- Compliance: discloses all components of internal control system
- R&D: integrated Global Health R&D unit
- Pricing: high proportion of equitable strategies in priority countries
- Patents: voluntary license for HIV/AIDS product having large geographical spread
- Capacity: large number of initiatives meeting good practice standards
- Donations: strong performance; responds to emergencies and humanitarian crises and tracks delivery

The greatest development for GSK has been building the strong partnerships it needs to see a clear exit in emerging markets, i.e. a partner to distribute products and a supply chain to get the products into these countries. The biggest challenge for GSK is accurately measuring the impact of its products.

Fund Objectives

Fund	Performance Objective
Multi Asset Fund	To invest the assets of the fund primarily in a portfolio of funds managed by Threadneedle. The portfolio may include exposure to equities, fixed income, commodities, property, absolute return funds, other alternative asset classes and cash. It aims to achieve total returns equivalent to cash plus 4% per annum, gross of fees, over the economic cycle (expected to be 5-7 years).
Mixed Fund	To invest the assets of the fund primarily in a portfolio of funds managed by Threadneedle. The portfolio may include exposure to equities, fixed income, cash and property. It aims to achieve total returns that are above its benchmark, gross of fees, over rolling 3 year periods.
Adventurous Pathway Fund	To invest primarily in a portfolio of funds managed by Threadneedle. The portfolio will mainly include exposure to equities but may include some exposure to other asset classes such as fixed income, commodities, UK property, absolute return funds and cash. The aim is to achieve total returns (from income and capital appreciation) that are above the composite equity benchmark, gross of fees, over rolling 3 year periods.
Balanced Pathway Fund	To invest primarily in a portfolio of funds managed by Threadneedle. The portfolio will include exposure to equities and fixed income and may include some exposure to other asset classes such as commodities, UK property, absolute return funds and cash. The aim is to achieve total returns (from income and capital appreciation) that are above the composite equity, fixed income and property benchmark, gross of fees, over rolling 3 year periods.
Cautious Pathway Fund	To invest primarily in a portfolio of funds managed by Threadneedle. The portfolio will include a mix of equities and fixed income and may include exposure to other asset classes such as commodities, UK property, absolute return funds and cash. The aim is to achieve total returns (from income and capital appreciation) that are above the composite equity, fixed income and property benchmark, gross of fees, over rolling 3 year periods.
Global Select Fund	To invest primarily in global equities, indirectly through a fund managed by Columbia Threadneedle Investments. It aims to achieve total returns that are 3% or more per annum above its benchmark, gross of fees, over rolling 3 year periods.
UK Equity Fund	To invest the assets of the fund primarily in UK equities. It aims to achieve total returns that are 2% or more per annum above its benchmark, gross of fees, over rolling 3 year periods.
UK High Alpha Fund	To invest the assets of the fund primarily in UK equities. It aims to achieve total returns that are 3.5% or more per annum above its benchmark, gross of fees, over rolling 3 year periods.
North American Equity Fund	To invest primarily in North American equities, indirectly through a fund managed by Columbia Threadneedle Investments. It aims to achieve total returns that are 2% or more per annum above its benchmark, gross of fees, over rolling 3 year periods.
European Equity Fund	To invest primarily in European equities excluding the UK, indirectly through a fund managed by Columbia Threadneedle Investments. It aims to achieve total returns that are 2% or more per annum above its benchmark, gross of fees, over rolling 3 year periods.

Fund	Performance Objective
Asia Equity Fund	To invest primarily in Asia Pacific equities excluding Japan , indirectly through a fund managed by Columbia Threadneedle Investments. It aims to achieve total returns that are 2% or more per annum above its benchmark, gross of fees, over rolling 3 year periods.
Japanese Equity Fund	To invest primarily in Japanese equities, indirectly through a fund managed by Columbia Threadneedle Investments. It aims to achieve total returns that are 2% or more per annum above its benchmark, gross of fees, over rolling 3 year periods.
UK Bond Fund	To invest primarily in sterling denominated bonds. It aims to achieve total returns that are 0.5% or more per annum above its composite fixed income benchmark, gross of fees, over rolling 3 year periods.
Corporate Bond Fund	To invest primarily in sterling denominated UK Corporate bonds. It aims to achieve total returns that are 0.75% per annum above its benchmark, gross of fees, over rolling 3 year periods.
Index-Linked Bond Fund	To invest primarily in UK index-linked bonds, indirectly through a fund managed by Columbia Threadneedle Investments. It aims to achieve total returns that are in excess of its benchmark, gross of fees, over rolling 3 year periods.
Property Fund	To invest primarily in direct UK commercial property. It aims to generate total returns (from income and capital appreciation) that are above its benchmark, over rolling 3 year periods.
Sterling Fund	To achieve an investment return similar to that of sterling cash deposits from investment in cash deposits; certificates of deposit; commercial paper and UK government issued treasury bills, indirectly through a fund managed by Columbia Threadneedle Investments. It aims to achieve capital security but this is not guaranteed.

Valuation and Costs of Buying and Selling Investments

All of the funds in the TPEN range are priced on a semi-swinging single price basis. That is, on each dealing day we calculate a single price per unit for each unit class of each fund, at which all investors buy and sell, based on the mid-market value of all of the assets of the fund. This unit price, however, does not take account of any purchase expenses that would be incurred if we had to invest new cash flowing into the fund, nor any encashment expenses if we had to sell assets within the fund purely to meet redemptions of units by clients.

Therefore, the actual dealing price of each fund may be adjusted or 'swung' by a dilution adjustment to account for the impact of large subscriptions or redemptions in the fund. Consequently this means that the price per unit may not be the same as the NAV per unit, and will in fact be:

- The mid-market net asset value of the fund **plus** an allowance to cover purchase expenses, or,
- The mid-market net asset value of the fund **minus** an allowance to cover encashment expenses.

The reason for adjusting the price of units is to protect other unit holders from the dilution in the value of their units, caused by dealing costs and disbursements associated with the purchase of underlying assets (in the case of net inflows) or the sale of underlying assets (in the case of net outflows).

The size of the allowances to cover purchase or encashment expenses depends upon the nature of the assets within the fund. For UK Equity funds, a typical dilution adjustment may be 0.70% for net purchases and 0.20% for net redemptions. For Bond funds, a typical dilution adjustment may be 0.40% for net purchases and net redemptions. The highest transaction expenses are normally associated with commercial property, due to the costs of acquiring and disposing of properties and the associated Stamp Duty. These costs only apply to physical properties and not any cash allocation in a fund. For the Property Fund therefore, the typical dilution adjustment is 6.0% for net inflows and 1.2% for net outflows, however may vary dependent upon both the prevailing costs of acquiring and disposing of properties and the cash allocation in the fund at the time.

Dilution adjustments are applied to the relevant fund at the discretion of TPEN for the benefit of all unit holders and not for the benefit of Threadneedle.

Where a TPEN fund invests in another Columbia Threadneedle Investment fund, such as a unit trust or OEIC, a decision to apply a dilution adjustment on the TPEN fund will be influenced by any decision to apply dilution on
the relevant unit trust or OEIC sub fund in which the TPEN fund has invested.

Further information on the latest available dilution rates for each fund can be found on our website: www.columbiathreadneedle.co.uk

In the table below we have illustrated how the application of a dilution adjustment can affect the unit price of a fund:

	Dilution adjustments	**Unit price at mid market asset value**	**Unit price with dilution adjustment for purchases**	**Unit price with dilution adjustment for encashments**
Fund investing in UK Equities	0.05% on purchases & sales	100.00p	100.70p	99.80p
Fund investing in property	5.80% on purchases 1.2% on sales	100.00p	105.80p	98.80p

If a TPEN fund is experiencing strong cash inflows, the fund manager may need to buy more assets for the fund, in which case it is likely that the single dealing price will be set at a level which includes the dilution adjustment
for purchases. So in our examples above the single dealing price of the fund would be 100.70p (UK equities) or 105.80p (commercial property).

If a TPEN fund is experiencing strong cash outflows, the fund manager may need to sell some of the assets of the fund to raise cash, in which case it is likely that the single dealing price will be set at a level which includes the dilution adjustment for encashments. So in our examples above the single dealing price of the fund would be 99.80p (UK equities) or 98.8p (commercial property).

If there are no cash flows into or out of a TPEN fund, or the flows are not sufficient to cause dilution within the fund, then the single dealing price can be set at mid-market net asset value (i.e. without any allowance for purchases or sales) which would be 100.00p in the example above.

Summarising the pricing level decision
When setting the unit price of a fund, the cash position of the fund has to be judged on a day to day basis **and** on the basis of a trend over time. We have summarised the pricing level decision in the table below.

Cash flow position of the fund	Pricing level decision
The value of unit purchases exceeds the value of unit redemptions, by a significant amount, on a single dealing day. The value of inflows only exceeds the value of outflows by a small amount on any single day, but the inflows tend to be continuous over a period of weeks or months.	The single dealing price will be the net asset value plus the dilution adjustment for purchases.
The value of unit redemptions exceeds the value of unit purchases, by a significant amount, on a single dealing day. The value of outflows only exceeds the value of inflows by a small amount on any single day, but the outflows tend to be continuous over a period of weeks or months.	The single dealing price will be the net asset value minus the dilution adjustment for sales.

Ultimately, the objective of setting the dealing price at one of these levels is a matter of preventing dilution of the investment returns of the fund. Changes to the price level protect existing investors from the expense effect of new investors coming into the fund, and protects the remaining investors against the expense effect of investors leaving the fund. Dilution adjustments are levied for the benefit of existing investors, not for Threadneedle.

Implications of using the single dealing price to value clients' unit holdings
Generally speaking, we use the single dealing price of a TPEN fund as the valuation price of units in our valuation reports for clients. So the unit price used for valuations is the same as the actual dealing price that existed on the dealing day that is being used as the basis of the valuation.

Although this is the obvious basis to use, if the dealing price of a fund happened to have been set at the highest level on the day of the valuation, then the effect could be to over-state the apparent value of the unitholding. Because if your unitholding had been sold on the valuation day, then the effect of that sale might have been great enough to prevent the dealing price having been set at the highest level, or might even have resulted in the dealing price having been set at the lowest level.

For TPEN funds with a small dilution adjustment (such as gilt or equity funds) this valuation effect is unlikely to be that significant. Underlying market movements in the value of these securities since the date of the valuation are quite likely to be **greater than** this valuation effect.

But for the TPEN Property Fund, the market movements in the value of the assets could easily be **less than** this valuation effect. This is because the assets in a property fund are not generally as volatile in value as highly liquid assets such as fixed interest or equity securities, and because the purchase and sale expenses for property are much greater than for other assets.

So the effect of operating a single dealing price for the TPEN Property Fund, when the dealing price was set at the higher level, is to show a value for the unitholding which may not be realisable in practice – depending upon the size of the encashment.

We cannot predict in advance what the pricing basis of any TPEN fund will be. This is because the pricing basis will depend upon the value of clients' purchases and sales, which we do not control. However, we can tell you what pricing level basis as used on any day or days in the past. So if you need an estimate of what the realisation value of units might have been, on a particular day in the past, please let us know.

Volatility Adjustment
Threadneedle may apply a volatility adjustment to reduce volatility in the unit price of a Fund caused by changes in the level of net inflow or outflow of investment into or from that Fund and consequent changes in the amount of any dilution adjustment applied.

So if there is a small inflow or outflow which goes against what is otherwise a general trend, a volatility adjustment may be applied instead of the dilution adjustment.

Such a volatility adjustment is currently applied only to the TPEN Property Fund, but may be applied to other funds, subject to 28 days' notice in writing.

Dilution Adjustment Estimates as at 31 December 2018

Fund	Estimate of dilution adjustment applicable % Adjustment to sales	% Adjustment to redemptions
Corporate Bond Fund	0.31%	-0.31%
European Equity Fund *	0.10%	-0.16%
Index Linked Bond *	0.09%	-0.09%
Japanese Equity Fund *	0.14%	-0.14%
North American Equity Fund *	0.06%	-0.06%
Asia Equity Fund *	0.24%	-0.20%
Global Select Fund *	0.08%	-0.14%
Property Fund	5.83%	-1.19%
UK Equity Fund	0.10%	-0.59%
UK Equity High Alpha Fund	0.07%	-0.56%
Sterling Fund *	Nil	Nil

*Where a TPEN fund invests in another Columbia Threadneedle Investment fund, such as a unit trust or OEIC, a decision to apply a dilution adjustment on the TPEN fund will be influenced by any decision to apply dilution on the relevant unit trust or OEIC sub fund in which the TPEN fund has invested

The funds listed below invest in a number of other Threadneedle funds, so their dilution adjustment will be calculated based on dilution adjustments applicable to the underlying funds in which they invest, or in response to a change in the weightings invested in the underlying funds.

Fund
Mixed Fund
Multi Asset Fund
Adventurous Pathway Fund
Balanced Pathway Fund
Cautious Pathway Fund
UK Bond Fund

Further information is set out in the policy document.

Threadneedle Policy in relation to Stock Lending

The stock lending program ceased for the TPEN range prior to migration to our new outsourced operations provider, Citi. The new stock lending program has not yet recommenced.

From time to time, some of the TPEN funds may engage in stock-lending, either directly or because they have invested in other Threadneedle funds which themselves operate stock lending arrangements. This note explains briefly the reasons for this, and how the arrangements work

Description of stock lending
Stock lending is a process whereby the owner of a security (which might be an equity holding or bond holding), lends that security to another party, in return for a lending fee. So stock lending provides a mechanism by which investors (in this case TPEN funds) can lend securities to third parties, and so generate an additional source of income for the Fund.

Stock lending can be conducted directly, between the TPEN Fund and a borrower, or through an intermediary, who will in turn lend the security to a borrower. So there could be a set of relationships which look like this:

TPEN Fund	Lends a security to:	An intermediary (in some cases)	Who in turn lends the security to:	A borrower

The borrower has to pay a fee to the lender, and the lender (in this case, a TPEN Fund) receives payment for the loan of that security, from the borrower, and so earns an additional income. Borrowers are typically large banks or other financial institutions.

Although a security can be lent in this way, the Fund retains the investment exposure of holding that security. The Fund continues to be entitled to any interest or dividends paid by the security, and continues to accrue any capital gains or losses as a result of changes in the market value of the security. The unit price of the TPEN funds continues to reflect any changes in capital value or the accrual of any interest or dividends, in the normal way.

Counterparty exposure
When a security has been lent, the Fund has counterparty exposure to the borrower to whom the security has been lent.

In order to provide protection for our clients, we require collateral to be posted with our custodians who are JP Morgan, by the borrower. This collateral has to exceed the market value of the security being lent, and has to be of acceptable quality. Currently, we are only accepting government and supranational bonds as collateral, and we keep our list of acceptable collateral, under review. The amounts and the values of the stocks out on loan are monitored by our custodians and reported to Threadneedle, to ensure that the value of collateral posted with us continues to exceed the value of the loans.

Our custodians have control over the collateral so that in the event of a default by the borrower, they are entitled to sell the collateral and use the cash proceeds to replace the lent security, should that be necessary. The fund also has the additional security of a borrower default indemnity from JP Morgan, so in the event of a default and there being a short downfall in the collateral, JP Morgan would make up the difference.

Cost & benefits of stock lending
The income from stock lending activities is modest, normally amounting to no more than a few basis points per annum for each fund, but it is a source of additional income that the funds would not otherwise earn. Threadneedle charges its costs for the administration of stock lending activities against the revenue earned, but otherwise the income earned is for the benefit of the funds.

TPEN funds which have engaged in stock lending
Some of the funds in the TPEN range are directly invested funds, so they hold securities such as equities and bonds directly. In theory all of these funds are in a position to engage in stock lending directly, although in practice they may not have done so, perhaps because worthwhile opportunities were not available. During this reporting period **no** funds earned income from stock lending.

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Past performance is not a guide to future performance.

The value of investments and any income is not guaranteed and can go down as well as up and may be affected by exchange rate fluctuations. This means that an investor may not get back the amount invested.

Performance figures and other data relating to a fund or a representative account are provided for illustrative purpose only and may differ from that of other separately managed accounts due to such differences as cash flows, charges, applicable taxes, and differences in investment strategy and restrictions.

Unless otherwise stated all performance returns shown are gross of any charges, expenses or applicable taxes, and are calculated using global close authorised valuations pricing securities on mid basis, and in-house calculated transactions with cash flows at the start of the day.

Benchmark data relates to the agreed Benchmark of the portfolio, as defined in the Mandate Summary section.

Where references are made to portfolio guidelines and features, these are at the discretion of the portfolio manager and may be subject to change over time and prevailing market conditions. Actual investment parameters will be agreed and set out in the prospectus or formal investment management agreement.

Please note that the performance target may not be attained.

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