



Universities Superannuation Scheme

Report and Accounts

for the year ended 31 March 2020



Working with Higher Education
employers to build a secure
financial future for our members
and their families



We are the principal pension scheme for universities and other Higher Education institutions in the UK

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How we create lasting value for our members and employers.

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The Annual Report and Accounts of the trustee company can be found on our website uss.co.uk

About USS

Our purpose

Working with Higher Education employers to build a secure financial future for our members and their families

Our business model

The scheme

Universities Superannuation Scheme (USS) was established in 1974 as the principal pension scheme for universities and other higher education institutions in the UK.

The trustee

The scheme's trustee is Universities Superannuation Scheme Limited (USSL). It is a corporate trustee which has overall responsibility for scheme management, led by a non-executive board of directors and employing a team of pension professionals in Liverpool and London. The trustee's key responsibility is to ensure that benefits promised to members are delivered in full on a timely basis.

Administration

The trustee employs an experienced team of pension administrators who are based in the Liverpool office. This team is supported by Capita, an external pensions administration firm.

Investment management

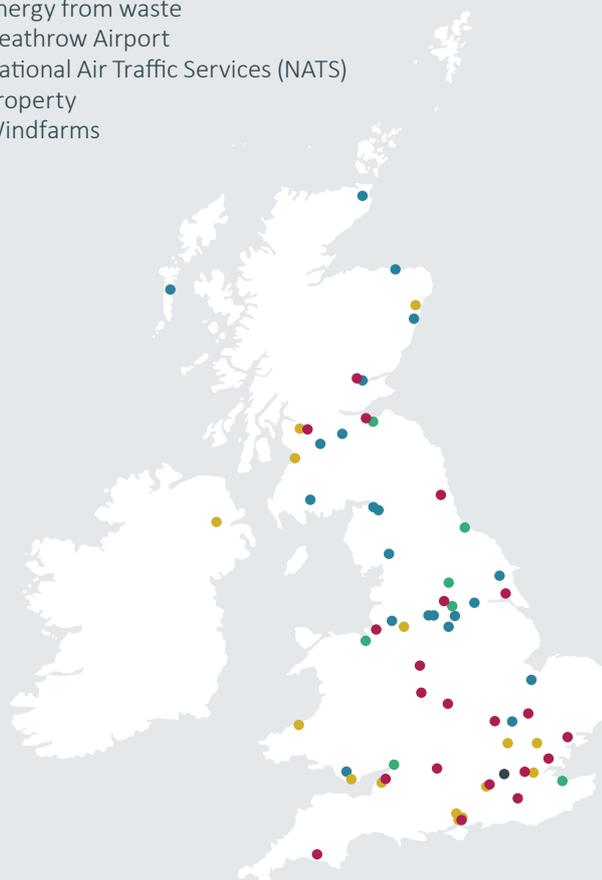
The trustee delegates implementation of investment strategy to a wholly-owned subsidiary – USS Investment Management Limited (USSIM) – which employs a team of investment management professionals in the London office providing in-house investment management and advisory services.

Where we invest

We invest our diversified portfolio in the UK and globally

Our major private market investments across the UK include:

- Energy from waste
- Heathrow Airport
- National Air Traffic Services (NATS)
- Property
- Windfarms



In addition, USS invests in 63 Moto service stations and 34 Westerleigh (crematoria) locations

Our global assets of £67.6bn are principally invested in:

Private Markets
including property

£18.2bn

Public Markets
Listed Equities

£14.9bn

Public Markets
Listed Bonds

£27.7bn

 The Annual Report and Accounts of the trustee company can be found on our website uss.co.uk

The scheme

The scheme provides two types of pension benefits: defined benefit and defined contribution, and in both cases we invest payroll contributions received from our members and employers to generate funds to pay for benefits in the future:

USS Retirement Income Builder
(defined benefit for all members)

£66.5bn

in assets and c.460,000 members

USS Investment Builder
(defined contribution)

£1.1bn

in assets and c.89,000 of our total members

Our Values



Integrity

- We always do the right thing
- We put our members' interests first
- We take decisions for the long term



Collaboration

- We work towards a common goal
- We take responsibility for our own actions
- We are straight-talking and respectful in our dealing with each other



Excellence

- We set high standards for ourselves and our colleagues for the benefit of our members
- We bring our best selves to work, every day
- We adapt and innovate to achieve the best outcomes

 For more information see page 18 and 31

Our stakeholders

Members want to feel financially secure

We are committed to improving the service we offer members through initiatives to deliver communication directly to our members rather than via their employer, to provide more services online and to give access to guidance and advice. For more information see page 12.

Employers want a high quality service and a sustainable fund

We engage with our employers informally as well as through more formal channels, such as the Institutions Advisory Panel and annual Institutions' Meeting. Throughout 2019/2020 we continued to improve our employer engagement which we are pleased is reflected in this year's engagement survey. For more information see page 16.

Employees want to be valued and have opportunity to thrive

Our employees are key to our success, so our people approach aims to foster a culture that supports diversity and inclusion, recruits, retains and develops talent and is responsive to employee needs. For more information see page 18.

Investee companies want us to be responsible investors and foster long-term growth

We are a long-term, active and responsible major institutional investor with one of the largest Responsible Investment teams in the UK pension sector. We use our influence to encourage positive change in the companies in which we invest. For more information see page 24.



At a time of such uncertainty, working to provide a secure financial future for our members and their families has never been more important

200,000 ↑

Increase in member numbers since I joined the Trustee Board

Professor Sir David Eastwood
Chair of the Trustee Board

Professor Sir David Eastwood was appointed Chair in April 2015. He first joined the Board in January 2007 as the Chief Executive of HEFCE and has served as a UUK-nominated Director since September 2009. He will retire from the Board in August 2020.

Shortly after I joined the Trustee Board, the far-reaching impacts of the global financial crisis were beginning to emerge.

It was a sobering time for pension schemes across the world, where many defined benefit schemes faced the prospect of funding deficits for the very first time.

The scale and reach of that crisis are reflected in the continued trend of closures of funded defined benefit schemes in the UK.

USS is one of only a handful of non government backed schemes still offering defined benefits, protected against inflation, for life in retirement.

Long-term trends and influences – including better life expectancies, greater regulation, and persistently very low interest rates – have made such promises much more expensive.

Against this backdrop, we have carefully navigated USS through the storms, including – more recently – the headwinds of Brexit and damaging global trade disputes.

Since 2009, I am pleased to report that USS has:

- increased the value of its assets from £22bn to £68bn;
- introduced a defined contribution (DC) element of the scheme;
- added access to private market investments for our DC members; and,
- significantly enhanced our pensions service offering; for example, launching new member support services and My USS.

Today, we are facing an unprecedented challenge in the form of the coronavirus pandemic. While the long-term impacts of containing the virus are still uncertain, it has already affected every part of our economy and changed the way we live our lives.

The impact it has had on the UK's Higher Education sector, global economics and financial markets is adding to the existing challenges faced by the few remaining private defined benefit pension schemes, like USS, that are still open to new members.

“It has been a privilege to serve alongside experts who truly care about the scheme and its purpose. Their perspectives, insights and wisdom have helped to ensure decisions were made for the right reasons.”

However, our investment strategy has helped to reduce the volatility of scheme asset values precipitated by coronavirus. The performance of the Retirement Income Builder over the year to 31 March 2020 was -1.7% which is 3.9% better than the benchmark over the same period.

Building on this, it remains critically important that we continue to work with Higher Education employers to provide a secure financial future for our members and their families.

Our confidence in the scheme’s ability to safeguard members’ entitlements should continue to be high, but we will remain vigilant.

We only need to look back at what has unfolded in recent years to appreciate how experience can differ dramatically from expectation, and how challenging it is to anticipate and mitigate against the risks the scheme might face.

We will therefore strive to ensure we have the right strategy in place and this is underpinned by the quality of our valuations.

Through the statutory valuation process we are able to assess our direction of travel on a regular basis, checking it against the course we have set, and adjusting it to keep us on track.

These crucial interventions are integral to delivering the pension promises that have been made to our members by their employers.

As a long-term investor, we have agreed with our sponsors a long-term approach to funding the scheme. The 2020 valuation is providing us an opportunity to take a calm and considered approach to assessing conditions and any changes to the long-term outlook. We will be able to review and reflect ‘post-valuation experience’ as we work through the process.

Given the challenging context of the 2020 valuation, this will be even more important than usual.

Dedicated professionals

As I retire as Chair of the Trustee Board, I want to take this opportunity to thank everyone at USS – their exemplary professionalism and unerring care and commitment are much appreciated.

Our members and sponsors can be confident that in such uncertain times, the scheme is supported by a team of skilled and dedicated professionals, many of whom are also members themselves.

I am delighted to welcome Dame Kate Barker, who will assume the role of Chair later this year. She combines rich and relevant senior expertise in the financial sector and elsewhere with an understanding of and sympathy for the Higher Education sector. I cannot imagine a better-qualified Chair of USS.

During my time on the Board, it has been a privilege to serve alongside experts who truly care about the scheme and its purpose.

Their perspectives, insights and wisdom have helped to ensure our decisions were made collectively and collegiately, for the right reasons, and always in the interests of the scheme’s beneficiaries.

I would like to take this opportunity to thank Dr Steve Wharton, who was appointed to the Board in September 2016 and who will be standing down in August 2020. Dr Wharton’s contribution to the work of USS has been invaluable, and his judgement exemplary.

His dedication to the cause was shared by our late friend and colleague Dave Guppy, who died suddenly in December. Dave was a man of deep and unerring integrity who believed profoundly in USS, in its purpose, and in its values. We are enormously the better for his service, and all the poorer for his passing.

A collegiate endeavour

USS was created by universities, for universities.

It is, and always has been, based on a collective endeavour.

The valuable pension benefits it provides are central to attracting and retaining the highest calibre of academics and support staff to our Higher Education sector, a sector that is of vital importance to the UK economy and society.

As trustee, we have a critically important role to play in ensuring excellent outcomes for members and institutions in the face of some of the most challenging peacetime conditions the developed world has ever experienced.

We must act prudently, in line with laws and regulations, and with the shared aim of ensuring such valuable promises can and will be kept.

It has been a privilege to serve as a director and Chair of the Board, to work with colleagues who share such a deep commitment to USS, its value, its values, and its long-term security, and to have had the opportunity to make a modest contribution to a great scheme.

Professor Sir David Eastwood
Chair of the Trustee Board

USS Retirement Income Builder financial position

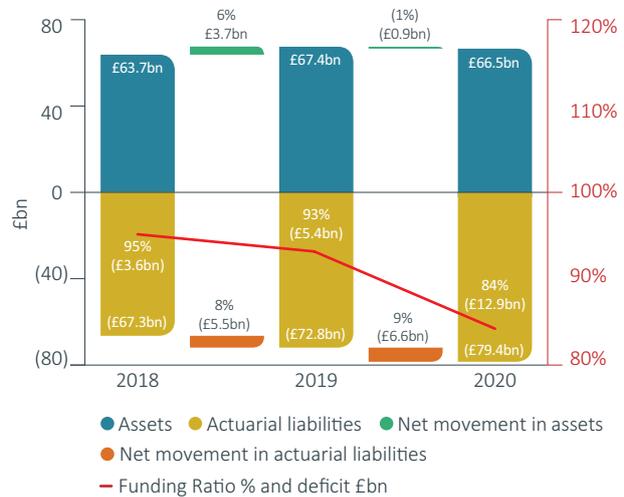
84% funding ratio

The chart shows one method of tracking the financial position of the USS Retirement Income Builder which provides defined benefits to members. The actuarial liabilities for each year are based on the 2018 valuation updated using our monitoring approach.

Alternative measures of scheme funding can help to illustrate the financial position and are included in the actuarial section on page 82.

The material reduction in the funding ratio reflects reductions in interest rates over the year and the devastating impact of coronavirus on global markets in the final quarter. In the year to 31 March 2020, assets reduced by £0.9bn/1.3% and liabilities increased by £6.6bn/9.1%.

Although our assets returned -1.7% performance, the Reference Portfolio (our benchmark for investment performance) returned -5.4%, with the relative outperformance arising largely during the coronavirus related volatility in the final quarter. This is described further in the investment matters section on page 22. Liabilities, as estimated using the 2018 valuation monitoring



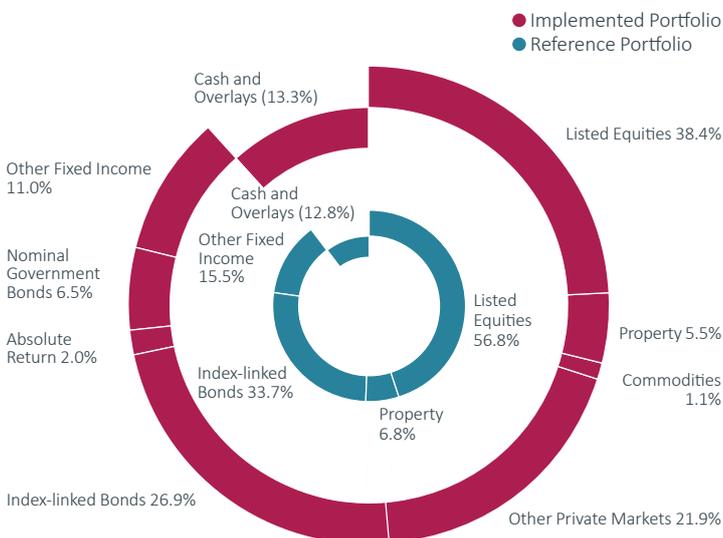
approach, increased in value at a rate greater than expected in the 2018 valuation due to market interest rate reductions in the year. Further information on actuarial liabilities is included in the actuarial section on page 82.

Asset allocation

£66.5bn

invested in public and private markets

The Implemented Portfolio shows the breakdown of the USS Retirement Income Builder assets at 31 March 2020. The Reference Portfolio is a long-term benchmark for the returns and risk of the investment strategy for those assets. For further information, including an explanation of how the asset allocation has developed over time, see the investment matters section on page 21.



Investment growth

£17.4bn

investment growth over 5 years

The USS Retirement Income Builder valuation growth over 5 years to 31 March 2020 is £17.4bn, an investment return of 6.19% per annum. This is 0.91% per annum above that of the Reference Portfolio over the period. For further information see the investment matters section on page 20.



Administrative and investment management expenses

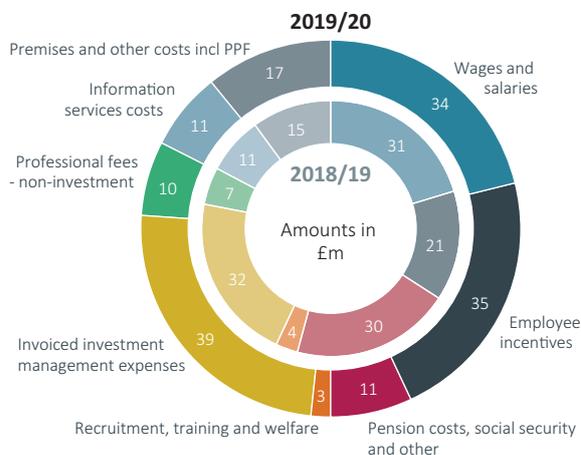
£160m scheme overheads

We have a responsibility to ensure that funds expended running the scheme are deployed in an efficient manner. As laid out on pages 10 and 11, cost effectiveness is one of our key strategic themes, with performance monitored through KPIs.

We control our expenditure through budgetary and transaction-based controls with monthly results reporting and a quarterly forecast process monitored by the executive committee and the Trustee Board.

Scheme overheads were £160m for the year ended 31 March 2020, which is a year on year increase of 6% (2019: £151m).

People related costs (shown on the right of the chart) make up just over 50% of the overheads and their total is slightly less than prior year. A £23m reduction due to a pension deficit provision release (following completion of the 2018 valuation) has been largely offset by a £15m increase in the long term incentive plan (LTIP) provision charge, together with pension, inflation and other increases. The LTIP provision is based on estimates of pay-outs over the next 5 years; these estimates increased sharply due to material benchmark outperformance during the coronavirus related market volatility of the final quarter. (Amounts paid in the year are analysed on page 39).



Non-people related costs (invoiced investment management expenses, non-investment professional fees, IT, premises and other) increased by £11m from prior year. Of this, £7m arose in invoiced investment management expenses as a result of fund management fees driven up by average asset growth over the prior year and investment transaction expenses.

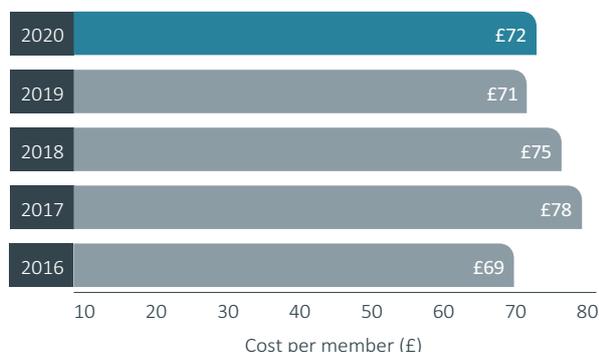
Further details of scheme overheads are included in note 7 of the financial statements on page 69.

Pension administration cost

£72 per member

Pension administration cost¹ per member is calculated on a basis intended to be comparable with that used by CEM Benchmarking. The most recent USS cost per member as validated by CEM Benchmarking was £71 – 2019². The cost increase over prior year is partly due to the acceleration of preparation work for the 2020 Valuation.

We consistently work to improve our cost-effectiveness while developing our service levels. For further information see the member services section on page 12.

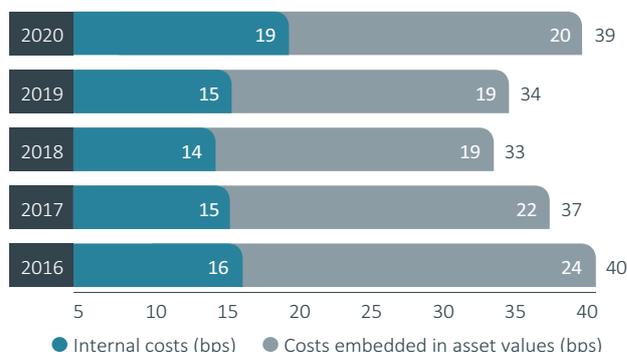


1 This is a KPI comprising scheme overheads incurred in pension administration activity (for further details see footnotes on pages 11 and 69). The 2020 KPI will be updated on completion of the 2019 CEM Benchmarking process.
 2 A peer comparison is less meaningful for pension administration cost than for investment management cost, as the majority of the peer group participating in the CEM Benchmarking process differ significantly to USS, mainly being single employer or group schemes, many of which are not hybrid schemes, and therefore are not comparable in terms of complexity or cost.

Investment management cost

39 basis points

Investment management cost¹, inclusive of embedded cost², is shown as a proportion of average USS Retirement Income Builder assets in basis points³ (bps) on a basis intended to be comparable with that used by CEM Benchmarking. The most recent USS investment management cost, as validated by CEM Benchmarking for the calendar year 2018, was 8bps lower than the peer average (equivalent of £49m pa). The cost increase over prior year is due to the LTIP and fund management costs described above and increased embedded costs related to private market investments.



1 This is a KPI comprising scheme overheads incurred in investment management activity and embedded cost as described below (for further details see footnotes on pages 11 and 69). The KPIs will be updated on completion of the 2019 and 2020 CEM Benchmarking processes.
 2 Embedded cost comprises external management and performance fees, excluding carried interest, deducted from the scheme asset value, rather than those invoiced as investment management expenses in the fund account.
 3 Basis points (bps) are a unit of measure for interest rates and other percentages in financial services. One basis point is equal to 0.01%, i.e. 1%=100bps



We are driven and united by a shared purpose: to make this the very best pension scheme it can be

Bill Galvin
Group Chief Executive Officer

Looking back over the year since we published our last report, these most recent months tower over all others for so many reasons.

As a society, we have had to respond to the emergence of coronavirus. As a pension scheme, we have sadly seen the human tragedies wrought by the virus, as the number of bereavements among our members has increased. The sincere and deeply felt sympathies of everyone at USS go to all who have lost colleagues, friends and loved ones.

My hope through it all – for our members, their families, my colleagues at USS, and all our stakeholders – is that we pass through this as safely as possible; that the lessons we are learning about what is really valuable are retained front of mind; and, that the long-term effects on our economy and society are minimised.

It is a challenging time for Higher Education. Our sponsoring institutions are drawing on all their resilience to endure the financial challenges and adopt radically new ways of working. They face the prospects of very different operating models and revenue flows over the coming terms, at least. One thing is certain: our universities have demonstrated their

enduring importance. They have been the source of much of the public policy support, scientific research, medical infrastructure and thought-leadership so essential to navigating such exceptional challenges.

I am also very proud of how the team at USS has responded to the coronavirus outbreak. We have worked hard to do what we can to continue to provide a responsive and empathetic service to our members, and to steer the scheme through volatile conditions.

We were able to arrange for almost all staff to work from home before the lockdown was brought into force. Our business continuity and resilience measures enabled 99% of our staff to perform their roles remotely within two weeks of lockdown. All pensions have, of course, been paid and all contributions have been processed without interruption. We were able to service member requests remotely with only minor changes to the normal range of services we offer.

But financially too, we have felt the economic effects. Our asset values have fallen, albeit our investment strategy helped mitigate market volatility driving strong benchmark outperformance (see the investment

matters section on page 20). At the same time, the market value of future pension payments increased again.

Keeping members' pensions funded and ensuring our members and their families have confidence in the security of the valuable benefits promised them is at the heart of our role.

Members who have savings in the USS Investment Builder, the scheme's defined contribution (DC) element, will have seen some reductions in the value of their funds as a result of recent market shocks. However, the life-styling approach within its design – whereby the balance of individual portfolios is weighted more towards lower risk assets as our members approach retirement – serves to protect those closest to drawing their pension from the worst effects of adverse market conditions (see page 23 for more detail on DC performance).

The benefits members have already built up in the Retirement Income Builder, which provides the scheme's defined benefits, are not changed by the performance of financial markets. They are protected in law and backed by the collective financial strength and ongoing support of our sponsoring employers.

“These are challenging times for us all, but we remain dedicated to delivering secure financial futures for our members and their families.”

In line with the approach agreed with our sponsors, the long-term investment strategy for DB assets seeks to add value and out-perform our liabilities. In taking this approach, there will be fluctuations in the scheme’s funding level – the value of its assets relative to the value of its liabilities (see page 81 for more detail).

Our 2020 valuation is an important part of how we can continue to do this, now and long into the future. This requires us, over the coming months, to assess how the world is changing around us and how we can continue to have confidence in the security of the promise to our members of a set income for life in retirement that is protected against inflation.

The primary challenge is to understand the long-term prospects for economic growth, investment returns and the support we can rely on from our sponsors to support the promises being made. This must be rooted in acceptance of the hard reality that fixed retirement benefits, so hugely valuable to our members and paid no matter what happens to our economy, have become more expensive. Persistently low interest rates, members living longer, greater regulation, and a global climate of increasing uncertainty are all key factors.

We need to keep working with our stakeholders to understand the longer-term impacts of recent events and to protect the sustainability of the scheme in the future. To prepare for the 2020 valuation, we carried out a fundamental review of our approach and engaged extensively with our stakeholders to find common ground on the way forward. The recommendations from the Joint Expert Panel’s second report, published in December online at ussjep.org.uk, informed these discussions.

There is no escaping the fact that the conditions prevailing on 31 March 2020 will present some significant challenges, but we will be able to consider ‘post-valuation experience’ as we work through the process. Our members can be confident that USS, as an independent organisation, will give an honest and objective assessment of what’s required to secure their benefits.

We are concerned that despite 88% of members reporting that they are well served by USS, they are less positive about their overall relationship with the scheme (while 24% have a good/very good relationship, 45% either don’t know or rate it as average). We share members’ frustrations at requirements for increased contributions and understand the impact this has on feelings about the scheme. We hope that, despite the difficult backdrop, it is clear that we work hard every day to make sure benefits accrued with us are secure, and members are as well served as possible.

These are challenging times for us all, but we remain dedicated to delivering secure financial futures for our members and their families, to continually improving the services and choices we offer, and to delivering value for money. We have built a team of outstanding professionals who are driven and united by this shared purpose. I am incredibly proud of the team at USS: proud of the way they have risen to the unprecedented challenges they have faced – both professionally and personally – in recent months, and proud of their tireless efforts to deliver the very best service they can for our members and sponsoring employers.

In October 2019, we welcomed Simon Pilcher as the new Chief Executive of USS Investment Management Ltd, our in-house investment manager. Simon has since introduced several changes to the way we manage the scheme’s assets.

In January 2020, we made a pioneering addition to the DC Default Lifestyle fund by adding ‘private market’ assets.

We were one of the first pension schemes in the country to include these kinds of investments in a DC fund and have done so at no extra cost to members or employers. We believe they are valuable assets which, in conjunction with ‘liquid’ assets, can lead to better outcomes for members. This was only possible because of our decision more than a decade ago to create a dedicated, in-house private markets team. This is now the leading team of its kind among UK pension schemes and delivers for USS at a fraction of the external cost. See the performance overview pages presented on page 7 for more detail.

In June, we announced that we will not invest in, or will divest from, tobacco manufacturing, thermal coal mining (where this makes up more than 25% of a company’s revenues) and companies with ties to cluster munitions, white phosphorus and landmines. These exclusions, which will apply to the DB fund and the default DC funds, will be kept under review and may be added to (for more detail see page 24).

In Helen McEwan’s first full year as Chief Pensions Officer, we have continued to enhance the way we engage with our members. We have launched our Member Voice panel and increased our focus on making members’ experiences of dealing with us ever better. We have also been working hard on other major projects. We will soon be launching a new Guidance and Advice service to help our members plan and prepare for the retirement outcomes they want to achieve. We have also been developing a new website offering a wide range of additional functionality and features to help members make better supported decisions. For more information, see the member services update on page 12.

In summary, we have continued to invest in our people and platforms to ensure we are serving one of the most important sectors of our economy to the best of our ability. We are committed to working with our stakeholders through the current challenges and beyond to make this the very best pension scheme it can be.

Bill Galvin
Group Chief Executive Officer

USS strategy and key performance indicators

Our strategy is supported by our five strategic themes; these are explained below

Strategic Priorities

Client service – stakeholders and investment

Using our scale and expertise to deliver secure futures for our members, support for universities and being a force for positive change in the UK and broader economy.



2019/2020 highlights

- Managed significant increases in transactional volume whilst meeting all SLAs, and with direct service related feedback captured for the first time
- Enhanced the new joiners and retirement processes and support, both key parts of the member journey
- Market leading addition to the USS Investment Builder offering to members, with the inclusion of access to our private markets investments, run by our dedicated in-house team
- Despite an overall reduction in the member relationship score, which has been negatively affected by consecutive scheme valuations, positive member feedback was received on USS services. This included, 85% stating they are happy with the service they get at retirement and consistent with 2018/19, over half of members stating that they are pleased with the My USS member portal.

Core capabilities

Our core capabilities are the building blocks for successful development and delivery of services to our employers and members. Core capabilities are delivered through people, technology and processes.



- Finalised Valuation 2018, planned and mobilised Valuation 2020 to maximise chances of timely, constructive completion
- Recruitment of Chief Pensions Officer and USSIM CEO with managed transitions successfully delivered

Cost effectiveness

We strive to develop and deliver targeted employer and member outcomes in the most cost-effective manner we can, as value for money is a central consideration.



- Multiple major procurement processes successfully executed (actuarial services, investment advice, legal, printing and stationery) delivering enhanced value for money
- Internal savings target delivered and exceeded across the business
- New hybrid scheme Value for Money assessment completed

Control and compliance

We manage risk by ensuring a culture and framework of control and compliance is in place across the business, accompanied by a learning culture to drive continuous control improvements.



- FCA Senior Manager Regime and Certification fully implemented for USSIM in December 2019
- TPR Master Trust requirements built into standard governance activities
- Controls, assurance and attestation project delivered in USSIM

Collaboration

A culture with teamwork and collaborative ways of working at the heart of the business enables us to optimise our performance across all elements of the scheme.



- Rolled out revised Group 'Purpose and Values' statements
- Strengthened defined contribution product management, accountability and governance

Further information regarding how risk management links to USS performance management measures and how it is aligned with our 5 strategic themes, can be found on [page 27](#)

2019/20		2018/19		Key performance indicators	Description
Result	Target	Result	Target		
83%	80%	80%	70%	Employer positive relationship	Based on 2019 employer survey findings. The percentage of employer respondents responding 'good' or 'very good' when asked the question 'Taking everything into account, how would you rate your overall relationship with USS?' Further information can be found on pages 16-17.
24%	36%	31%	50%	Member positive relationship	Based on the 2020 member perceptions survey, the percentage of respondents responding 'good' or 'very good', when asked about their overall relationship with USS. Further information can be found on pages 12-15.
0.91%	0.55%	0.31%	0.54%	Investment outperformance (rolling 5 year)	Comparison of actual annualised five-year performance to 31 March relative to that of the Reference Portfolio (net of costs). Further information can be found on page 22.
86,867	88,230	80,212	77,440	My USS registrations	Number of active members registered on My USS.
99%	96%	99%	96%	Annual Member Statement¹	The percentage of active members who received an Annual Member Statement. Further information can be found on page 14.
£72	£70	£71	£72	Pension administration cost per member²	The pension administration cost per member calculated for the financial year on a CEM Benchmarking basis. Further information can be found on page 7.
39bps	33bps	34bps	33bps	Investment management cost²	Investment management cost in basis points (bps) as a proportion of average assets under management. Further information can be found on page 7.
91%	100%	94%	100%	% of internal audit findings remediated	Percentage of significant audit findings remediated within the agreed timeframe.
100%	100%	100%	100%	% of material breaches remediated	Percentage of material breaches remediated within the agreed timeframe.
7.5/10	7.4/10	81%	80%	Employee engagement	Based on 2019 employee engagement survey results. The number out of ten of USS employees who agree and strongly agree with relevant survey statements. This measure and target for this KPI has changed as the employee survey has been updated this year. Further information can be found on pages 18-19.

Notes

- 1 Not all active members receive Annual Member Statements due to personal circumstances or multiple periods of employment. Information on their benefits is available to these members from USS on request.
- 2 These cost KPIs are calculated on a management accounting basis which differs to the calculation and breakout of scheme overheads included in the fund account. The management basis does not include statutory adjustments, for example, it includes pension deficit recovery charges as they become payable rather than based on provision movements following finalisation of the scheme valuation. The investment management cost KPI is stated as a proportion of USS Retirement Income Builder assets under management which aligns more closely to the costs included than do total scheme assets.

Member services

Our service and the support we provide to members is key to members' sense of financial security

204,753

Active members

180,353

Deferred members

74,608

Pensioner members

Helping to provide USS members with financial security – from when they join the scheme, through to taking their pension and finally in supporting their dependants, is our central mission.

As members' expectations change and the decisions they make about their pensions and retirement become more complex, our service is evolving too.

We continue to invest in our digital capability, communications and administration to expand and improve the service and support we provide to members.

Some member service highlights for 2019/20 were:

- coping with a significant increase in workloads whilst meeting all Service Level Agreements (SLA), and with direct service related feedback captured for the first time;

- prepared for the insourcing of the Member Service Desk, which will provide opportunities to enhance the consistency of our member interactions; and,
- enhancements to the new joiners and retirement processes and support, which are both key parts of members' dealings with the scheme.

Key Performance Indicators (KPIs) are reviewed each year and set to monitor our delivery of annual and long-term business objectives. Our performance in the most important aspects of our service is measured by those KPIs, which include the overall relationship, digital experience, and rating of key communications. In 2020/21 we will also:

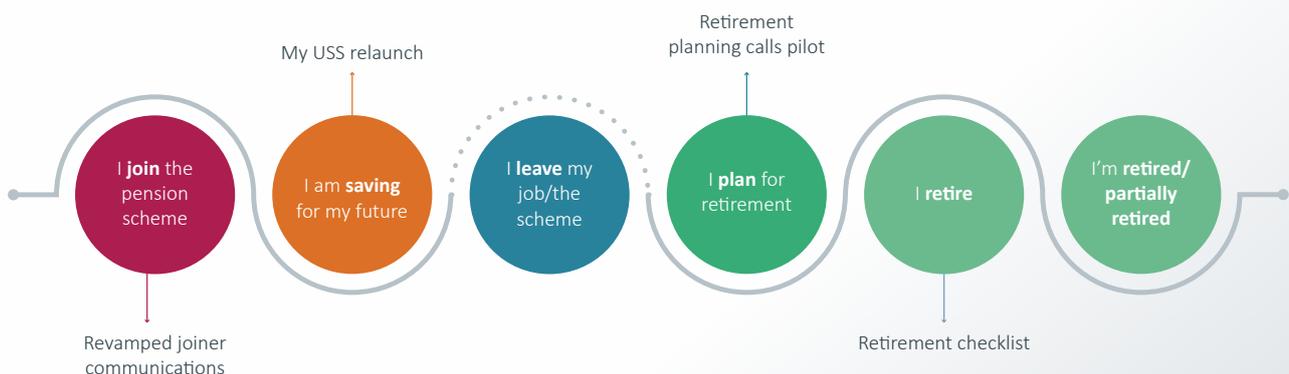
- relaunch the My USS portal and website, and improve all members' ability to access and manage their pension online;
- implement online functionality to allow members to tailor their communications from USS;

- launch online guidance webinars and seminars available onsite at institutions (at a point in the year when this becomes practical to do so), as well as piloting 1:1 guidance calls for members considering retirement;
- provide members with access to drawdown and annuity broking services for them to consider alongside options available within the scheme and on the open market; and,
- complete the insourcing of the Member Service Desk.

Member service

It is central to our service that when members contact us, we respond in a timely, accurate manner that meets their expectations. In 2019/20, we maintained stretching SLA's whilst dealing with an 8% increase in volumes with no corresponding increase in operations staff.

There are six main stages to the USS member journey; the diagram below shows this journey with some highlights planned for the next 12 months





“I have found USS very helpful and the staff are friendly and patient with my questions.”

Member feedback

Our Member Service Desk, often the front door for enquiries received around 22,000 calls, 8,000 emails and 2,000 web forms. Performance is monitored regularly and key performance indicators for call answering, speed of response and quality of information given are all being achieved. Since March, the coronavirus pandemic has had unprecedented impacts on the needs of our members and on the way we provide our services. However, we are very pleased to have been able to implement a home based operations service by the time the government implemented a lockdown. We have been able to meet the payment and processing standards members expect, with the only reduction in our service being the temporary suspension of new transfers into the scheme.

Our overall service rating, as assessed independently by CEM Benchmarking, improved from 65/100 in 2018 to 69/100 in 2019 and compared positively to a selection of other UK defined benefit pension schemes (peer median 64/100)¹. To try to improve further, we have started measuring members’ experiences at stages or touchpoints where they have their most important interactions with us. Joining the scheme is a key element and almost three quarters of members report that they are satisfied or very satisfied with the overall on-boarding process. Much later in members’ lives, we provide support as they decide how to retire and take their pension. 88% of active members and 86% of deferred

members report that the service they receive is good or very good. As a result of feedback, we have introduced retirement checklists for members and employers, as well as making changes to the new joiner communications. Despite these overall high standards of service and the majority of members reporting positive member feedback of their interactions with us, the percentage of active members reporting a good relationship with USS in our annual survey declined in 2019/20 to 24% (2018/19: 31%). Having analysed the various sources of insight we have, it appears that the ongoing impact of consecutive scheme valuations and views on how we are handling this extremely challenging situation are affecting members’ perceptions of us overall. We have reflected on all the feedback from members in our approach to conducting the 2020 valuation, and in how to improve day to day services to make them more personalised.

Digital service

One of our key strategic objectives is supporting members to manage their USS pension online. A large majority of members prefer USS to contact them directly via email (83%) and the same proportion want to contact us digitally, including a growing group who would like to use web forms and web chat. Use of the My USS member portal continues to grow, with over 85,000 members registered and an average of 9,000 individual members logging on to the portal each month.

Member voice

In August 2019, we launched an online community for USS members, in partnership with research agency Join the Dots. It is open to all members, and provides a flexible and timely way for us to gauge their views and test new ideas, as well as a place for them to discuss their USS pension and retirement planning.

Over 500 members have joined the panel so far, and we have run a range of research projects successfully, including:

- revamping communications for new joiners;
- testing the new website and member portal; and,
- gathering views on the importance of Environmental, Social and Governance (ESG) issues.

In 2020, we will deliver a series of enhancements to the uss.co.uk website and My USS, which will include:

- improvements to performance, navigation and user experience;
- a review and refinement of all content for readability and optimisation for mobile and tablet users; and,
- increasing ability to integrate with web apps and other software; and providing My USS access to pensioner members.

After the initial launch, we will continue to improve what members can see and do online, focusing on areas that are a priority for members.

1 These figures are not directly comparable with those reported in the 2019 annual report, as CEM Benchmarking have adjusted their scoring methodology.

Member services *continued*

Four key principles which guide our work for members



23,500

Deferrals

46,177

Joiners

9,275

Numbers using My USS each month

Communicating with members

Communicating and engaging with our members is a vital part of what we do, as we try to give our members the confidence to make informed decisions and peace of mind when it comes to their pension.

In the past year, we've continued the successful pilot of sending communications direct to members, as opposed to via their employer. Engagement across this group has remained high (click rates on such communications are on average twice as high as members receiving communications via their employer).

To roll out the Direct to Member approach to all members, we're developing an online member preference functionality. This will allow members to confirm their communications options and increase the proportion of members with whom we can communicate electronically. We issued Annual Member Statements (AMS) to 98% of members by September 2019 and 99% in total.

Information was available on request for the small residual group of members with particularly complex circumstances. 70% of members who read their statement reported that they found it useful. This year we also tested a 'speed read' version of the statement with 9,019 members, which follows principles for simpler annual statements that the Government has consulted on.

In addition to statements for active members, we have also communicated with our pensioner members, issuing a Summary Funding Statement and our annual In Touch newsletter.

This year we also informed members of changes to the scheme due to happen in 2019/20, including increases in contribution rates in October 2019 and the delay of future contribution increases to October 2021 pending a further valuation of the scheme. We communicated with members through emails, My USS alerts and by post to explain the implications for them.

We have also acted on the Joint Expert Panel report recommendations by communicating the 2020 valuation process to members, creating a dedicated 2020 valuation resources hub on our website which provides regular updates as well as more technical documents, employer briefings, videos and webinars that are available to all members.

Member choices

At the end of March 2020, around 35,000 members were making additional contributions to their USS pension. The employer match incentive was removed in April 2019 but, whilst most members reported they were aware of the change, the majority (75%) have carried on making contributions. The majority of members with USS Investment Builder funds invest wholly in the 'do it for me' default or ethical lifestyle fund (84%), while 3% invest wholly in 'let me do it' funds and 11% have chosen a combination of the two. In total, 8% of members have chosen to invest in one of our ethical fund options.



Pensions in retirement

After helping our members build a financially secure retirement, we then pay pensions to over 74,000 pensioner members. We also support over 14,000 survivors and other beneficiaries, giving members peace of mind that their loved ones will be looked after.

Membership numbers

USS provides a snapshot of members at the financial year end each year and the table below shows the active membership of the scheme at the beginning and end of the year along with changes during the year.

	University institutions	Non-university institutions	Total
Active members			
Active members at 1 April 2019 as reported	195,507	6,658	202,165
Restatement of active members ¹	(8,045)	(161)	(8,206)
Active members at 1 April 2019 as restated	187,462	6,497	193,959
New members	35,912	1,383	37,295
Rejoiners	8,687	195	8,882
Sub-total	232,061	8,075	240,136
Leavers and exits during the year			
– Retirements	(2,241)	(60)	(2,301)
– Retirements through incapacity	(93)	(4)	(97)
– Deaths in service	(138)	(4)	(142)
– Refunds	(775)	(77)	(852)
– Deferrals	(22,509)	(991)	(23,500)
– Retrospective withdrawal	(8,206)	(285)	(8,491)
Sub-total	(33,962)	(1,421)	(35,383)
Active members at 31 March 2020²	198,099	6,654	204,753

The number of pensioner members, along with an analysis of the movements in the year, is provided in the table below:

	University institutions	Non-university institutions	Total
Pensioner members			
Pensioner members at 1 April 2019 as reported	69,553	2,779	72,332
Restatement of pensioner members ¹	(322)	28	(294)
Pensioner members at 1 April 2019 as restated	69,231	2,807	72,038
New pensioners in year resulting from:			
– Retirement of active members	2,334	64	2,398
– Retirement of deferred members	1,747	131	1,878
Sub-total	73,312	3,002	76,314
Rejoiners	(220)	(15)	(235)
Deaths in retirement	(1,436)	(35)	(1,471)
Pensioner members at 31 March 2020²	71,656	2,952	74,608

Notes

- Membership data for the prior year has been restated for administrative processes completed after 31 March 2019 but with an effective date prior to that date. In addition, improved data controls and a respecification of how members are classified has given rise to a further adjustment to the opening number of active members.
- In addition to the pensioner numbers above, are 14,271 pensions in payment at 31 March 2020 which are paid in respect of the service of another person (for example, a surviving spouse or dependant). During the year, USS was notified of approximately 8,491 employees of participating employers who were eligible to join the scheme but elected not to do so, which equates to 16%. This represents an increase of 4,006 from approximately 4,485 in the prior financial year. In addition to members included in the tables above, the scheme has 180,353 deferred members not yet receiving a pension, giving the total number of members at 31 March 2020 of 459,714. Included in the above are 77,139 active members in the USS Investment Builder as at 31 March 2020.

Employer services

Through proactive collaboration, we are able to understand employers' specific needs and deliver targeted improvements which continue to evolve and enhance employers' experience of the scheme

83%

of employers rated their overall relationship with USS as 'good' or 'very good'

75%

of employers rated the way in which USS communicates with them as 'good' or 'very good'

81%

of employers rated the overall quality of support provided by USS as 'good' or 'very good'

Employer engagement

We work closely with employers to deliver an efficient, timely and high-quality service to our members. We seek feedback from employers through the daily contact we have with scheme administrators, through our engagement and relationship management teams, and through more formal channels, such as the Institutions' Advisory Panel. We also collaborate with employer focus groups and Institutions' Advisory Panel sub-groups on specific initiatives to ensure the views of the employer are represented and their needs are fully understood and catered for.

Employer perceptions

Each year we survey employers to determine a relationship satisfaction rating. The main objective of the employer perceptions survey is to gain a better understanding of employers' views of their interactions and overall relationship with us. The metrics are closely monitored to ensure they remain appropriate and drive the right actions to improve employers' experience with the scheme. In the latest survey, 83% of employers rated their overall relationship with USS as 'good' or 'very good' (2018/19: 80%). The proportion of employers rating their overall relationship with USS as 'very good' has increased by 10% this year to 34%.

Employer education and support

It is vital that employers have easy access to the support they require from us to assist them in discharging their administrative obligations in an accurate and timely manner.

Following the successful launch of the formal employer training programme in 2018/19, a further 25 training courses have been held this year for around 230 delegates. Feedback remains extremely positive with 99% of attendees stating that the goals of the course had been met and would be useful in their work.

In addition to the formal training programme, our dedicated engagement and relationship management teams have continued to provide day-to-day support to employers in key areas of processing, including specific guidance and support covering the implementation of the revised contribution rates in April and October 2019.

The benefit of this investment in support continues to be seen with over 97% of employers consistently achieving or exceeding their processing targets in key areas, such as the processing of contributions. This has also contributed to a significant increase in employers' rating of the overall quality of support provided by USS, with 81% rating this as 'good' or 'very good' in 2019 (2018: 72%).

Employer focus

We have continued to build on our suite of employer-focused tools. Enhancements to our Client Relationship Management system and Client Feedback Tracker have contributed to an increase in the number of employers who rated our ability to resolve their issues or questions as ‘good’ or ‘very good’ from 74% to 83% in the latest survey.

Employer communications

Employers want timely, targeted and streamlined communications. We issue a monthly communication to all employers and provide additional updates on specific topics as required. This has included a number of communications about the increase in contribution rates during 2019/20.

We continually review and assess the way in which we communicate with employers.

Working with the employer focus groups, we made changes to the look, feel, and content of a number of our key employer communications, as well as the employer website during the year. The rating of our overall performance in our communications with employers increased to 75% from 69% in the prior year.

In addition, the survey showed employers believed the content on the website was more useful to them, rating it at 72%, an increase of 12% on last year.

Looking ahead

Building on our success this year, in 2020/21 we will:

- continue to support employers in key areas of processing through targeted education and selective engagements;
 - engage with employers at a more strategic level to gain a greater understanding of their increasingly diverse needs and priorities;
 - tailor communications to specific institutions with a particular focus on segmentation and effectiveness;
 - evolve the employer training programme through the introduction of online training support; and,
 - be clear on our expectations of employers and assist them in managing their participation in order that the scheme operates effectively.
- reduce the administrative burdens on employers by moving to a more direct and digitised service for members;



Employer training

USS is committed to providing education and support for employers. In 2019 the USS training team collaborated with the Employers Institutions Advisory Panel; training sub-group, to co-design 6 courses for both administrators and pension managers.

- 25 courses were delivered;
- 232 institution employees attended at our London and Liverpool offices; and
- 7 regional courses were delivered at Loughborough, Oxford, Edinburgh and Cambridge.

Feedback included:

- 99% of people either strongly agreed or agreed that what the courses set out to achieve in terms of goals were met and that people believed that the course would be useful in their work;
- 100% of delegates strongly agreed or agreed that the facilitators of each course were knowledgeable, well prepared and engaging;
- “This was a masterclass in training facilitation. Thank you for all your hard work and care”; and,
- “These are the best training sessions I have ever been to. The amazing facilitators are super friendly, personable, well versed in their field, they make each session fun and interactive”.

Our people approach

Attracting, retaining and rewarding the best talent helps us to deliver the quality of service, outstanding support, and value for money our stakeholders expect from us. Our mission is to create and maintain a positively engaged and motivated workforce

Achievements this year:

Senior appointments Senior appointments successfully recruited and onboarded	Health and wellbeing As part of the health and wellbeing programme introduced Mental Health First Aiders	Diversity and Inclusion Development of Diversity and Inclusion action plan	Upskill management Continued upskilling of line manager capability with a focus on all aspects of risk and people management responsibilities
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USS engagement survey

88%

Survey participation

7.5/10

Overall engagement

8.3/10

“People from all backgrounds are treated fairly at USS”

8.4/10

“I understand how my work supports the goals of the team”

“The commitment of USS employees to the Purpose and Values of the organisation is exemplary. This is due to the fact that they were instrumental in defining them. The best interests of employers and members are incorporated in the objectives of all employees.”

Kevin Purcell
USS Chief People Officer

Investing in people continues to be a major priority; we are committed to helping our managers better understand and more effectively manage their teams and the wider organisation.

Talent cycle

We have embedded our talent management and succession planning at all levels to ensure we have strong successors for many of our critical roles. This approach has already proved valuable and we have made several senior appointments from our existing team over the past year, recognising that we will not fill every role internally.

Resourcing

Hiring the best talent to deliver the best service for our members and sponsors is a strategic imperative.

Our investment in our resourcing model has resulted in an increase in the number of successful direct appointments, reducing our reliance on recruitment agencies and therefore saving on recruitment costs.

The coronavirus pandemic presented USS with a number of challenges, all of which we met effectively. The safety and wellbeing of our employees is a top



People Priorities

- Management capability
- Health and wellbeing of our employees
- Senior leadership succession planning
- Maintain high levels of employee engagement
- Diversity and Inclusion progress



Helen McEwan
Chief Pensions
Officer

“ Since joining USS, I have been very impressed with the collective commitment to serving our members and employers to the highest possible standards of personal integrity and excellence. It is evident to me that our culture is that of a learning organisation and benefits from collaboration across the whole organisation.”

Helen McEwan
Chief Pensions Officer

priority. To this end, we mandated at an early stage that all of our employees work from home until it was possible for them to return to the office. With considerable management, IT and facilities support we have managed to maintain almost all normal activities in order to meet the needs of the scheme and our members.

USS employee engagement

Despite a challenging backdrop over the past year, our employee engagement scores, gathered via a new engagement survey platform, have remained largely stable and continue to be in line with our

benchmark; this is a strong result for USS in the circumstances. We believe our focus on developing our people, and our management teams in particular, has contributed to the overall results.

Participation in the engagement survey this year was at the highest level ever, with 88% of employees taking the time to complete the survey and provide their commentary. We see employee engagement as a key indicator of our ability to provide a high-quality service and are pleased to see our employees scored highly on their understanding of how their roles support team goals (8.4/10).

Diversity and Inclusion

Although a great deal remains to be done, we have made progress in our approach to diversity & inclusion, which is critically important for USS. Our goal is to nurture an environment where employees feel confident in being themselves at work.

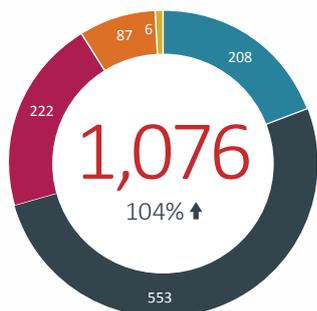
This is our third year publishing our gender pay gap. Using the data we developed a clear action plan outlining the steps required to drive real change within our business.

Some examples of progress during the past year are:

- roll out of remote working technology which facilitates flexible working for all USS employees accelerated by coronavirus considerations;
- the recruitment of female candidates into senior leadership positions, namely USSL Board Chair and Chief Pensions Officer; and,
- the incorporation of diversity & inclusion focused elements in our Human Resources policies and procedures.

uss.co.uk/gender-pay-gap

Total classroom days



Executive ● Group ● Pensions business ● USSIM ● USS ●

Total delegate numbers



Mandatory e-learning completion rates

100%

- Anti-bribery and corruption
- Anti-money laundering
- Preventing market abuse
- Diversity and inclusion

Learning & Development continues to be a critical area of investment

Investment matters

Simon Pilcher joined USS in October 2019 as CEO of USSIM, read his introduction to the investment report here

Delighted to be at USSIM

I am delighted to have joined USS Investment Management (USSIM) as Chief Executive last October. As the first member of my family to go to university, and benefiting hugely from that experience, USS is an organisation in whose aims I wholeheartedly believe.

Having spent my first months at USS familiarising myself with the business and the investment teams and their investment strategies, I was immediately struck by the calibre of the people who work here, and their single-minded focus and commitment to a common goal - generating the investment performance needed to pay the pension promises made to members.

Prior to joining USSIM, I spent 20 years leading the Fixed Income and Alternatives businesses at M&G Investments before also becoming Chairman of Real Estate, investing money on behalf of many pension funds and insurance companies. My background has made me attuned to investing for the long-term and focused on the risks and rewards that go along with that.

Focus on the long term

An early conclusion was that while USSIM is clearly head and shoulders above most, if not all, UK schemes in terms of sophistication, I felt there was scope to do more in terms of looking through the very long-term lens that pension investing requires. For me that meant looking, for instance, at how asset allocation and Environmental, Social and Governance (ESG) issues might affect our investments in the decades to come.

We were joined in January 2020 by Ben Clissold to run Fixed Income and he, together with the broader asset allocation specialists at USSIM, have been looking at how we build up this side of our strategy.

I was delighted to discover the deep sense of duty that we have as an investor. For example, we invest around one-quarter of our assets directly in private companies, both in the UK and globally. Our Private Markets Group (PMG), which runs this portfolio, is of a size, experience and expertise that is rarely found among UK pension schemes, and is an active supporter of the companies in which it invests.

Since the start of the year, I, together with our Responsible Investment team and many others in the business, have been examining how the entire portfolio can become a byword for responsible ownership. I believe strongly that ESG will increasingly shape the financial returns of the companies in which we invest, and with that in mind we began a wide-ranging review.

The first phase of this work was completed in March when we decided that we would cease to make investments in companies in certain sectors given our concern about their long-term financial future. There remains a great deal more that we can do, and we are actively working on how our long-term investment philosophy will shape the portfolio. I look forward to updating on that work in due course.

Resilient performance despite coronavirus

Through some intense work in the final quarter of the financial year, USSIM dealt with the dramatic early impacts of coronavirus, which ripped its way through global markets with a speed that made it impossible for anyone to completely avoid. USSIM performed admirably against a backdrop of substantial volatility. Over the twelve months to 31 March 2020, the USS Retirement Income Builder assets, although down 1.7%, compared very favourably to the performance of the Reference Portfolio (our benchmark for investment performance) which fell by 5.4% (equivalent to a 12 month outperformance of 3.9% net of



“
USS has a long history of progressive thinking and an outstanding record of delivering strong risk-adjusted returns. I look forward to serving the many members of USS who rely on it for their long-term financial security.

Simon Pilcher
Chief Executive Officer of USSIM

applicable costs). Further details are laid out over the following pages. When the virus started to make its dramatic impact in March, the PMG team drew up a set of principles to ensure that, as far as possible, USS would be a supportive shareholder or landlord and an encouraging support to those management teams where we have a meaningful investment. These are very challenging times – and not just for USS but also for all of our stakeholders who are having to grapple with their own circumstances as well as finalise a scheme valuation. But whether we are in the office or working from living rooms and kitchens, we are striving to do our very best for members.

About the USS Retirement Income Builder

The Board sets a Reference Portfolio for the USS Retirement Income Builder. This is an allocation across mainstream asset classes (global equities, UK property, government, corporate and emerging market bonds) and which is consistent with the scheme's risk appetite. The Reference Portfolio is expected over the long-term to deliver returns that are significantly in excess of the Liability Proxy. This proxy is a very low risk strategy (comprising UK Government bonds) that would match our liabilities.

The returns of the Reference Portfolio can be measured via readily available performance benchmarks. This makes it a suitable longer-term benchmark for the returns and risk of the strategy implemented by USSIM.

USSIM is a wholly owned subsidiary of the trustee company and is mandated by the scheme to implement its investment programme and does so across a broad range of public and private assets. At present, USSIM manages nearly three quarters of these assets directly and uses external managers for the balance.

USSIM is tasked with outperforming the Reference Portfolio, currently by 0.55% or more per year on an annualised basis, net of costs, over rolling five-year periods with asset-liability risk that is similar to the Reference Portfolio.

The table above sets out the approximate distribution of the scheme's assets (Implemented Portfolio) as at 31 March 2020 and compares it with the Reference Portfolio.

As shown in the table, the Implemented Portfolio displays a more diversified asset mix, with less concentrated exposure to mainstream equity assets and a sizeable allocation to private market investments.

These are expected to reward patient investors over a long-time horizon due to the greater governance rights that we have and higher return we expect to earn in exchange for the illiquidity of the investment. Their valuations can also exhibit lower levels of price volatility than mainstream equities as we have seen recently.

USS Retirement Income Builder asset distribution

	Implemented Portfolio %	Reference Portfolio %	Difference %
Listed Equities	38.39	56.75	(18.36)
Property	5.52	6.75	(1.23)
Other Private Markets	21.92	0.00	21.92
Commodities	1.09	0.00	1.09
Absolute Return	1.95	0.00	1.95
Nominal Government Bonds	6.50	0.00	6.50
Index Linked Bonds	26.85	33.74	(6.89)
Other Fixed Income	11.03	15.51	(4.48)
Cash and Overlays	(13.25)	(12.75)	(0.50)
Total	100.00	100.00	0.00



Case study

GEMs

The Global Emerging Markets team (GEMs) was launched in 2010 by team leader, Carmel Peters, to enable USSIM to fully tap into the potential of investing in higher growth but more volatile markets of the world. Over the last decade the mandate has generated an annualised 2.3% outperformance (to 31 March 2020).

Today, the team is 7-strong and invests in three separate regions or "sleeves" – Greater China, Korea and GEMS-Ex Korea & China. This portfolio was designed to reduce the otherwise likely dominance of Greater China and Korea in terms of investment – giving the team the ability to generate returns from other smaller and more illiquid markets such as Indonesia and the Philippines. Flexibility is needed to invest successfully in GEMs. Emerging markets can have periods of extreme change and stocks can be mispriced. To be successful, the team must understand and anticipate global, country, sector, industry and company-specific opportunities and risks and to position the portfolio accordingly.

As a long-term investor, the GEMs team works to thoroughly understand a company's business model and the

quality of its management team, with a focus on its durability as a sector leader. Members of the team regularly travel to countries with emerging markets, to meet with current and potential investees and to research the economic conditions in their target countries.

One successful example of our investment strategy was Alibaba, the Chinese online retailer that became a public company in September 2014. We invested at IPO because we saw improved living standards in China would encourage consumption and today Alibaba is the largest e-commerce company in China. By March 31st 2020, Alibaba had 726m active consumers on its China platforms, and \$71.9bn of revenue in the financial year 2019-20. This compares to 255m active consumers on its China platforms and \$8.4bn of revenue in the full year prior to its IPO (year ending March 31st 2014). Between Alibaba's IPO on September 18th 2014 and March 31st 2020, Alibaba's stock had a total return of 186% in US Dollar terms.

As well as retail, Alibaba has branched out into a number of other fields since listing such as digital payments, cloud computing, on-demand delivery of food & groceries, digital entertainment and logistics, which should help to drive the firm's growth for years to come.

Investment matters *continued*

Performance of the USS Retirement Income Builder

The 2019/20 financial year was dominated by the coronavirus pandemic which engulfed world markets in March 2020.

With the expectation of significant economic contraction, there was a rapid flight to quality in the final quarter of the financial year. In the United States, yields on 10-year bonds dropped from 1.92% at the end of 2019 to 0.67% at the end of the financial year, having reached a low of 0.54% on 9 March 2020, the lowest level on record.

In contrast, risk assets struggled. Equities declined sharply in the final quarter of the financial year having reached all-time highs towards the end of 2019. Oil prices turned negative for the first time ever, with demand completely drying up for a time. Amidst this difficult investment backdrop, the DB fund produced a negative return of -1.7% net of costs in the financial year. The Reference Portfolio in the same period produced a negative return of -5.4%, while the Liability Proxy produced a return of 3.0%. Outperformance relative to the Reference Portfolio arose mainly during the coronavirus related volatility in the final quarter. The outperformance was driven partly as a result of work done since October 2019 to increase our exposure to defensive assets such as UK gilts and US Treasuries.

At the same time, we were underweight in our allocation to equity assets. Our exposure to US government bonds offered support as they significantly outperformed UK gilts. These actions taken at an early stage left us better equipped to weather the storm in financial markets that followed. Short-term performance can be highly variable, particularly in periods of extreme volatility. Over longer horizons the fund has outperformed both the Reference Portfolio and the Liability Proxy. Over the last 5 years, the fund has returned 0.91% per annum above the Reference Portfolio net of all costs. In the same period the fund has returned 0.20% above the Liability Proxy net of all costs.

Looking ahead, we are continuing to navigate our way calmly through this difficult period. We increased our exposure to liability-matching assets and switched out of US government bonds into similar UK assets as the relative attractiveness of US Treasuries has diminished and given that gilts are better aligned to our liabilities. We also moved to increase our exposure to high grade credit while reducing the weight of emerging market debt. We made similar regional changes in equities by reducing emerging markets in favour of US equities, which have been more resilient thanks to their greater exposure to technology and healthcare sectors that have been less affected by the pandemic.

Within private markets and as a long-term responsible investor, we have and continue to work closely with our portfolio companies to help them manage through this difficult environment.

About the USS Investment Builder

The DC element of the scheme offers two lifestyle options: USS Default Lifestyle Option and USS Ethical Lifestyle Option. It also offers a range of 10 self-select options for members who would prefer to be actively involved in making investment decisions. These options include: multi-asset, developed market equities, emerging market equities, bonds, cash, ethical and Sharia funds.

DC Default Strategy

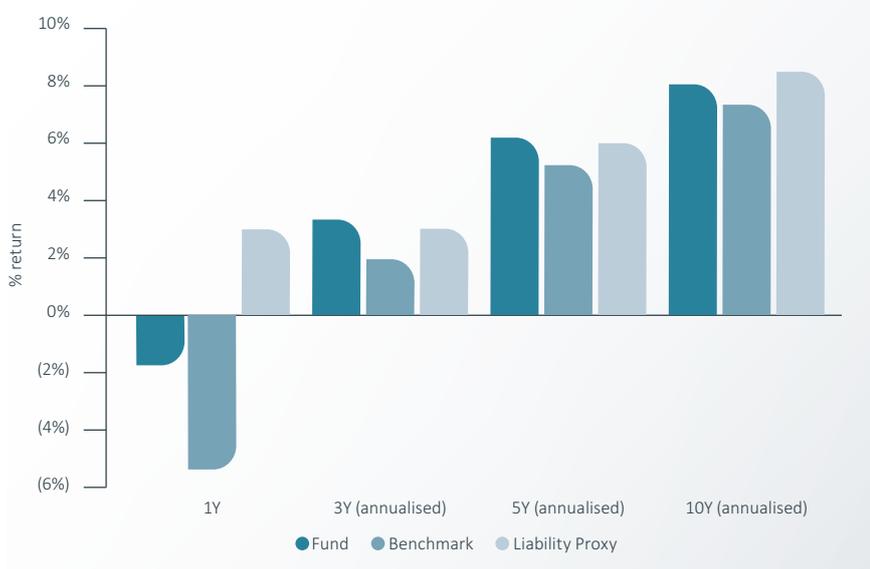
In the default strategy, members' pension savings are invested in a mix of investment types which will evolve over time in a life-style manner as members approach retirement. Members with more than 10 years from normal retirement age and invested in the USS Default Lifestyle Option are fully allocated to the USS Growth Fund.

However, as members get close to retirement, USS increases protection for their assets by moving progressively into the USS Moderate Growth Fund and then into the USS Cautious Growth Fund and USS Cash Fund, which are designed to deliver a smoother return path.

The USS Growth Fund invests in an equity-rich asset mix that is diversified across public and private asset classes in order to help reduce investment risk and with the aim of delivering attractive risk-adjusted returns. Growth investments offer the opportunity for a higher return on a member's pension savings, but also imply a higher level of risk, so the USS Default Lifestyle Option invests in these types of investments at a time when there are many years left for members' savings to recover from possible losses.

The majority of DC assets were invested in the USS Growth Fund (£467m) as at 31 March 2020.

USS Retirement Income Builder Performance





Case study

DC in-house private market investments

Earlier this year, USS became one of the first pension schemes in the country to enable members of its Investment Builder to enjoy access to its private market investments.

From February 2020, DC members in the Default Lifestyle Option were given an allocation to private markets, previously only available to DB members. We are building the allocation slowly over time to minimise trading costs, aiming to be at circa 20% of the Growth fund by the end of the year (markets depending).

Private markets investments are companies or assets that are privately held rather than traded on a public exchange, such as the stock market.

USS has around 390 assets in this category, including property, substantial investments in on- and off-shore windfarms and major stakes in critical UK infrastructure such as Thames Water.

Private market assets have been difficult to provide to DC members in the UK because they are not regularly traded and can incur high charges. Having in-house investment capabilities through USSIM enabled members to have access to an asset class that is expected to improve scheme returns over the long-term at no additional cost to members or to their employers.

Performance of the USS Investment Builder

The spread of coronavirus profoundly affected global markets in the first quarter of 2020 and heavily impacted the funds' returns. The under-performance relative to the benchmark over the last 12 months was predominantly due to asset selection of managers within the equity and emerging markets debt components of the fund. The default funds (comprising the USS Growth Fund, USS Moderate Growth Fund and USS Cautious Growth Fund) delivered negative absolute and relative performance over the last 12 months, remaining marginally ahead of their benchmarks since inception.

In February 2020, the default funds started making an allocation to private markets, which will diversify the sources of fund returns in the future. Please see the case study for further information about this exciting development.

In the self-select funds, the ethical funds, cash fund and the global equity fund all out-performed their benchmarks in the year whereas the other equity funds and bond and sharia funds underperformed.

The Ethical Equity Fund had a particularly strong performance against benchmark due in part to its relatively smaller exposure to the energy sector. Since inception all self-select funds have outperformed their benchmarks with the exception of the UK Equity Fund.

USS Investment Builder Performance

	1 Year %	Benchmark %
Growth Fund	(9.5)	(7.4)
Moderate Growth Fund	(7.1)	(4.9)
Cautious Growth Fund	(4.9)	(3.2)
Cash Fund	0.8	0.6
Global Equity Fund	(5.9)	(6.1)
Emerging Markets Equity Fund	(14.5)	(12.9)
UK Equity Fund	(18.9)	(18.3)
Ethical Equity Fund	2.6	(5.3)
Bond Fund	3.5	3.6
Sharia Fund	6.4	6.5
Ethical Growth Fund	1.7	(2.4)
Ethical Moderate Growth Fund	2.1	(0.4)
Ethical Cautious Growth Fund	2.5	1.0
Ethical Cash Fund	0.8	0.6

USS Growth Fund Performance

Investment matters *continued*

Responsible Investment

In addition to conducting careful financial due diligence prior to making investments, USS believes that the way a business manages environmental, social and governance (ESG) issues is critical to how it will perform over the long-term and the sustainability of the value it will create.

We do not restrict our responsible investment activities to public equities, as other assets such as private equity, credit, property and infrastructure are equally impacted by ESG issues.

This is particularly the case as our extended holding periods for many of these assets increase our exposure to long-term risks. USS engages with regulators and policy makers to support

the proper functioning of markets and, where necessary, improve market standards, for example, around the protection of minority shareholders or climate change.

USS recognised many years ago that integrating ESG issues and engaging with its investments could reduce risk and potentially improve returns.

We published our first Responsible Investment policy in 1999. Since then, the Responsible Investment team has been at the forefront of many global initiatives to enhance both the reporting and company standards for ESG.

Climate change has moved up the global agenda in recent years. Although USS has always encouraged its investee companies to analyse climate change

risks, 2019 saw some major strides forward in our internal approach to understanding this critical issue.

During the year, USS undertook scheme-wide climate scenario analysis and stress testing – looking at the impact of global warming based on different temperature increases. The analysis used four climate scenarios: an increase in global temperatures of 1.5°C (both an orderly transition, and also a disorderly transition), a 2°C scenario, and then an increase that is more than 4°C. An orderly transition is one in which policy and technology changes are gradual and internationally coordinated.

The transition can become disorderly if public policy were to change abruptly – for example all coal fired power production is suddenly closed. The outcomes of the analyses were that, under the scenarios USS assessed, the scheme had lower asset returns under more adverse climate scenarios as a result of greater economic disruption.

While we are still working through the repercussions of the results, in 2020 we plan a number of initiatives to determine how we can create a more climate-resilient portfolio going forward. This includes: assessing how we can better integrate climate risk in the investment decision-making process, how we manage our assets and how we create our asset allocation framework; examining how we consider the economic impacts of our investment mandates and then how we benchmark them; improving both internal and external climate-related reporting; working to develop “climate aware” models of returns to achieve complete consistency in our risk-return modelling, and looking at scenario analysis for the valuation best estimate.

In addition to this critical scheme wide assessment, we also undertook a specific 2°C scenario analysis of our internal Pan-European equities portfolio. The purpose was to analyse the exposure of the portfolio to a range of risks that would affect these companies should global warming push temperatures up by a maximum of 2°C. This upper limit was particularly chosen as the Paris Agreement, a global Government pact signed in 2015, is designed to keep global warming below this figure.



Case study

Selective Exclusions

At the end of 2019, USSIM embarked on a detailed review of a selection of sectors in which the scheme invests. As USSIM implements a long-term investment strategy on behalf of the trustee, USSIM was looking for any differences between what industry financial models predict in terms of performance returns, and what USSIM could reasonably expect to happen over the long-term.

USSIM concluded from the process, that in several cases, the outcomes predicted by the market as a whole do not appropriately take into account the potential impact of certain specific risks, which USSIM considers are likely to have a long-term financial impact on these sectors.

These risks include the impact of regulatory or societal changes which may not affect companies in those sectors today, but over the long-term are likely to mean a material deterioration in expected returns.

As a result of this review, in June, USSIM announced plans to exclude, and where necessary divest from, companies in those sectors that were deemed to be financially unsuitable over the long-term. These were:

- tobacco manufacturing;
- thermal coal mining (the mining of coal to be burned for electricity generation), specifically where this makes up more than 25% of revenues;
- companies that may have ties to cluster munitions (a form of explosive), white phosphorus (a chemical which spontaneously ignites on contact with air) and landmines.

Over the next two years, if not earlier, USSIM will cease investing in companies in these sectors and begin the process of fully divesting from any such companies where it has investments it can control.

These exclusions will be kept under review and may be changed or added to over time.

The outcome appeared to indicate a relatively low level of risk to the portfolio, with the main downside exposure largely focused on companies in the utility, materials, and energy sectors. That said, a diversified mining company was ranked as one of the top companies at risk due to its exposure to ship-borne coal. However, the process did not recognise the positive benefit this company might gain from its exposure to materials which are used in batteries and other low carbon infrastructure and which will benefit from the shift to a lower carbon economy. This demonstrates that whatever the outcome of the modelling or scenario analysis undertaken, understanding the drivers of the results will be at least as important as the headline outcomes.

Further information about our work on climate change and RI can be found on the Principles for Responsible Investment (PRI) website¹: unpri.org/private-equity/case-study-uk-pension-scheme-on-esg-monitoring-reporting-and-dialogue-in-private-equity/3322. article. As well as in our Task Force for Climate Related Financial Disclosures report at uss.co.uk/how-we-invest/responsible-investment/responsible-investment-activities.

The advanced analysis techniques detailed here demonstrates USS's clear commitment to addressing ESG in the portfolio, and indeed during the year, USS was recognised several times for its work. For example, we qualified among the PRI's 2019 list of Leaders, a status given to those signatories who had demonstrated a breadth of responsible investment excellence, particularly in the oversight of external managers. USS was also awarded for 'a decade of ESG leadership' at the IPE Real Estate Global Awards – 10 years after we partnered with two other funds to create the global real estate sustainability benchmark, GRESB – a globally recognised industry benchmark of ESG performance data used by investors to monitor real estate and infrastructure investments.

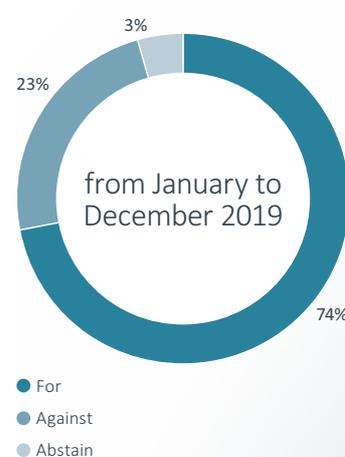
Voting

Exercising our voting rights is one of the cornerstones of our stewardship activities. When we vote we take into consideration outcomes from our engagement meetings, our portfolio managers' perspectives, proxy research and discussions with our peers.

When it comes to voting, we can then vote with purpose. Indeed, we typically vote against at least one resolution the majority of the time – usually on issues such as executive remuneration or board member independence.

We review our voting policy annually and publish it on our website along with our voting record. From the 2020 AGM season we augmented our climate disclosure policy by voting against those companies with the lowest (zero) scores in the Transition Pathway Initiative's² assessment process. Additionally, we enhanced our board diversity policy by voting against companies where one-third of board members are not female.

USS global votes



Top Twenty Investments

Below are the top 20 holdings in the scheme (excluding the external manager mandates laid out earlier in this section) which total £18.7bn as at 31 March 2020.

Asset grouping	Asset description
Nominal Government Bonds	USA Bond Fixed 1.375% 15/02/2044
	USA Bond Fixed 0.75% 15/02/2042
	USA Bond Fixed 0.625% 15/02/2043
	USA Bond Fixed 0.75% 15/02/2045
	UK Gilt 1.50% 22/07/2047
	USA Bond Fixed 2.125% 15/02/2041
	USA Bond Fixed 1% 15/02/2046
	USA Bond Fixed 2.125% 15/02/2040
Inflation Linked Government Bonds	UK Gilt Infl. L. 0.75% 22/11/2047
	UK Gilt Infl. L. 0.375% 22/03/2062
	UK Gilt Infl. L. 0.125% 22/03/2044
	UK Gilt Infl. L. 0.125% 22/11/2065
	UK Gilt Infl. L. 1.25% 22/11/2055
	UK Gilt Infl. L. 0.50% 22/03/2050
	UK Gilt Infl. L. 0.625% 22/03/2040
	UK Gilt Infl. L. 0.125% 22/03/2058
Private Inflation Linked Equity	Heathrow Airport Holdings Limited
	Redexis Gas
	Virginia International Gateway
Private Equity	Moto International Holdings Limited

Note

- This link leads to a website operated by another party. We have provided this link because we think it may be of use and interest to the reader of this document. We have no connection with this website and can accept no responsibility for its security, content or availability. You should check the terms and conditions and privacy policies of any third party websites.
- The Transition Pathway Initiative (TPI) is a global, asset-owner led initiative which assesses companies' preparedness for the transition to a low carbon economy.

Risk management

By taking a robust approach to risk management, we help to ensure our members' pension entitlements remain protected and secure

In conducting our business, we manage a wide range of risks that could impede the execution of our primary duty to ensure that the benefits promised to members are delivered in full on a timely basis.

For the USS Retirement Income Builder this means ensuring there are sufficient funds available to provide members with retirement income, in accordance with employers' commitments.

For the USS Investment Builder it means having an appropriate range of investment fund options available. Along with an effective investment process, this enables members to manage their investment selections in line with their risk appetite.

Risk framework

We operate a three lines of defence approach to risk management (see below), which is embedded in the organisation through the operation of our risk management framework. We have a comprehensive framework for managing risks, including a dedicated group risk team along with risk governance arrangements, policies and processes. The aim of the framework is to ensure that risks are effectively identified, monitored, reported and managed across the business.

The group risk team is independent of USS front line businesses and its head, the Chief Risk Officer, reports directly to the Group Chief Executive Officer.

Risks are identified on an ongoing basis, as part of business as usual and business change activities.

Consideration is also given to emerging risks. Risks are measured regularly using key risk indicators, which are reviewed by the first and second lines of defence before being reported to the relevant risk governance and oversight committees.

Risks are managed by mitigation (for example using controls), transfer or avoidance. Risk monitoring and reporting is implemented through several tools including risk registers, event logs and assurance maps. The latter have been developed collaboratively by each of the three lines of defence, to provide an indication of the health of the control environment in relation to key business processes. Additionally, risks are monitored through the delivery of a risk-based assurance programme undertaken by the Compliance and Internal Audit functions.

Risk appetite

Taking on too much or too little risk could result in a failure to deliver our strategic priorities. At the core of our approach to risk management is our risk appetite; this is articulated in our risk appetite statements which describe the types and levels of risk that we are prepared to accept. They set risk-taking boundaries and enable consistent risk-aware decision making.

Risk governance

As the ultimate owner of all risks, the Trustee Board has overall responsibility for risk management across the group. It sets risk appetite and must satisfy itself that the risk management framework has been implemented effectively. It delegates responsibility for this implementation to executive management, which ensures that responsibilities for risk management are clearly articulated, clearly applied, and consistent with the three lines of defence model. Risk management is overseen by executive and non-executive risk committees which ensure that risk management processes are effective, and that risk is appropriately assessed against appetite.

The USS three lines of defence risk management approach

1st

USS business units

- risk ownership
- risk management
- operation of control

2nd

USS functions of group risk, legal, compliance and financial control

- risk oversight
- challenge to first line
- maintenance of the risk framework

3rd

USS internal audit function

- independent review
- risk assurance
- challenge to first and second line

Principal risks

Our five strategic themes which can be identified in Strategy, KPIs and risk categories. **For further information see page 10.**

-  Client service
-  Collaboration
-  Control and compliance
-  Core capabilities
-  Cost effectiveness

We maintain a comprehensive register of the principal risks faced by the business as well as their potential impact and how we mitigate them

We have identified the scheme’s principal risks and uncertainties based on their potential to threaten the ability of the trustee to deliver its strategic priorities. These risks can arise from internal or external factors and can adversely impact the scheme’s funding, investments, operations and reputation. The tables below set out those principal risks, their potential impact and the mitigation in place and represent a high-level summary of the scheme’s risk registers.

The coronavirus pandemic event has heightened some of the risks we face, so we have tightened our business continuity arrangements, strengthened our existing controls and added new ones as necessary. Details are included in the table.

Defined benefit (DB) funding risk

Strategic theme	Description	Impact	Control/Mitigation
	A deterioration in the financial health of the USS Retirement Income Builder (DB) driven by a significant increase in the scheme deficit and/or a significant deterioration in the ability of employers to make contributions to fund the benefits promised to members.	This may lead to the requirement to substantially increase contributions, amend investment strategy and/or reduce future benefits.	<ul style="list-style-type: none"> • Implementation of a comprehensive Financial Management Plan (FMP) as part of each actuarial valuation, incorporating the acknowledged strength of the employers’ covenant, the appropriate contribution rate and investment strategy • A dedicated funding strategy and actuarial team focused on funding of the USS Retirement Income Builder • Regular monitoring of the funding level, employers’ covenant strength, contribution adequacy and liability in the context of the USS Financial Management Plan • Regular analysis of the sources of changes in both the liability and the deficit and of the impact of this on the required employer contribution rate

Stakeholder risk

Strategic theme	Description	Impact	Control/Mitigation
	Failure to engage effectively with our stakeholders.	This may lead to an impaired ability to understand correctly and respond effectively to the changing needs of employers and members. Employers, or their representative bodies, may no longer view USS as the primary service provider for retirement benefits, or members may no longer want to use USS for their retirement provision.	<ul style="list-style-type: none"> • Regular meetings with agendas relevant to those attendees are held with employers, member representatives and employer representatives, including both Universities UK and UCU • Annual member and employer surveys as well as publication of regular updates for members and institutions, along with blogs, articles, videos and webinars on relevant topics of interest to Universities UK, UCU, individual employers and members

Service risk

Strategic theme	Description	Impact	Control/Mitigation
 	Pension service delivery fails to meet requisite quality or timeliness standards, as a result of the failure to manage or execute operational processes effectively.	This may lead to poor or incorrect outcomes for our members or beneficiaries and the potential for increased costs and reputational damage.	<ul style="list-style-type: none"> • Robust operational controls and defined service standards • Review and reporting of performance across all administration teams • Comprehensive workload forecasting • Quality control checking • Regular training of all service staff

Principal risks *continued*

Supplier risk

Strategic theme	Description	Impact	Control/Mitigation
 	<p>The risk that a supplier fails to perform a business-critical contracted service. This could arise as a result of an operational failure by a supplier or in the event of a supplier insolvency.</p>	<p>This could result in a failure to perform business-critical activities on a timely basis or a failure to obtain value for money for the scheme.</p>	<ul style="list-style-type: none"> • Dedicated procurement function with responsibility (together with the Group General Counsel) for controlling supplier onboarding and ongoing monitoring of key suppliers' performance. Appropriate remedial actions and ultimately replacement of non-performing suppliers and pursuit of USS entitlements should value for money not be received • Appropriate relationship management structures are in place with key suppliers, supported by service-level agreements, management information provision and incident escalation and resolution protocols

Investment performance risk

Strategic theme	Description	Impact	Control/Mitigation
 	<p>A prolonged period of inadequate investment performance, or a sharp fall in the value of investments in either element of the scheme. This may be due to (i) selection of an inappropriate Reference Portfolio, (ii) under-performance of the implemented portfolio relative to the Reference Portfolio and/or (iii) unfavourable economic conditions or political developments.</p>	<p>A significant increase in the deficit of the USS Retirement Income Builder. This may lead to the requirement to increase contributions, amend investment strategy and/or reduce future benefits.</p> <p>Lower growth in the size of members' USS Investment Builder funds. This may lead to lower than expected values being available to members on retirement.</p>	<ul style="list-style-type: none"> • A documented, structured and effective investment process, run by experienced investment professionals, incorporating robust controls and diligent oversight • USS Retirement Income Builder: the investment portfolio is diversified across a range of asset classes and risk factors. It is managed relative to a long-term Reference Portfolio designed to fulfil the goals of the USS FMP • USS Investment Builder: the Self-Select Fund range has been chosen to provide members with an appropriate range of risk and return expectations. The Default Lifestyle strategy progressively reduces investment risk exposure over the 10 years prior to expected retirement, to provide greater certainty around outcomes

People risk

Strategic theme	Description	Impact	Control/Mitigation
	<p>Failure to attract and retain sufficient people with the necessary skillsets in the right roles, or to develop appropriate management structures and business culture.</p>	<p>This may lead to an inability to provide the necessary resources to achieve successful delivery of the scheme's strategic priorities, leading to poor investment performance, increased incidence of operational error and failure, and ultimately result in reputational damage with key stakeholders.</p>	<ul style="list-style-type: none"> • Focused recruitment processes • Talent management and succession planning • Clear objectives set for all staff, linked to the USS strategic priorities • Regular staff performance and remuneration reviews with reference to appropriate external benchmarks • Training and development programmes • Regular employee satisfaction reviews • Employee Health and Wellbeing programme to promote a healthy and productive working environment for staff • Diversity and Inclusion forum to address diversity challenges through inclusive practices



Further information regarding how USS manages risk can be found in the risk supplement on our website at uss.co.uk/about-us/report-and-accounts

Regulatory risk

Strategic theme	Description	Impact	Control/Mitigation
	The product and service offering is impacted adversely by changes to pension and/or investment policy, legislation or regulation. The trustee fails to adopt and apply effective oversight of its legal and regulatory compliance arrangements.	Potential for change to impact the scheme's product and service offering, give rise to additional costs and lead to operational complexity. Failure to respond to such changes in an appropriate and timely manner could lead to fines, compensation costs and censure, as well as damage to stakeholder relationships and reputation.	<ul style="list-style-type: none"> Dedicated professionals focused on assessing existing and emerging regulatory initiatives Legal and regulatory change is monitored by the USS legal team and reviewed quarterly to ensure that relevant updates are captured and flagged to business areas Structured change management methodology for the implementation of necessary changes Ongoing compliance training, advisory and monitoring activity tailored for the relevant business divisions

Business disruption risk

Strategic theme	Description	Impact	Control/Mitigation
	Prolonged business disruption caused by economic, political or social disruption such as the outbreak of coronavirus, causing disruption in financial markets, inability to provide critical services due to staff unavailability or supplier failure, and financial hardship across the Higher Education sector.	Physical and infrastructural disruption could lead to adverse impact on operational capacity and controls. Economic disruption could result in deterioration of the value of the scheme's assets, adversely impacting our funding and liquidity position and asset valuation uncertainty in the short term. Financial hardship may lead to a deterioration of the employers' covenant.	<ul style="list-style-type: none"> Full remote working capability for all key teams, to allow continuity of key processes and physical isolation of employees Prioritisation of critical services to cope with reduced staffing levels Monitoring of supplier viability through the supplier framework processes. Investment monitoring and remedial actions to ensure adequate liquidity and to position optimally for economic conditions Employers' covenant monitoring

Information and privacy risk

Strategic theme	Description	Impact	Control/Mitigation
	Failure to protect the confidentiality, integrity or availability of critical data (including personal and commercially sensitive data) held by the scheme or its suppliers, or failure to prevent unauthorised access to USS data.	Breach of applicable data protection legislation, potential for regulatory censure or fine, damage to stakeholder relationships and reputation. Potential for monetary loss and remediation costs.	<ul style="list-style-type: none"> A dedicated information security team whose head is the USS Data Protection Officer Implementation of an appropriate information security and data protection framework and processes Implementation of appropriate cyber risk controls Delivery of regular education and awareness training to employees Ongoing maintenance of the international information security accreditation, ISO 27001 Achievement of Government-backed Cyber Essentials Plus accreditation Implementation of processes designed to maintain compliance with GDPR (the EU's General Data Protection Regulations) Mandatory compliance with information security team requirements as a condition of supplier onboarding with ongoing oversight through the appropriate relationship management structures



Governance

The governance framework at USS that supports our decision making and accountability.

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Good governance
is of vital importance
and a cornerstone
of our success

Governance

Strong governance is essential for the effective management of the scheme and for optimising performance

Universities Superannuation Scheme Limited (USSL), is the trustee company of the scheme. The trustee company is led by a board comprised entirely of non-executive directors. The Trustee Board's role is to provide overall leadership, strategy and oversight of the scheme, the trustee company and USSIM in co-operation with USSIM's board of directors. The Trustee Board is primarily responsible for exercising objective and independent judgement, in compliance with regulatory requirements, so as to safeguard the sustainability of the scheme.

Good governance is of vital importance and a cornerstone of our success. As such, we have enhanced our processes to ensure that the directors of the trustee company collectively have the expertise, skills and competencies that are appropriate and proportionate to the oversight and governance of the scheme, the trustee company and the evolving regulatory environment within which the scheme operates. You can read about the skills and expertise of the board members on pages 33-35.

The Trustee Board has delegated responsibility for day-to-day management of the scheme to the Group Executive Committee, subject to ongoing Trustee Board oversight. The Trustee Board is also supported by five specialist standing committees:

- Governance and Nominations Committee (GNC);

- Audit Committee (Audit);
- Remuneration Committee (Remuneration);
- Investment Committee (Investment); and
- Policy Committee (Policy).

The Trustee Board and committee structure is set out at the bottom of the page. There are two other key committees:

- Joint Negotiating Committee (JNC); and
- Advisory Committee.

The JNC and Advisory Committee are both formed under the scheme's rules and whilst entirely separate to, and distinct from, the Trustee Board, they play an important part in the governance of the scheme.

The JNC comprises representatives for the scheme's stakeholders, Universities UK and Universities and College Union (UCU), and is chaired by an independent chair appointed by the JNC. During the financial year, the JNC played a key role in relation to both the 2018 and 2020 valuations. The role of the JNC in the valuation is entirely distinct from that of the trustee company.

Whilst the trustee has responsibility to undertake the valuation in accordance with all legal and regulatory requirements, the JNC's role is restricted to considering whether

any benefit changes should be made and negotiating how any contribution changes should be shared between members and/or employers.

The Advisory Committee's primary role is to fulfil the member dispute resolution function for the scheme.

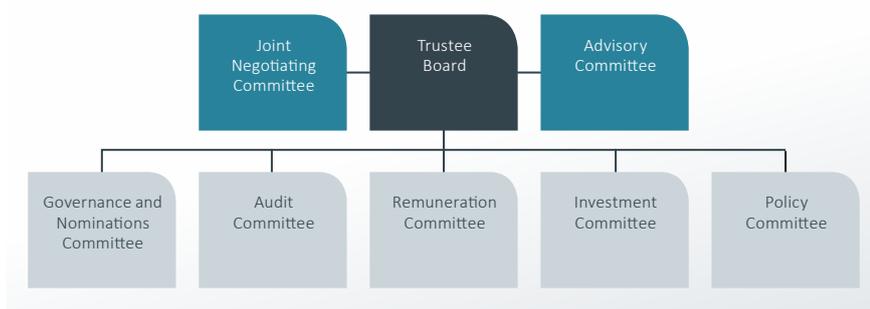
More information about the activities and membership of the Trustee Board, its committees, the JNC and the Advisory Committee is set out on the following pages and in the Governance Report provided on the USS website at uss.co.uk/about-us/report-and-accounts.

Division of responsibility between the Trustee Board and Executive

As explained earlier in this report, the Trustee Board has delegated day-to-day management of the Group to the Group Executive Committee.

While the Trustee Board has responsibility for the strategic direction of the Group and makes key decisions (for example, it is required to approve the Group's business plan, significant supplier contracts, the strategic aims and objectives of the scheme and the scheme's investment policy), a number of decisions about the commercial activities of the scheme are made by the Group Executive Committee. For example, it decides the scheme's strategic approach to delivering the required levels of service to employers and members and takes certain decisions in relation to the scheme's recruitment and retention strategy.

Trustee Board and committee structure





Dame Kate Barker

Introducing our new Chair Elect - Dame Kate is one of Britain's foremost economists, and was a member of the Bank of England's Monetary Policy Committee from 2001 until May 2010.

Since leaving the Bank of England in 2010, she has held a number of posts in the private and public sectors. She has been a non-executive director for private companies in the financial sector as well as house building and private equity, and also has experience as a pension trustee.

running a pensions scheme of the size and complexity of USS. This provides a framework for considering the skills the trustee may wish to prioritise when preparing non-executive director role briefs, and when evaluating potential new candidates. A summary of the skills of the serving trustee directors can be found in below.

Trustee Board composition

The Trustee Board usually consists of 12 non-executive directors, although for succession planning purposes this has been increased to a maximum of 13 for a limited time, comprising;

- four directors appointed by Universities UK;
- three directors appointed by the UCU, (at least one of whom must be a pensioner member); and
- between three and five (or until 31 January 2021, six) independent directors.

The composition and diversity of experience of the directors promotes an effective and balanced Trustee Board and helps to ensure the directors collectively have all the key competencies and knowledge required. This includes competencies in, and knowledge of, pensions, investments, strategic management, the Higher Education (HE) sector, and scheme member views. The trustee works with Universities UK and UCU to ensure that the board includes directors with a good understanding of the views of both members and employers.

The trustee has been working with UCU to identify appropriate candidates to fill the two UCU vacancies left by the sad and untimely death of Mr David Guppy

in December 2019, and the removal of Professor Jane Hutton from her position on the board in October 2019 following her suspension and an independent legal investigation. The trustee is pleased to announce the appointment of Andrew Brown as one of the new University and College Union (UCU) nominees to the USSL board. Andrew will formally join us as a non-executive director on 1 August 2020.

In addition, the board is focused on improving the diversity of its board members. Maintaining and improving key competencies, knowledge, and diversity of the Trustee Board also remain vitally important. During the year the trustee has focused on its succession arrangements to ensure a smooth handover from Professor Sir David Eastwood to Chair-elect Dame Kate (Katharine) Barker. Sir David retires from the board in August, after five years as Chair and 13 years as a Director.

Plans have also been developed more broadly to ensure the appropriate balance of continuity and refreshed membership of the Board is achieved going forward. In conducting all director recruitment exercises, the trustee uses a skills matrix, which captures the core skills required for

Board competencies

Number of USS Directors with this skillset	Skills and experience
5	Senior experience in university governance and leadership
5	Senior/substantial experience of HE leadership and understanding of the economics of the HE sector
9	DB/DC pensions industry experience
8	Senior corporate governance expertise/board management knowledge
2	Industrial relations
7	Pensions administration and member engagement
8	Communication, media and stakeholder engagement
7	Control, compliance and risk management
4	IT and security and digital development
7	Supplier/contract management
9	Senior management experience
5	Actuarial
7	Audit, accounting and financial management expertise
6	Investment
5	Legal
8	HR and remuneration
8	Strategy development

Governance continued

Members of the Trustee Board



Professor Sir David Eastwood¹ ● G I

- Universities UK appointee
- Chair of the Trustee Board
- Appointed as a director January 2007, Chair since 2015

Sir David became Vice-Chancellor of the University of Birmingham in April 2009. Former posts include Chief Executive of the Higher Education Funding Council for England (HEFCE), Vice-Chancellor of the University of East Anglia (UEA) and Chief Executive of the Arts and Humanities Research Board. Sir David will retire from the board in August 2020.



Dame Kate Barker² ● I

- Independent appointee
- Chair elect
- Appointed April 2020

Dame Kate will become Chair of the Trustee Board on 1 September 2020. She has been Chair of the Trustee Board of the British Coal Staff Superannuation Scheme since 2014, and a pension trustee for the Yorkshire Building Society from 2015 to 2019. She was governor at Anglia Ruskin University from 2000 to 2010, including Chair of Governors from 2007 to 2010, and served on the Council of Oxford University from 2017 to 2020.



Dr Kevin Carter ● I P

- Independent appointee
- Senior Independent Director and Deputy Chair
- A director of USSIM
- Appointed September 2012

Kevin is Chair of Murray International Trust plc and of JPMorgan American Investment Trust plc, and a non-executive director of Aspect Capital Limited and Newton Investment Management Ltd. He is a Trustee Director of the BBC Pension Trust Limited, and Chair of its Investment Committee.



Mr Gary Dixon ● A

- Universities UK appointee
- Appointed April 2019

Gary trained as a Chartered Accountant with PwC after graduating in 1987 from the University of Leicester in Physics with Astrophysics. In 1994 he joined the banking and pensions focused financial services group, Pointon York, where he was subsequently appointed Group CFO. He is a Fellow of the ICAEW and holds an MBA from Warwick Business School. He is the Chair of Council at the University of Leicester having served as a Lay Member of Council since 2009. Gary is also a non-executive director of the Church of England's Investment Trustee company, CBF Funds Trustee Limited.



Ms Kirsten English ● G A

- Independent appointee
- Appointed May 2014

Kirsten has more than 25 years' experience in FinTech and Financial Service institutions. She has held roles as CEO, General Manager and non-executive director across FTSE 25, FTSE 350 and private equity-backed business.



Professor Sir Anton Muscatelli ● I

- Universities UK appointee
- Appointed April 2015

Sir Anton became Principal and Vice-Chancellor of the University of Glasgow in October 2009. He studied at the University of Glasgow, where he graduated with an MA in Political Economy and with a PhD in Economics. Sir Anton is Chair of the Russell Group.

 Biographies of each board member appear on the USS website at uss.co.uk/about-us/how-were-governed/people/uss-board

Key to Committee membership

-  Chair
-  Chair elect
-  Audit Committee
-  Governance and Nominations Committee
-  Investment Committee
-  Policy Committee
-  Remuneration Committee



Dr Steve Wharton



- UCU appointee
- Appointed September 2016

Steve is a Senior Lecturer in French and Communication at the University of Bath. The last national President of the Association of University Teachers (AUT) and first (joint) President of UCU, he served as a member of the USS Advisory Committee for three years. In 2012, the French government made him Chevalier dans l'Ordre des Palmes Académiques for services to French culture.



Mr Ian Maybury



- Independent appointee
- Appointed November 2013

Ian joined Schroders in 2012 as the Head of Solution Management and has previously worked for Redington, Citigroup and Royal London Insurance in various actuarial and management roles. He is a Trustee Director of the John Lewis Pension Scheme and the Mineworkers Pension Scheme and Chair of Trustees at the RNIB Retirement Benefits Scheme.



Mr Will Spinks



- Universities UK appointee
- Appointed September 2018

Will has worked in Higher Education since 2007, initially as the first Chief Operating Officer at Loughborough University and subsequently as the Registrar, Secretary, Chief Operating Officer and Associate Vice President at the University of Manchester.



Mr Rene Poisson



- Independent appointee
- Appointed November 2012

Rene became a Director of USS in November 2012 having retired after a 30 year career with JPMorgan latterly as Managing Director and Senior Credit Officer for Europe, Middle East and Africa. He is Chair of the JP Morgan UK Pension Plan and a member of its Investment Sub-Committee and a Director of the Standard Life Master Trust.



Mr Michael Merton



- Independent appointee
- Appointed February 2014

Michael is a Director and chair of the Audit Committee of BlackRock Energy and Resources Income Investment Trust plc. He previously had a thirty year career at Rio Tinto, and was chair of the J Sainsbury Pension Scheme and a director at Cape plc.



Director changes

The trustee has been working with UCU to identify appropriate candidates to fill the two UCU vacancies left by the sad and untimely death of Mr David Guppy in December 2019, and the removal of Professor Jane Hutton from her position on the board in October 2019 following her suspension and an independent legal investigation. The trustee is pleased to announce the appointment of Andrew Brown as one of the new University and College Union (UCU) nominees to the USSSL board. Andrew will formally join us as a non-executive director on 1 August 2020.

1 Professor Sir David Eastwood will retire as Chair of the Trustee Board on 31 August 2020.
2 Dame Kate Barker will be Chair of the Trustee Board from 1 September 2020.

Trustee Board key activities 2019/2020

There was a significant volume of activity carried out by the Trustee Board during 2019/20, particularly in connection with the completion of the actuarial valuation as at 31 March 2018 and the commencement of preparations for a 2020 valuation. More information is set out below.

Board activities	
Topic	Activity
Regulatory	<ul style="list-style-type: none"> Engagement with The Pensions Regulator around the 2018 and 2020 valuations and as part of its ongoing supervision of the scheme.
2018 valuation	<ul style="list-style-type: none"> Concluded the 2018 valuation of the scheme, and as part of the valuation formally consulted with Universities UK on behalf of employers in relation to the schedule of contributions and recovery plan. Oversaw the scheme's readiness to administer the contribution changes arising from the 2018 valuation. Approved a monitoring and action framework in relation to the scheme's funding position following conclusion of the 2018 valuation.
Other valuation related activities	<ul style="list-style-type: none"> Reviewed the 2017 and 2018 valuations and the lessons that could be learnt from them when undertaking future valuations. Met with the chair of the Joint Expert Panel (JEP) and received updates in relation to the JEP's second report as well as on the tri-partite discussions held between Universities UK, UCU and the Trustee Board in relation to that report. In addition, the Board approved 'shared valuation principles' and the shared definition of "Sustainability" which emanated from the tri-partite discussions. Oversaw preparations for the 2020 valuation and approved a discussion document in relation to the methodology and risk appetite that should be used in respect of that valuation.
Pensions operations	<ul style="list-style-type: none"> Oversaw pensions administration during the year and continued improvements in key service levels and turnaround times. Oversaw engagement with members and employers, including approval of a business case for the continued development of direct-to-member communications. Oversaw progress in relation to increasing member flexibilities and approved the development of a guidance, advice and pensions flexibilities programme for members. Approved a new delegations framework in relation to key employer participation decisions. Considered and negotiated settlement for Trinity College Cambridge withdrawal from the scheme subject to payment of its debt obligations.
Strategy	<ul style="list-style-type: none"> Approved a revised corporate purpose statement and associated values. Considered the impact on the USS business of the evolving regulatory landscape (including the new supervisory regimes introduced by The Pensions Regulator for both DB and DC Schemes and the Pension Schemes Bill). Oversaw the implementation by USSIM of a framework compliant with the Financial Conduct Authority's, Senior Managers and Certification Regime (SMCR). Oversaw a request for proposal (RfP) process for the provision of actuarial and advisory services and approved the appointment of a new Scheme Actuary and reappointment of the DB investment consultant.
Investment	<ul style="list-style-type: none"> Approved the revised Statement of Investment Principles (SIP) for the DB and DC sections of the scheme, and the DC Default SIP. Reviewed the trustee's approach to Responsible Investment and considered environmental, social and governance (ESG) risks associated with the scheme's investments. Approved the appointment of a new USSIM Chief Executive Officer. Oversaw the expansion of the Default Lifestyle Option to include an allocation to private markets at no additional cost to members or employers.

Board activities

Topic	Activity
Financial reporting and controls	<ul style="list-style-type: none"> • Approved the financial statements for the scheme and the trustee company for the year ended 31 March 2019 on recommendation from the Audit Committee. • Reviewed the scheme three-year plan and approved the annual plan and budget. <p>Defined contribution:-</p> <ul style="list-style-type: none"> • Approved an updated DC business plan for the financial year 2019/2020 and oversaw its submission to The Pensions Regulator. • Oversaw the creation of a new Value for Members assessment framework to assess costs and charges applied to scheme members DC funds. • Oversaw the Value for Members assessment for 2019/20.
Risk management and internal controls	<ul style="list-style-type: none"> • Regularly reviewed the enterprise risk report encompassing all key risks impacting upon the delivery of the scheme's strategic objectives. • Oversaw the scheme's preparedness for Brexit. • Considered the adequacy of the scheme's internal-control and risk management-framework, based on assurance provided by the Audit Committee on each of the three lines of defence.
Performance and general oversight	<ul style="list-style-type: none"> • Approved a range of key performance indicators, measures and targets against which performance across the group could be monitored and assessed. • Reviewed performance reports from all key business areas on a quarterly basis. • Received and discussed reports from all standing Trustee Board committees which had met in the reporting period. • Received updates around the executive's responses to the operational challenges posed by the coronavirus pandemic, including the impact of the market volatility on investment performance, employer covenant, pensions operations and the move to working from home and actions being taken to respond to the situation.
Corporate governance	<ul style="list-style-type: none"> • Reviewed the group corporate governance framework which includes the terms of reference for the Trustee Board's standing committees. • Reviewed and approved two appointments to the Trustee Board; including that of Dame Kate Barker as chair elect, and approved the reappointment of Kevin Carter to the USSIM board. • Approved Gary Dixon as designated Non-Executive Director for workforce engagement. • Approved an independent, external investigation into whistle-blowing allegations made against the trustee company and considered the recommendations of the findings of the report. • Approved an external evaluation of the Board and Committees' effectiveness to perform their roles and fulfil their responsibilities.
Leadership	<ul style="list-style-type: none"> • Oversaw initiatives being undertaken by the executive to increase diversity and inclusion. • Oversaw succession planning for the Chair of Trustee Board and approved the appointment of Dame Kate Barker as a director from 1 April 2020 and Chair from 1 September 2020.
Stakeholder	<ul style="list-style-type: none"> • Engaged directly with the Joint Expert Panel and oversaw the executive's engagement with key stakeholders including Universities UK and UCU. • Considered employer and member feedback against the trustee's business plan and strategic objectives. • Oversaw member and employer communications activity in the year, and the approach to corporate affairs more generally.

Governance continued

Trustee Board meeting and committee attendance

The Trustee Board met 15 times during the year. A summary of Trustee Board activity during the year is outlined on pages 36 to 37. An overview of attendance at meetings of the Trustee Board and its specialist standing committees is provided below:

	Trustee Board	Investment	Policy	Audit	Remuneration	Governance and Nominations
Meetings held in the year:	15	7	7	5	4	6
Trustee Board members:						
Dame Kate Barker ⁽ⁱ⁾						
Dr Kevin Carter	14	7	5			
Mr Gary Dixon ⁽ⁱⁱ⁾	15			2		
Professor Sir David Eastwood	15	7				6
Ms Kirsten English	14			5		6
Mr David Guppy ⁽ⁱⁱⁱ⁾	10					
Professor Jane Hutton ^(iv)	1			1		
Mr Ian Maybury ^(v)	13	6	7	4		6
Mr Michael Merton	15			5	4	
Professor Sir Anton Muscatelli	11	7				
Mr Rene Poisson	15		7		4	
Mr Will Spinks ^(vi)	12		7		4	
Dr Steve Wharton	15		7		4	6
Committee members:						
Mrs Sarah Bates		7				
Mr Mark Fawcett		4				
Mrs Virginia Holmes		7				
Mr Tony Owens				5		
Mr Bill Galvin						6

Notes

- (i) Dame Kate joined the board on 1 April 2020 and consequently did not attend any meetings during the financial year.
- (ii) Mr Dixon joined the Audit Committee on 1 August 2019 and has attended all Audit Committee meetings since then.
- (iii) Mr Guppy sadly passed away on 3 December 2019. He attended all of the Trustee Board meetings until that date. Mr Guppy also attended the Audit Committee and seven Trustee Board meetings as an alternate for Professor Hutton.
- (iv) Subsequent to her suspension from the Trustee Board on 21 June 2019, Professor Hutton was removed from the board on 10 October 2019 following an independent legal investigation.
- (v) Mr Maybury retired from the Audit Committee on 10 February 2020. He attended all of the Audit Committee meetings until that date.
- (vi) Mr Spinks was appointed to the Policy Committee with effect from 16 May 2019 and has attended all Policy Committee meetings since then.

Pensions increases

USS pensions are generally increased in line with increases in official pensions as defined in the Pensions (Increase) Act 1971, although from 1 October 2011, changes to the scheme rules introduced limits on such increases in respect of rights that accrue after that date. Increases to official pensions are based on the rate of inflation for the 12 months to September, measured using the Consumer Prices Index (CPI). For the year to September 2019, the CPI rate was 1.7% and therefore the increase applied to USS pensions in payment and deferment was 1.7% effective from April 2020.

 Further information regarding the work completed by USS specialist standing committees in 2019/20 can be found in our Governance supplement which is available online on our website at uss.co.uk/about-us/report-and-accounts

Remuneration report

We focus on aligning pay with performance to ensure the right mix of skills and expertise to deliver our long-term priorities and value for money for members

Our remuneration framework is designed to ensure USS has access to those with the right mix of skills and expertise to deliver our long-term priorities and value for money for members.

We hire experts, who can deliver cumulative, long-term results, and we pay them at market rates commensurate with the skills and experience they bring to the scheme. A cornerstone of our remuneration and incentive policy is to pay for performance, which means to reward contribution that is aligned to the needs of employers and members in a cost-effective manner.

Investment managers represent the largest proportion of the compensation paid, representing 93% of the variable incentive paid in the year. The direct costs associated with employing an in-house team of highly-skilled investment professionals in an extremely competitive market are much lower than the fees charged by external managers.

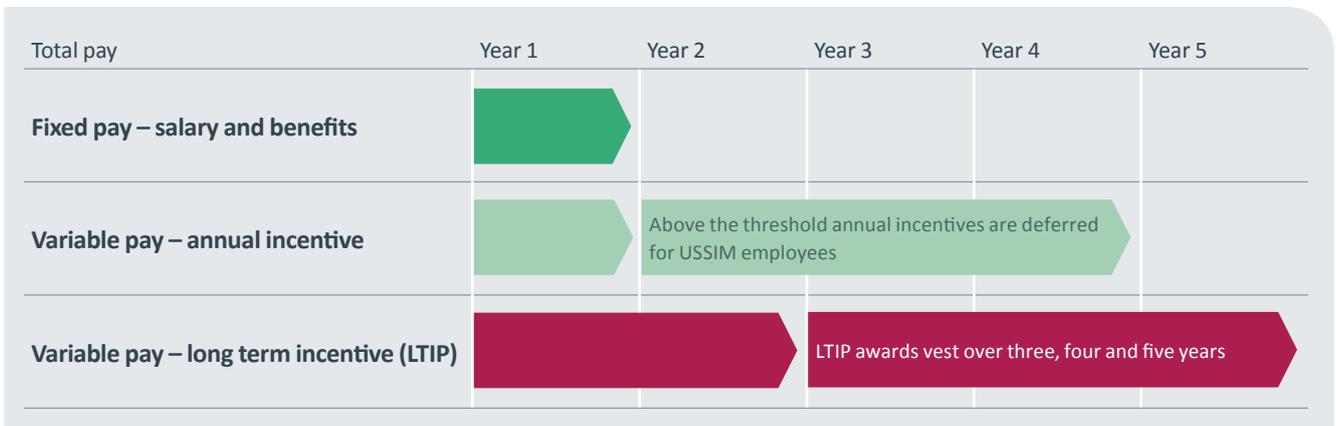
£49m

Having an in-house investment management team means our investment management costs are £49m per year lower than the peer average according to the most recent analysis by CEM Benchmarking from 2018.

£462m

Our in-house management team outperformed its rolling five-year benchmark, adding £462m of value to the fund (net of costs) for the five year period to 31 December 2019.

Remuneration structure



Our compensation approach includes the following key elements:

- base salary, which is benchmarked annually (either in its own right or as part of total remuneration). Base salary is designed to attract and retain high-performing individuals;
- annual incentives, aimed at motivating and rewarding top performance, aligned to USS values. In the investment management function, where incentives exceed a £50,000 threshold, payment is partially deferred for three years. For investment managers, the annual incentive includes an element that is linked to scheme performance, calculated on a rolling five-year basis;
- long-term incentive plans (LTIPs), available to a limited population, are designed to incentivise delivery of scheme performance over the long-term and to encourage retention of key personnel;
- all employees are eligible to join the USS pension scheme which aligns the employee's own personal objectives with the purpose of the scheme itself; and
- Trustee Board directors and other non-executives receive only the agreed fee level for their services.

Remuneration report *continued*

Remuneration in 2019/20

The total remuneration paid includes payments in respect of deferred incentive amounts from previous years and prior year LTIP plans paid out in the year. The compensation reference period is based on the calendar year to 31 December 2019 and amounts paid in the year are based on performance up to that date.

Remuneration	For the year-ended 31 March 2020 £m			
	High earners	Group Executive (A)	Trustee Board (B)	Total key management personnel (A+B)
Fixed pay- salary and benefits	16.8	2.5	0.6	3.1
Variable pay- annual incentive	12.9	1.3	-	1.3
Variable pay- LTIPs	3.1	0.8	-	0.8
Total remuneration paid	32.8	4.6	0.6	5.2

Trustee Board Director Fees

The Trustee Board director fees are shown in table below with the comparison to 2018/19. Their emoluments are included within the analysis table above.

Directors are remunerated on a basis which is approved by the Joint Negotiating Committee and is in accordance with the contribution which they make to the work of the trustee company and their legal responsibilities.

The Remuneration Committee report provides a summary of the oversight and governance of the compensation awards and can be found in the Governance Report on our website at uss.co.uk/about-us/report-and-accounts

The number of directors who are members of the USS Retirement Income Builder

	2020	2019
As at 31 March (100% of those eligible)	4	7

Total emoluments of the directors of the trustee company

For the year-ended 31 March, in £000's	2020	2019
Fees (non-executive directors)	615	587
Total	615	587

How staff are incentivised

Incentives for employees are based on performance and depend on the part of the organisation in which they work.

In USSIM, investment managers receive an incentive based on their performance against defined investment performance and personal targets.

Risk management and behavioural factors are included in the overall assessment, alongside remuneration market dynamics.

Non-investment staff both within USSIM and USSL have incentives based on similar non-investment factors as described above with the key driver being performance against agreed annual objectives.

A notional amount is awarded in respect of LTIPs and amounts eventually payable depend on the performance and service conditions explained on page 42 where qualifying criteria for each type of staff incentive are laid out.



Training and development case study

During 2019 we launched Management Fundamentals, a risk management based set of training modules for managers across USS.

This follows the rollout of Managing at USS, a general management based course launched during 2018.

A combination of both courses allied to individual development plans has seen a number of high potential employees within USS promoted into more senior roles.

📄 see our website for more information regarding USS purpose and values, which guide the USS management approach at uss.co.uk/about-us/purpose-and-values

Salary banding

We remain committed to openly reporting the total remuneration of the Trustee Board directors, key management personnel and highly-paid employees (who are typically the investment managers).

For the last group of employees, the remuneration disclosure goes beyond what legislation requires which we hope demonstrates our commitment to openness.

The table below shows total remuneration (base salary plus incentives plus non-pension benefits) of 'high earners' (employees earning >£100,000), including key management personnel. Approximately 83% of high earners are investment management professionals.

The annual and long term incentive amounts included below reflect that USS exceeded its investment performance targets on a rolling five-year basis in the compensation reference period to 31 December 2019. Rolling five-year performance at that date was 0.25% above benchmark (against the target of 0.55%).

For the year-ended 31 March, showing numbers of individuals.

	Amounts paid	
	2020	2019
£100,001 to £150,000	47	41
£150,001 to £200,000	31	30
£200,001 to £250,000	20	18
£250,001 to £500,000	33	26
£500,001 to £750,000	8	10
£750,001 to £1,000,000	2	4
£1,000,001 to £1,250,000	2	-
£1,250,001 to £1,500,000	-	-
£1,500,001 to £1,750,000	1	2
Total	144	131

Benchmarking of base salary and/or total compensation

Given the importance of attracting and retaining high calibre employees in a competitive market, we offer fair and competitive salaries in comparison with our peers.

Salaries reflect the experience, responsibility and contribution of the individual and of their role within USS.

Annual benchmarking is performed on salaries. This both minimises the disruption caused by employee turnover and any potential negative impact on employee engagement. At the same time, salary benchmarking is vital to ensure we deliver value for money to employers and members.

We used two external benchmarking agencies: one for investment management and support services, and another aimed at pensions services roles and their support functions.

Remuneration report *continued*

Incentive payments

There are three types of incentive payments:

	Annual incentive	Investment LTIP ¹	Group LTIP ¹
Main features and objectives	<ul style="list-style-type: none"> To drive strategic change and individual delivery of the business plan To recognise and reward individual contributions to USS priorities Individual contribution is calibrated annually 	<ul style="list-style-type: none"> Restricted to a minority of roles in the USSIM subsidiary Value at vesting depends on scheme or, where applicable, private markets investment performance Promotes performance and retention of key personnel 	<ul style="list-style-type: none"> Restricted to those not in receipt of an Investment LTIP Enables the recruitment of the executives necessary to deliver strategy Promotes performance and retention of key personnel
Performance conditions	<p>For investment managers:</p> <ul style="list-style-type: none"> Scheme performance² over five years and mandate performance (where applicable) over five years Qualitative measures aligned to USS values and delivery of strategic objectives <p>For other employees:</p> <ul style="list-style-type: none"> Qualitative elements aligned to longer-term strategic goals and behavioural competencies 	<ul style="list-style-type: none"> Scheme performance² over multiple years Specific investment performance measures² for USSIM Private Markets employees over multiple years Retention element included 	<ul style="list-style-type: none"> All qualitative – not linked to scheme performance Reflects achievement of personal objectives Promotes objectivity of senior management within the second and third lines of defence
Service conditions	<ul style="list-style-type: none"> Must be in employment and not serving notice at date of award For deferrals, must be in employment and not serving notice at the date of payment 	<ul style="list-style-type: none"> Must be in employment and not serving notice at date of award and through to vesting although 'good leaver' provisions may apply LTIPs vest in tranches, the earliest being three years and the latest being five years after award 	<ul style="list-style-type: none"> Must be in employment and not serving notice at date of award and through to vesting although 'good leaver' provisions may apply LTIPs vest after either three, four or five years
Deferred element	<ul style="list-style-type: none"> Incentives above threshold for USSIM employees are deferred for three years as follows: <ul style="list-style-type: none"> – 30% over £50,000; – 40% over £200,000; and – 50% over £400,000 <p>Where the deferred element is calculated as less than £50,000, this is paid immediately</p>	<ul style="list-style-type: none"> As a long-term plan, the payment is deferred until conditions have vested 	<ul style="list-style-type: none"> As a long-term plan, the payment is deferred until conditions have vested

Notes

1 Long-term investment plans.

2 Consistent with previous years, scheme performance is assessed over calendar year periods in order to allow payments to be made at the financial year end.

Chair's defined contribution statement

The purpose of this statement is to explain how the trustee ensures that the scheme is governed and managed to the standard required by legislation and expected by The Pensions Regulator (TPR)

The USS Investment Builder, the defined contribution (DC) element of the Universities Superannuation Scheme (the scheme), was introduced in October 2016.

This is the fourth annual statement from the chair of the trustee (Universities Superannuation Scheme Limited) regarding the governance of the USS Investment Builder and the scheme's money purchase AVC arrangement with the Prudential Assurance Company Limited.¹

The content of this statement is structured around the following areas:

1. Investment design: the default investment approach and other investment options available to members.

2. Fund performance and governance: management of investment options to ensure investment performance is at appropriate levels compared to risks, benchmarks and charges and that the fund selection remains appropriate.

3. Administration: demonstrating how core financial transactions are processed promptly and accurately.

4. Value for money: how costs and charges, including transaction costs, are managed, monitored and recorded, and how this provides value for money to our members.

5. Trustee knowledge and understanding: how the Trustee Board ensures that it has the skills and competencies required for the role it performs and how the requirements regarding non-affiliation of trustee directors are met.

6. Member, communication, engagement and representation: how the scheme engages with members (and member representatives) and encourages member feedback to improve member experience.

1. Investment design

The USS Investment Builder provides members with a choice of whether to use the default investment approach designed by the trustee, or to actively manage their investments themselves through a choice of ethical lifestyle options or by selecting from a range of individual funds directly. Members have funds in the USS Investment Builder if they have earnings above the salary threshold (£58,589.70 for the 2019/20 financial year), made additional contributions, or recently transferred funds into the scheme.

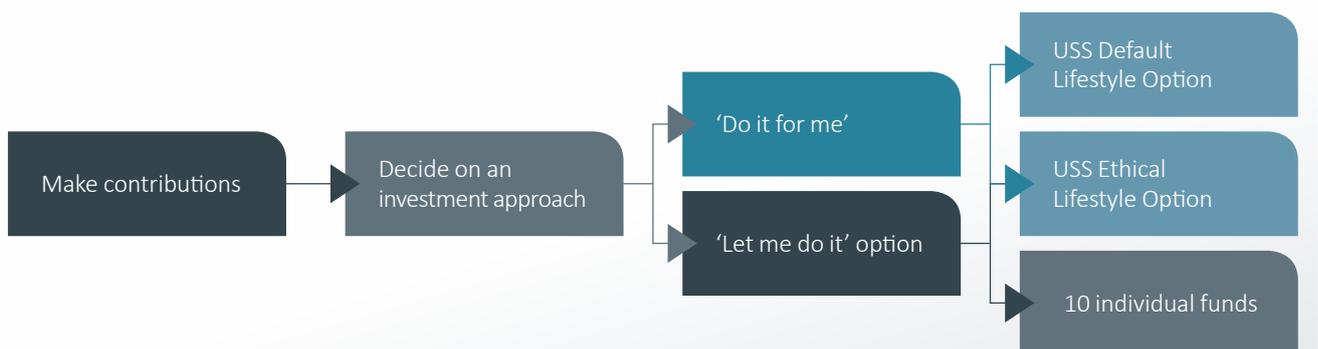
The options offer a range of different types of investment with different levels of risk and prospective return to cater for a range of investment objectives and beliefs.

The investment choices fall into two broad categories reflecting the degree of self-management that members wish to undertake:

- 'Do it for me' – a choice between two lifestyle options – the USS Default Lifestyle Option and the USS Ethical Lifestyle Option. Both lifestyle options automatically adjust to reduce risk as the member approaches their target retirement age.

¹ Prepared in accordance with Regulation 23 of the Occupational Pension Schemes (Scheme Administration) Regulations 1996 (as amended from time to time).

Key investment decisions available are:



Chair's defined contribution statement *continued*

Default investment approach: USS Default Lifestyle Option

At outset

- Invested in the USS Growth Fund
- To provide greater opportunity to generate investment returns over the longer term

Within 10 years of retirement

Switched progressively into the USS Moderate Growth Fund over the next 5 years to reduce the overall level of risk

Within 5 years of retirement

Start reducing the USS Moderate Growth Fund and switch progressively into the USS Cautious Growth Fund and the USS Cash Fund

At retirement

Invested 50% in the USS Cautious Growth Fund and 50% in the USS Cash Fund

- 'Let me do it' – a choice of 10 individual funds that members can choose to invest in if they wish to customise their approach. These are referred to as the self-select options.

It is also possible for a member to adopt a combination of the two broad categories outlined above.

Members who make no decision about investment approach are invested in the USS Default Lifestyle Option. As at 31 March 2020, 84% of the active membership were fully invested in the USS Default Lifestyle Option with a further 11% choosing a combination of the USS Default Lifestyle Option and self-select funds. The remaining members were wholly invested in either the self-select funds (3%) or the USS Ethical Lifestyle Option (2%).

My USS portal

By logging on to the member portal (My USS), members can change their investment choices within the USS Investment Builder for their existing funds or future contributions at any time, including moving between the 'Do it for me' and 'Let me do it' options, changing the level of contributions and their retirement age.

Default investment approach: USS Default Lifestyle Option

The USS Default Lifestyle Option is designed to reflect the different investment needs of a member during their working life and as they approach their target retirement age. If a member has not set their own target retirement age, it will be set to the scheme's normal pension age (currently age 65).

Design of the USS Default Lifestyle Option

The default option was designed in advance of the USS Investment Builder launch in October 2016, explicitly taking into account the hybrid structure and demographics of the scheme and considering the findings of:

- a large scale survey with members to understand their risk appetite and investment beliefs;
- projections of member benefits and the relative role of DB and DC benefits at retirement;
- focus groups with members to understand their views on DC benefits and their plans for how they might use their funds at retirement; and

- extensive investment strategy modelling to consider different risk and return profiles and asset allocation strategies.

The conclusions from this research and a corresponding set of 'Policy Beliefs' that guide the development of the USS Investment Builder funds are published at uss.co.uk/how-we-invest/our-principles-and-approach

A full description of the USS Default Lifestyle Option is included in the USS Default Lifestyle Option Statement of Investment Principles (SIP) on page 56 to 58 (annexed to and immediately following this DC Chair's Statement).

Between July and October 2019 the trustee undertook a review of the USS Default Lifestyle Option in line with legislation. This considered its performance since inception, the appropriate future strategy and the associated default statement of investment principles (SIP).

The review considered how member demographics, behaviours and future projections had changed since launch, alongside the latest market developments. As part of this review, the trustee considered the impact of the investment strategy and fund performance to date on different groups of members. It concluded that:

- the Policy Beliefs that underpin the design of the default option remain valid;
- the growth stage of the strategy, while performing well, does not fully reflect the higher than typical risk capacity of USS Investment Builder members;
- there is a small but growing group of members who are using their funds flexibly, including retaining funds beyond their target retirement age, or DB retirement; and
- as a result, the trustee resolved to adjust the glidepath to provide greater potential for growth during the later years of the glidepath, whilst still providing a relatively high degree of protection for members wishing to fully disinvest when they take their DB Benefits.

The proposed changes to the USS Default Lifestyle Option glidepath will be implemented in 2020/21, following communication to all affected members.

In addition to compliance with the legislative requirements for a triennial review, the trustee's Policy Committee undertakes a review of the ongoing suitability of the USS Investment Builder each year. Following the latest review in October 2019, the USS Bond Fund will be updated to provide a broader exposure to global listed credit. The next review will be undertaken in October 2020.

Prudential money purchase AVCs

In addition to the funds offered in the USS Investment Builder, some scheme assets are managed by Prudential.

These assets relate to the money purchase AVC arrangement previously in place. Prudential funds are closed to new contributions. Members with Prudential funds can choose to transfer them into USS Investment Builder or retain them in the AVC arrangement.

2. Fund performance and governance

The trustee has appointed USS Investment Management Limited (USSIM) as its investment manager. USSIM monitors the monthly performance of each of the investment options offered to members within the USS Investment Builder. It also reviews the performance of any remaining funds held under the Prudential money purchase AVC arrangement on an ongoing basis.

USSIM provides regular investment performance reports to the trustee's Investment Committee which is responsible for the oversight of the performance of the USS Investment Builder.

The Investment Committee provides the Trustee Board with a report on its activities and any recommendations arising after each meeting.

Each November, following the Policy Committee suitability review, the Investment Committee carries out an in depth look at both performance and how any recommended changes are implemented, to be recommended for approval at the full Trustee Board.

In February 2020, following a competitive tender, the trustee appointed Lane Clark & Peacock (LCP) to provide external investment advice to the scheme in place of Mercer ensuring that the trustee continues to receive robust, independent challenge on all investment matters relating to members' DC benefits. This is separate from, and additional to, the investment advice that the trustee receives from USSIM.

3. Administration

The trustee operates and annually reviews a suite of processes and controls designed to (i) ensure that those who are carrying out scheme administration have the appropriate training and expertise and (ii) enable a continuous and consistent service in the event of a change of administrator personnel or administration provider, including the business continuity plan that is tested periodically.

Quality assurance is embedded into scheme procedures to ensure that the trustee is confident that the processes and controls in place are robust, and to ensure that core financial transactions are processed promptly and accurately. The trustee recognises that delay and error in these financial transactions can cause losses to members. The financial transactions for the USS Investment Builder arrangement include (but are not limited to):

- receipt, reconciliation and investment of contributions to the scheme;
- transfers of assets relating to members into and out of the scheme;
- transfers of assets relating to members between different investment options within the scheme; and
- payments from the scheme to, or in respect of, members.

More detail on processes and how they operate in practice, in respect of these core financial transactions, is provided below.

Strategic partnerships

The trustee has established strategic partnerships with two external suppliers to deliver different aspects of the USS Investment Builder, namely:

- Capita: provides the pensions administration IT system for the scheme and all DC related back office administration services; and
- Northern Trust: provides the investment platform.

Working with these two partners, the trustee closely monitors end to end financial transactions to ensure prompt and accurate processing. This is achieved by delegation of this function to various dedicated teams, which are described in more detail below. The team conduct monthly service reviews with the partners, which are underpinned by comprehensive stewardship and MI reports. Collaboration between the dedicated teams and the external partners is critical and appropriate systems and processes are in place to ensure smooth and timely communication.

The trustee has recently appointed a Supplier Relationship manager to oversee its strategic relationship with key suppliers to the Pensions segment of the company, which includes Capita. Although the day to day oversight remains with the dedicated teams, the Supplier Relationship manager provides a point for escalation of any matters that the teams deem appropriate.

Chair's defined contribution statement *continued*

Core Transactions

Contributions

The Service Level Agreement between Capita and the trustee requires contributions to be invested by the end of the third working day following receipt or reconciliation against member records where this occurs later. Any delays in reconciliation are investigated to identify thematic issues which require improvement.

Processes and controls are now well established across both employers and USS teams and, assisted by a significant degree of process automation, provide assurance to the trustee that queries and issues are identified and addressed promptly.

A dedicated USS Client Engagement Team works with employers to manage contribution cycles effectively and to monitor validation matters or queries. Where validation matters are not addressed within prescribed timescales, and therefore contributions not allocated to member records, an automatic loss remedy procedure is invoked to ensure members experience no material shortfall as a result of these investment delays.

The USS Pensions Operating Group monitors investment of contributions on a monthly basis. Any significant matters are also reported to the Trustee Board.

Transfers into and out of the scheme

Transfers in and out of the scheme are overseen by the USS Transfers Team. Transferred monies are sent directly to the DC bank account which is operated by Capita. To ensure out of market exposure is limited, the USS Transfers Team work closely with the Capita DC Back Office Team to identify these payments and send for investment within two days of receipt.

Members can transfer out their USS Investment Builder funds to another registered pension scheme at any time, subject to none of their funds being in payment. Members have to initiate a transfer by completion of a form, following which the scheme aims to complete its due diligence procedures and make the transfer within 10 days (excluding any time allocated to dialogue and correspondence with the receiving scheme).

Switching of investments

Switching of investments happens automatically for those members with funds invested in the scheme's lifestyle options and who are within 10 years from their Target Retirement Age (TRA). The switches operate in line with the scheme's glidepaths, which stipulate the gradual movement of investments from higher to lower risk funds. Automatic switches are sample checked by Capita and the USS Pension Operations team to ensure they have been completed in accordance with the glidepaths.

Members can also voluntarily switch investments between funds via a web form on the member portal, My USS. Switches are transacted within one day of the member's instruction. Controls are in place to ensure that voluntary switches are executed to the member's instruction and completed within expected timescales.

Payment of pensions and other amounts to members

Pension commencement lump sum (PCLS) and uncrystallised funds pension lump sum (UFPLS) payments are made directly to members' bank accounts from the scheme. Once a payment request has been confirmed, payment of a PCLS is made on the first day following the member's date of retirement. Pension payments are made on the 21st of each month. As UFPLS payments also go through the pension payroll, these payments are also made on the 21st to those members whom we have completed an UFPLS event for within that payroll period.

Quality controls

The trustee ensures that core financial transactions are processed promptly and accurately by:

- defining the timescales and associated Service Level Agreements (SLAs) both internally and with the third party service providers (see below);
- requiring monthly reporting and assessment against the SLAs;
- designing appropriate and effective controls to mitigate the risk of inaccurate or protracted transactions;
- identifying errors or delays that have affected USS Investment Builder investments and rectifying these in conjunction with a loss remedy procedure;
- monthly reviews of the effectiveness of the controls and the timeliness of information processing, performance against SLAs and operational risk issues carried out by the USS Pensions Operations team;
- carrying out regular data review exercises to ensure that the data held in relation to members' DC benefits is complete and accurate, with conditional data reviewed on a monthly basis and additional checks carried out on other data at least four times a year;
- leveraging assurance reviews completed by the USS Internal Audit team who carry out periodic risk-based audits across key processes and controls;
- commissioning an external annual audit (performed by Ernst & Young LLP) to provide external assurance that the financial statements are free from material misstatement; and
- commissioning an external annual review of the default lifestyle funds' glidepaths (performed by Hymans Robertson) to provide external assurance that switches are completed in accordance with the glidepath rules.

The trustee also routinely considers administration of the scheme on a quarterly basis. Failure to process financial transactions promptly and accurately is recognised as a risk on the risk register. Risk reporting is considered quarterly at Trustee Board. Records of any issues in this area are also kept.

4. Value for members

Costs and charges

Charges and transaction costs borne by members can have a significant impact on the value of their USS Investment Builder funds. In recognition of this, the approach to, and appropriate level of, member charges was subject to extensive discussion as part of the design of the USS Investment Builder. Costs and charges are benchmarked against a range of other DC providers at least annually, as are the services offered by the scheme in exchange.

Typically, the majority of members who are invested in the USS Investment Builder do not incur any direct charges. This is because employers currently meet all administration costs of the scheme. They also subsidise investment costs up to 0.30% on all funds resulting from normal and additional contributions.

For both of the USS lifestyle options and all but one self-select fund (the USS Emerging Markets Equity Fund), this subsidy covers the entirety of the investment cost incurred by the scheme. Funds resulting from transfers into the scheme do not qualify for this subsidy and therefore incur a charge on funds under management as set out in the tables on page 49.

USS Default Lifestyle Option – notional charges

Whilst employers meet the majority of the costs of the USS Investment Builder on members' behalf, for transparency, estimated notional charges are included below to demonstrate what members would pay if they met the full cost.

The trustee reviews this notional charge on an annual basis and benchmarks it against the wider industry, noting the challenges in direct cost comparisons arising from the scheme's hybrid status and the additional complexity of running such an arrangement. A review of the level of the notional charges was carried out in January 2020.

The notional charging structure for the USS Default Lifestyle Option is a single notional charge of 0.50% of the member's fund value, including 0.30% for investment management charges and 0.20% in respect of pension administration and other services provided by the scheme.

Self-select options

The trustee has considered the cost and charges of the self-select options, including the USS Ethical Lifestyle Option, and compared these to those for the USS Default Lifestyle Option. The investment cost is based on the member's total fund value for the self-select fund options, and charges (pre subsidy) range from 0.10% to 0.45%, as shown in the tables on page 49.

One fund, the USS Emerging Markets Equity Fund currently has an Investment Management Charge (IMC) of 0.45% which is higher than the maximum available subsidy of 0.30%. Members who select this particular fund are therefore charged the incremental 0.15% on assets arising from contributions (and the full 0.45% on any assets transferred in).

Transaction costs

This section of the DC Chair's Statement reflects the latest legal requirements introduced in April 2018¹ and the September 2018 DWP guidance in this area which the trustee has taken into account, along with other regulatory guidance issued from time to time.²

Transaction costs are the costs associated with buying and selling units within a fund. There are three components (the first two of which are one-off costs):

- purchase costs – these are the costs of making new investments into a fund;
- selling costs – these are the costs of selling out of a fund; and
- embedded costs – these costs can be explicit and therefore easily identifiable (such as taxes, levies, and broker commissions) or implicit and therefore less readily defined and may include the response of the market to a trade or the timing of a trade (market impact, opportunity cost, and delay costs). There may be times when there is a negative cost (i.e. a gain is shown) due to market impact.

The potential transaction costs for buying and selling funds vary over time and with market conditions. Transaction costs within the USS Investment Builder are minimised as far as possible by netting sales and purchases and using new cash flows for re-balancing funds to target. The Cost Transparency Initiative (CTI) is an industry body overseeing the introduction of standardised templates for reporting of costs and charges by suppliers of investment services. The trustee has adopted their templates for the purpose of collecting transaction cost information from the external investment managers.

¹ Relating to the disclosure and publication of the level of charges and transaction costs by the trustees and managers of a relevant scheme.

² Including The Pensions Regulator's Code of Practice No 13 (last updated in July 2016)

Chair's defined contribution statement *continued*

Without exception, the external investment managers have all provided the requested data in this format for the period 1 January 2019 to 31 December 2019. The data collected for periods prior to 1 January 2019 used the DC workplace pensions template developed by the joint ABI/IA working group for the purpose of providing insurers with transaction costs data in accordance with COBS 19.8.4R, while the CTI templates used this year were being finalised. As reported last year, only two managers were able to provide historical data for full years prior to 1 January 2018 and the trustee is building up transaction cost data each year in line with TPR guidance.

The embedded transaction cost data provided for the funds in the AVC arrangement with Prudential was an aggregate figure rather than being collected via the CTI template. The transaction cost data received for the period 1 January 2019 to 31 December 2019 has been aggregated with the prior period data previously collated (as described above) to calculate the average transaction costs shown in the tables and illustrations on pages 49 to 51.

The tables on the following pages provide the details of the (pre-subsidy) investment management costs and specific transaction costs for both the USS Default Lifestyle Option and the self-select funds (including the USS Ethical Lifestyle Option).

As mentioned above, no members pay the 0.20% notional cost of pension administration services applicable to all of the scheme's funds so this cost has not been included in the tables below. Sale and purchase costs for the USS DC Funds range up to 0.78% for the USS Default Lifestyle Option and up to 0.72% in the USS Ethical Lifestyle Option. Exact costs will depend on the particular funds members are invested in, whether they are buying or selling and the day on which they deal.

The costs apply to the investment of contributions, requests by members to switch between funds or disinvest funds, automatic switching as part of the scheme's lifestyle options and transferring assets in from schemes outside USS. Transaction costs include advisory fees, commissions and stamp duty (stamp duty is applicable on property and UK equity purchases only, not sales).

Overall value for members

Delivering good value for both employers (who subsidise the costs of the USS Investment Builder) and members is fundamental to the scheme. In designing and managing the USS Investment Builder, the trustee focused on using the scheme's scale and expertise to deliver a high quality, cost-effective DC arrangement as part of the overall hybrid scheme.

The trustee has worked with two independent consultancies to provide an assessment of value for members; with Crowe UK to create a self-assessment framework supported by external insight; and, with Redington to undertake a benchmarking exercise with five Master Trust peers.

Assessment framework

Under the framework developed with Crowe, the trustee is able to assess the scope and quality of services provided relative to the illustrative or actual cost of these services. The assessment takes a broad range of factors into consideration, including, the scheme's performance in each key area of service, the characteristics of the members and their preferences, and, financial needs where possible.

The framework considers whether the quality of service justifies any differential in cost compared to other schemes in the market. This annual assessment uses a scoring mechanism to identify areas where the level of benefit relative to the associated cost could be improved.

The Redington benchmarking exercise considered our performance alongside that of the five peers across six service characteristics compared to the price members pay for those services. This was based on a completed questionnaire and additional insight gained from meetings with management.

Weightings were agreed for the service characteristics to reflect what matters most to members. Administration and Investment capabilities were given the greatest weighting.

The trustee is satisfied that the quality of the USS Investment Builder product and service is high relative to charges. The Crowe framework demonstrates that good value for members is evident in three out of four categories and value for members is evident in the area of Communications and Member engagement, which is in line with 2018/19.

We did not expect an improvement in this area during 2019/20 as we were only able to send members emails relating to service updates unless we had obtained their permission to send emails interpreted as marketing under the Privacy and Electronic Communications (EC Directive) Regulations 2003 (PECR).

The USS Investment Builder benchmarked joint first in the overall Redington assessment and first in the Investment criteria, with particular credit given for the design of the default strategy and employer absorption of most investment costs.

Funds in the USS Default Lifestyle Option

Fund	Transaction costs and charges (%)			
	IMC	Purchase (max)	Sale (max)	Embedded
USS Growth	0.30	0.78	0.22	0.09
USS Moderate Growth	0.30	0.60	0.19	0.09
USS Cautious	0.30	0.43	0.16	0.08
USS Cash	0.10	0.00	0.00	0.02

Funds in the USS Ethical Lifestyle Option

Fund	IMC	Purchase (max)	Sale (max)	Embedded
USS Ethical Growth	0.30	0.72	0.23	0.09
USS Ethical Moderate Growth	0.30	0.59	0.23	0.07
USS Ethical Cautious	0.30	0.45	0.21	0.05
USS Ethical Cash	0.10	0.00	0.00	0.05

Self-select Funds

Fund	IMC	Purchase (max)	Sale (max)	Embedded
USS Growth	0.30	0.78	0.22	0.09
USS Moderate Growth	0.30	0.60	0.19	0.09
USS Cautious	0.30	0.43	0.16	0.08
USS Cash	0.10	0.00	0.00	0.02
USS Bond	0.10	0.12	0.13	0.04
USS UK Equity	0.25	0.57	0.10	0.09
USS Global Equity	0.10	0.09	0.05	-0.03
USS Emerging Markets Equity	0.45	0.23	0.27	0.12
USS Ethical Equity	0.30	0.07	0.06	0.12
USS Sharia	0.30	0.00	0.00	0.04

Funds in an AVC arrangement with Prudential

Fund	IMC	Purchase (max)	Sale (max)	Embedded
With-Profits Cash Accumulation	Up to 1%	Not applicable	Not applicable	0.08%
Deposit	Not applicable	Not applicable	Not applicable	0.00%
International Equity	0.65%	0.22%	0.22%	0.07%
UK Equity	0.65%	0.71%	0.24%	-0.04%
Index-Linked	0.65%	0.14%	0.14%	0.18%
Discretionary	0.65%	0.57%	0.24%	0.03%
Fixed Interest	0.65%	0.10%	0.10%	0.09%
LGIM Ethical Global Equity Index	0.85%	0.10%	0.05%	0.01%
UK Equity Passive	0.45%	0.60%	0.11%	0.07%
Cash	0.65%	0.00%	0.00%	0.00%
Ethical	0.65%	0.64%	0.06%	0.04%

Notes for the transaction cost information on this page:

1. Purchases and sale costs are maximum costs. Actual realised costs may be much lower.
2. A negative embedded cost indicates a positive impact i.e. a gain. This may be due to implicit costs such as market timings.
3. IMCs are applied per annum, sales and purchases are one off costs and embedded fees will vary depending on the reporting period.
4. Prudential embedded transaction costs are the average over the period from January 2018 to 31 December 2019.

Chair's defined contribution statement *continued*

Illustration of costs and charges

The trustee is required to provide an illustrative example of the cumulative effect over time, of the application of the transaction costs on the value of a member's DC benefits.

Members automatically make contributions into the USS Investment Builder at the point where their salary exceeds the salary threshold (£58,589.70 for the 2019/20 financial year).

All members (including those with earnings below this threshold) can elect to make additional contributions into the USS Investment Builder.

The potential impact of costs and charges, across three different investment examples is set out below and on the next page for four different member profiles.

The examples illustrate the costs and charges borne by each member whose

entire funds are invested in one of the funds named below only (and not a combination of the different options):

- (i) USS Default Lifestyle Option;
- (ii) USS Emerging Markets Equity Fund (most expensive fund with the highest expected return); and
- (iii) USS Cash Fund (cheapest fund with the lowest expected return).

Member 1: Member who joins the scheme age 40 with a starting salary of £60,000 and makes normal contributions (but no additional contributions) until accessing their USS Investment Builder funds at age 65 (Normal Pension Age)

Investment in USS Default Lifestyle Option

Years in scheme	Before charges £	After all charges and cost £	After all charges and cost %
1	291	288	98.9
3	1,643	1,620	98.6
5	4,109	4,041	98.3
10	15,937	15,570	97.7
15	37,575	36,459	97.0
20	69,923	67,291	96.2
25	108,907	104,146	95.6

Investment in USS Emerging Markets Equity Fund (most expensive fund)

Years in scheme	Before charges £	After all charges and cost £	After all charges and cost %
1	299	296	99.2
3	1,715	1,695	98.8
5	4,367	4,300	98.5
10	17,739	17,293	97.5
15	43,902	42,349	96.5
20	87,995	83,929	95.4
25	156,965	147,580	94.0

Investment in USS Cash Fund (least expensive fund)

Years in scheme	Before charges £	After all charges and cost £	After all charges and cost %
1	280	280	99.9
3	1,534	1,531	99.8
5	3,734	3,723	99.7
10	13,529	13,464	99.5
15	29,799	29,602	99.3
20	53,006	52,559	99.2
25	83,664	82,815	99.0

Member 2: Member who joins the scheme age 30 with a starting salary of £35,000 and makes additional voluntary contributions of 2% from entering the scheme as well as normal contributions when salary exceeds the prevailing salary threshold until accessing their USS Investment Builder funds at age 65 (Normal Pension Age)

Investment in USS Default Lifestyle Option

Years in scheme	Before charges £	After all charges and cost £	After all charges and cost %
1	723	715	98.9
3	2,287	2,252	98.5
5	4,016	3,941	98.1
10	9,158	8,901	97.2
15	15,669	15,081	96.2
20	23,839	22,718	95.3
25	34,015	32,090	94.3
30	46,434	43,340	93.3
35	62,839	58,422	93.0

Investment in USS Emerging Markets Equity Fund (most expensive fund)

Years in scheme	Before charges £	After all charges and cost £	After all charges and cost %
1	742	736	99.2
3	2,405	2,373	98.7
5	4,334	4,254	98.1
10	10,564	10,221	96.8
15	19,370	18,461	95.3
20	31,665	29,709	93.8
25	48,677	44,922	92.3
30	73,057	66,354	90.8
35	112,783	101,040	89.6

Investment in USS Cash Fund (least expensive fund)

Years in scheme	Before charges £	After all charges and cost £	After all charges and cost %
1	695	694	99.9
3	2,111	2,106	99.8
5	3,562	3,550	99.6
10	7,359	7,312	99.4
15	11,419	11,316	99.1
20	15,772	15,590	98.8
25	20,454	20,169	98.6
30	26,417	26,003	98.4
35	38,110	37,517	98.4

Member 3: Member who joins the scheme age 50 with a starting salary of £80,000, transfers in a starting pot of £100,000, and who makes normal contributions (but no additional contributions) until accessing their USS Investment Builder funds at age 65 (Normal Pension Age)

Investment in USS Default Lifestyle Option

Years in scheme	Before charges £	After all charges and cost £	After all charges and cost %
1	107,772	107,339	99.6
3	125,089	123,648	98.8
5	144,948	142,284	98.2
10	202,248	195,196	96.5
15	259,568	247,336	95.2

Investment in USS Emerging Markets Equity Fund (most expensive fund)

Years in scheme	Before charges £	After all charges and cost £	After all charges and cost %
1	110,498	109,910	99.5
3	134,428	132,377	98.5
5	162,712	158,741	97.6
10	256,531	245,046	95.5
15	392,921	367,366	93.5

Investment in USS Cash Fund (least expensive fund)

Years in scheme	Before charges £	After all charges and cost £	After all charges and cost %
1	103,529	103,404	99.9
3	111,445	111,058	99.7
5	120,531	119,866	99.4
10	148,591	147,141	99.0
15	184,751	182,351	98.7

Member 4: Member who joins the scheme age 40 with a starting salary of £60,000 and makes normal contributions (but no additional contributions) until leaving the scheme at age 50, and remaining as a deferred member until accessing their USS Investment Builder funds at age 65 (Normal Pension Age)

Investment in USS Default Lifestyle Option

Years in scheme	Before charges £	After all charges and cost £	After all charges and cost %
1	291	288	98.9
3	1,643	1,620	98.6
5	4,109	4,041	98.3
10	15,937	15,570	97.7
15	18,789	18,018	95.9
20	21,591	20,285	94.0
25	23,052	21,229	92.1

Investment in USS Emerging Markets Equity Fund (most expensive fund)

Years in scheme	Before charges £	After all charges and cost £	After all charges and cost %
1	299	296	99.2
3	1,715	1,695	98.8
5	4,367	4,300	98.5
10	17,739	17,293	97.5
15	23,695	22,503	95.0
20	31,650	29,285	92.5
25	42,277	38,021	89.9

Investment in USS Cash Fund (least expensive fund)

Years in scheme	Before charges £	After all charges and cost £	After all charges and cost %
1	280	280	99.9
3	1,534	1,531	99.8
5	3,734	3,723	99.7
10	13,529	13,464	99.5
15	13,048	12,907	98.9
20	12,583	12,373	98.3
25	12,136	11,861	97.7

Notes on illustrations above and the previous page:

- Starting pot criteria is as follows:
 - Member 1, 2 and 4: starting pot criteria is nil and no funds are transferred in.
 - Member 3: starting pot criteria is £100,000 of transferred in funds. No further funds are transferred in.
- All members retire at age 65 and funds are then fully disinvested, with no early withdrawals.
- For the purposes of this illustration it is assumed that investment management charges apply, even though employers currently fully subsidise most of the fees that a member would otherwise pay for investing in the USS Investment Builder (with the exception of the IMC that applies to transferred in funds and to the Emerging Markets Equity Fund over the 0.30% subsidy level). This approach has been taken because there is no guarantee that employers will continue the subsidy in the future so it provides a more prudent estimate of the impact of charges.
- Values shown are estimates and actual experience will depend on investment performance.
- Projected pension pot values are shown in today's prices, and do not need to be reduced further for the effect of future inflation.
- Inflation is assumed to be 2.5% per annum as prescribed in the Statutory Money Purchase Illustrations.
- Normal contributions are assumed to be 20% per annum in excess of salary cap (8% employee and 12% employer). It is assumed that there are no contribution holidays for any of the three members and no additional contributions are made by member 1, 3 or 4. Member 2 is assumed to make 2% additional voluntary contribution from entering the scheme.
- Salary increases are assumed to be 4.5% per annum.
- The projected growth rate for the USS Default Investment Lifestyle Option is 5.9% up to 10 years prior to retirement, reducing to 5.0% at 5 years prior to retirement, and 3.4% at 1 year prior to retirement. The projected growth rate for the USS Emerging Markets Equity Fund is 8.6%. The projected growth rate for the USS Cash Fund is 1.8%. These are consistent with the assumptions used in calculating members' Statutory Money Purchase illustrations as at 31 March 2020.
- The above illustrations take account of property management expenses as these are embedded within the projected growth rate of the relevant fund; they are not included within the percentages in the tables on page 49.
- Year 1 represents the year ending 31 March 2020, with a pertaining salary threshold of £58,589.70.

Chair’s defined contribution statement *continued*

Members typically face minimal charges, as administrative costs are met in full by the employer and investment costs are currently fully subsidised (other than for funds transferred in) for members in the USS Default Lifestyle Option and all other funds except the USS Emerging Markets Equity Fund (where charges exceed the subsidy level as noted above). Even in a case where a member does face some charges, for example a member who has transferred funds into the scheme, the charges members actually pay for investment management (which are a maximum of 0.45% for the most expensive fund) are broadly in line with market practice.

The trustee continues to identify and implement improvements to the products and services we offer members. In 2020/21 we are focusing on the following developments:

- implementing a communications preference centre, to allow us to tailor direct communications that are most relevant to members;
- introducing guidance and advice services for members, including online, telephone and face to face support. Alongside this we will be improving members access to pensions flexibilities; and
- relaunching the My USS digital platform, with better access, user interface and functionality.

More information on USS member services can be found on pages 12 to 14 of the Annual Report and Accounts.

5. Trustee knowledge and understanding

The Trustee Board is made up of a diverse and mixed range of individuals who collectively possess the broad range of skills needed for management of both the DC elements and DB elements of the hybrid scheme. The Trustee Board includes members with significant expertise and experience in DC pensions, DB pensions, trusteeship, investment, governance, pension administration, financial management, risk and compliance, IT, HR and remuneration, communications, stakeholder engagement and the Higher Education sector. There are also four

active scheme members on the Trustee Board, who help to support and contribute to the Board’s understanding of the views and needs of the scheme membership. The diversity of the Trustee Board allows individuals to challenge each other and to offer different perspectives and solutions to matters. The trustee is committed to ensuring that its directors, both individually and collectively, have access to appropriate professional advice, and have and maintain all of the necessary skills, knowledge, competence and understanding required for the effective performance of their role as directors of the trustee. As part of this, each trustee director ensures that he or she is conversant with each of the key scheme documents (including the Scheme Rules, the Statement of Investment Principles (SIP), the default SIP and the Statement of Funding Principles) as well as the law relating to pension schemes and the principles relating to funding and investment. The scheme has various procedures in place to facilitate this which are detailed below. A number of activities are undertaken each year to evaluate and enhance the individual and collective skills, knowledge, competence and experience of the Trustee Board. These activities facilitate compliance by the trustee with The Pensions Regulator’s DC Code of Practice number 7 (TKU) and number 13 (Governance and administration) and are summarised in the diagram below and further details appear on the following pages.

Skills and competencies

Each trustee director is assessed against the trustee’s skills and competency matrices at least annually. Following completion of the 2019 annual appraisal process, during the scheme year ended 31 March 2020, each director completed a personal development plan to help meet both short and long-term objectives. Following which, individual training and/or development requirements were identified and appropriate steps taken to rectify any actual or potential knowledge gaps (see further below).

An effectiveness review of the Trustee Board is usually carried out annually. During the financial year, the trustee issued a Request For Proposal for the provision of board effectiveness review services. A new provider was selected to undertake trustee and USSIM Board effectiveness reviews concurrently in order to allow interaction between both boards to be considered as part of the review. Whilst the review is underway, completion of the review has been extended beyond the original anticipated completion date due to the outbreak of the coronavirus pandemic.

The Governance and Nominations Committee also reviews the completed board competency matrix annually and assesses whether or not the Trustee Board’s collective competencies are appropriate in enabling the trustee to properly exercise its functions or whether there are any gaps which should be filled by training, succession planning or other means.

Trustee skills, knowledge and understanding: key tools		
Skills matrix	Competency matrix	Induction
Training needs assessment and training programme	Annual appraisal process	Trustee Board/ committee effectiveness reviews

As part of this review, consideration is also given to whether the skills and knowledge of the Trustee Board's standing committees should be supplemented. For example, the chair of the USSIM Board and two additional investment specialists are members of the Investment Committee to enhance and widen the asset specific expertise of the trustee in this area. A full review of the effectiveness of the Trustee Board's standing sub-committees is typically undertaken once every two years (and overseen by the Governance and Nominations Committee). The last sub-committee reviews partly took place in 2019 and will cover the remaining sub-committees as part of the ongoing effectiveness review, currently on hold due to the coronavirus.

Rigorous appointment processes are followed in respect of all trustee director appointments and reappointments (having regard to the Trustee Board succession plan and competency matrix), including a formal role description which highlights the skills and behaviours required for the role. This helps to ensure that the directors, collectively as a board, will have appropriate competencies and that each director appointed is fit and proper.

Training

In addition to the review of individual director's training and development needs during annual appraisals, the collective training needs of the Trustee Board and its committees are reviewed at least annually by the Governance and Nominations Committee, which has responsibility for approving and overseeing the implementation of the annual board and committee training programme.

In compiling the annual training programme, consideration is given to a number of relevant matters including:

- (a) directors' completed skills matrices;
- (b) the scheme's business plan;
- (c) future board and committee agenda plans;
- (d) legal and regulatory horizon scanning;
- (e) regulatory guidance, and

- (f) feedback from directors, committee members and the executive.

The training is compiled in this way in order to ensure that any actual or potential knowledge gaps are identified and rectified. The directors receive targeted training sessions delivered by both external industry experts and USS employees. In order to ensure the most effective use of the Trustee Board's time, training sessions take place through a variety of mediums including, face-to-face at, and outside of board meetings, via webinar and other remote working technology. These formal training sessions are supplemented by additional (non-compulsory) educational sessions, open house events and the completion of mandatory e-learning modules. A log is maintained of all training undertaken by the trustee directors.

Trustee directors are also encouraged to attend additional external training events relevant to their specific areas of expertise and/or the committees on which they sit.

Trustee directors receive training on a broad range of topics, including some that are DC specific. By way of example, during the scheme year, the training received by the Trustee Board included training on the following topics:

- educational sessions in relation to the 2020 valuation, including an overview of USSIM's 'Fundamental Building Blocks' model;
- legal requirements of DC regulation and how the scheme meets certain governance standards;
- Value for Money Framework (including how it may impact future choices in relation to DC product developments);
- DC innovations in the market (including illiquid investments, Environmental, Social and Governance ('ESG') factors, cost transparency and post retirement innovation);
- insights into the Higher Education Sector;
- developments in corporate governance;

- the role of pension funds as capital allocators and as stewards of assets;
- how peers have approached implementing an ESG agenda within a pension fund; and,
- The Pensions Regulator's consultation on a revised DB Funding Code of Practice.

At the end of the scheme year, the Governance and Nominations Committee concluded that on balance, the training delivered had been helpful to the directors and committee members in discharging their duties and understanding the issues faced by the business.

Induction

The scheme has a detailed induction process for new Trustee Board directors, designed to ensure familiarity with the key scheme documents and sufficient knowledge and understanding of pensions and trust law, as well as the principles of pension scheme funding and investment (among other matters). This includes sessions with Trustee Board members, and members of the management team, including investment, pensions administration, actuarial, accounting, communications, internal audit, compliance, legal and governance and key external advisers.

This process is documented and is regularly reviewed by the Governance and Nominations Committee, which also oversees completion of the induction process by each new director. One new Trustee Director, Gary Dixon, joined the Board during the scheme year and has completed this induction programme.

Dame Kate Barker joined the Trustee Board on 1 April 2020 (ie after the scheme year ended) and is currently completing a tailored induction programme, details of which will be included in next year's Statement.

Each new Trustee Board director is expected to devote significant time to their induction, which is tailored to reflect their individual level of knowledge and assessed by reference to their completion of the skills matrix.

Chair's defined contribution statement *continued*

The trustee's appointment and induction processes also require that any individual appointed to the Trustee Board completes TPR's Trustee Toolkit prior to commencement of their appointment (in line with TPR's Code of Practice 15). All of the current trustee directors have completed TPR's trustee Toolkit.

Advice and guidance

The combined knowledge of the Trustee Board is supported by the USS Executive Management Team (which includes a range of professionals from various disciplines including: legal, actuarial and risk and compliance) as well as external professional advisers.

The Scheme Actuary and the Group General Counsel and/or the Chief Legal Officer generally attend all Trustee Board meetings ensuring that the Trustee Board has access to timely actuarial and legal advice. The trustee's principal investment manager and adviser is USSIM. During the financial year, the trustee also received the benefit of independent investment advice in relation to members' DC benefits. This was provided by Mercer before LCP assumed that role in February 2020. Both USSIM and the scheme's external investment advisers generally attend each meeting of the Investment Committee. In addition, other professional advisers, attend meetings of the Trustee Board and its other committees on an ad hoc basis when required.

Non-affiliation of trustee directors

The scheme is a multi-employer trust-based pension scheme and as such it is required to comply with additional requirements in relation to governance. These include that the majority of the trustee directors (including the chair) must be 'non-affiliated'. The Trustee Board has considered these requirements and determined that of the 11 directors, 7 directors, including the Chairman, can be classed as 'non-affiliated trustees' for the purpose of the legislation, and therefore the requirement for a majority of non-affiliated directors is satisfied.

This means that we have considered carefully any links that directors may have with companies providing services to the scheme and reviewed the procedures in place for managing any conflicts of interest that may arise. We have also reviewed the length of service on the Trustee Board and confirmed that no Director who is regarded as non-affiliated has been in his or her post for longer than the requisite time limits and that each has either been appointed through an open and transparent process or their appointment preceded these requirements.

Of the remaining four directors:

- Dr Carter is affiliated because he is a director of USSIM, the scheme's principal investment manager, providing investment and advisory services to the scheme;
- Professor Sir Anton Muscatelli is counted as an affiliated director because it is unclear whether his role was advertised sufficiently widely for the process used for his reappointment (which was operated by UUK and not the trustee itself) to be considered to be in accordance with the 'open and transparent' criteria in the legislation; and
- Ms English and Mr Merton are considered as affiliated directors as, when they were reappointed by the Trustee Board at the end of their first three-year term, the additional requirement to achieve non-affiliated status of holding an open and transparent recruitment process was not fulfilled.

Since these reappointments, changes have been made to trustee director appointment procedures to reflect the legislative requirements, ensuring that the trustee has oversight and suitable control over the appointment process for all directors and every director appointment or reappointment in the future will satisfy the 'open and transparent' criteria.

During the scheme year ended 31 March 2020, two directors were subject to appointment/reappointment processes as follows:

- Mr Dixon was appointed as a director with effect from 1 April 2019. Mr Dixon was appointed by Universities UK (UUK). UUK advertised the role in its CEO newsletter, in The Times and The Sunday Times newspapers, posted on specialist recruiter in the academic sector, as well as on websites open to the public such as LinkedIn and jobs.ac.uk. Applicants were shortlisted by UUK based on whether or not they met the criteria of the director role profile. The four shortlisted candidates were then interviewed and assessed against a common scorecard by a UUK appointing panel, supplemented by Kirsten English, the chair of USS's Governance and Nominations Committee. The chair of the Trustee Board was consulted on the proposed appointment which was also reviewed by the Governance and Nominations Committee and the full Trustee Board; and
- Mr Maybury was reappointed to the Trustee Board with effect from 1 November 2019. Mr Maybury is an independent director and was reappointed by the Trustee Board. The role was advertised in the Times newspaper and elsewhere. Applicants were sifted by the trustee's external recruitment adviser prior to being shortlisted. The shortlisted candidates were then interviewed and assessed against a common scorecard. The process was overseen by the Governance and Nominations Committee with input from the scheme's HR Officer. The chair of the Trustee Board was consulted on the proposed appointment. The Governance and Nominations Committee and the Trustee Board then reviewed and approved the reappointment of Mr Maybury. As a result of the reappointment following the revised process, Mr Maybury is now considered a non-affiliated director.

6. Member communications, engagement and representation

We take substantial action to communicate with members, engage them in their pension saving and reflect their views in decision making. As well as meeting statutory disclosure requirements, we are proactive in seeking to improve the overall member experience and reflect best practice identified by the Government, regulators and wider industry. A range of channels are used to communicate with members, including regular email updates, the online member portal, 'My USS' and Annual Member Statements (including Statutory Money Purchase Illustration (SMPI) components) which are issued to active members.

My USS

Around 40% of the scheme's active membership, and over 86,000 active members in total, are now registered for the My USS portal. This online platform provides a further communication channel and allows active and deferred members to manage their contributions and investment decisions, see the value and performance of their Investment Builder funds and view detailed fund information through fund factsheets. Access for retired members who retain USS Investment Builder Funds is being introduced later this year.

Emails

Throughout the scheme year, we've continued to test and improve our member emails whilst working within the constraints of the Privacy and Electronic Communications Regulations (PECR). The regulations inhibit our ability to send value-add email content such as retirement planning and financial wellbeing articles, to members – topics which typically encourage member engagement.

Instead we have focused on bolstering our service email proposition and have kept members up to date with important scheme news such as contribution changes and the introduction of illiquid assets into the USS Lifestyle investment options.

Combined Annual Member Statements

Combined DB and DC Annual Member Statements for the year ending 31 March 2019 were issued to the vast majority of active members by September 2019. These statements are personalised to individual members and they highlight specific benefits and/or calls to action. They also include information about the tax status of members' pensions in relation to annual and lifetime allowances to assist members with tax planning. For the first time the scheme trialled a Speed Read version of the statement, the results of which are being fed back into the design of the statement for 2020.

The scheme also met the statutory requirement to provide all active and deferred members with Statutory Money Purchase Illustrations (SMPIs) during the scheme year.

Member feedback

The scheme ensures member experiences and views are at the heart of its decision making. UCU has the power (subject to the approval of the trustee) 'to appoint' three directors to the Trustee Board. UCU also has a wide role representing members in connection with the scheme, both formally through the Joint Negotiating Committee (JNC) which approves and can initiate changes to scheme rules, and also informally through regular discussions with the USS Executive Management Team.

The scheme gathers feedback from individual members in a number of ways. Members are given information on uss.co.uk about how to contact USS online, by phone or by letter, and there is also a specific telephone Member Service Desk (MSD) for members with questions or comments about the USS Investment Builder.

Members are also invited to provide specific 'touch point' feedback, for example when calling with a technical enquiry or going through the retirement process.

The scheme has expanded the number of touchpoints where it gathers member feedback, to provide a more holistic view of the member experience. In 2019/20, the arrangements outlined above were supplemented by a large-scale survey sampling the whole membership. This was designed to understand members' perceptions, but also to encourage members to share their views about a number of aspects of the scheme, including the options available in the USS Investment Builder, the quality of member communications, and other dimensions of the products and services offered.

These surveys included both structured questions and the ability to provide open feedback. In August 2019, the scheme launched an online 'Member Voice' Panel.

This provides a flexible and timely way of soliciting feedback from members, as well as giving members another route to raise issues that will be passed onto the executive. Among a range of projects carried out, members have taken part in research into the new joining process, views about ESG and understanding of investment performance and risk.

Feedback from the surveys and the member panel has been shared with the Trustee Board and the scheme stakeholders through the JNC. It has helped the trustee to prioritise further improvements to the USS Investment Builder and the support offered to members around it.

The trustee takes all member feedback seriously and through dedicated policy and member communications teams, continually assesses all of the channels (and their effectiveness) including through a dedicated Member Experience Forum, which reports regularly to the Trustee's Policy Committee.

Professor Sir David Eastwood
Chair of the Trustee Board

USS Default Lifestyle Option Statement of Investment Principles

1. Introduction

1.1 This is the Statement of Investment Principles of the Universities Superannuation Scheme (“**USS**” or “**Scheme**”) Default Lifestyle Option (the “**Default SIP**”). The USS Default Lifestyle Option is the default arrangement in relation to the USS Investment Builder (**DC Section**). Although the USS Default Lifestyle Option can be actively chosen by members as their investment strategy, as a default arrangement it is the investment strategy into which the contributions of members who do not make any investment decisions are paid.

1.2 Universities Superannuation Scheme Limited (the “**trustee**”) has selected a lifestyle strategy as its default arrangement. Lifestyle strategies are designed to meet the divergent objectives of maximising the value of a member’s assets at retirement and protecting the value of accumulated assets particularly in the years approaching retirement.

1.3 This Default SIP sometimes refers to the main Statement of Investment Principles (the “**Main SIP**”) which covers the whole scheme. Copies of the Main SIP can be found in the “How USS invests” area of the scheme’s website uss.co.uk.

2. The trustee’s investment beliefs

2.1 The trustee maintains a set of Investment Beliefs as set out in section 1.2 of the Main SIP and available in the “How USS invests” area of the USS website. These Investment Beliefs include beliefs in relation to the range of suitable investment options for the DC Section.

2.2 In relation to the default arrangement, the trustee’s key beliefs are that:

2.2.1 as a member’s DC savings grow, investment risk will have a greater impact on member outcomes. Therefore, a strategy which seeks to reduce investment risk as the member approaches retirement is suitable; and

2.2.2 maintaining a measured amount of risk will improve the average outcome for members in the protection phase prior to retirement.

3. Investment governance structure

3.1 The trustee applies the same governance structure it uses for the scheme as a whole to the default arrangement. This is described in detail in Section 1.3 of the Main SIP. Broadly, the trustee’s governance structure focuses on embedding compliance with legislative requirements into agreements with investment and related service providers and monitoring compliance by having clear terms of reference for the board and sub-committees and supplementing this with appropriate formal investment advice where required.

4. Aims and objectives of the Default Fund

4.1 The default lifestyle option aims to take a suitably controlled amount of risk to generate investment returns in order to provide a reasonable level of retirement

benefits for members, taking into account the performance of asset markets and the level of contributions paid over a member’s lifetime into the DC section and recognising the hybrid nature of the scheme.

4.2 The objectives of the default lifestyle option are detailed below:

4.2.1 To focus particularly on generating returns in excess of inflation during the growth phase of the strategy (up to ten years before retirement) with a degree of downside risk mitigation;

4.2.2 To provide a strategy that reduces investment risk in the consolidation phase for members between ten and five years before expected retirement;

4.2.3 To provide exposure, at retirement, to a portfolio of assets to align as much as possible with how a member is likely to use their savings at and into retirement; and

4.2.4 To ensure sufficient liquidity to be able to pay benefits or transfers when required.

5. Investment Strategy

5.1 Kinds of investments to be held, the expected returns and the balance between different kinds of investments

5.1.1 The following are indicative descriptions of the type of investments that may be held by the different underlying funds comprising the default lifestyle option:

- **A growth fund** – will invest predominantly in growth assets, with an objective to provide long-term growth to members, with some diversification to mitigate portfolio risk to a degree. Investments will be made in both public and private markets in order to take advantage of the opportunity to earn enhanced returns including a premium for illiquidity and the benefit of additional diversification.
- **A moderate growth fund** – will typically invest a majority in growth assets, with more diversification than the growth fund, and with an objective to provide long-term growth to members from a balanced, more diversified portfolio of assets. Investments will be made in both private and public markets to increase diversification and enhance returns. This additional diversification aims to mitigate portfolio risk to a greater extent.
- **A cautious growth fund** – with an objective to provide stable growth to members from a portfolio of predominantly low risk, income focused assets, with some diversification, and minority exposure to growth assets. Investment will be made in both private and public markets to increase diversification and enhance returns.
- **A cash fund** – typically aims to produce a return in-line with its benchmark which represents

short-term interest rates, principally from a portfolio of Sterling denominated cash, deposits and money market instruments.

5.1.2 Moving from growth to moderate growth to cautious growth funds would be associated with decreasing proportions in growth assets such as equities and property; and increasing proportions in non-government and government bonds.

5.1.3 The chart below provides an illustration of the default structure, in particular detailing the balance between the different default lifestyle funds held in the final 10 years prior to a member's retirement date:

5.2 Managing risk

5.2.1 The default lifestyle option manages strategic asset allocation risks through Reference Portfolios consisting of mainstream assets, calibrated to different stages in the lifestyle strategy (as indicated in item 5.1.3). Risk is not considered in isolation, but in conjunction with expected investment returns and outcomes for members. The actual holdings within the constituent default lifestyle funds will include private market investments where appropriate in order to take advantage of the opportunity to earn enhanced returns including a premium for illiquidity and to gain additional diversification.

5.2.2 The default lifestyle option's growth phase invests in equities and other growth-seeking and diversifying assets. These investments are structured to generate higher real (after inflation) returns over the long term with some downside protection. During the growth phase, the downside

risk from an equity market downturn is partially mitigated through diversification away from equities into other asset classes.

5.2.3 In the consolidation phase, from ten years before expected retirement, the trustee is seeking, through greater diversification of assets, to reduce the likelihood of extreme investment shocks adversely affecting retirement outcomes.

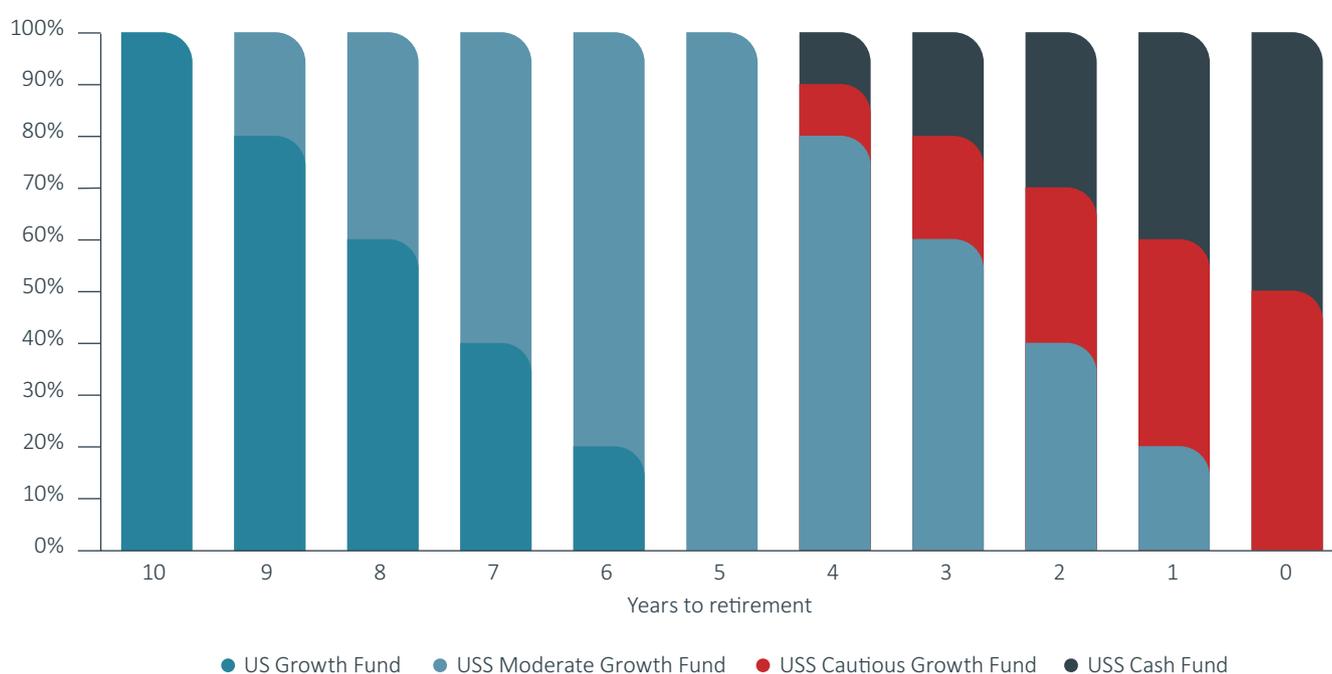
5.2.4 In the final five years before expected retirement (protection phase), the trustee has constructed a glide-path that seeks to continue to grow the member's DC retirement savings while reducing volatility as members' funds get closer to maturity. In the protection phase, assets are therefore switched to more cautious assets (such as gilts and corporate bonds), including an allocation to cash. This has been designed to reflect the uncertainty inherent in the timing of retirements, and the post-retirement investment choices that might be made by members.

5.2.5 Paragraph 2.3 of the Main SIP sets out further detail on how the trustee measures and manages risks.

5.3 Realisation of investments, cashflow and liquidity management

5.3.1 The USS DC section offers members a range of daily dealing notional funds. While a portion of the USS Default Lifestyle Option will be in illiquid assets, the trustee's policy is to maintain sufficient investments in liquid assets so that the realisation of assets will not be unduly costly nor disrupt the scheme's overall investment strategies in foreseeable circumstances. More detail can be found in paragraphs 2.2.5 and 3.2.9 of the Main SIP.

The USS Default Lifestyle Option Glidepath (as at 31/03/2020)



USS Default Lifestyle Option

Statement of Investment Principles *continued*

6. The trustee's policies on responsible investment and engagement activities

6.1 The default lifestyle option is managed in line with the trustee's policies as set out in the Main SIP, in particular, paragraph 1.4. The trustee's policies on responsible investment and engagement activities cover:

6.1.1 how financially material considerations are taken into account in the selection, retention and realisation of investments. This includes how the trustee considers environmental, social and governance (ESG) factors where financially material to the scheme, such as but not limited to climate change;

6.1.2 the extent to which non-financial ESG matters are taken into account in the selection, retention and realisation of investments;

6.1.3 the exercise of the rights (including voting rights) attaching to the investments; and

6.1.4 engagement activities in respect of the investments.

6.2 In addition to the default lifestyle option, the trustee makes available an ethical lifestyle option reflecting the fact that a number of members have specific objectives around ethical investing. This ethical lifestyle option is built along similar principles to the default lifestyle option but has been specifically designed to reflect members' objectives in this area. As well as this, an ethical equity fund and a Sharia consistent fund are included in the range of self-select funds offered to members.

6.3 The scheme's statement on responsible investment sets out detailed information on how the trustee considers ESG factors where financially material to the scheme and the extent to which it takes non-financial ESG factors into account. The trustee expects its internal and external managers to act consistently with this statement in the selection, retention and realisation of the scheme's investments. The current Statement on Responsible Investment can be found in the "How USS invests" area of the scheme's website uss.co.uk.

6.4 The trustee's policies in relation to its arrangements with asset managers are as set out in paragraph 1.5 of the Main SIP, including in relation to the trustee's wholly owned investment manager and advisor, USS Investment Management Limited (USSIM) which is primarily responsible for the management of the default arrangement and manager selection.

7. Investment in the best interests of beneficiaries

7.1 In designing the default lifestyle option, the trustee aims to invest USS assets in beneficiaries' best financial interests, taking into account the different risk profile of representative members (e.g. according to their expected time frame until retirement). In doing so, the trustee explicitly considers the trade-off between risk and expected returns and continues to monitor these risks through ongoing reporting. The trustee considers high level profiling analysis of the scheme's membership in order to inform decisions regarding the default lifestyle option. In accordance with the trustee's mandate, USSIM also manages and monitors the default arrangement and the performance of investment managers involved in that arrangement, and makes changes where necessary to ensure the trustee's aims and objectives are met.

8. Compliance and review

8.1 This Default SIP has been prepared in accordance with the requirements of the Pensions Act 1995 and relevant Regulations taking into account guidance from The Pensions Regulator.

8.2 The trustee will undertake such a review at least triennially, or sooner and without delay if there are significant changes to the scheme's investment policy, demographic profile or other circumstances which the trustee determines warrant a reconsideration of the reference portfolios for the default lifestyle option.

8.3 The trustee will revise the Default SIP after every review unless it decides that no action is needed as a result of the review.

Enquiries about the scheme

Enquiries should be addressed to the Company Secretary, Ms Nicola Mayo, Universities Superannuation Scheme Limited, Royal Liver Building, Liverpool L3 1PY.

Following a competitive tender process, a new Scheme Actuary has been appointed. Ali Tayyebi of Mercer ceased to be Scheme Actuary on 3 April 2020 and confirmed in writing to USS on 3 April 2020, that he knew of no circumstances connected with his removal from the appointment, which will significantly affect the interests of the current or prospective members and beneficiaries under the Universities Superannuation Scheme. The new Scheme Actuary (noted below) was appointed on 6 April 2020.

Principal officers and advisers

The principal external advisers of the scheme and for the trustee company are:

Scheme Actuary

Aaron Punwani of Lane Clark & Peacock LLP, 95 Wigmore Street, London W1U 1DQ

Independent Auditor

Ernst & Young LLP, 25 Churchill Place, Canary Wharf, London E14 5EY

Bankers

Barclays Bank PLC, Manchester M2 1HW
National Westminster Bank Plc, 22 Castle Street, Liverpool L2 0UP

Custodians

JP Morgan, 25 Bank St, Canary Wharf, London E14 5JP
Northern Trust, 50 Bank Street, Desk 7-18-F, London E14 5NT

The financial statements included within the annual report and accounts have been prepared and audited in accordance with regulations made under sections 41(1) and (6) of the Pensions Act 1995.

Financial statements

Audited financial statements consisting of the fund account, statement of net assets and notes

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Dedicated USS professionals delivering to high standards

Statement of trustee's responsibilities

The financial statements, which are prepared in accordance with UK Generally Accepted Accounting Practice, including the Financial Reporting Standard applicable in the UK (FRS 102) are the responsibility of the trustee. Pension scheme regulations require, and the trustee is responsible for ensuring, that those financial statements:

- show a true and fair view of the financial transactions of the scheme during the scheme year and of the amount and disposition at the end of the scheme year of its assets and liabilities, other than liabilities to pay pensions and benefits after the end of the scheme year; and
- contain the information specified in Regulation 3A of the Occupational Pension Schemes (Requirement to obtain Audited Accounts and a Statement from the Auditor) Regulations 1996, including making a statement whether the financial statements have been prepared in accordance with the relevant financial reporting framework applicable to occupational pension schemes.

In discharging the above responsibilities, the trustee is responsible for selecting suitable accounting policies, to be applied consistently, making any estimates and judgments on a prudent and reasonable basis, and for the preparation of the financial statements on a going concern basis unless it is inappropriate to presume that the scheme will not be wound up.

The trustee is also responsible for making available certain other information about the scheme in the form of an annual report.

The trustee also has a general responsibility for ensuring that adequate accounting records are kept and for taking such steps as are reasonably open to it to safeguard the assets of the scheme and to prevent and detect fraud and other irregularities, including the maintenance of an appropriate system of internal control.

The trustee is responsible under pensions legislation for preparing, maintaining and from time to time reviewing and if necessary revising a schedule of contributions showing the rates of contributions payable towards the scheme by or on behalf of the employers and the active members of the scheme and the dates on or before which such contributions are to be paid. The trustee is also responsible for keeping records in respect of contributions received in respect of any active member of the scheme and for adopting risk-based processes to monitor whether contributions are made to the scheme by the employers in accordance with the schedule of contributions. Where breaches of the schedule occur, the trustee is required by the Pensions Acts 1995 and 2004 to consider making reports to The Pensions Regulator and the members.

**Signed on behalf of the trustee
on 22 July 2020.**

Professor Sir David Eastwood
Chair

Independent auditor's report to the trustee of Universities Superannuation Scheme

Opinion¹

We have audited the financial statements of Universities Superannuation Scheme for the year ended 31 March 2020 which comprise the fund account, the statement of net assets and the related notes 1 to 21, including a summary of significant accounting policies. The financial reporting framework that has been applied in their preparation is applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice), including FRS 102 'The Financial Reporting Standard applicable in the UK and Republic of Ireland'.

In our opinion, the financial statements:

- show a true and fair view of the financial transactions of the scheme during the year ended 31 March 2020, and of the amount and disposition at that date of its assets and liabilities, other than liabilities to pay pensions and benefits after the end of the year;
- have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice including FRS 102 'The Financial Reporting Standard applicable in the UK and Republic of Ireland'; and
- contain the information specified in Regulation 3A of the Occupational Pension Schemes (Requirement to obtain Audited Accounts and a Statement from the Auditor) Regulations 1996, made under the Pensions Act 1995.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of our report below. We are independent of the scheme in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the FRC's Ethical Standard, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Conclusions relating to going concern

We have nothing to report in respect of the following matters in relation to which the ISAs (UK) require us to report to you where:

- the trustee's use of the going concern basis of accounting in the preparation of the financial statements is not appropriate; or
- the trustee has not disclosed in the financial statements any identified material uncertainties that may cast significant doubt about the scheme's ability to continue to adopt the going concern basis of accounting for a period of at least twelve months from the date when the financial statements are authorised for issue.

Other information

The other information comprises the information included in the Annual Report and Accounts other than the financial statements and our auditor's report thereon. The trustee is responsible for the other information.

Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in this report, we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of the other information, we are required to report that fact. We have nothing to report in this regard.

Note

¹ The maintenance and integrity of the Universities Superannuation Scheme web site is the responsibility of the trustee; the work carried out by the auditors does not involve consideration of these matters and, accordingly, the auditors accept no responsibility for any changes that may have occurred to the financial statements since they were initially presented on the web site. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

Independent auditor's report to the trustee of Universities Superannuation Scheme *continued*

Responsibilities of the trustee

As explained more fully in the trustee's responsibilities statement set out on page 60, the trustee is responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the trustee determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements the trustee is responsible for assessing the scheme's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the trustee either intends to wind up the scheme or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

A further description of our responsibilities for the audit of the financial statements is located on the Financial Reporting Council's website at www.frc.org.uk/auditorsresponsibilities.

This description forms part of our auditor's report.

Use of our report

This report is made solely to the scheme's trustee, as a body, in accordance with the Pensions Act 1995 and Regulations made thereunder. Our audit work has been undertaken so that we might state to the scheme's trustee those matters we are required to state to it in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the scheme's trustee as a body, for our audit work, for this report, or for the opinions we have formed.

Ernst & Young LLP

Statutory Auditor
25 Churchill Place
London E14 5EY
22 July 2020

Fund account for the year ended 31 March 2020

Contributions and benefits

	Note	2020 £m	2019 £m
Employer contributions receivable	4	2,454	2,030
Employee contributions receivable	4	255	249
Total contributions		2,709	2,279
Transfers in		16	16
Total additions		2,725	2,295
Benefits payable	5	(1,965)	(1,892)
Payments to and on account of leavers	6	(111)	(125)
Administrative expenses	7	(36)	(44)
Total withdrawals		(2,112)	(2,061)
Net additions from dealings with members		613	234

Return on investments

	Note	2020 £m	2019 £m
Investment income	8	1,663	1,716
Taxation		(21)	(49)
Change in market value of net investments	9	(2,903)	2,205
Investment management expenses	7	(124)	(107)
Net return on investments		(1,385)	3,765
Net (decrease)/ increase in the fund during the year		(772)	3,999
Net assets of the scheme at the start of the year		68,456	64,457
Net assets of the scheme at the end of the year		67,684	68,456

Statement of net assets available for benefits as at 31 March 2020

	Note	2020 £m	2019 £m
Investment assets			
Equities	9	18,397	24,276
Bonds	9	30,607	25,789
Pooled investment vehicles- Defined benefit	9, 10	12,634	13,399
Pooled investment vehicles- Defined contribution	9, 10	1,133	1,035
Derivatives	9, 11	1,301	834
Property	9	2,424	2,313
Cash and cash equivalents	9	5,395	2,929
Other investment balances	9, 12	1,411	1,107
		73,302	71,682
Investment liabilities			
Derivatives	9, 11	(1,427)	(411)
Other investment balances	9, 12	(4,299)	(2,881)
		(5,726)	(3,292)
Total net investments		67,576	68,390
Current assets	17	305	232
Current liabilities	18	(197)	(166)
Net assets of the scheme at 31 March		67,684	68,456

The financial statements summarise the transactions of the scheme and deal with the net assets at the disposal of the trustee. They do not take account of obligations to pay pensions and benefits which fall due after the end of the scheme year. The actuarial position of the scheme, which does take account of such obligations, is dealt with in the report on Actuarial Liabilities on page 82 and should be read in conjunction with this report.

The defined contribution investments included within total net investments include additional voluntary contributions invested with Prudential Assurance Company Limited (the Prudential). These assets are specifically allocated to secure extra benefits for those members that have made these additional voluntary contributions (AVCs).

The financial statements on pages 63 to 80 were approved by the trustee, Universities Superannuation Scheme Limited, on 22 July 2020 and were signed on its behalf by:

Professor Sir David Eastwood
Chair

The notes on pages 65 to 80 form part of these financial statements.

Notes to the financial statements for the year ended 31 March 2020

1 Basis of preparation

The financial statements have been prepared in accordance with the Occupational Pension Schemes (Requirement to obtain Audited Accounts and a Statement from the Auditor) Regulations 1996, Financial Reporting Standard 102 (FRS 102) – The Financial Reporting Standard applicable in the UK and Republic of Ireland issued by the Financial Reporting Council and the guidance set out in the Statement of Recommended Practice (2018) (the SORP).

Universities Superannuation Scheme is a registered Pension Scheme under Chapter 2 of Part 4 of the Finance Act 2004 and is therefore not normally liable to income tax on income from investments directly held, nor to capital gains tax arising from the disposal of such investments.

The scheme is a hybrid scheme. However where it is material and can be reliably measured the amounts in the financial statements have been split between defined contribution and defined benefit. Where amounts have not been split this has been disclosed in the relevant section or note.

In performing the going concern assessment, the trustee has reviewed the principal risks and uncertainties facing the scheme as set out on pages 27-29 and has concluded that these risks do not cast significant doubt on the scheme's ability to continue as a going concern. The trustee has reviewed the cash flow forecasts of the scheme, for a period of at least 12 months from the date of signing these financial statements and in doing so has considered the impact of coronavirus. Coronavirus has brought about increased market uncertainty. However, the trustee considers the scheme to be operationally resilient. There have been no material operational incidents or losses post year end. Consequently, the financial statements have been prepared on the going concern basis.

2 Treatment of subsidiary undertakings

The trustee company, Universities Superannuation Scheme Limited, owns the share capital of a number of investment holding companies to aid the efficient administration of the scheme's investment portfolio. In accordance with FRS 102 and the SORP, the trustee is not required to prepare consolidated accounts which include these entities and has chosen not to do so because the companies are held for investment purposes and not as operating subsidiaries. An analysis of the net assets held within such companies is shown in Note 15. Details of these companies may be obtained by writing to the Company Secretary of Universities Superannuation Scheme Limited, Ms N Mayo, at Royal Liver Building, Liverpool L3 1PY.

3 Accounting policies

The principal accounting policies of the scheme are set out below and have been applied consistently by the scheme in both the current and prior year.

(a) Contributions receivable

Contributions represent the amounts returned by the participating employers as being those due to the scheme under the Schedule of Contributions for the year of account and include contributions in respect of deficit funding. The responsibility for ensuring the accuracy of contributions rests with institutions which, under the terms of the trust deed regulating Universities Superannuation Scheme, are ultimately responsible for ensuring the solvency of the scheme. Retirement augmentation receipts and benefits payable are accounted for in the period in which they fall due under the agreement under which they are payable. Employer S75 debt contributions are accounted for when a reasonable estimate of the amount receivable can be determined.

(b) Benefits paid or payable

Pensions in payment are accounted for in the period to which they relate. The principal scheme benefits are provided under the main section. The supplementary section, which is funded by a contribution of 0.35% of salary from the members, provides additional benefits payable when a member retires on the grounds of ill health or incapacity or dies in service.

Where members can choose whether to take their retirement benefits as a full pension or as a lump sum with reduced pension, retirement benefits are accounted for on an accruals basis from whichever is the later of the retirement date and the date the scheme is advised of the member's choice. Other benefits are accounted for on the date of retirement or death as appropriate. Opt-outs are accounted for when the scheme is notified of the opt-out.

Where the trustee agrees or is required to settle tax liabilities on behalf of a member (such as where lifetime or annual allowances are exceeded) with a consequent reduction in that member's benefits receivable from the scheme, any taxation due is accounted for on the same basis as the event giving rise to the tax liability and shown separately within benefits.

(c) Transfers in and out

Transfers to and from the fund are accounted for when member liability is accepted or discharged, which is normally when the transfer amount is paid or received.

Notes to the financial statements for the year ended 31 March 2020 *continued*

3 Accounting policies (continued)

(d) Administrative and investment management expenses

Administrative and investment management expenses represent the costs incurred by the trustee company in managing and administering the scheme. These costs are recharged to the scheme in accordance with its rules and recognised in the scheme accounts on an accruals basis.

(e) Investment income

Investment income is brought into account on the following bases:

- (i) Dividends, tax and interest from investments, on the date that the scheme becomes entitled to the income;
- (ii) Interest on cash deposits and bonds, as it accrues; and
- (iii) Property rental income, on a straight-line basis over the period of the lease.

(f) Change in the market value of investments

The change in market value of investments during the year comprises all increases and decreases in the market value of investments held at any time during the year, including profits and losses realised on sales of investments during the year.

(g) Investments

Investments are included in the statement of net assets at fair value at the year end as follows:

(i) **Quoted equities and bonds** – Quoted equities and bonds in active markets are stated at closing prices; these prices may be last traded prices or bid market prices depending on the convention of the stock exchange on which they are quoted;

(ii) **Fixed interest securities** – Interest is excluded from the market value of fixed interest securities and is included within investment income receivable. However, in some global markets, the market value of the fixed income security includes the accrued interest and there will not be any separate interest accruals on these securities;

(iii) **Unquoted equities and bonds** – Unquoted equities and bonds are stated at fair value as estimated by the trustee using appropriate valuation techniques e.g discounted cash flow models. Significant direct investments are valued by independent valuation experts or a qualified internal team of valuation experts; and,

(iv) **Pooled investment vehicles** – Pooled investment vehicles are stated at unit prices or values as advised by the fund administrator based on the fair value of the underlying assets.

Unit trusts and managed funds

- Unit trusts and managed funds are stated at latest available bid price or single price, as advised by the fund manager, based on the market valuation of the underlying assets.

Private equity funds

- Private equity funds are stated at the latest available cashflow adjusted valuations prepared in accordance with International Private Equity and Venture Capital ('IPEV') Guidelines, including the recent IPEV guidance which addressed how to reflect the impact of coronavirus in valuations at 31 March 2020. An appropriate discount was estimated and applied by the trustee in respect of those funds where no contemporaneous valuation had been provided by the fund administrator as at the reporting date.

Hedge funds

- Hedge funds are stated at fair value based on prices determined by the independent administrator of each respective investment manager.

(v) **Derivative contracts** – Derivative contracts are included in the statement of net assets at fair value. Exchange traded derivatives with positive values are included as assets at bid price, and those with negative values as liabilities at offer price. Derivatives with an initial purchase price are reported as purchases. Those that do not have an initial purchase price but require a deposit, such as initial margin to be placed with the broker, are recorded at nil cost on purchase. Derivatives comprise the following types of contracts which are either exchange-traded or over the counter (OTC).

Options (exchange-traded)

- Options are recognised at the fair value as determined by the exchange price for closing out the option as at the year end. Collateral payments and receipts are reported as broker balances and are not included within realised gains or losses reported within change in market value.

Futures (exchange-traded)

- Open futures contracts are recognised in the statement of the net assets at their fair value, which is the unrealised profit or loss at the current bid or offer market quoted price of the contract, as determined by the closing exchange price as at the year end. Margin balances with the brokers represent the amounts outstanding in respect of the initial margin and any variation margin due to or from the broker. Amounts included in the change in market value represent realised gains or losses on closed futures contracts and the unrealised gains or losses on open futures contracts.

Swaps (OTC)

- Swaps (OTC) are recognised at fair value, which is the current value of future expected net cash flows arising from the swap, taking into account the time value of money. Net receipts and payments are reported within change in market value. Realised gains and losses on closed contracts and unrealised gains and losses on open contracts are included within change in market value. The notional principal amount is used for the calculation of cash flow only.

Forward foreign exchange contracts (OTC)

- Forward foreign exchange contracts outstanding at the year end are stated at fair value, which is determined as the gain or loss that would arise if each outstanding contract was matched at the year end with an equal and opposite contract at that date. Changes in the fair value of forward contracts are reported within the change in market value in the fund account.

(h) Property

Property is stated at open market value as at the year end date determined in accordance with the Royal Institute of Chartered Surveyors (RICS), Valuation - Global Standards 2017 (Incorporating the International Valuation Standards) and the UK National Supplement 2018, taking into consideration the current estimate of rental value and market yields. As at the year end date all direct property valuations were reported to the scheme by its independent property valuation experts on the basis of 'material valuation uncertainty' as per VPS 3 and VPGA 10 of the RICS Red Book Global.

(i) Defined contribution investments

Defined contribution investments are stated at net asset value provided by the fund administrator at the year end date.

(j) Repurchase agreements (repos)

The scheme continues to recognise and value securities that are delivered out as collateral under repurchase agreements (repos) and includes them in the financial statements. The cash received is recognised as an asset and the obligation to pay it back is recognised as a payable.

(k) Foreign currency

The scheme's functional and presentation currency is pounds sterling. Foreign currency investments and related assets and liabilities are translated into sterling at the rate ruling on the date of the transaction and subsequently at the rates of exchange at the year end. Exchange differences arising from translation are included in the fund account within the change in market value of investments. Foreign currency income and expenditure is translated at exchange rates prevailing on the appropriate dates, which are usually the transaction dates.

(l) Other investment arrangements

- The scheme continues to recognise securities delivered out under stock lending arrangements and as collateral under OTC derivative contracts reflecting its ongoing interest in those securities.
- Collateral securities received in respect of stock lending arrangements and derivative contracts are disclosed but not recognised as scheme assets.
- The value of collateral received in respect of OTC derivative contracts reflects its fair value.

4 Contributions receivable

	Defined benefit £m	Defined contribution £m	2020 £m	Defined benefit £m	Defined contribution £m	2019 £m
Employer contributions						
Employer contributions	1,632	95	1,727	1,351	93	1,444
Employer salary sacrifice contributions	635	57	692	518	55	573
S75 debt	33	–	33	11	–	11
Augmentation	2	–	2	2	–	2
	2,302	152	2,454	1,882	148	2,030
Employee contributions						
Members' basic contributions	83	7	90	72	7	79
Main section AVCs	27	106	133	30	106	136
Legacy AVCs	–	4	4	–	8	8
Supplementary section	28	–	28	26	–	26
	138	117	255	128	121	249
	2,440	269	2,709	2,010	269	2,279

Notes to the financial statements for the year ended 31 March 2020 *continued*

4 Contributions receivable (continued)

The scheme offers the following additional contributions facilities:

- Main section AVCs referred to above, represent additional contributions made into the USS Investment Builder which provides defined contribution benefits from the scheme. Contributions from members who commenced additional contributions on or after October 2016 are paid into main section AVCs.
- Legacy AVCs represent contributions made to purchase benefits under a legacy facility administered throughout the current and prior year by the Prudential. Individual members' contributions are deducted from their salaries and paid direct to the Prudential by the employers. The contributions are invested through the Prudential on behalf of the individuals concerned to provide additional benefits within the overall limits laid down by HM Revenue and Customs (HMRC).
- Contributions receivable from institutions towards the past service deficit are included within employer contributions above. For the period 1 April 2019 to 30 September 2019 there were no contributions made for this (year ended 31 March 2019: 2.1% of total salaries) Under the current funding plan, from 1 October 2019 up to the 30 September 2021 contributions will be 2% of total salaries, increasing to 6% from 1 October 2021 up to 31 March 2028.

5 Benefits payable

	Defined benefit £m	Defined contribution £m	2020 £m	Defined benefit £m	Defined contribution £m	2019 £m
Main section						
Pensions	1,574	–	1,574	1,498	–	1,498
Lump sums on or after retirement	307	42	349	326	28	354
Lump sums on death in service	19	–	19	17	–	17
Taxation where lifetime and annual allowance exceeded	1	3	4	3	–	3
	1,901	45	1,946	1,844	28	1,872
Supplementary section						
Pensions	16	–	16	15	–	15
Lump sums on death in service	2	–	2	4	–	4
	18	–	18	19	–	19
MPAVCs						
Lump sums on death in service	–	1	1	–	1	1
	–	1	1	–	1	1
	1,919	46	1,965	1,863	29	1,892

Taxation arising on benefits paid is in respect of members whose benefits have exceeded the lifetime or annual allowance and who elected to take lower benefits from the scheme in exchange for the scheme settling their tax liability.

The main section pensions for the prior year includes a reclassification of £36m benefits payable, previously reported as MPAVCs, as this is a more accurate classification of the substance of the transaction. This reclassification has had no impact on the total benefits payable in the prior year of £1,892m.

6 Payments to and on account of leavers

	Defined benefit £m	Defined contribution £m	2020 £m	Defined benefit £m	Defined contribution £m	2019 £m
Individual transfers out to other schemes	100	10	110	114	10	124
Refunds of contributions in respect of non-vested leavers	1	–	1	1	–	1
	101	10	111	115	10	125

7 Administrative and investment management expenses

	2020			2019		
	Administrative expenses £m	Investment management expenses £m	Total £m	Administrative expenses £m	Investment management expenses £m	Total £m
Personnel costs						
Wages and salaries	12	22	34	11	20	31
Employee incentives	2	33	35	1	20	21
Pension costs	(3)	(1)	(4)	9	10	19
Social security costs	1	8	9	1	6	7
Other	2	4	6	2	2	4
Total personnel costs	14	66	80	24	58	82
Other costs incurred in managing and administering the scheme						
Professional fees	10	13	23	7	9	16
Invoiced external manager fees	–	12	12	–	10	10
Securities research fees	–	8	8	–	9	9
Information services costs	2	9	11	4	7	11
Investment property management fees	–	6	6	–	4	4
Group premises costs	1	3	4	1	3	4
Recruitment, training and welfare	1	2	3	2	2	4
Pension Protection Fund levies	4	–	4	3	–	3
Other costs	4	5	9	3	5	8
Total other costs	22	58	80	20	49	69
Total scheme overheads	36	124	160	44	107	151

Administrative expenses are incurred by the trustee company in managing and administering the scheme and, in accordance with the trust deed, are chargeable to the scheme. Investment management expenses comprise all costs directly attributable to the scheme's investment activities. The prior year results have been restated to amend the split of administrative expenses and investment management expenses. The restatement has reduced administrative expenses by £17m, and increased investment management expenses by £17m. There has been no overall impact on the net assets of the scheme. The restatement of results is to better reflect the nature of expenses and to bring the financial statements into line with external benchmarking and internal management reporting.

USS operates a hybrid scheme and therefore administrative and investment expenses are incurred, recorded and controlled as a whole; a split between defined benefit and defined contribution would therefore be on an estimated basis. Any such defined contribution element would not be material for the current and prior years and therefore is not disclosed.

Investment management expenses¹ comprise all costs directly attributable to the scheme's investment activities, including the operating costs of USS Investment Management Limited and the costs of management and agency services rendered by third parties.

Included in the administrative personnel costs are emoluments charges (which equal amounts paid) in relation to salary and benefits, excluding LTIP and pension related charges, for Mr Galvin, Group Chief Executive, of £486,410 (2019: £459,163). Mr Galvin is eligible to participate in an individual LTIP plan which vests after 3, 4 and 5 years that will be entirely related to his performance and the achievement of set objectives. Amounts paid relating to the LTIP plan, for Mr Galvin, in the year are £212,009 (2019: £103,419). Pension related payments for Mr Galvin in the year amounted to £58,369 (2019: £60,713). Mr Galvin's accrued USS Retirement Income Builder pension at 31 March 2020 was £18,709 (2019: £17,106) and his accrued lump sum, including USS Investment Builder pension was £64,338 (2019: £59,835). These accrued pension benefits relate to amounts earned in respect of services to the scheme and exclude transfers in from other schemes. No pension contributions to the scheme were made on behalf of Mr Galvin in the year.

The aggregate amount of compensation payable for loss of office to employees during the year was £0.4m (2019: £0.5m) of which £0.4m (2019: £0.4m) was payable to employees whose remuneration exceeded £100,000 during the year.

Note

¹ Investment management expenses and administrative expense differ from the investment management and pension administration cost KPIs, as the KPIs do not include annual statutory adjustments such as the movements in the pension deficit recovery provision.

Notes to the financial statements for the year ended 31 March 2020 *continued*

8 Investment income

	2020 £m	2019 £m
Dividends from equities	718	789
Net property income	116	109
Income from pooled investment vehicles	245	311
Income from bonds	600	565
Interest on cash deposits	29	30
Expenses from derivatives	(27)	(54)
Other expenses	(18)	(34)
	1,663	1,716

Income from property is net of property related expenses of £5m (2019: £4m). Investment income from overseas investments may be subject to deduction of local withholding taxes under local domestic law. Where double taxation treaties exist between the UK and the country in which the income arises, the tax withheld may be reduced to a lesser rate or to zero by the operation of the relevant treaty. Final withholding taxes suffered, after applying any beneficial treaty rates, are disclosed on the face of the fund account as taxation. The investment income attributed to defined contribution is less than £1m, therefore has not been included in a separate column in the table above.

9 Investments reconciliation

The changes in the market value of investments are shown below:

	Note	Market value 2019 £m	Purchases at cost and derivative payments £m	Proceeds of sales and derivative receipts £m	Changes in value during the year £m	Market value 2020 £m
Equities		24,276	8,675	(12,778)	(1,776)	18,397
Bonds		25,789	15,299	(12,007)	1,526	30,607
Pooled investment vehicles- Defined benefit	10	13,399	2,151	(2,569)	(347)	12,634
Pooled investment vehicles- Defined contribution	10	1,035	327	(163)	(66)	1,133
Derivatives	11	423	8,216	(6,598)	(2,167)	(126)
Property		2,313	201	(1)	(89)	2,424
		67,235	34,869	(34,116)	(2,919)	65,069
Cash and cash equivalents		2,929			(20)	5,395
Other investment balances (net)	12	(1,774)			36	(2,888)
	13	68,390			(2,903)	67,576

Changes in the value of investments comprise both realised gains and (losses) on investments sold during the year and unrealised gains and (losses) on investments held at the year end. Please refer to note 3g for the valuation techniques and key model inputs used for determining investment fair values. At 31 March 2020 the scheme's approach to valuation was substantially consistent with its normal process and valuation policy. For the scheme's private market investment holdings, the valuation approach considered estimations regarding the short-term impact of coronavirus on their ability to generate earnings and cash flow and also considered a longer-term view of their ability to recover. The trustee has a separate Fair Value Committee to review the valuations policies, processes and their application to individual investments. The trustee has satisfied itself as to the methodology used, the discount rates and other key assumptions applied in the valuations reported at the year end date.

Included in the amount for derivatives are realised and unrealised losses of £1,199m (2019: £983m) from forward currency contracts, which are used to hedge the currency risk relating to overseas investments (see Note 11, Derivatives). These are offset by gains in the values of the corresponding overseas assets. Defined contribution investments comprises £228m (2019: £256m) legacy MPAVC investments and £905m (2019: £779m) USS Investment Builder investments.

At the year end, within other investment balances, amounts payable under repurchase agreements are £3,568m (2019: £2,441m). At the year end £3,644m (2019: £2,559m) of bonds reported in scheme assets are held by counterparties under repurchase agreements.

In addition to the defined contribution assets reported as Pooled Investment vehicles - defined contribution (market value 2020: £1,133m), a further £12m of assets included in other categories are held within the defined contribution element of the scheme. Further analysis of this balance is deemed immaterial to the accounts.

Transaction costs

Transaction costs are included in the cost of purchases and deducted from sale proceeds. Direct transaction costs include costs charged to the scheme such as advisory fees, commissions and stamp duty. In addition to the direct transaction costs disclosed below, indirect costs are incurred through the bid-offer spread on investments. Transaction costs analysed by main asset class and type of cost are as follows:

	Fees & taxes £m	Commission £m	2020 £m	Fees & taxes £m	Commission £m	2019 £m
Equities	7	7	14	14	10	24
Bonds	2	–	2	1	–	1
Private equity	2	–	2	1	–	1
Property	1	–	1	3	–	3
	12	7	19	19	10	29

10 Pooled investment vehicles

The scheme's pooled investment vehicles at the year end comprised:

	Note	2020 £m	2019 £m
Equities		1,981	2,232
Hedge funds		1,296	1,760
Private equity		8,111	8,026
Property		1,246	1,381
Pooled investment vehicles - Defined benefit	9,13	12,634	13,399
Equities		511	439
Bonds		255	224
Cash		83	58
Property		56	58
Legacy AVCs		228	256
Pooled investment vehicles- Defined contribution	9, 13	1,133	1,035
Total pooled investment vehicles		13,767	14,434

11 Derivatives

At the year end, the scheme recognised the following derivatives:

	Note	2020 £m	2019 £m
Assets			
Options		–	38
Futures contracts	11 (a)	463	249
Swaps	11 (b)	237	152
Forward foreign exchange contracts	11 (c)	601	395
		1,301	834
Liabilities			
Options		–	(2)
Futures contracts	11 (a)	(69)	(146)
Swaps	11 (b)	(165)	(152)
Forward foreign exchange contracts	11 (c)	(1,193)	(111)
		(1,427)	(411)
Net (liability)/ asset	9, 13	(126)	423

Notes to the financial statements for the year ended 31 March 2020 *continued*

11 Derivatives (continued)

Objectives and policies

The trustee has authorised the use of derivatives by the investment managers in accordance with the investment guidelines for each mandate. Investment in derivative instruments is only permitted for the purposes of:

- contributing to a reduction of risks; and
- facilitating efficient portfolio management (including the reduction of cost or the generation of additional capital or income with an acceptable level of risk).

Processes and controls are in place to ensure risk exposures, including to individual counterparties, are maintained within acceptable levels.

The main objectives for the use of derivatives are summarised as follows:

(i) Protection

Derivatives may be used as part of the permitted instrument types available to managers to protect (or enhance) active returns relative to the specified strategic benchmarks, for example, through the use of options and credit default swaps.

(ii) Modify exposure to asset classes

Derivatives are bought or sold to allow the scheme to change its exposure to a particular market or asset class more quickly than by holding the underlying physical assets. They may also be easier to trade than conventional stocks, particularly in large amounts.

(iii) Hedging

Forward currency contracts are used to partially hedge the currency risk relating to overseas investments. This aims to achieve a better match between the fund's assets and the base currency of its future liabilities. Derivatives may also be used for the purpose of hedging risk exposures affecting future scheme liabilities, for example, through the use of inflation and interest rate swaps.

(iv) Replication

Derivatives are used where liquidity or funding for generating a relevant investment exposure is perceived to be more efficient in derivatives, rather than the underlying physical assets.

Derivative contracts outstanding at year end

A summary of the scheme's outstanding derivative contracts at the year end is set out below. The valuations are based on the unrealised fair values of the various investments as at 31 March 2020:

a) Futures (exchange traded)

Type of future	Expires within	Notional principal £m	Asset £m	Liability £m
Equities	1 year	8,005	321	(14)
Commodity	1 year	407	17	(35)
Bonds	1 year	157	6	–
Currency	1 year	92	3	–
Interest rate	1 year	7,701	116	(20)
		16,362	463	(69)

The economic exposure represents the notional value of stock purchased under the futures contract on an absolute basis and is subject to market movements.

b) Swaps (OTC)

	Expires within	Nature of Swap	Notional principal £m	Asset £m	Liability £m
Credit default	0-10 years	Index	1,054	15	(6)
	0-10 years	Single	1,004	48	(33)
Interest rate	0-50 years	Fixed vs floating	982	109	(46)
Total return	0-1 years	Equity	825	65	–
	0-1 years	Commodity	807	–	(80)
			4,672	237	(165)

c) Forward foreign exchange (OTC)

Currency bought	Currency sold	Notional principal £m	Asset £m	Liability £m
GBP	USD	19,029	97	(694)
GBP	EUR	4,348	84	(31)
GBP	AUD	1,214	26	–
GBP	Other	1,046	4	(24)
USD	GBP	2,799	18	(100)
USD	Other	3,290	154	(8)
Other	USD	2,928	3	(167)
Other	GBP	1,357	17	(27)
Other	Other	700	1	(5)
JPY	GBP	1,451	98	–
EUR	GBP	1,026	2	(25)
IDR	USD	239	–	(31)
MXN	USD	291	–	(55)
USD	MXN	181	32	–
USD	ZAR	384	65	–
ZAR	USD	362	–	(26)
		40,645	601	(1,193)

Other currency relates to a number of smaller contracts in denominations not disclosed above. All of the above contracts settle within one year.

At the end of the year the scheme held collateral of £149m (2019: £500m) and pledged collateral of £1,134m (2019:£14m) in the form of cash and government bonds in respect of OTC derivatives.

Notes to the financial statements for the year ended 31 March 2020 *continued*

12 Other investment balances

	2020 £m	2019 £m
Assets		
Amount due from stockbrokers	29	139
Dividends and accrued interest	211	282
Margin balances	1,171	686
	1,411	1,107
Liabilities		
Amount due to stockbrokers	(268)	(198)
Margin balances	(462)	(238)
Repurchase agreements	(3,568)	(2,441)
Accrued interest	(1)	(4)
	(4,299)	(2,881)
Net other investment balances	(2,888)	(1,774)

During the normal course of business, the scheme enters into derivative transactions which are reflected in the scheme financial statements. As a consequence of the clearing arrangements in respect of these transactions, certain charges have been granted by Universities Superannuation Scheme Limited. No liability is expected to arise as a result of these charges.

13 Fair value determination

Fair value is the price that would be received to sell an asset or the price paid to transfer a liability in an orderly transaction between market participants at the measurement date.

The fair value of financial instruments has been estimated using the following fair value hierarchy:

Category 1: The unadjusted quoted price in an active market for identical assets or liabilities that the entity can access at the measurement date.

Category 2: Inputs, other than quoted prices included within Level 1, that are directly or indirectly observable (i.e. developed using market data) for the asset or liability.

Category 3: Inputs are unobservable for the asset or liability (i.e. assets for which market data is unavailable).

2020 Category					
	Note	1 £m	2 £m	3 £m	Total
Equities		14,958	–	3,439	18,397
Bonds		–	27,302	3,305	30,607
Pooled investment vehicles- Defined benefit	10	149	902	11,583	12,634
Pooled investment vehicles- Defined contribution	10	–	1,133	–	1,133
Derivatives	11	394	(520)	–	(126)
Property		–	–	2,424	2,424
Cash and cash equivalents		5,395	–	–	5,395
Other investment balances	12	(2,888)	–	–	(2,888)
	9	18,008	28,817	20,751	67,576

2019 Category					
	Note	1 £m	2 £m	3 £m	Total
Equities		20,804	–	3,472	24,276
Bonds		–	22,935	2,854	25,789
Pooled investment vehicles- Defined benefit	10	230	1,017	12,152	13,399
Pooled investment vehicles- Defined contribution	10	–	1,035	–	1,035
Derivatives	11	103	284	36	423
Property		–	–	2,313	2,313
Cash and cash equivalents		2,886	43	–	2,929
Other investment balances	12	(1,774)	–	–	(1,774)
	9	22,249	25,314	20,827	68,390

Notes to the financial statements for the year ended 31 March 2020 *continued*

14 Investment risks

Investment risks are set out below as follows:

Credit risk: This is the risk that one party to a financial instrument will cause a financial loss for the other party by failing to discharge an obligation.

Market risk: This comprises currency risk, interest rate risk and other price risk.

- **Currency risk:** This is the risk that the fair value or future cash flows of a financial asset will fluctuate because of changes in foreign exchange rates.
- **Interest rate risk:** This is the risk that the fair value or future cash flows of a financial asset will fluctuate because of changes in market interest rates.
- **Other price risk:** This is the risk that the fair value or future cash flows of a financial asset will fluctuate because of changes in market prices (other than those arising from interest rate risk or currency risk), whether those changes are caused by factors specific to the individual financial instrument or its issuer, or factors affecting all similar financial instruments traded in the market.

The trustee manages investment risks, including credit risk and market risk, within agreed risk limits which are set taking into account the scheme's strategic investment objectives. These investment objectives and risk limits are implemented through the Reference Portfolio in place with the scheme's internal investment manager and monitored by the trustee by regular reviews of the activity and performance of the internal manager and of scheme assets relative to the Reference Portfolio.

Further information on the trustee's approach to risk management and the scheme's exposures to credit and market risks are set out below and within the Statement of Investment Principles. This does not include defined contribution investments as these are not considered significant in relation to the overall investments of the scheme.

Credit risk

The scheme is subject to credit risk because the scheme invests directly in bonds, OTC derivatives, has cash balances and unsettled trades, undertakes stock lending activities, leases properties and enters into repurchase agreements. The scheme also invests in pooled investment vehicles and is therefore exposed directly to credit risk in relation to the instruments it holds in the pooled investment vehicles. The scheme is exposed indirectly to credit risks arising on the financial instruments held by the pooled investment vehicles.

	Investment grade		Non-investment grade		Unrated		Total	
	2020 £m	2019 £m	2020 £m	2019 £m	2020 £m	2019 £m	2020 £m	2019 £m
Direct non collateralised								
Bonds not under repurchase or stock loan agreements	17,361	15,388	1,458	1,640	4,207	3,368	23,026	20,396
Cash	5,395	2,929	–	–	–	–	5,395	2,929
Pooled investment vehicles	–	–	–	–	12,490	13,170	12,490	13,170
Rent debtor	–	–	–	–	11	2	11	2
Unsettled trades	29	105	–	10	–	–	29	115
Sub-total	22,785	18,422	1,458	1,650	16,708	16,540	40,951	36,612
Direct collateralised								
Bonds lent under repurchase agreements	3,569	2,448	–	–	–	–	3,569	2,448
Bonds lent under stock loan agreements	4,138	3,063	–	–	–	–	4,138	3,063
Equities lent under stock loan agreements	1,096	1,614	–	–	–	–	1,096	1,614
Derivatives	836	548	–	–	–	–	836	548
Sub-total	9,639	7,673	–	–	–	–	9,639	7,673
	32,424	26,095	1,458	1,650	16,708	16,540	50,590	44,285

Indirect credit risk arises in relation to underlying investments held in pooled investment vehicles holding private market funds, hedge funds and controlled property funds (value of underlying assets subject to credit risk only included in the note). The value at the year end was: private market funds £6,742m (2019: £6,842m), hedge funds £1,296m (2019: £1,760m) and controlled property funds £19m (2019: £13m).

A summary of pooled investment vehicles by type of arrangement is as follows:

	Note	2020 £m	2019 £m
Unit trusts		832	1,040
Open ended investment companies (OEIC's)		1,981	2,232
Partnership interests		8,525	8,367
Shares of limited liability partnerships		1,296	1,760
	9,10,13	12,634	13,399

Direct credit risk on pooled investment vehicles comprises the pooled funds shown in note 10 with the exception of £149m (2019: £230m) investment in exchange traded funds which are not considered to be subject to credit risk as they are traded on an active market. Additionally £5m (2019: £nil) of accrued income is included within the credit risk table.

Credit risk arising on bonds and private credit is managed:

- (i) through investment in developed-market government bonds where the credit risk is minimal; and
- (ii) for corporate and emerging-market bonds and private credit, individual investment mandates set out the maximum permissible exposure to non-investment grade issuers, so as to maintain the overall credit quality of the portfolios.

The use of credit default swaps has the effect of mitigating the maximum exposure to credit risk. The exposure to fixed interest credit risk mitigated through credit derivatives was £662m (2019: £1,855m).

Cash is held with financial institutions which are at least investment grade credit rated, with the maximum deposit limit for any one counterparty set by reference to its credit rating. Credit default swaps (CDS) spreads and rating notifications are monitored to ensure exposures remain within the approved limits. Money market liquidity funds must have a minimum AAA rating to be eligible for investment and limits are in place on the maximum allowable exposure to any single fund.

Credit risk arising from unsettled trades is mitigated through delivery versus payment settlement in the majority of markets.

Credit risk arising on derivatives depends on whether the derivative is exchange-traded or OTC. OTC derivative contracts, other than those which are centrally cleared, are not guaranteed by any regulated exchange and therefore the scheme is subject to risk of failure of the counterparty. The credit risk for OTCs, including swaps and forward foreign currency contracts, is reduced by collateral arrangements (see note 11). OTCs are valued daily and counterparty exposures are fully collateralised subject to de minimis limits.

Credit risk arises from the rents due from tenants of the scheme's investment property portfolio. This is mitigated through credit control procedures, regular review of tenant credit ratings and the use of rent deposits where appropriate.

Credit risk arising from repurchase activities is mitigated through collateral arrangements which fully collateralise the exposure.

Credit risk arising from stock lending activities is mitigated by restricting the amount of stock that may be lent, only lending to approved borrowers who are rated investment grade, limiting the amount that can be lent to any one borrower and through collateral arrangements. Loans are fully collateralised, with daily mark to market of all loaned securities, to ensure collateral is received or returned to maintain full collateralisation. In addition, the scheme's custodians provide indemnity against losses arising from stock lending exposure to counterparties.

Direct credit risk arising from pooled investment vehicles is mitigated by the underlying assets of the pooled arrangements being ring-fenced from the pooled manager, provisions to automatically dissolve the funds in the event of insolvency of the pooled manager or general partner, a cap of liability to pooled funds at the level of funds committed, and diversification of investments amongst a number of pooled arrangements. Due diligence checks are carried out on the appointment of new pooled investment managers and on an ongoing basis thereafter.

Notes to the financial statements for the year ended 31 March 2020 *continued*

14 Investment risks (continued)

Currency risk

The scheme is subject to currency risk because some of the scheme's investments are denominated in foreign currencies and/or comprise assets whose economic value is generated in foreign currencies. Currency exposures are monitored and mitigated through a currency hedging policy, through which the reference portfolio includes 50% hedging for developed market equity and 100% for developed market fixed income. Derivative holdings are represented on a market value basis within the table below:

	2020 £m	2019 £m
Direct		
Australian Dollar	744	1,750
Brazilian Real	422	670
Canadian Dollar	449	704
Euro	4,523	4,496
Hong Kong Dollar	1,278	1,615
Indian Rupee	473	652
Indonesian Rupiah	338	–
Japanese Yen	1,813	2,067
Mexican Peso	626	587
South African Rand	313	583
South Korean Won	472	590
Swiss Franc	760	971
Taiwan New Dollar	513	–
United States Dollar	17,099	18,996
Other	1,989	3,102
	31,812	36,783
Less: Foreign currency hedging	(10,608)	(15,016)
	21,204	21,767

Indirect currency risk arises on pooled investment vehicles where the vehicle invests in assets which are denominated in foreign currencies and/or comprise assets whose economic value is generated in foreign currencies. The value as at the year end was £9,343m (2019: £9,870m).

Interest rate risk

The scheme's investments are subject to interest rate risk because they include public and private credit, swaps and money market instruments. Also, investments in certain unquoted equities are valued in a way that makes them sensitive to interest rates and are, therefore, directly subject to interest rate risk. Much of this investment-related interest-rate risk provides an offsetting exposure to the interest risk which is inherent to the scheme's liabilities. This serves to mitigate the interest rate risk across the scheme as a whole.

Cash including liquidity funds are exposed to short duration interest rate risk. However these balances have been excluded from the amounts disclosed below as the interest rate risk involved is immaterial.

	2020 £m	2019 £m
Direct		
Bonds	30,607	25,789
Equities	2,747	2,840
Derivatives	(399)	378
	32,955	29,007

The prior year comparative for derivatives (£378m) has been restated by £8,955m (previously reported as £9,333m) to reflect market value as opposed to economic exposure. Indirect interest rate risk arises on pooled investment vehicles where the vehicle invests in assets which are exposed to interest rate risk. The value as at the year end was £1,705m (2019: £1,595m).

Other price risk

Other price risk arises principally in relation to the scheme's return-seeking portfolio, which includes directly held equities, equities held in pooled vehicles, futures, hedge funds, private equity and investment properties. Derivative values below are based on market value.

The scheme manages this exposure to overall price movements by constructing a diverse portfolio of investments across various markets.

	2020 £m	2019 £m
Direct		
Equities	18,397	24,276
Derivatives	274	45
Property	2,424	2,313
Pooled investment vehicles	12,634	13,399
	33,729	40,033

The prior year comparative for derivatives (£45m) has been restated by £20,180m (previously reported as £20,225m) to reflect market value as opposed to economic exposure. Bonds have been removed and pooled investment vehicles have been added following a review of asset types subject to the risk.

Indirect other price risk arises in relation to underlying investments held in pooled investment vehicles holding equity, private market funds, hedge funds and property funds. The value of at the year end was; equity £1,981m (2019: £2,232m) private market funds £8,111m (2019: £8,026m), hedge funds £1,296m (2019: £1,760m) and property funds £1,246m (2019: £1,381m).

15 Subsidiaries controlled by Universities Superannuation Scheme

The net assets of subsidiary companies through which the scheme holds investments are summarised in aggregate below.

	2020 £m	2019 £m
Equities	2,884	2,837
Bonds	1,672	1,288
Pooled investment vehicles	6,754	6,466
Cash	19	18
Other investment balances	2	(1)
	11,331	10,608

16 Self investment

The scheme had no 'employer related investments' at year end, as defined by relevant legislation, except equity and loan investments made in the normal course of business in certain investment holding companies. The funding of these investment vehicles, which are held for investment purposes and are not operating subsidiaries as explained on page 65, amounts to 2.0% (2019: 2.3%) of the net assets of the scheme.

17 Current assets

	2020 £m	2019 £m
Contributions receivable:		
– employer contributions	145	118
– members' basic contributions	66	53
– members' additional voluntary contributions	11	11
Other debtors	26	3
Cash at bank and in hand	57	47
	305	232

Contributions due at the year end have been paid to the scheme subsequent to the year end in accordance with the Schedule of Contributions. Current assets have not been split between defined benefit and defined contribution on the basis that the defined contribution element would not be material on a line by line basis (see Note 7 for further details).

Notes to the financial statements for the year ended 31 March 2020 *continued*

18 Current liabilities

	2020 £m	2019 £m
Rents and service charges received in advance	(22)	(20)
Benefits payable	(96)	(88)
Taxation creditor	(3)	(1)
Due to trustee company	(75)	(56)
Other creditors	(1)	(1)
	(197)	(166)

Current liabilities have not been split between defined benefit and defined contribution on the basis that the defined contribution element would not be material on a line by line basis (see Note 7 for further details).

On 26 October 2018, the High Court handed down a judgement involving the Lloyds Banking Group's defined benefit pension schemes. The judgement concluded that the schemes should be amended to equalise pension benefits for men and women in relation to guaranteed minimum pension benefits. The issues determined by the judgement arise in relation to many defined benefit schemes. The trustee of the scheme is aware that the issue will affect the scheme and will be considering this at its future board meetings and decisions will be made as to the next steps. Under the ruling, schemes are required to backdate benefit adjustments in relation to GMP equalisation and provide interest on the backdated amounts. Based on an initial assessment of the likely backdated amounts and related interest, the trustee does not expect these to be material to the financial statements and therefore has not included a liability in respect of these matters in these financial statements. Any such amounts will be accounted for in the year in which they are determined.

19 Securities on loan

Securities have been lent to the counterparties in return for fee income earned by the scheme. Security for these loans is obtained by holding collateral in the form of cash, equities, government bonds and letters of credit.

	2020 £m	2019 £m
Value of stock on loan at 31 March		
Equities	1,096	1,614
Bonds	4,138	3,063
	5,234	4,677
Collateral held	5,695	5,031

20 Financial commitments

	2020 £m	2019 £m
Outstanding commitments to private equity partnerships	5,038	6,058

These represent amounts subscribed and committed to private equity partnerships that had not been drawn down at the year end and are committed for draw down in the next 5 years.

21 Related party transactions

Related party transactions are defined as either employer-related transactions or trustee-related transactions. There were no transactions with employers in either the current or preceding years, other than those identified as employer-related investments disclosed in Note 16. Such transactions are performed in the normal course of business and at an arm's length. The only trustee-related transactions in either the current or prior year relate to the day-to-day administration of the scheme by the trustee company and its subsidiary, and the membership of the scheme of certain trustee board members or key management personnel. The membership of those trustee board directors is through past or present employment with the scheme employers and accordingly is in the normal course of business on an arm's length basis. Similarly, membership of key management personnel which arises on account of their employment by the trustee company, is based on the same conditions as all members and is therefore considered to be on an arm's length basis and in the normal course of business.

Administrative and investment management expenses incurred by the trustee company are shown in Note 7. All transactions are solely for the purposes of effectively administering the scheme.

Actuarial

An explanation of the actuarial liabilities of the scheme and the funding ratio.

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Principal actuarial assumptions	88
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Reporting Actuarial matters for the scheme

Report on actuarial liabilities

Actuarial valuations: how we protect the promises made to members

Funding ratios

(using technical provisions liabilities)

95%

Actuarial valuation at 31 March 2018

84%

Funding update of 2018 valuation at 31 March 2020

Overview

As the trustee of USS, we must regularly carry out an actuarial valuation of the scheme’s funding. A valuation establishes whether, at a certain date, we believe the scheme will have enough money for us to be able to pay the pensions that our members are expecting, now and long into the future. We last carried out a valuation as at 31 March 2018. Part of the conclusion of that valuation was an agreement that we would carry out a further valuation as at 31 March 2020. This is now underway, and we will finalise it next year.

If the valuation shows that the scheme might be insufficiently funded, for example because future expected investment returns to fund pensions have reduced, we must put a plan in place to improve its funding.

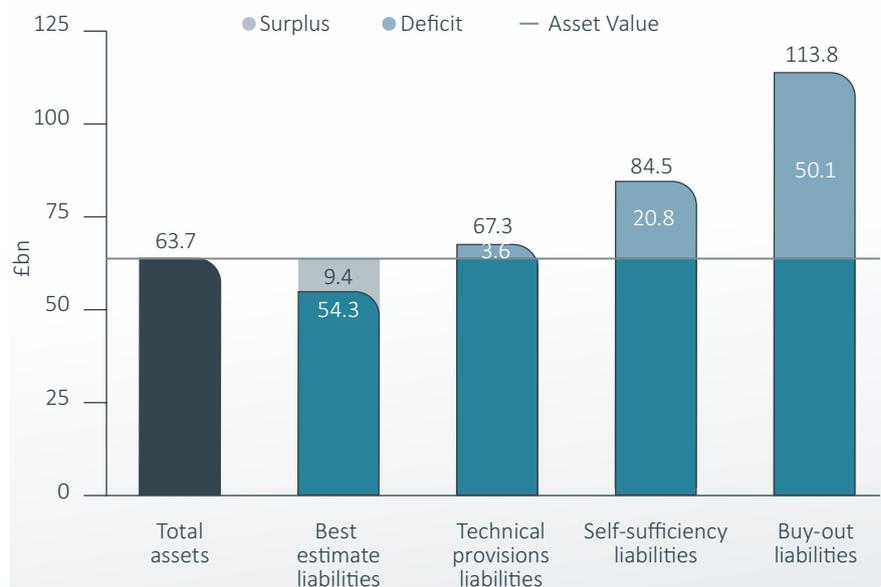
By law, we need to take a prudent approach to assessing how much money we will need to pay the earned benefits members have built up. To do this, we use a range of assumptions, and calculate the results in a number of different ways.

The results that primarily drive the required contributions are called the ‘technical provisions’ liabilities, although other measures feed into the trustee’s considerations in setting the final contribution rates. By law the trustee must be prudent when calculating the technical provisions liabilities.

Below, we show the results of the last valuation, at 31 March 2018, across a range of approaches. These results reflect different levels of certainty of being able to provide the promised benefits.

- The ‘best estimate’ value represents an amount which we believe would be adequate if all our assumptions were borne out in practice. The amount on a best estimate basis does not make an allowance for prudence and has a 50% chance of being more than is required to pay the benefits and 50% of being too little.

USS funding position as at 31 March 2018



- The technical provisions value, takes the best estimate and adds an allowance for prudence. This is the figure we use in finalising the valuation. In the 2018 Valuation it was the value we estimated to have about a 67% chance of being sufficient to pay benefits when due.
- The self-sufficiency value reflects the value of assets required to pay, with a high probability, all the benefits members have built up so far, using a low-risk investment strategy without any further contributions. In our view, it has a more than 95% chance of being enough to be able to meet all the benefits as they fall due.
- The ‘buy-out’ value is effectively the cost of buying a very high degree of certainty of all earned benefits being paid – it represents the estimated cost of paying for an insurer to provide the benefits.

The actuarial valuation at 31 March 2018 was finalised in September 2019. This followed a thorough and robust review of the scheme’s financial position including extensive consultation with the scheme’s stakeholders. This resulted in a new set of contribution requirements from 1 October 2019, with a further increase to member and employer contributions being planned for 1 October 2021. The 84% funding level as at 31 March 2020, is based on updating the 2018 valuation results on an approximate basis using our monitoring approach which allows for changes in market value of assets, expected future investment returns, and the expected changes in membership. This is shown in more detail in the section titled ‘How has the funding position changed since the 31 March 2018 valuation’ on page 84.

In the sections below, we set out an update of the financial position of the scheme since the 2018 valuation. Details of the work that has been undertaken to date on the 2020 valuation are available on the USS website at uss.co.uk/about-us/valuation-and-funding/2020-valuation.

The USS benefit structure

Members build up benefits on what is called a Career Revalued Basis in the USS Retirement Income Builder in respect of salary up to a threshold (£59,585.72 from 1 April 2020). This threshold is adjusted each year in line with the Consumer Price Index (CPI) measure of inflation (subject to certain restrictions).

Above this salary threshold, defined contribution benefits are built up in the USS Investment Builder. These DC benefits are funded by 8% and 12% of salary above the threshold being paid into the USS Investment Builder by members and employers respectively. The remainder of the contributions are paid into the USS Retirement Income Builder; the level of total contributions each year arising from the 2018 valuation is laid out in the table below.

Contributions from sponsoring employers and from scheme members into the USS Retirement Income Builder, together with the investment returns earned, are used to pay benefits to members and/or their eligible dependants and to pay the costs of operating the scheme.

	Member	Employer
Contributions to 31 March 2019	8.0%	18.0%
1 April 2019 to 30 September 2019	8.8%	19.5%
1 October 2019 to 30 September 2021	9.6%	21.1%
1 October 2021 onwards	11.0%	23.7%

For more information on the scheme’s benefits please refer to the USS website at uss.co.uk/for-members/your-pension-explained.

Report on actuarial liabilities *continued*

How we measure the financial position of the USS Retirement Income Builder

The main way we measure the financial position of the USS Retirement Income Builder is by comparing the current value of its assets with our estimate of the current value of its liabilities. We determine the current value of the assets at a particular point in time, using their market value at that date. In estimating the current value of the liabilities there are inherent uncertainties. These uncertainties include the future rate of return on investments, the future level of inflation, the length of time a pension might be paid for, and the possibility that a survivor's benefit might be paid. We use estimates or 'assumptions' of these factors. We then determine the value of the liabilities by calculating the amount of assets that would be required today in order to meet, in full and without additional contributions, the benefits members have already earned up to the date of the valuation. We aim to take an appropriate amount of risk, and to ensure that the reliance on employers to make good any shortfall remains at an acceptable level over time.

The actuarial valuation as at 31 March 2020 is not yet finalised. The most recently completed full review of the funding position was the actuarial valuation as at 31 March 2018. In any actuarial valuation, a value is placed on the liabilities assuming that the scheme is ongoing, which is known formally as the 'technical provisions'. It is this technical provisions basis that is typically used when referring to the value of the scheme's liabilities.

In addition to technical provisions, we are required by law to value the scheme's liabilities on a buy-out basis as described on the previous page. This provides a further reference point for assessing the health of the scheme, although neither the Trustee Board nor the scheme's stakeholders have any plans to buy-out the scheme with an insurance company.

At every actuarial valuation we review all of the underlying assumptions relating to the USS Retirement Income Builder. We then consult the employers to obtain their view of our proposed assumptions. Our final set of assumptions following consultation with the employers for the 2018 valuation is shown on page 88. We have provided a Discussion Document to employers about the potential approach for the 2020 valuation. See uss.co.uk/about-us/valuation-and-funding/2020-valuation. We are looking at the feedback received on this as part of determining the assumptions for the formal consultation.

How the funding position has changed since the 31 March 2018 valuation

As part of our overall monitoring of the Financial Management Plan, we regularly monitor the funding position under several metrics. These metrics include both technical provisions and self-sufficiency. Self-sufficiency provides a measure of the amount of risk in the scheme related to the level of reliance on the sponsoring employers. These updates do not involve the same detailed review of all the underlying assumptions that happens with full valuations, including the ongoing 2020 valuation. As the 2020 valuation is still underway, we have shown the funding position as at 31 March 2020 using the approach adopted for the 2018 valuation. We have allowed for expected benefit payments and changes in membership since then, and updated for changes to market conditions and investment return expectations. This is consistent with the approach we used previously to monitor the funding position between actuarial valuations. We will maintain this approach until it is updated as part of the completion of the 2020 valuation.

As a result, the value of liabilities as at 31 March 2020 presented here does not reflect assumptions we will use to finalise the 2020 valuation. You can find reports and other information on the valuation at uss.co.uk/about-us/valuation-and-funding/our-valuations.

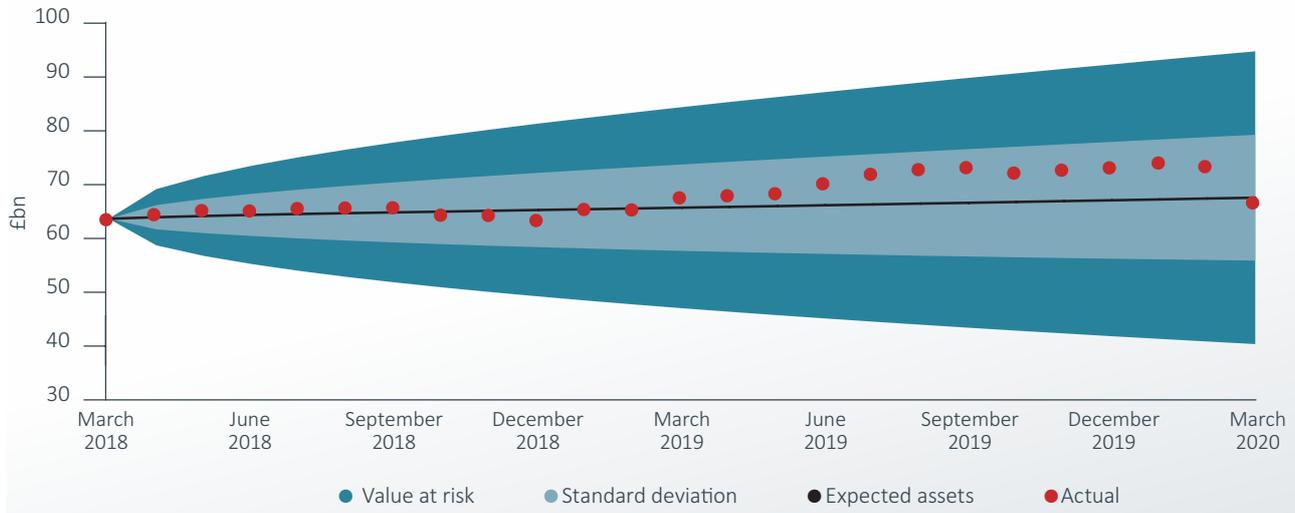
Since 31 March 2018 the scheme's funding position has worsened on the technical provisions basis. In the two years since the 2018 valuation, the scheme's deficit is estimated to have increased from £3.6bn to £12.9bn as at 31 March 2020. This is largely due to a significant rise in the deficit over the 2019/20 year. The deficit increased by £7.5bn, from £5.4bn as at 31 March 2019, as assets fell by £0.9bn (see Investment Matters section, page 22) and liabilities rose by £6.6bn.

The graphs on the next page show the development of the value of the USS Retirement Income Builder assets and liabilities, based on the monitoring approach, since 31 March 2018 (see below for more about the monitoring approach). The black line reflects the expected path of assets and liabilities¹ at the time of the valuation. The light blue area represents the range of outcomes around those expected paths that might reasonably have been expected, shown here as the expected path plus or minus one standard deviation. Each of the dots corresponds to the actual scheme assets and the monitoring approach estimate of the liabilities at the end of each month, except one where expected investment returns are not available. The outer boundaries of the dark blue area show outcomes that in 2018 were considered extreme. These outcomes had a 1% likelihood of happening (as implied by normal market volatility). The actual investment returns on the assets held in the USS Retirement Income Builder have been around the same as expected at the 2018 valuation, but the increase in the scheme's liabilities has been higher than expected, leading to an increase in the deficit.

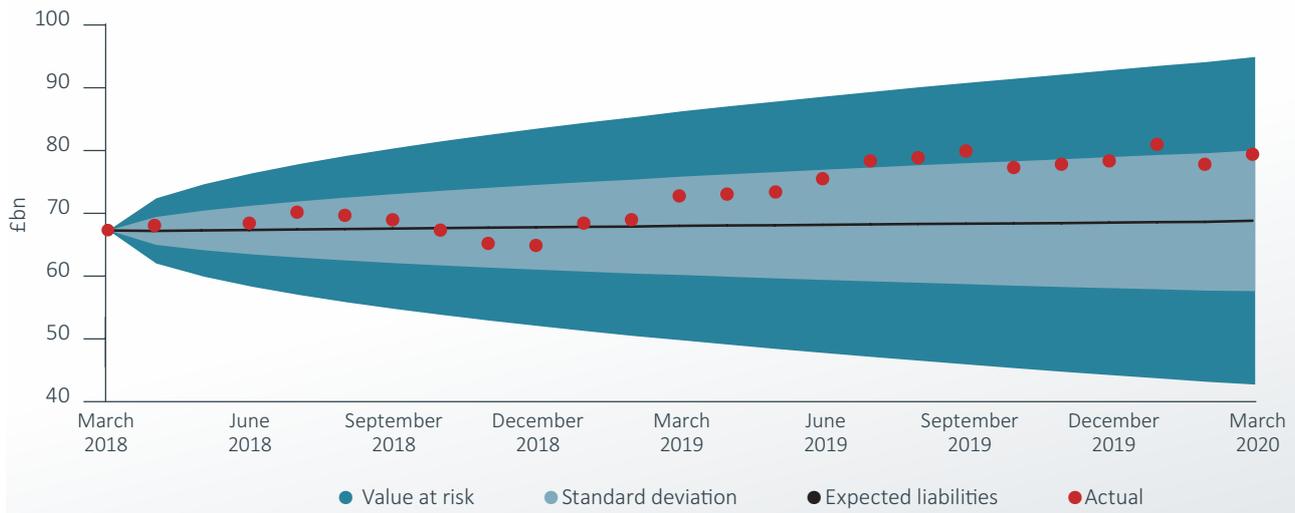
Note

1. The expected path of the liabilities is measured using the single equivalent discount rate relative to UK government bonds (gilts) on the valuation date, being the gilts yield plus 1.33%.

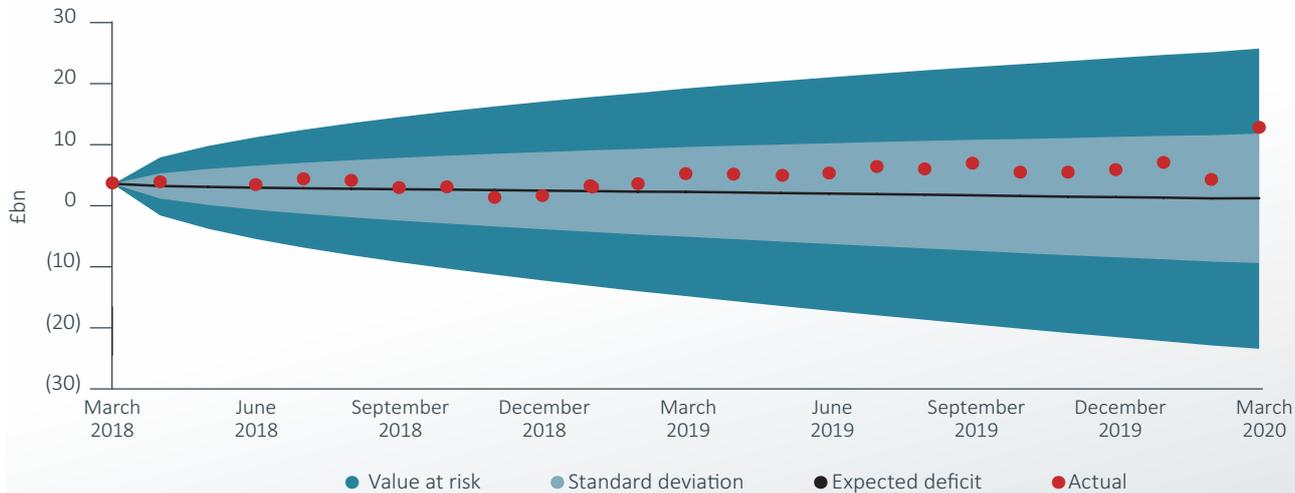
Asset progression since 2018 valuation



Liabilities progression since 2018 valuation¹



Deficit progression since 2018 valuation¹



Note

¹ Liabilities and Deficit progression have no figures for May 2018 as there was no expected return data available for these dates.

Report on actuarial liabilities *continued*

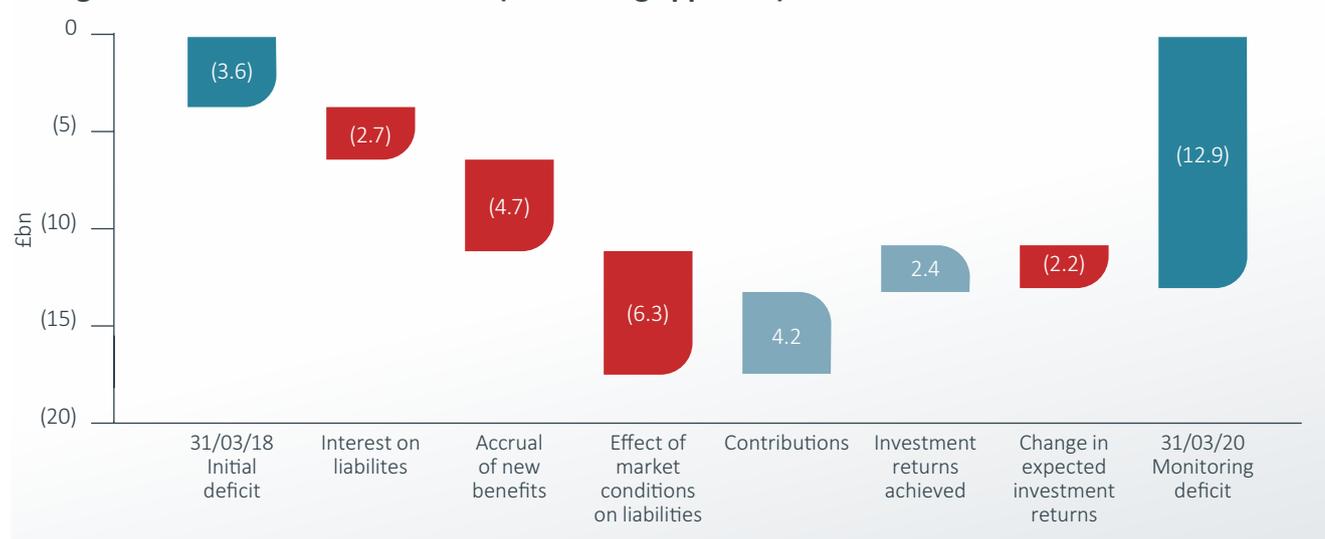
Funding position based on the 2018 monitoring approach

The table below summarises the funding position of the scheme each 31 March since 2018 on the monitoring basis using the approach described above.

As at 31 March in £bn	Funding update 2018	Funding update 2019	Funding update 2020
Value of assets	63.7	67.4	66.5
Value placed on liabilities	67.3	72.8	79.4
Deficit	3.6	5.4	12.9
Funding ratio	95%	93%	84%

The above table shows that the deficit on the monitoring approach has increased from £3.6bn at 31 March 2018 to £12.9bn at 31 March 2020. This is an increase of £9.3bn relative to the 2018 valuation and £7.5bn relative to the previous year end. The chart below details the underlying drivers of the change in the deficit using this monitoring approach.

Change in deficit since 2018 valuation (monitoring approach)



Other approaches

As mentioned above, the value placed on the scheme's liabilities can be measured on a number of different bases, including technical provisions, buy-out, best estimate, and self-sufficiency bases. We regularly monitor the technical provisions and self-sufficiency bases. We update the buy-out and best estimate liabilities at each actuarial valuation. The table below summarises the scheme's position on a self-sufficiency basis. Self-sufficiency is based on the 'guaranteed' cash flows available from low risk investments. It is the value of assets we would need to hold in order to have a greater than 95% chance that all the benefits members have earned to date can be paid when due, without any further contributions. In other words, this is the funding level we would need to achieve in the absence of further support from employers. Self-sufficiency is assessed using return assumptions on the portfolio of assets that would achieve this level of security (delivering a discount rate of gilts +0.75%) and with a different inflation assumption to that adopted in the technical provisions. Our aim is to be within a set value of self-sufficiency in 20 years' time such that the ability to secure the benefits promised to members at that point is, credibly and demonstrably, within the means of employers to fund. More details can be found in the Statement of Funding Principles on uss.co.uk.

As at 31 March in £bn	Self-sufficiency 2018	Self-sufficiency 2019	Self-sufficiency 2020
Value of assets	63.7	67.4	66.5
Self-sufficiency liabilities	84.5	92.0	96.9
Deficit	20.8	24.6	30.4
Funding ratio	75%	73%	69%

As at 31 March 2018, the Scheme Actuary estimated the cost on a buy-out basis as £113.8bn. As a result, the deficit on this basis was £50.1bn. A buy-out basis often gives the worst view of the liabilities. However, on a best estimate basis, liabilities at 31 March 2018 were £54.3bn, implying a surplus on this basis of £9.4bn. Although not required, we also produced figures under the FRS102 accounting approach of using a discount rate based on corporate bond yields. We did this because such figures are a required disclosure for many UK entities, so it is a recognised method of measurement. Using this approach, as at 31 March 2020, produces liabilities of £79.7bn and a deficit of £13.2bn. This is based on a discount rate of 2.55% and a CPI assumption of 2.05% with all other assumptions unchanged from those stated on page 88. This approach is not used to inform our decisions. We are currently in the process of working to complete the 2020 valuation.

The Trustee Board's funding plan

Our overarching funding principle, supported by the employers, is that the amount of funding and solvency risk within the scheme should be proportionate to the amount of financial support available from the scheme's sponsoring employers. Specifically, the reliance being placed on the employers should not be greater than what they can and are willing to support. We are therefore of the view that, with the right economic conditions, and following appropriate dialogue, opportunities should be taken over the years ahead to reduce the amount of risk within the scheme, and specifically reduce the amount of investment risk. At the 2018 actuarial valuation we incorporated a long-term, gradual de-risking into our funding approach, with the intention of slowly reducing the amount of investment risk in the scheme over a 20-year period. We also adopted this principle in the 2014 and 2017 valuations. You can find details of our investment approach in the Statement of Investment Principles, this is available online at uss.co.uk/how-we-invest/our-principles-and-approach.

The recovery plan in the 2018 actuarial valuation requires employers to make additional contributions towards repairing the deficit. These contributions are 2% of salaries from 1 October 2019 to 30 September 2021, increasing to 6% from 1 October 2021 to 31 March 2028. Thus, the recovery plan aims to recover the deficit over a 10-year period. We determined this plan following extensive work with our advisers on the ability of the scheme's sponsoring employers to financially support the scheme - the 'covenant'. The conclusion from that work was that there was good visibility of the ongoing strength of the covenant over the next 20–30 years, but the position became less clear after that.

However, the self-sufficiency deficit showed that the risk the scheme was carrying in the short term was close to the limit that employers could bear.

When we calculated the contributions required for the recovery plan, we used the same investment return assumptions as for the technical provisions.

Pension Protection Fund

The Government established the Pension Protection Fund (PPF) in 2005 to provide benefits in the event that a scheme's sponsoring employer (or employers) becomes insolvent without there being sufficient funds available in the scheme.

USS is recognised by the PPF as a multi-employer scheme with a joint or shared liability. This joint liability is based on the 'last-man standing' concept. This means that it would only become eligible to enter the PPF in the extremely unlikely event that the vast majority (if not all) of the scheme's employers were to become insolvent. If such circumstances were ever to occur, the PPF would take over the payment of pension benefits to members. However, the benefits received might be less than the full benefits earned within USS. The precise amount that the PPF would pay to each member would depend on the member's age, the period over which the benefits were earned and the total value of benefits. At the 31 March 2018 valuation date, the scheme's 'section 179' valuation position, used in determining the PPF levy payable by the scheme, showed a deficit of £19.6bn.

Further information about the PPF is available at pensionprotectionfund.org.uk or you can write to Pension Protection Fund, Renaissance, 12 Dingwall Road, Croydon, Surrey, CR0 2NA.

Report on actuarial liabilities *continued*

Principal actuarial assumptions

The following table shows the assumptions used in the 2018 technical provisions actuarial valuation, and how these have been updated as at 2019 and 2020 to produce the figures shown earlier. These funding updates, shown in the 'Funding position based on the 2018 monitoring approach' section above, reflect broad changes in market conditions and expected investment return. The contributions payable to the scheme are determined based on the full actuarial valuations only, with the funding updates used for monitoring purposes.

The 2018 valuation uses full yield curves in the assumptions, rather than averages. The full year-on-year figures in the 2018 valuation assumptions are available in the documents shown on the website here: uss.co.uk/about-us/valuation-and-funding/2020-valuation/2018-valuation.

The assumptions that will be used for the 2020 valuation are not yet finalised because this valuation is incomplete.

Principal actuarial assumptions	31 March 2018 valuation – technical provisions
Market derived price inflation ¹	Term dependent rates in line with the difference between the Fixed Interest and Index Linked yield curves
Inflation risk premium	0.3% p.a.
Price inflation – Retail Price Index(RPI) ¹	Term dependent rates based on market derived price inflation less Inflation risk premium
RPI / Consumer Prices Index (CPI) gap	1.0% p.a.
Price inflation – Consumer Prices Index ¹	Term dependent rates based on RPI assumption less RPI / CPI gap
Investment return	Years 1-10: CPI + 0.14% reducing linearly to CPI – 0.73% Years 11-20: CPI + 2.52% reducing linearly to CPI + 1.55% by year 21 Years 21 +: CPI + 1.55%
Salary increases ²	CPI assumption plus 2% p.a.
Pension increases in payment	CPI assumption (for both pre and post 2011 benefits)
Mortality base table	Pre-retirement: 71% of AMCOO (duration 0) for males and 112% of AFCOO (duration 0) for females Post retirement: 97.6% of SAPS S1NMA 'light' for males and 102.7% of RFV00 for females
Future improvements to mortality	CMI 2017 with a smoothing parameter of 8.5 and a long term improvement rate of 1.8% pa for males and 1.6% pa for females

Date	Funding update 2019	Funding update 2020
Investment return	Years 1-10: CPI – 0.2% reducing linearly to CPI – 1.21% Years 11-19: CPI + 2.37% reducing linearly to CPI + 1.54% by year 20 Years 20 +: CPI + 1.54%	Years 1-10: CPI +0.32% reducing linearly to CPI -0.96% Years 11-18: CPI + 1.62% reducing linearly to CPI + 0.82% by year 19 Years 19 +: CPI + 0.82%
Market derived price inflation	As above, updated for market derived price inflation as at 31 March 2019	As above, updated for market derived price inflation as at 31 March 2020

Notes

¹ These values have been updated for funding updates in subsequent years in line with the table above.

² This assumption is applied to the scheme's overall payroll and is used to project the development of the overall scheme over time, including the recovery plan, but does not affect the projected size of individual members' accrued benefits.

Actuarial certificate of technical provisions

SCHEME FUNDING REPORT OF THE
ACTUARIAL VALUATION AS AT 31 MARCH 2018

UNIVERSITIES SUPERANNUATION
SCHEME

F

CERTIFICATE OF TECHNICAL PROVISIONS

Name of the Scheme

Universities Superannuation Scheme

Calculation of technical provisions

I certify that, in my opinion, the calculation of the Scheme's technical provisions as at 31 March 2018 is made in accordance with regulations under section 222 of the Pensions Act 2004. The calculation uses a method and assumptions determined by the Trustee of the Scheme and set out in the statement of funding principles dated 16 September 2019.

Signature



Name

Ali Tayyebi

Date of signing

16 September 2019

Name of employer

Mercer Limited

Address

Four Brindley place, Birmingham B1 2JQ

Qualification

Fellow of the Institute and Faculty of Actuaries

Actuarial certificate of schedule of contributions

CERTIFICATE OF SCHEDULE OF CONTRIBUTIONS

Name of the Scheme

Universities Superannuation Scheme

Adequacy of rates of contributions

1. I certify that, in my opinion, the rates of contributions shown in this schedule of contributions are such that the statutory funding objective could have been expected on 31 March 2018 to be met by the end of the period specified in the recovery plan dated 16 September 2019.

Adherence to statement of funding principles

2. I hereby certify that, in my opinion, this schedule of contributions is consistent with the statement of funding principles dated 16 September 2019.

The certification of the adequacy of the rates of contributions for the purpose of securing that the statutory funding objective can be expected to be met is not a certification of their adequacy for the purpose of securing the Scheme's liabilities by the purchase of annuities, if the Scheme were to be wound up.

Signature



Name

Ali Tayyebi

Date of signing

16 September 2019

Qualification

Fellow of the Institute and Faculty of Actuaries

Name of employer

Mercer Limited

Address

4 Brindley Place
Birmingham
B1 2JQ

Glossary

Actuarial valuation	appraisal of the defined benefit element of the scheme's assets and liabilities, using investment, economic, and demographic assumptions for the model to determine whether, at a certain date, we believe the scheme will have enough money for us to be able to pay the pensions promised to our members on a timely basis.	My USS	the online service for managing USS savings and benefits
CEM Benchmarking	external benchmarking service for pension providers to compare value for money across industry peers	pension administration cost	a measure used by USS to assess the cost of administering USS pensions to analyse value for money for members
defined benefit	an employer-sponsored retirement plan where employee benefits are computed using a formula that considers several factors, such as length of employment and salary history.	private markets	financial companies involved in private rather than public markets are part of the capital market. They include investment banks, private equity, and venture capital firms in contrast to broker-dealers and public exchanges.
defined contribution	a plan in which members and employers contribute a fixed amount or a percentage of pay which is invested and the proceeds used to buy a pension and/or other benefits at retirement.	public markets	refers to securities available on an exchange or an over-the-counter market.
employees	employees of USSL or USSIM	Reference Portfolio	the Reference Portfolio is set by the board, and is an allocation of investments across mainstream asset classes (global equities, UK property, government, corporate and emerging market bonds). It is used as a benchmark for performance and asset-liability risk.
employers	Higher Education institutions who pay contributions to their employees pensions	the scheme	the scheme means Universities Superannuation Scheme
ESG	environmental, social and corporate governance	the trustee	the trustee or trustee company means USSL. It is a corporate trustee which has overall responsibility for scheme management
FCA Senior Manager and Certification Regime	relates to regulation, implemented by the Financial Conduct Authority (FCA), to extend regulatory accountability to the senior managers within financial institutions in an effort to curb corruption and enforce an increased culture of compliance in the UK's financial services market.	Trustee Board	representatives of the trustee who provide overall leadership, strategy and oversight of USS, the scheme, the trustee company and USSIM, in co-operation with its board of directors
Fixed income	means an investment approach focused on preservation of capital and income. It typically includes investments like government and corporate bonds and can offer a lower risk steady stream of income.	USS	USS primarily means the scheme but, where the context admits, may mean the trustee and/or USSIM; Universities Superannuation Scheme (USS)
funding ratio	ratio of a pension or annuity's assets to its liabilities.	USS Investment Builder	the defined contribution element of the scheme. Members have funds in the USS Investment Builder if they have earnings above the salary threshold (£58,589.70 for the 2019/20 financial year), made additional contributions, or recently transferred funds into the scheme.
IAP	Institutions Advisory Panel; employer advisory group to USS	USS Retirement Income Builder	the defined benefit element of the scheme. Members automatically join the USS Retirement Income Builder
Implemented Portfolio	the actual distribution of the scheme's assets, across a more diversified asset mix, as determined by the investment programme.	USSIM	USSIM means USS Investment Management Limited. The trustee delegates implementation of investment strategy to a wholly-owned subsidiary – USSIM.
investment management cost	a measure used by USS to assess the most of investments managed on USS members behalf to analyse value for money	USSL	USSL means Universities Superannuation Scheme Limited.
members	employees of Higher Education institutions who may be active (make contributions into future pensions), deferred (previously active who have deferred their pension until retirement age), or pensioner members (in receipt of pension benefits).	we, us or our	we, us or our means the trustee but, where the context admits, may mean USSIM



Threadneedle Street,
the London offices
of USS.

The registered number of the trustee company (Universities Superannuation Scheme Ltd) at Companies House is 01167127

The reference number of the scheme (Universities Superannuation Scheme) at The Pensions Regulator is 10020100
Royal Liver Building, Liverpool, L3 1PY



