USS

UNIVERSITIES SUPERANNUATION SCHEME

# Report & Accounts

## for the year ended 31 March 2016

USS
Universities Superannuation Scheme Ltd
Royal Liver Building
Liverpool
L3 1PY

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

*USS is committed to its members, offering a valuable way to save for retirement.*



Universities Superannuation Scheme is the principal pension scheme provided by universities and other higher education and associated institutions in the UK. It has over 370,000 members across almost 400 institutions.



**ONLINE INFORMATION**

To keep our members and employers fully up-to-date, we have a range of communications available on our website www.uss.co.uk. This means access to the information required 24 hours a day.

# Key facts and figures

***Funding ratio***

**83% - 31 March 2016**

*31 March 2015: 86%*
*Actuarial valuation 31 March 2014: 89%*

*See page 92*

***Employer satisfaction survey***

**73%**

*2014/15: 71%*

*See page 20*

***Member satisfaction survey***

**65%**

*2014/15: 68%*

*See page 17*

***Net assets available for benefits***

**£49.8bn**

*2014/15: £49.1bn*

*See page 13*

***Investment Outperformance***

**2.38% (1 yr)**

*Target: 0.55%*

**1.10% (5 yrs)**

*Target: 0.475%*

*See page 40*

***Member numbers***

**373,090**

*Active members: 180,862*
*Pensioner members: 64,185*
*Deferred members: 128,043*

*See page 19*

***Staff numbers***

**441**

*2014/15: 379*

*See page 23*

# Chair's introduction

Professor
Sir David Eastwood
Chair

## Our goal is simple: to ensure that USS continues to provide a secure place for members to save for retirement, which is entirely aligned to the requirements of the higher education sector.

This has been a remarkable year. The trustee has begun to implement the most substantial changes in the scheme's 40 year history. We have been supported by extraordinary levels of engagement and commitment from our sponsoring employers. We have received many thousands of responses from members who have contributed to surveys and focus groups and provided feedback to help inform the development of the new sections of the scheme. I must firstly express, on behalf of my fellow directors on the trustee board, our gratitude for all the support and input we have received during the year.

The trustee's primary duty remains to ensure there are sufficient funds to provide an income for our members in retirement. This responsibility stretches for many decades into the future, and it is the trustee's role to take a long term view on scheme solvency and sustainability when making judgements on funding matters. In order to do this, we have introduced a new framework for managing funding risk over a 20 year horizon. In recent times economic developments have not been trending in our favour. As a result our implied funding level is currently 83%, whilst at this point we had expected to be closer to 90%, as per the recovery plan put in place following the 2014 valuation. USS is not alone in this position, many schemes have been impacted by the ongoing low-return environment. Importantly, our funding level still remains within the anticipated volatility range, and these external developments have not in our view necessitated any further action between valuations. We shall, of course, carry out a full review of these assumptions as part of the 2017 actuarial valuation. You can read more about the scheme's funding position and our preparations for the 2017 valuation on pages 92 to 96.

### Retirement saving for the future

The trustee – following decisions by the stakeholders – introduced a new section to the scheme on 1 April 2016. The **USS Retirement Income Builder**, a defined benefit (DB) pension arrangement replaces the largely final salary benefits which preceded it. This is the first step towards delivering new ways for our members to save for their retirement. The USS Retirement Income Builder provides a secure and valuable income in retirement for the 180,000 active members currently in the scheme, and is the section all new members now join. Later this year we shall provide members with additional investment opportunities with the introduction of the **USS Investment Builder**, the new defined contribution (DC) section of the scheme. Much of the work which has taken place in 2015/16 has been preparing for the introduction of these two new sections.

Once all the key components are in place we shall be working with employers and members to enhance these arrangements, we shall focus on those features we know are important, such as the range and flexibility of options available at retirement, as well as how we support members to make good retirement decisions. Our goal is simple: to ensure that USS continues to provide a secure place for members to save for retirement, which is entirely aligned to the requirements of the higher education sector. You can read more about the changes to the scheme on pages 11 to 12.

### A valuable pension service

Our pensions administration and investment management services underpin the broad range of services which the trustee provides to employers and members.

*We provide a professional personalised pension administration service which we know employers and members value.*

This year we were determined to maintain that level of service through a significant period of change for the scheme. We have not only introduced a new benefit structure, but have also made necessary changes to the technology and processes which support the day-to-day running of the scheme. I am pleased to report that throughout this period our response times have remained broadly stable, and this has been reflected in the feedback we have received from employers and members on our service. You can read more about that on pages 17 to 21.

The trustee maintains its preference for in-house investment management. During the financial year to March 2016 we have developed our in-house capabilities in public credit, and private equity and developed the direct investment capabilities of the private markets team. Our approach has proved successful, with the in-house investment management team returning £2.2bn above the benchmarks set for them, measuring the last five-year rolling period*, and doing so at a lower cost than our peer organisations according to latest available information. You can read more about overall fund investment performance, and our approach, on pages 38 to 45.

*Over the 2015/16 financial year, outperformance (on a total return basis) added £1.1bn to scheme value. Total return captures both changes in market value and income and capital gains realised during the year.

Continued overleaf

The trustee does use external investment managers from time to time but only if the skills required are not available in-house and are too costly to develop in a timely fashion. Given the time constraints, we have chosen external investment managers for the **USS Investment Builder** which will be introduced on 1 October 2016. One of the priorities for the forthcoming year will be to consider how we might offer some of the benefits of in-house investment management to our members in the USS Investment Builder.

## Tailored support for employers and members

USS is uniquely placed to provide pensions and investment services which are tailored to meet the needs of the higher education and related sectors. Its size and the financial strength of the sponsoring employers mean that it is able to provide a secure way for members to save for retirement, at a very competitive cost. Our governance structure and the way the trustee operates reflects its dedication to the UK's academic community. The expertise of our people supports employers to understand the impact of economic and public policy changes which affect pensions and investments, and make effective responses to policy makers, which is important in the increasingly complex environment in which the scheme operates. We shall continue to work with our employers and members to further develop this tailored support over the coming year.

## Changes to the trustee board

Finally, on behalf of the trustee board, I would like to thank Mr Joseph Devlin and Mr David McDonnell, for their service to the board and its committees. Both completed their terms during the year; Mr Devlin stepped down from his role as a University and College Union (UCU) appointed director in October 2015. Professor Jane Hutton has been appointed by UCU following Mr Devlin's departure. Mr McDonnell retired as a Universities UK (UUK) appointed director at the end of March 2016; Professor Stuart Palmer has been appointed by UUK to succeed Mr McDonnell.

I'd also like to confirm the reappointment of two independent directors, Dr Kevin Carter and Mr Rene Poisson, and a UUK-appointed director Professor Dame Glynis Breakwell, who each have been reappointed for a further term of three years.

**Professor Sir David Eastwood, Chair**

# Group Chief Executive Officer's update

**Bill Galvin**
**Group Chief Executive**

## Engagement with our members and with our sponsoring employers has been a key feature of our activity throughout the year.

Looking back at 2015/16, the trustee company has very much appreciated the unstinting support of our participating institutions and our stakeholders throughout the year, as we transformed both the USS benefit structure and operating model. The level of change underway, beginning with the scheme rules and rippling through all parts of USS operations and on into employer payroll systems and pensions administration functions, has been immense. The end result is a more secure, sustainable, efficient and effective pension scheme and delivery vehicle, and though we are not yet at the finishing post, all involved can take a great deal of credit for the progress to date, and for the ambition of our shared goal.

Through this period of substantial change, one constant has been the willingness of my colleagues across USS to go above and beyond what might have been expected of them. Their dedication to delivering a strong outcome for our members, to working collaboratively to solve problems as we explore new ground in our investment and pensions services, and to delivering on the commitments we have made internally and externally, has been exceptional. I am proud to represent their efforts, in this publication and more broadly.

The commitment of our staff and the support of our stakeholders are critical to our continued success. Both of these factors are substantially enhanced by the mutual nature of our business model. We are all proud to be associated with a business that is set up under trust, and fully focussed on directing all parts of the pensions value chain to act solely in the interests of our beneficiaries. These values underpin all our decisions and actions.

The USS mission is to be the pension service of choice for the higher education sector, for the long term, and so one of our key measures of success is the confidence of our members and participating institutions in our delivery. Throughout this very challenging period, our members have consistently said they would report positively on USS (our net promoter score this year was 65%, compared to 68% last year). We have similarly maintained the support of employers (73% vs 71% last year report positive views). Another key measure in ensuring we maintain our focus on this goal is how closely our own employees identify with that mission, year on year that figure has increased from 69% to 82%.

In a year where all parts of the business have been challenged to do more, a special mention must go to our investment teams who have significantly outperformed their benchmarks over one, two and five years. However, they're not alone in outperforming: our administration teams have maintained service levels and the confidence of members and employers despite unprecedented levels of change. Our operations teams have delivered a new operating model for our pensions business, (and for the new *Investment Builder)*, built on new technology, and with new partners. These are substantial achievements.

Our operating costs have increased substantially in the last year, and will continue to increase as we approach the peak of the transformation activity. There are several drivers of the increase. The unprecedented levels of change have resulted in increased headcount in the business, as we transition our supporting technologies. The change to the shape of our investment portfolio has seen higher allocations to private market investments, and more in-house management in areas such as credit. This has resulted in reductions in the fees we pay to external managers (that would previously have reduced returns in our portfolio), but has increased our reported in-house investment costs, to the substantial benefit of the scheme. The successful implementation of these strategies, and the good performance of our portfolio managers has meant that our investment outperformance over this period has been very, very good, and as a result there has been a corresponding increase in variable compensation in the investment business. The combination of these factors has seen our underlying cost base increase by 13% over the course of the year.

*Our investment performance has significantly exceeded our benchmark over one, two and five years.*

The trustee company continues to apply informed and critical judgement to the cost base: the interests of scheme members and beneficiaries are to the fore in the development of business cases, and the consistent focus on value for money means we continue to benchmark positively on costs against comparable providers. You can read more about our operating costs and the focus we place on providing value for money on pages 15 to 16.

Despite the exceptionally good investment performance, asset values have not kept pace with the further decline in interest rates this year and it remains far from clear how the world and the UK economy will respond to current challenges over the funding horizon of the pension scheme. We continue to monitor the position closely: overlaying recent market based inputs on the base assumptions set at the 2014 valuation sees our implied deficit increasing since that date by £4.7bn. However it remains within the predicted levels of volatility, and the employer covenant has remained robust through the period. We will examine the base assumptions thoroughly as we approach the 2017 valuation. More detail on our funding position is included on page 92 in this report.

Continued overleaf

The outcome of the UK's referendum on membership of the European Union (EU) has emerged just as this document goes to press. Albeit not a factor in the period for which we are reporting, depending on the alternative constitutional arrangements that are yet to be negotiated with the EU, the referendum result is likely to have a substantial impact on USS as we look forward.

Much of the legislation that governs UK pensions comes from, or is driven by EU law and decisions on whether and how this will change may affect the USS offering, and our ways of working. Our participating institutions are closely engaged in EU-wide, and EU sponsored research activities, and benefit from the freedom of movement of students and staff. If any alternative arrangements are less favourable, the outcome may have implications for our covenant and funding arrangements. As an institutional investor, we are invested in over 100 countries worldwide, and we will need to review the implications of any proposed constitutional changes for areas such as tax, counterparty exposure and investor protection. There will be much contingency work to do, as negotiations proceed.

Of course, the actual impact will depend on the outcomes of discussions that have not yet begun. We will monitor developments in these areas closely, and look to protect and improve the position of USS, and of our members (including those pensioners we provide for in other EU countries, some 2% of our pensioner members), as we enter some uncharted waters.

## Developing our services

Having identified last year that a fundamental change to our technology platforms was required in order to meet service expectations of our participating employers and deliver a new benefit structure, this year we entered into a strategic technology partnership with Capita to deliver our core technology in the pensions business. We believe this partnership will help us develop and enhance our services to both employers and members over the long term.

*We will continue to work closely with employers to ensure the new systems and processes are implemented smoothly.*

With good support from Capita, we worked closely through the year with employer representatives and their payroll providers, to ensure the new systems (supporting pension administration, pensioner payroll and institution interfaces) were implemented to schedule. Though the complete functionality will take some time to be fully effective, this investment has enabled us to improve considerably our capabilities in bulk processing, for example, ensuring employers can complete more efficiently administration tasks such as notifying USS of multiple joiners and leavers.

We shall continue to develop the system over the coming months to deliver greater efficiencies, saving employers both time and money, and improving the quality of service provided to both our employers and our members. You can read more about our work in this area on pages 11 to 12.

## Successful investment strategy

In January 2015 we implemented a new approach to investment governance. Under this new arrangement, the trustee sets its appetite for risk and its expectations for returns in the form of a reference portfolio. The executive is then tasked with achieving above expected returns at a level of risk which is consistent with that set by the trustee (having consulted with the stakeholders). This approach provides the investment team with the flexibility to take advantage of a wider range of investment opportunities, and to make more nimble investment decisions.

During the year, the investment team put this flexibility to good use. The allocation to private markets investments increased, and we acquired some important new assets such as Moto, the UK's largest motorway service provider, and a private debt portfolio providing loans to UK based wind farms. The portfolio was further diversified, with investment in new asset classes and factors, including securitised debt and commodities.

These decisions, and others, helped our investment management team perform particularly strongly, generating 1.62% total return and beating the reference portfolio by 2.38% or £1.1bn. The outperformance generated over the last five years (our core measurement period) has added over £2.2bn of value to the pension scheme (above that which would have been delivered had we invested in our reference portfolio benchmark).

I am very pleased that Roger Gray, our CIO since 2009 has this year received a lifetime achievement award from the institutional investor magazine: a well earned recognition of his substantial achievements at USS and elsewhere. You can read more about our investment performance on pages 38 to 45.

## A more complex operating environment

For many reasons, our operating environment has become more complex. The investment portfolio has many more components, our benefit structures have been transformed as we prepare to add a defined contribution arrangement, and the regulatory environment has become more challenging. This has required us to invest in our operations, but also in our control and compliance functions.

We have enhanced our in-house risk management capabilities, and further strengthened our legal and compliance teams. These are important activities, and we set ourselves stringent targets in this area, supported by a thorough internal audit process. We have also increased our focus on the responsiveness of our business to identified control issues, setting a challenging target for the effective and timely closure of any findings from our internal audit teams. We made substantial progress in this area, this year, but there is further room to improve.

Transparency around the risks we face, and the controls we put in place to mitigate those risks, is important for maintaining trust in our business. On pages 29 to 36 we set out our approach, identify our key risks, and provide more information about what we are doing to mitigate those risks. Members and stakeholders should be assured that we take these matters extremely seriously and the leadership team is focussed on demonstrating and embedding a strong risk culture throughout our organisation.

## Listening to employers and members

Engagement with our members and with our sponsoring employers has been a key feature of our activity throughout the year as we have prepared to implement the changes to the scheme. This is exemplified by the comprehensive programme of research undertaken to support the design and development of the **USS Investment Builder**, which included the largest ever survey of pension scheme members' attitudes to risk. We have also invested in tracker surveys, that will inform us about how effectively we (and our institutions) are getting the key messages on pensions reform across to our members. This coming year, we will institutionalise a new regular survey of members perceptions on all relevant issues. You can find a summary of the research on the USS website, www.uss.co.uk

We shall continue to work with our members, our participating employers, and with representatives from the University and College Union (UCU), to ensure we provide an offering which continues to be relevant to our members' developing needs. You can read more about our engagement with members on pages 17 to 19.

During the year, our sponsoring employers have contributed a vast amount in terms of feedback and support as we have developed the new scheme structure. We have worked with employer representatives within the Employers Pensions Forum (EPF), and Universities UK (UUK), on funding matters, policy and scheme design. We established an Institutions' Implementation Working Group (IIWG), comprising a cross-section of employer representatives to work with us on the implementation of the new scheme structure. We have drawn upon the expertise of the Institutions' Advisory Panels to support our focus on delivering a good quality 'business as usual service' throughout this period of change. Looking to the future, we have invested more in employer facing roles to coordinate our activities and ensure we continue to provide an efficient and effective service to participating employers.

In finalising this quick overview of the year, I'd like to express my appreciation of the USS executive team. USS is fortunate to benefit from their abilities and dedication to the task. The first line delivery functions are led by Roger Gray our Chief Investment Officer and Kevin Smith, our Chief Service Delivery Officer, both working closely with Howard Brindle, our Chief Operating Officer and (for much of the year) Brendan Mulkern, as Chief Policy and External Affairs Officer. Guy Coughlan, our Chief Risk Officer and Jeremy Hill, our Group General Counsel lead the second line in their support and challenge roles. Jennifer Halliday, our Chief Finance Officer, leads our focus on value for money and financial controls across the business, as well as our people strategy.

The team achieved a lot this year, and there is much to do as we look forward through 2016/17 and beyond. In addition to the implementation of the USS Investment Builder and the introduction of secure online access for members, we are preparing for the 2017 valuation and considering how the future needs of our employers and members may develop – and what that means for our service. We shall of course continue to rely upon the support of, and feedback from, employers and members across the full range of our activities; these views and opinions are crucial to our business and help to shape our future priorities. I am grateful for all the thought and energy contributed by so many this year. I am confident that, by continuing to work together, we can further develop USS for the future, and help set the standards for the delivery of secure, sustainable and good value pension outcomes in the UK.

**Bill Galvin, Group Chief Executive Officer**

The trustee presents its annual report on the Universities Superannuation Scheme (USS or the scheme) together with the financial statements for the year ended 31 March 2016.

# Scheme management

## An introduction to the scheme

Universities Superannuation Scheme began operating in 1975 and is one of the largest private sector pension schemes in the UK with assets of over £50.2bn at 31 March 2016. USS is the principal pension scheme for academic and comparable staff in UK universities and other higher education and research institutions (or employers).

Universities Superannuation Scheme Limited is the Corporate Trustee (the trustee) of the scheme and holds scheme assets on trust to apply them for the purpose of paying pensions and other benefits under the scheme rules.

## USS mission and values

The trustee's primary duty is **to ensure there are sufficient funds available to provide an income for members in retirement.** This anchors the trustee company and its investment management subsidiary to a transparent, long-term, member-driven goal. How the trustee satisfies that duty, and other services it provides to sponsoring employers and members, is guided by the USS mission, an aspirational, forward looking statement which captures the alignment of interests shared by the trustee and the higher education sector.

## The USS mission:

*To be the pensions service provider of choice for the higher education sector for the long term.*

In 2014, the trustee refreshed its view of the areas of focus to ensure it is able to continue to fulfil its primary duty and to progress towards achieving the USS mission. These strategic priorities are monitored regularly by the executive committee and the trustee board through the review of the Key Performance Indicators (KPIs) which are underpinned by clear reporting and target metrics.

On an annual basis, these KPIs are reassessed for ongoing relevance to the strategy and in relation to the future requirements. This approach enables the executive committee to direct operational activity effectively and ensures that USS adapts to the changing external environment and responds to the needs of employers and members. During the current financial year, significant activity is underway preparing to transition in October 2016 from a DB-only scheme to a hybrid scheme which will include both DB and DC-sections. Accordingly, the KPIs were updated to reflect this significant scheme change programme.

An important emphasis for the trustee is the value the employers and members place on the scheme and the trustee company's services. This value can be measured in a number of ways but considers what is important to members and employers relative to the cost of delivering strong outcomes in relation to those expectations. A key activity in the forthcoming year will be to develop the framework for assessing and reporting value for money including gathering feedback and making peer comparisons.

The trustee's activities are underpinned by the company values; a set of six statements which describe the behaviour expected of USS employees. The values express the way USS does business and indicates the standards employers and members can expect.

**Trustee's primary duty**

**USS mission**

**Strategic priorities**

### USS Values

- ✔ Being member-focussed;
- ✔ Acting with integrity;
- ✔ Taking responsibility;
- ✔ Aiming for excellence;
- ✔ Being dependable; and
- ✔ Working in collaboration

### What is meant by a 'hybrid scheme'?

USS has historically been a scheme which offers Defined Benefit (DB) pensions (comprising the now closed Final Salary and continued Career Revalued Benefits section). This has also been the case throughout 2015/16. However, from 1 October 2016 a new Defined Contribution (DC) section will be introduced. As a result, USS will become a DB/DC hybrid scheme in 2016/17.

For more information on what this means for members, please refer to page 11 or visit www.uss.co.uk

## USS strategic priorities for 2015/16

The trustee believes that in fulfilling its primary duty, and achieving its mission, it has a responsibility to ensure the scheme is well-governed and that opportunities to improve service standards are taken. The trustee is particularly concerned with the value derived, by both the membership and the employer community, from the developments it makes, and this has been a guiding principle for setting and evaluating the trustee's strategic priorities. In the year to March 2016, the trustee identified three strategic priorities:

- **Development of the pension offer for employers and members;**
- **Enhancement of our service to the members and employers; and**
- **Development of the governance framework.**

### Development of the pension offer for employers and members

Following the conclusion of the stakeholders' discussions around benefit arrangements, the trustee has spent much of this year working to implement the changes to the scheme. This has required fundamental changes to processes, the tools and technologies used to administer the scheme and to the controls and monitoring framework. There have been a number of strategic decisions to be made around how the high level changes to benefit arrangements were to be implemented at a detailed scheme level. The trustee has worked closely with the scheme's stakeholders to transfer the high level changes into detailed amendments to the scheme. This work has included consideration of tax efficient retirement savings options, the treatment of existing additional voluntary contribution arrangements and the most efficient way for contributions to be allocated to the different sections of the scheme on an accurate and timely basis. The allocation is based on a number of variables including pensionable salary levels, sometimes across multiple appointments; matched contribution choices; and where applicable, whether pensionable salary is capped (by the Voluntary Salary Cap). USS has committed to handling the calculation of this allocation centrally, providing an additional service to employers, which is expected to be more efficient and less costly than a decentralised approach (with contribution allocations being calculated by each employer for their respective members).

**Expected outcomes:**
New scheme rules to be agreed and implemented at a detailed level; preparations to be completed for the implementation of the **USS Retirement Income Builder**, which provides benefits on a career revalued basis for all members, with implementation to take place on 1 April 2016; a successful implementation of the new technology solution required to administer the scheme, including the transfer of member data; preparations for the implementation of the **USS Investment Builder**, the new defined contribution section, to be well underway.

**Progress in 2015/16:**
First phase of the changes to the scheme were implemented on 1 April 2016, with the implementation of the USS Retirement Income Builder and the new administration platform; contribution handling, member transactions and pensioner payroll processed smoothly with a low volume of errors; specifications for improved management information have been agreed and will be delivered in the 2016/17 period; the trustee remains on track to deliver the USS Investment Builder on 1 October 2016.

### Enhancement of our service to the members and employers

The changes to the scheme also provided an opportunity for the trustee to consider how it supports employers and members, and whether, in making these changes, it could also make improvements to its services. The changes decided upon could not be supported by the existing pensions administration system, nor was the infrastructure available in-house to deliver the USS Investment Builder. The trustee therefore required new technologies; in seeking a solution the trustee specifically considered both the potential for future development, and the long term cost effectiveness. The strategic partnership the trustee has established with Capita provides for greater automation of administration tasks, improved reporting at both an employer and scheme level, and a shared desire to continue to improve services and add value for employers and members. In addition to introducing a new pensions administration platform, the trustee also listened to feedback from employers and members around improving digital processes and electronic use of communications. It also considered how it could make improvements to its own processes, and better support the activity required to deliver a full retirement saving service to employers and members.

Within the investment management service, the trustee has continued to embed the reference portfolio approach introduced in January 2015. This approach enables the trustee to set a strategic investment portfolio, whilst delegating day-to-day investment decisions to its investment management subsidiary. The trustee continues to believe that a well-run and appropriately governed internal investment team provides the best opportunity to meet its long-term objectives. It has therefore moved some investment activities in-house, limiting spending with external managers to those areas which would not provide good value for employers and members if developed internally. Investment performance is an important measure of the trustee's services and this year, despite significant economic challenges, the team has beaten its benchmarks. However, performance is not the only measure of our investment management activities, we know many members are interested in how we achieve that performance, and how decisions are taken. The trustee is keen to have an open and engaged dialogue with employers and members, and will continue to act transparently, providing up to date information on its website, and engaging with members on these matters. In addition, it remains a strategic priority to listen to the preferences of our members and employers and focus on Responsible Investment principles, for which further information and updates are available on pages 43 and 44.

**Expected outcomes:**
Maintain service levels to employers and members throughout a significant period of change; new online portal launched to enable employers to support scheme administration; a continuation of strong positive member experience and continued low volume of complaints; a continued low volume of errors in contribution handling and optimised value for money for employers and members alike; improved depth and breadth of management information; sustained investment outperformance in a challenging market; lower investment costs with higher internal management than peer average*.

*USS is committed to making things simpler, easier and more cost effective for employers and members. USS has centralised the process to allocate contributions between DB and DC, removing the burden from institutions and reducing cost. The trustee and its executive, proactively seek out opportunities to add value.*

Kevin Smith
Chief Service Delivery Officer

**Progress in 2015/16:**
Member and employer service levels within target parameters set at the start of the year; member and employer feedback has remained broadly consistent with previous years, indicating no significant degradation of service; employer portal launch and plan in place to roll out new functionality; enhanced understanding of end to end processes, and plan to drive efficiencies established; active management of service delivery caseload to improve service to employers and members; effective and established investment management approach, following implementation of the reference portfolio; investment costs lower than peers as reported by CEM* in latest published report; investment performance above benchmarks; transparent information regarding investment approach available on new public website.

*Latest available information is in respect of 2014/15. Results for 2015/16 will be reported in the 2016/17 annual report.

## Development of the governance framework

A well-governed scheme provides positive member outcomes at retirement, and value for money for both the sponsoring employers and the membership. Transparency around governance structures, and risk management, alongside effective administration of the scheme, helps build employer and member trust. Effective risk management is central to good governance, and to achieving USS's primary duty to ensure there are sufficient funds available to provide an income for members in retirement. In the 2015/16 year, the trustee identified some key areas of governance it wished to refine and strengthen, notably those in relation to the implementation of the reference portfolio, and separately those related to the new DC section of the scheme. During the year, it has reviewed and refreshed its governance strategy, and enhanced and strengthened its risk management framework ensuring the trustee's controls remain robust. Some specific work has taken place in the year to support these improvements, the trustee has invested in the management structure which supports the executive, making new appointments, providing training for existing employees and reviewing remuneration arrangements. Specific disclosures are included within this report in relation to the trustee's approach to remuneration, both in terms of its philosophy and compensation payable (pages 24 to 27) and the role of the Remuneration Committee (page 56). The trustee has also enhanced its supplier management approach, including pre-contract activity, and the core processes the team use from purchase of a good or service through to final payment. Governance arrangements are explained in more detail on pages 48 to 61 and the risk management framework is set out on pages 29 to 34. Maintaining strong governance structures and strict control of risk management processes will remain a key part of the trustee's work in 2016/17. You can read more about the outlook for 2016/17 on page 35.

**Expected outcomes:**
Effective and transparent governance structures, supported by a comprehensive risk management framework; strong member and employer satisfaction and trust as measured by surveys; effective governance structures and delegations associated with the reference portfolio approach; a smooth transition to the DC regulatory landscape, delivering a well-governed hybrid scheme, which can respond quickly and effectively to relevant changes; rationalisation of the supplier base over the medium term allowing for better leverage of relationships; enhanced focus on quality of service to ensure value for money through improved effectiveness of key supplier relationships.

**Progress in 2015/16:**
Review of governance structures completed and further development of the risk management framework; processes associated with reference portfolio delegations reviewed and revised as required; register of relevant legislation and regulations known as the USS 'Canon of Law' has been developed alongside supporting framework. This Canon of Law is an oversight tool which sets out the relevant regulations and laws against which compliance monitoring will be focussed. Key appointments have been made to senior manager level, and remuneration arrangements reviewed and refined as appropriate; centralised procurement function established with automated purchasing processes which will support future review of our supplier relationships. The Risk Management Framework presented on page 29 was reviewed and refined during the course of the financial year and provides a strong framework for the risk governance activities across USS.

# Scheme change programme

## Overview

Preparing for, and implementing, the changes to the scheme has formed a large part of the trustee's activity in the year which has presented USS with an exciting and complex challenge.

The trustee identified three elements of this major change programme which it wished to see delivered, these were:

- Implementation of the new **USS Retirement Income Builder**, the defined benefit (DB) section of the scheme, and implementation of the **USS Investment Builder**, the new defined contribution (DC) section of the scheme and associated upgrades to USS systems and procedures;
- The production and communication of each member's final salary benefit entitlement as at 31 March 2016;
- Establish appropriate foundations from which it can develop future improvements to both the retirement savings solutions and the service it provides.

The analysis carried out by USS quickly established that the administration and payroll records had to be migrated to a modern and flexible system to deliver these three elements. The executive committee also concluded that there was a strong business case to re-platform, that itself stood independent of the scheme change proposals. After careful consideration the USS trustee embarked upon one of the largest implementation projects ever undertaken by a UK private sector scheme.

## Governance

To oversee the programme of changes (the programme) and to ensure that the constituent projects are integrated effectively, a comprehensive governance structure has been established.

- The Group Chief Executive Officer (GCEO) is programme sponsor, responsible to USS stakeholders for its successful delivery and chairs the programme board. The programme board meets regularly and reports into the trustee board.
- A number of steering groups have been created which manage the detailed components of delivery, and a controls committee is in place to oversee the associated risks and the governance of key programme decisions.
- The design of components, systems and processes is overseen by accountable owners within USS with support from other internal or external subject matter experts.
- An experienced programme team co-ordinates all of the activity involved and provides progress update reports to steering groups, the controls committee, programme board and the trustee board.

## Engagement and design

USS knows that the member experience is dependent on the successful delivery of a smooth end-to-end process and that USS does not deliver this in isolation. There has been a high degree of engagement between the trustee and employer and member representatives throughout this period, from the initial engagements on scheme funding, through to the stakeholder discussions around changes to benefits and contribution rates, and finally the detailed design and implementation of the changes as decided upon. The feedback received through member surveys and focus group sessions, has informed the design of the USS Investment Builder and has shaped the communications activity around these changes. The inputs provided by employers, notably through the Institutions' Implementation Working Group (IIWG), a representative group of employers formed to consider implementation of the changes, has been invaluable. The IIWG, and its sub-groups, have considered in some depth those components which connect employer processes and systems, to those within USS, most notably those which support the payment of contributions and the update of member records. Our shared goal has been to ensure new processes are effective and efficient, so that USS, and the sponsoring employers, can continue to provide a high quality service through this period of change and beyond.

## Strategic partnerships

The trustee conducted a thorough procurement process to identify external suppliers with whom it could work to deliver the three elements identified above. For the new pensions administration system it selected Capita, and for the investment platform required to support the new USS Investment Builder it selected Northern Trust. The standards expected of our chosen suppliers reflect the high standards against which the trustee measures its own services. As both employers and members would expect, this includes working together in a professional and constructive spirit to deliver these key changes, and future developments effectively.

## Expected outcomes and progress update:

The programme delivery has been planned on a phased basis. The high-level milestones are:

### April 2016 (Complete)

- ✔ Migration of administration records and scanned documents to the new pensions administration system;
- ✔ Migration of payroll records to the new pensions administration system;
- ✔ Launch of a new employer portal with enhanced contribution and HR data interfaces; and
- ✔ Launch of the USS Retirement Income Builder.

### July 2016 and ongoing

- Delivery of member communications, setting out investment and other options available to members from October 2016; and
- Launch of My USS, a new online service for members, which will enable members to indicate whether they wish to opt out of the match and make investment choices, with the USS Investment Builder.

### October 2016

- Implementation of the USS Investment Builder;
- Implementation of software to segregate USS Investment Builder contributions from total contributions; and
- Implementation of the voluntary salary cap.

### Early 2017

- Completion of the calculation of final salary entitlements at 31 March 2016.

*USS has also been able to support employers with automation for event-based tasks that will reduce workload.*

# Performance overview

The performance overview on the following pages presents a view of the funding and administration of the scheme for the financial year from the perspective of the executive committee. The overview, which is intended to highlight sections of the financial statements that are key to understanding the financial position of the scheme, includes historical information, analysis and interpretation and should be read in conjunction with the financial statements on pages 62 to 88. A summary of the funding status of the scheme is also provided and should be read in conjunction with the Report on Actuarial Liabilities included on pages 92 to 96.

In relation to the investment portfolio, the purpose of the financial statements is to show, amongst other things, the fair value of investments at a fixed point in time, being the financial year-end. They also provide a comparative fair value at the same point a year earlier within the statement of net assets on page 65. The fund account on page 64 shows the movement (the gains and losses) between those fixed points. When drawing conclusions about the investment performance shown in the fund account, the impact of market volatility can be pronounced and yet, the gain or loss is unrealised until the investment is sold. For this reason, investment performance is typically also assessed within the trustee's annual report from a longer-term perspective. This smoothes the impact of such volatility and represents a more accurate view from a long-term investor standpoint such as USS. This perspective is given within the investment matters section looking at performance over a five-year rolling period. Investment income is also shown within the fund account and represents sources of income generated by investments such as dividend receipts from equities, interest on bonds and property rental income. This income represents a realised gain to the scheme.

## Financial position as at 31 March 2016

The scheme ended the year with a net deficit of £10.0bn, which compares to £8.2bn from 2014/15. The deficit represents the difference between net assets available for benefits of £49.8bn and accrued liabilities of £59.8bn at the year end.

**Year-end financial position**

| As at 31 March, in £billions | 2016 | 2015 |
|---|---|---|
| Net assets of the scheme | 50.2 | 49.5 |
| Less AVCs | (0.4) | (0.4) |
| Net assets available for benefits | 49.8 | 49.1 |
| Accrued pension benefits | 59.8 | 57.3 |
| **Deficit** | **10.0** | **8.2** |

During the year, net assets available for benefits increased by £0.7bn driven by an overall net investment returns (of £0.7bn) and net additions from members and employers <£0.1bn.

The net investment return consists of investment income of £1.2bn partly offset by £0.4bn reduction in market value of investments. This £0.4bn reduction in value was mainly driven by lower values of quoted and unquoted equities at 31 March 2016 compared to 2015 (£0.9bn reduction), and £0.5bn losses on derivatives, primarily forward currency contracts which are used to hedge the foreign exchange risk of overseas equities. Upward valuations of pooled investment vehicles in contrast have increased the assets by £0.7bn over the same period. Pooled investment vehicles are funds in which USS invests along with other investors to benefit from economies of scale and thus lower trading costs on assets under management. Other gains including those in respect of property and bonds drive the remaining £0.3bn increase.

Investment income of £1.2bn in total arises from dividends from equities of £0.6bn, £0.4bn bond income, and £0.2bn other income.

Employer contributions generated £1.6bn of income in the year and employee contributions generated £0.2bn of income; other receipts from members totalled £0.1bn and payments to members in respect of pensions and benefits amounted to £1.8bn. Overall contributions have increased year-on-year and the levels of members opting out of the scheme as a proportion of those eligible to join is lower than in 2014/15 (14% compared to 21%). However, whilst the active membership at 31 March 2016 fell compared to the level at the start of the year (180,000 versus 188,000 as restated) the movement was heavily weighted towards the end of the financial year, therefore not having a corresponding reduction on contributions received throughout the year. The growth in membership (and pensioner membership in particular) has also resulted in an increase in benefits payable year-on-year at £1.8bn up from £1.7bn.

**Net assets of the scheme**

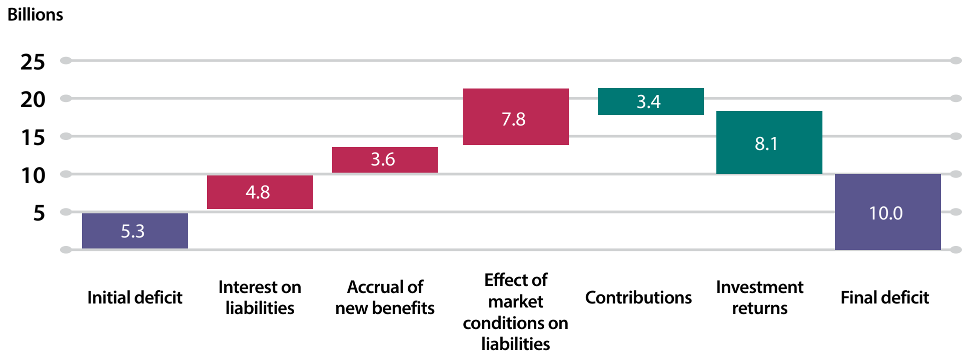
| As at 31 March, in £billions | 2016 | 2015 |
|---|---|---|
| Securities (equities and bonds) | 36.0 | 35.0 |
| Pooled investment vehicles | 10.1 | 9.9 |
| Derivatives (net) | 0.1 | - |
| Property | 2.1 | 2.0 |
| Cash balances | 1.4 | 3.0 |
| AVCs | 0.4 | 0.4 |
| Other investment balances | 0.1 | (0.8) |
| **Net assets of the scheme** | **50.2** | **49.5** |

The scheme's assets and liabilities are stated at fair value. The largest component of the scheme's net assets is held in securities, the equities and bonds on the balance sheet. During the year, purchases of £13.8bn were made and disposals totalled £12.0bn. The net movement includes a new low volatility fund of £0.5bn at year end in respect of developed market equities; four new funds for overseas bonds (£0.7bn) and an increase in the index-linked bonds held by the scheme.

## Deficit reconciliation

Since the 2014 valuation, the deficit on the technical provisions basis has increased from £5.3bn to £10.0bn. The investment performance over the period since the valuation has been positive; however this has not outweighed the effect of the fall in discount rates which has led to the liabilities increasing at a faster rate than the assets over the period.

## Change in deficit since 2014 valuation



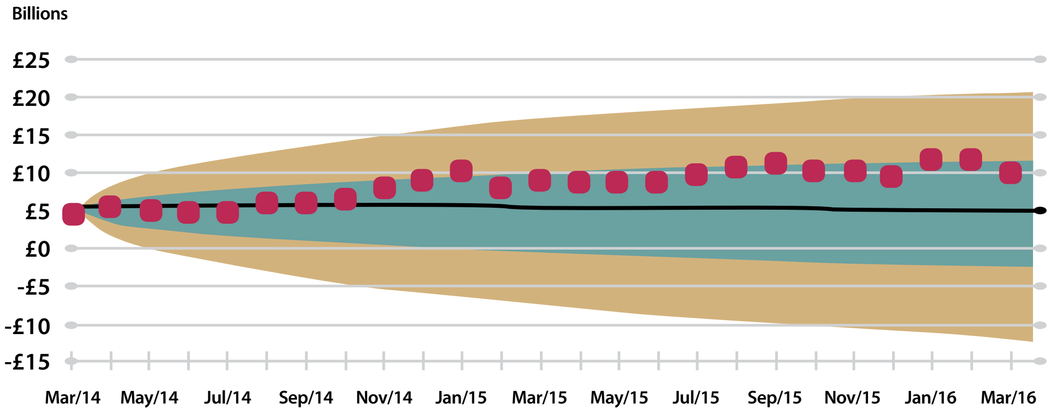

The chart above shows a number of factors which drive the level of deficit recorded. The two most significant drivers are the level of investment returns and the effect of market conditions on the liabilities.

The assessment of the technical provisions deficit takes into account the expected level of future investment returns and to the extent that these are exceeded (or not met) in practice, the deficit will be reduced (or increased). The higher the investment returns, the greater the value of the assets, and the lower the gap between assets and future pension payments will be. The actual investment returns achieved have been higher than originally expected and this has decreased by deficit by around £3.3bn over this period (relative to the valuation discount rate).

The increase in deficit due to the effect of market conditions reflects the prevailing low investment return environment. This has reduced the discount rate used to calculate the scheme's liabilities leading to a higher value for these liabilities.

The deficit is monitored closely and at 31 March 2016 falls within reasonable bounds of its expected path as forecast at the 2014 valuation. This is summarised in the chart below, where the black line reflects the expected path of the deficit and the green area represents the range of outcomes that might be reasonably expected over the intervening period (shown here as the expected path plus or minus one standard deviation). Each of the dots corresponds to an estimate of the actual scheme deficit at the end of every month since the 2014 valuation. At 31 March 2016 the measured deficit was in the green zone, as it had been over most of the financial year.

## Deficit progression since 2014 valuation




More information is set out in the report on actuarial liabilities starting on page 92.

## Administrative and investment management expenses

The operating costs of administering the pension scheme and its investments are borne by the trustee company and its investment management subsidiary. Such costs are recharged to the scheme as incurred. The audited financial statements of the consolidated trustee company are available on the USS website www.uss.co.uk. The external auditors issued an unqualified opinion on these financial statements.

**Operating costs of the scheme**

| For the year-ended 31 March, in £thousands | 2015/16 Underlying | 2015/16 Exceptional | 2015/16 Total | 2014/15 restated* Underlying | 2014/15 restated* Exceptional | 2014/15 restated* Total |
|---|---|---|---|---|---|---|
| Personnel | 52,304 | 7,468 | 59,772 | 41,367 | - | 41,367 |
| Premises | 3,601 | 1,567 | 5,168 | 3,480 | - | 3,480 |
| Investment | 29,897 | - | 29,897 | 28,607 | - | 28,607 |
| Other | 22,212 | 988 | 23,200 | 22,517 | - | 22,517 |
| **Total** | **108,014** | **10,023** | **118,037** | **95,971** | **-** | **95,971** |

**Restated for the impact of FRS 102, which became applicable in the year. The impact of the restatement was £0.1m reduction in personnel costs.*

Total operating costs have increased by £22.1m and on an underlying basis (excluding exceptional costs) have increased £12.0m or 13% year-on-year.

Investment costs have increased by £1.3m largely owing to external manager total fees. This increase is driven by continued strong scheme performance. Premises costs relate to the rent and associated charges of the operational properties used by the trustee company and its investment management subsidiary to conduct their business. In the second half of 2015/16, additional space was committed which has increased the premises cost and on an annualised basis equates to £0.2m. Other costs include computer and information services of £8.0m (2014/15 £6.9m) professional fees of £6.3m (2014/15 £6.0m) and the Pension Protection Fund Levy of £2.2m (2014/15: £3.6m).

The table also shows a £10.9m increase in underlying personnel costs and this is analysed below:

| As at 31 March, in £thousands | 2015/16 Underlying | 2015/16 Exceptional | 2015/16 Total | 2014/15 restated* Underlying | 2014/15 restated* Exceptional | 2014/15 restated* Total |
|---|---|---|---|---|---|---|
| *Staff incentives* | | | | | | |
| -Investment | 16,586 | - | 16,586 | 9,790 | - | 9,790 |
| -Non-investment | 1,617 | - | 1,617 | 283 | - | 283 |
| Total staff incentives | 18,203 | - | 18,203 | 10,073 | - | 10,073 |
| Other wages and salaries | 34,101 | 7,468 | 41,569 | 31,294 | - | 31,294 |
| **Total personnel** | **52,304** | **7,468** | **59,772** | **41,367** | **-** | **41,367** |

- An increase in incentives earned of £8.1m (including national insurance payments) arising from the strong cumulative scheme performance relative to its strategic allocation benchmark during the year. The outperformance during the financial year added £1.1bn to the scheme's value. The incentive paid in total amounts to 1.7% value added to the scheme by outperformance.
- On an underlying basis salary and other employee personnel costs have increased by £2.8m. An increase in headcount driven by two elements of USS strategy, firstly, broadening capabilities and bringing investment management in-house where this is more cost effective, and secondly increasing the number of staff, both permanent and temporary, driven by increased activity to implement the scheme's changes, particularly introduction of DC benefits in 2016/17. This accounted for approximately £1.5m of the increase.
- Increases in salary from the annual benchmarking exercise totalled £1.3m.

Exceptional costs, which are defined as costs that are material (from the trustee company's perspective) and unusual by incidence or by nature, total £10.0m. The trustee company is required to separately identify such exceptional costs in order to aid the understanding of its performance in the year. The exceptional costs relate to three areas:

- **Pension deficit provision** of £4.6m. Under FRS 102, a technical provision to reflect the discounted cashflow of future contributions to rectify the scheme's deficit must be recognised on the consolidated balance sheet of the trustee company and reflects its own contractual obligation in respect of its current and past employee members. When the funding plan was updated (which for the trustee company was in the 2015/16 financial year), the provision increased, by virtue of the increased contribution rate and longevity of the funding plan. Accordingly, this increase in the provision is reflected as an exceptional expense.
- **Scheme change expenditure** of £3.9m is recognised in the administrative expenses and reflects the cost of the programme which does not meet the capitalisation criteria of internally generated software costs. This expenditure does not reflect the ongoing activity of the scheme, as it is solely related to the activities undertaken to implement the changes to the scheme. This expense has been separately identified as exceptional as it is material.
- **Dilapidations provisions** of £1.5m have been recognised in the year and reflect a contractual liability to the landlord of the operating properties, where on exit of the property, costs may be incurred to remediate the premises bringing the condition back into the state at which it was originally. Such conditions are typical in rental contracts. The lease terms on which the provision is based extend for 10 years and therefore the provision is long-term in nature and is both material and non-recurring.

The cost profiles of the trustee company and USS Investment Management Limited is monitored throughout the year. The scheme takes part in an annual global benchmarking survey by an independent company (CEM) and USS compares favourably with comparator peers and has done so for a number of years. USS is pleased to report that for its mix of assets, the scheme achieved investment costs £33.7m lower than the peer group of large funds according to the latest assessment (for 2014). USS will continue to monitor cost effectiveness through the value for money commitment to members and employers.

# Member experience

Throughout the last year, everyone at USS has focussed on maintaining the track record of a high quality service to members. Targets set at the start of the year aimed to maintain service levels and member satisfaction within a tolerance of the results achieved in 2014/15. These results are measured in a number of ways including service ratings benchmarked independently (by CEM and Net Promoter Scores (NPS)).

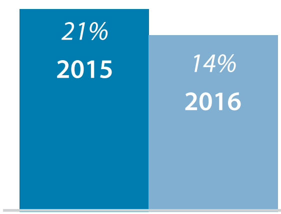
CEM provides both public and private schemes with insights into their service levels. By analysing and quantifying the services provided to members and the cost constraints associated with this administration, the value of the service relative to the cost is assessed against the most relevant peers and tracks this result over time. NPS is derived from feedback directly from members about their experience both positive (expressed as a positive percentage) and negative (expressed as a negative percentage) to give an overall satisfaction score. The goal of maintaining the results from the prior year has been a challenge at times, given the increasing workloads arising from efforts involved in the design, training and transition to the new platform. However, the USS values stood the trustee company in good stead through this time, in particular being member focussed throughout the transition has enabled USS to keep the service levels within the target parameters set, and member feedback was in line with the previous year's results. Looking forward to 2016/17 the objective is again to protect all aspects of USS' core service, but most notably of paying benefits at retirement, so that service is not adversely affected by the implementation and embedding of the new pensions administration and the new benefit structure.

Some of the member service highlights for 2015/16 are:

- Increasing the overall service rating by one percentage point compared to the previous year. This result of 70% compared favourably with the peer group median of 62%.
- Positive member satisfaction scores (NPS) were broadly maintained. USS achieved 65% compared to a 68% in the previous year. It is important to note that the highest volume category of negative responses related to views on the changes to the benefit structure and did not relate to core member servicing;
- All pension payments were made on time;
- 99.5% of tax free lump sums were paid within one week of the members retirement date. This compares with an average of 91.8% for a comparator peer group. (source CEM Benchmarking in the latest available report which was 2014/15);
- Members were provided with dedicated resources to explain the changes being made to the scheme, including an online benefit illustrator with which to estimate their future retirement income. The illustrator is available from the USS website [www.uss.co.uk](www.uss.co.uk)
- USS delivered presentations and question and answer sessions on the changes being made to the scheme at 54 employers, over 9,000 members attended.

## Other key facts

### Non-joiners




*Decreased by seven percentage points*

### *New members*

## *22,865*

*New active members were welcomed into the scheme during the year.*

### *Pensions in payment*

- *Over 76,000 individual pensions were in payment at year end.*
- *An increase of 4.3% compared to 2014/15.*

In the forthcoming year the preparations we have made and the improvements to our systems and processes will become increasingly apparent to members. Specifically, members will have access to:

- My USS, the new online service for members;
- Self service capability;
- A dedicated help-desk; and
- New modellers and calculators to help members to understand all the valuable features of the new benefit structure and plan effectively for their retirement.

USS is, however, acutely aware that the implementation of the new system and the new benefit structure will impact on service during a transitional period in 2016. The executive committee is committed to protecting USS's core service and processing but fully expect to have some challenges in maintaining the turnaround times that were delivering in 2015.

*I frankly think USS is doing a very good job - and I am typically not easily pleased.*

2015 member survey

## Membership Age bands

| Actives | |
|---|---|
| 30 & Under | 12.2% |
| 31 – 40 | 32.9% |
| 41 – 50 | 28.2% |
| 51 – 55 | 12.0% |
| 56 & Over | 14.7% |
| **Total** | 100% |

| Pensioners | |
|---|---|
| 50 & Under | 0.2% |
| 51 – 60 | 7.3% |
| 61 – 70 | 48.3% |
| 71 – 80 | 32.0% |
| 81 & Over | 12.3% |
| **Total** | 100% |

| Deferred | |
|---|---|
| 30 & Under | 6.4% |
| 31 – 40 | 29.4% |
| 41 – 50 | 35.6% |
| 51 – 60 | 24.8% |
| 61 & Over | 3.7% |
| **Total** | 100% |

*More detail on member numbers are shown over the page.*

## Member numbers

USS provides a snapshot of members at a specific and consistent date each year. The date chosen is the financial year end 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:

| Active Members | University Institutions | Non-university institutions | Total |
|---|---|---|---|
| **Membership at 1 April 2015 as reported** | **141,842** | **5,295** | **147,137** |
| Change in active members* | 39,096 | 2,102 | 41,198 |
| **Membership at 1 April 2015 as restated** | **180,938** | **7,397** | **188,335** |
| New members | 21,835 | 1,030 | 22,865 |
| | **202,773** | **8,427** | **211,200** |
| Leavers and exits during the year | | | |
| – Retirements | (2,588) | (124) | (2,712) |
| – Retirements through incapacity | (122) | (7) | (129) |
| – Death in service | (59) | (1) | (60) |
| – Refunds | (1,201) | (169) | (1,370) |
| – Deferrals | (19,900) | (1,428) | (21,328) |
| – Retrospective withdrawal | (4,571) | (168) | (4,739) |
| | (28,441) | (1,897) | (30,338) |
| **Total active members at 31 March 2016** | **174,332** | **6,530** | **180,862** |

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

| Pensioner Members | University Institutions | Non-university institutions | Total |
|---|---|---|---|
| In payment at the start of the year* | 60,153 | 1,927 | 62,080 |
| New pensioners in year resulting from: | | | |
| – Retirement of active members | 2,710 | 131 | 2,841 |
| – Retirement of deferred members | 672 | 267 | 939 |
| | 63,535 | 2,325 | 65,860 |
| Deaths in retirement | (1,632) | (43) | (1,675) |
| **In payment at 31 March 2016** | **61,903** | **2,282** | **64,185** |

In addition to the pensioner numbers above are 12,704 pensions in payment at 31 March 2016 which are paid in respect of the service of another (for example a surviving spouse or dependant).

Deferred members not yet receiving a pension totalled 128,043. The total number of members as at 31 March 2016 was therefore 373,090, comprising 180,862 active; 64,185 pensioners; and 128,043 deferred members.

* In previous years, the definition of active members for external reporting purposes included new joiners only where notified by the consistent date adopted (the financial year end) or where notified prior to approval of the report and accounts for that financial year. USS however, receives data for sometime thereafter and in adopting this definition and excluding those late joiners the disclosed membership numbers have been understated for the last seven years. The definition has been updated to capture these movements and at the same time, to capture improvements to definitions. This primarily relates to members which may be classified in more than one category. In adopting this improved definition and methodology, USS sought to reflect a cumulative adjustment and report the 2014/15 numbers on a consistent basis. This adjustment is for external reporting purposes only, since for internal management purposes, data used by the scheme reflected the full membership at the relevant point in time including late joiners.

# Employer experience

The trustee provides both a service to employers, and works with employers to provide a service to members. There has always been significant engagement and collaboration with employers in order to deliver a service which is both effective and valued. Employer inputs through the Institutions' Advisory Panels, the Institutions' Meeting and the regular feedback we receive through our daily contact with employers have helped shape and improve our services. The trustee recognises not all employers have the same requirements, and therefore provides a flexible support model, which considers both the needs of our largest employers, who have experienced full time pensions teams and thousands of members and the needs of some very small employers with employees for whom pensions administration is just a small part of a wider role.

With the major changes decided upon earlier in the financial year, to both benefit arrangements and pensions administration and investment systems, the trustee recognised the need to increase its engagement with employers. In December 2014, the trustee established the Institutions' Implementation Working Group (IIWG), comprised of more than 20 experienced pensions professionals from a variety of employers. This group has made a significant contribution to the design of the new systems and procedures, some of which are already in use.

USS completes a net promoter score exercise each year, and similar to the member NPS it measures the positive and negative responses to give an overall score. It is used as a proxy for gauging the overall employer satisfaction with USS.

## Activities undertaken by the IIWG and its sub-groups

- A sub-group of the IIWG agreed the high level requirements for a new HR data interface file. This interface file extends the ability for employers to update member records held by USS in bulk so that the records are in line with the data held by employers. It has also extended this facility to the notification of new joiners. In the first month of operation (April 2016), over 30,000 records have been updated using the HR data interface file where many would have previously required a manual process to be completed.
- The IIWG provided inputs into the development of a new contributions interface file has been developed to report employer and member contribution reporting. This interface file consolidates three separate files into a single file. It has also introduced front-end validation checks, which means the data is automatically scanned and common issues are identified as employers upload the file. Front-end validation means employers receive immediate notification if there are any discrepancies in the file, supporting speedier resolution. The file format enables the trustee to separate contributions in respect of the **USS Retirement Income Builder** and contributions in respect of the **USS Investment Builder**, removing a complex and time consuming administrative burden from employers.
- The IIWG's views have been gathered across a range of detailed design and implementation activities, including the management of the new voluntary salary cap, the match provided for additional employee contributions, and salary sacrifice options.
- The IIWG has provided inputs into the ongoing development of online services for employers and members.

## Administration and servicing

Teams at USS work closely with participating employers to deliver an efficient, timely and high quality service to our members. We actively seek feedback and look to continuously improve our performance. During 2014, data from employer surveys highlighted two areas for improvement. There was a clear consensus that USS should look to reduce the turnaround time for provisional retirement quotations. There was also a strong correlation in responses that suggested a need to simplify and clarify communications. Both these areas were specifically targeted for improvement.

The highlights from the 2015 employer survey are:

- The overall employer satisfaction (net promoter) score was broadly maintained from 2014 increasing from 71%* to 73%;
- 68% of employers consider that USS provides a timely service for provisional retirement quotes. This compares with 55% in the previous year;
- 73% of employers consider that USS provides a timely service for retirement processing. This compares with 65% in the previous year; and
- Eight out of nine processes surveyed were deemed to have improved in timeliness and clarity from the previous years' results.

*Due to a typographical error in the 2014/15 Report and Accounts this was previously incorrectly reported as 80%.

The executive committee and staff at USS greatly appreciate feedback from employers and it features highly on the USS agenda of continuous improvement. The transition to the new systems and benefit structure will, of course, also impact on service levels to employers. USS will work closely with employers to ensure we deliver an acceptable service to members throughout this period.

*Some quotes from the survey:*

> *It is a real pleasure to deal with staff at USS. They work extremely hard and always find time to help me and our staff. Big thanks!!*

> *I hope the excellent level of service continues during the transition phase and after the implementation of the changes in April 2016.*

# People experience

The ability of the trustee to fulfil its primary duty, succeed in its mission and deliver its strategic priorities rests upon the expertise and dedication of the people employed by USS. To create optimum value for members and employers, the executive committee must engage employees in its aims and values, provide effective support and encourage a supportive culture, and ensure it has the right mix of skills and experience required at every level. The trustee identified three priorities for 2015/16 to ensure the trustee company was well-positioned to deliver during the year:

- Develop the performance management framework;
- Strengthen employee engagement; and
- Review the existing mix of skills and develop the workforce to deliver the new scheme structure.

## Develop the performance management framework

During the year, the trustee reviewed the alignment of individual performance objectives with the trustee's primary duty, mission, values and strategic priorities. Following the completion of this review, the purpose of performance management was restated with a clear focus on the linkage between sustaining value for members and employers with continuous development of services within USS. Specific importance has been placed on maximising outcomes that contribute the most to employers' and members' experience of USS, and achieving that through the demonstration of the trustee company's values. Employees attended a series of workshops which supported the development of the performance management framework and embedded the importance of high quality feedback. Building on the work completed in 2015/16, the trustee will implement a behavioural competency framework to bring further clarity, consistency and alignment with the trustee company's values.

An important element of the performance management framework is remuneration and how the amount people are paid, and any incentive payments they earn, are linked to the trustee's primary duty, mission, values and strategic priorities. The link between performance (including longer-term investment performance) and remuneration is fundamental, to ensure a continued emphasis on the overall contribution made to provide value for employers and members. We work hard to measure performance fairly across the organisation both quantitatively, in terms of outperformance of the scheme investment mandates where applicable, and qualitatively in terms of alignment with the trustee's mission and demonstration of the trustee company's values. A calibration exercise was introduced across the organisation in 2015/16 to increase fairness and introduce an opportunity to challenge individual managers on the performance of their team.

The trustee recognises the importance of appropriate remuneration, and the interest in this area from employers and members. The Remuneration Committee, the trustee board and the board of USS Investment Management Limited scrutinise the remuneration structure and key judgements linked to incentive payments. Remuneration levels for the highest paid individuals, who typically are the executive committee, and the investment managers, have the biggest impact on overall levels of remuneration and reward. The trustee is transparent in its approach, and with regards to any judgements made, detailed information on the remuneration packages in the year 2015/16 is provided on pages 24 to 27.

*This is a people business. How managers support and develop their people is a key critical success factor for our ability to achieve the agenda that lies ahead.*

Bill Galvin – Group Chief Executive

## Strengthen employee engagement

Engagement can be defined as the extent to which employees feel passionate about their jobs, are committed to the organisation, and put discretionary effort into their work. As a people-based, service organisation it is important to the trustee, the investment management board, and the executive committee that all employees, including those working on a temporary basis, are engaged with the trustee's primary duty, mission and strategic objectives. In addition the trustee is keen to ensure that employees feel connected to the company values and understand how the work they do contributes to USS's success and the value derived by employers and members. In order to measure these factors the trustee carries out an annual employee engagement survey; the 2015/16 employee engagement scores were very encouraging. In particular, the results show a 13 percentage-point improvement on the engagement score from the previous year, reflecting the focus on this area. Further analysis is shown in the chart to the right of the page.

One of the key reasons the trustee chose to focus on strengthening employee engagement was an understanding that, with significant change taking place in the year, it was going to be a challenging year for the trustee company. Many individuals within the organisation have needed to adapt to new processes and new ways of working both internally and externally. It was important for employees to have a clear view of the trustee's mission and strategic priorities, to be engaged in the changes taking place and understand their role in making the changes a success. Typically through times of change employee engagement reduces; the trustee wished to develop a strong base, removing any obstacles which were within USS's control, and providing employees with appropriate support. Employee engagement will continue to be a priority in future years.

## Develop the workforce

The trustee has reviewed the skills and experience required to deliver both the changes to the scheme and to operate the new hybrid scheme structure in a business as usual environment. In 2015/16 a number of temporary resources have been recruited to support the delivery of the changes to the scheme. Some internal restructuring has taken place to prepare for the introduction of the new scheme structure and some additional permanent resources have been hired to fill gaps in existing skills and experience. Average employee numbers are shown in the chart to the right of the page. The trustee anticipates overall employee numbers will fall as the temporary resources hired to support the delivery of the scheme changes leave. However, some new permanent roles are required to develop in-house expertise where it will add the most value and cost effective to do so.

**Employee engagement is a good indicator of how connected staff are with the organisation and in helping it to achieve its goals.**

**Response rate to the survey: 86%**

***Engagement score***

***82%***

+13 percentage points vs 2014/15

***USS staff have a clear understanding of the goals and objectives of USS***

***87%***

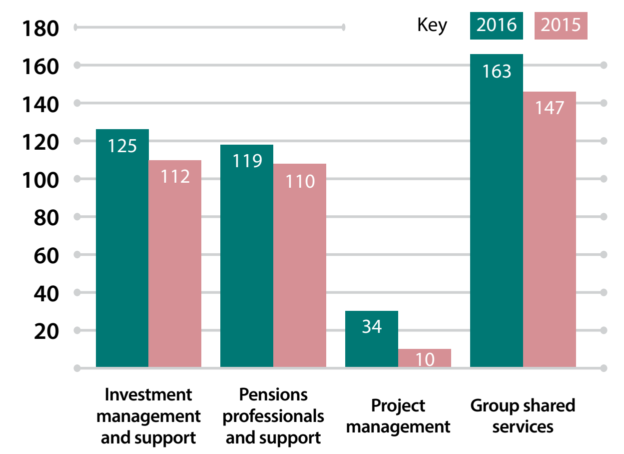
+7 percentage points vs 2014/15

***USS cares about the service it provides and is sincere in its dealings with members and stakeholders***

***92%***

+18 percentage points vs 2014/15

The average monthly number of employees was:




In total, staff numbers were 441 (2015: 379).

# Remuneration and incentive arrangements

This section explains the trustee's approach to remuneration arrangements including the components within the overall remuneration package of all employees, with a specific focus on the remuneration of the 'Key Management Personnel' being those individuals responsible for the direction of the scheme's activities (defined as the trustee board and executive committee). Furthermore, whilst not defined as key management personnel, the remuneration of highly paid individuals (those earning in excess of £100,000 in the year) is also subject to specific focus included within this section.

## Remuneration philosophy

USS's remuneration framework is designed to ensure the scheme has access to the right mix of skills and experience to deliver its long-term mission and strategic priorities. As outlined throughout this report, it is a fundamental objective of USS to deliver good value for money for members. Accordingly a cornerstone of the remuneration and incentive objective is to pay for performance, which means to reward contribution that is aligned to the needs of the members and employers in a cost effective manner. The investment managers represent the largest proportion of the compensation paid representing 88% of the variable incentive in the year. USS's compensation approach includes the following key elements:

- Base salary; which is benchmarked annually (either in its own right or part of total remuneration). Base salary is designed to attract and retain high-performing individuals;
- Annual incentives for certain roles; aimed at motivating and rewarding top performance and aligned to the USS values. Where incentives exceed a £50,000 threshold, payment is 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; designed to incentivise delivery of scheme performance over the long-term and to encourage retention of the key management 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.

Trustee board directors and other non-executives receive only the base salary or agreed fee level for their services.

## Benchmarking of base salary and/or total compensation

Given the importance of attracting and retaining high-calibre employees in a competitive talent pool, USS's objective is to offer fair and competitive salaries in comparison with its peers. Salaries reflect the experience, responsibility and contribution of the individual and of the role within the organisation. Annually benchmarking of the salaries enables the trustee to demonstrate that salaries are fair, minimising the disruption caused by employee churn and any potential negative impact on employee engagement. At the same time, salary benchmarking is vital to ensure we maximise the value and cost effectiveness obtained for employers and members. Two external benchmarking agencies are used; one for investment management and support services and one aimed at pensions services roles and their support functions. We therefore target to pay a competitive, but not excessive, compensation level across the business as a whole.

## Incentive payments

The incentive arrangements in place ensure alignment to the trustee's primary duty, mission and values and to the strategic priorities. During the 2015/16 financial year, the trustee met its targets in relation to the strategic priorities and delivered strong investment performance, accordingly, the incentive payments reflect this performance. There are three types of incentive payments as shown in the table below:

| | Annual Incentive | Investment LTIP | Group Executive LTIP |
|---|---|---|---|
| **Main features & objectives** | • Restricted to certain roles including certain executive committee members<br>• To drive strategic change and individual delivery of the business plan<br>• To recognise and reward individual contributions to USS priorities<br>• Individual contribution is calibrated annually<br>• Deferred elements aligned to longer-term strategic priorities | • Restricted to a small number of roles in the investment management subsidiary<br>• Measured against scheme performance to deliver value<br>• Promotes retention of key roles<br>• Applicable to members of the executive committee with an investment focus | • Applicable only to executive committee members of the trustee company<br>• Restricted to those not in receipt of an Investment LTIP<br>• Enables the recruitment of executives who are necessary to deliver the strategy |
| **Performance conditions** | **For investment managers**<br>• Scheme performance over five years and mandate performance (where applicable) over five years<br>• Qualitative measures aligned to USS values and delivery of strategic priorities<br>**For other employees**<br>• Qualitative elements aligned to longer-term strategic priorities | • Scheme performance over multiple years<br>• Specific investment performance measures for Private Markets employees over multiple years | • All qualitative and reflects personal objectives (2/3 weighting) and executive committee overall objectives (1/3 weighting)<br>• Promotes objectivity of those executive committee within the second or third lines of defence |
| **Service conditions** | • Must be in employment and not serving notice at date of award<br>• For deferrals, must be in employment and not serving notice at the date of payment | • Must be in employment and not serving notice at date of award and through to vesting although 'good leaver' provisions may apply<br>• LTIPs vest in tranches, the earliest being three years and the latest being four years after award | • Must be in employment and not serving notice at date of award and through to vesting, although provision is made for 'good leavers'<br>• LTIPs vest after either three years or five years |
| **Deferred element** | • Incentives above threshold are deferred for three years as follows:<br>– 30% over £50,000;<br>– 40% over £200,000; and<br>– 50% over £400,000. | • As a long term plan, the payment is deferred until conditions have vested | • As a long term plan, the payment is deferred until conditions have vested |

## Remuneration in 2015/16

The trustee remains committed to reporting openly the remuneration packages of the trustee board directors, key management personnel and highly paid employees who are typically the investment managers. For the latter group of employees the remuneration disclosure goes beyond what legislation requires to be disclosed and reflects the transparency commitment the trustee has given to stakeholders. In the current year, the trustee has sought to improve the analysis of this disclosure to provide it in context and to facilitate a deeper sense of understanding of how these figures are derived, measured and approved.

The table below shows remuneration of highly paid employees including key management personnel. A mean average base salary across the organisation (by full-time equivalent staff) was £58,700. A median average was £43,000.

| Remuneration levels for highly paid individuals | 2016 | 2015 |
|---|---|---|
| *For the year-ended 31 March, showing numbers of individuals in bands of £50,000* | | |
| £100,001-£150,000 | 22 | 23 |
| £150,001-£200,000 | 22 | 21 |
| £200,001-£250,000 | 13 | 8 |
| £250,001-£300,000 | 13 | 4 |
| £300,001-£350,000 | 2 | 5 |
| £350,001-£400,000 | 3 | 7 |
| £400,001-£450,000 | 6 | 2 |
| £450,001- £500,000 | 1 | - |
| £500,001-£550,000 | 6 | - |
| £550,001-£600,000 | 2 | 1 |
| £600,001-£650,000 | - | 1 |
| £650,001-£700,000 | 1 | - |
| £750,001-£800,000 | 2 | - |
| £900,001-£950,000 | - | 1 |
| £1,350,001-£1,400,000 | 1 | - |
| £1,600,001-£1,650,000 | 1 | - |
| **Total** | **95** | **73** |

The number of highly paid individuals has increased due to:

- Strong investment outperformance (generating £1.1bn of value to the scheme for the year ended 31 March 2016); and
- Strengthening of the investment team to broaden capabilities and bring investment activity in-house. Amongst other benefits cost savings to the scheme are generated as a result.

***Mean average base salary 2015/16***

**£58,700**

***Median average base salary 2015/16***

**£43,000**

The table above includes the remuneration earned in respect of base salary, annual and long-term incentives. A significant proportion of the annual incentive is deferred for three years. The long-term incentive includes increases to the estimated value of plans previously awarded, which will mature over the next four years. This estimate depends on the scheme performance and therefore is reviewed each year until maturity.

### Investment out-performance

A target of 0.55% was set by the investment committee. This target represents a strong outcome over periods of five years or longer. The target was exceeded throughout the year. Page 40 includes more detail.

*Continued overleaf*

The tables below show the same individuals and key management personnel. The table provides the analysis of the 2016 amounts by remuneration element showing both amounts earned during the financial year and cash amounts paid during the year. The net value-added (defined as the impact of active management on the scheme return) contributed £1.1bn. The incentives earned in 2015/16 (annual plus long-term) by high earners of £16.9m represent 1.5% of the net value added (1 year).

| Remuneration | High earners | Group Executive (A) | Trustee Board (B) | Total Key Management Personnel (A+B) |
|---|---|---|---|---|
| *For the year-ended 31 March 2016, in £millions* | | | | |
| Total base salary | 11.7 | 1.8 | 0.5 | 2.3 |
| Annual incentive | 12.8 | 1.3 | - | 1.3 |
| LTIP allocated* | 4.1 | 1.0 | - | 1.0 |
| **Total compensation earned** | **28.6** | **4.1** | **0.5** | **4.6** |
| Less: | | | | |
| Annual incentives earned in the year deferred until 2019 | (2.2) | (0.5) | - | (0.5) |
| LTIP allocated* | (4.1) | (1.0) | - | (1.0) |
| Add: | | | | |
| Annual incentives from 2013 paid in the year | 0.7 | 0.1 | - | 0.1 |
| LTIP vested | 1.8 | 0.5 | - | 0.5 |
| **Total compensation paid** | **24.8** | **3.2** | **0.5** | **3.7** |

* The LTIP allocated refers to the apportionment of the movement in LTIP provision and corresponds to a proportion of the expense incurred in the year.

## LTIP Awards

A notional amount is awarded in respect of LTIPs and amounts eventually payable depend on the performance and service conditions explained earlier in this report.

Twenty four investment LTIP awards were made in the current year totalling £5,950,000, of which two related to key management personnel with a notional value of £1,050,000. Five group executive LTIPs were awarded in the year with a notional value of £345,000, all of which related to key management personnel.

The trustee board director fees are shown below with the comparison to 2014/15. Their remuneration is included within the analysis table above.

| Total emoluments of the directors of the trustee company: | 2016 | 2015 |
|---|---|---|
| *For the year-ended 31 March, in £thousands* | | |
| Fees (non-executive directors) | 446 | 456 |
| Employers' costs - National Insurance contributions | 79 | 71 |
| Expenses incurred | 66 | 34 |
| **Total** | **591** | **561** |

| The number of directors who: | | |
|---|---|---|
| are members of the USS defined benefit scheme | 8 | 6 |

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 on pages 56 of this report.

# Legal and regulatory update

As highlighted earlier in this report, the external regulatory landscape as applicable to USS, is subject to significant change, most notably as a result of the inclusion of a DC section within the scheme. 2015/16 has therefore been a busy year from a change and readiness perspective and will continue to be so in 2016/17. The key highlights of the work undertaken and ongoing are presented below and these form part of the Canon of Law under development described on page 10.

## New rules and benefit structure

After engagement with the scheme's stakeholders, the Trust Deed and Rules governing the scheme were formally amended in November 2015 with the changes becoming effective from 1 April 2016. The changes introduced are far-ranging, and as explained in the scheme changes overview on pages 11 to 12, fundamentally change the nature of benefit provision for the future within the scheme.

## Abolition of contracting out

The abolition of the State second pension in April 2016 has had a particular 'knock-on effect' for the scheme and its membership, in relation to the provision of increases to Guaranteed Minimum Pensions (GMPs) by the scheme. Historically, USS provided (along with other occupational pension schemes) for limited increases on GMPs, with the State picking up the remainder of increases. The impact of the reforms is that the State will no longer provide increases for those reaching State Pension Age after 5 April 2016. The trustee therefore took legal advice to determine the impact, having specific regard to the terms of the Trust Deed and Rules. This confirmed that for those members reaching State Pension Age after 5 April 2016, USS will assume responsibility for providing the full increase in payment.

## Introduction of Defined Contribution benefit provision

As outlined above, the introduction of DC benefits into the scheme structure in the form of the **USS Investment Builder** brings with it a number of new legislative requirements and additional consideration of Codes and Guidance issued by the Pensions Regulator (tPR):

### a. Codes and Guidance

The Pension Regulator (TPR) recently substantially updated its DC Code reflecting on enhanced focus on the proper governance of DC schemes in the UK. The trustee is in the fortunate position as it develops its own DC section, the USS Investment Builder to be able to take full account of the Code and related Guidance to build a compliant scheme that seeks to reflect best practice in scheme governance.

### b. The Occupational Pension Schemes (Charges and Governance) Regulations 2015

The regulations introduce a number of requirements on the scheme, such as the introduction of a charges cap on DC default investment funds; assessment of value for money for members; and requirements for the majority of the trustee directors to be "non-affiliated" (broadly defined as not connected to service providers to the scheme). They also include a number of requirements that will impact the 2016/17 Report and Accounts, including the requirement to produce a signed annual Chair's Statement on how the scheme has complied with these regulations including how the trustee seeks to monitor and maintain value for members.

## Changes to the requirements to obtain and Auditor's Statement about contributions

The Occupational Pensions Scheme Regulations were amended during the year to dispense with the requirement for certain schemes including USS to obtain an auditor's statement about contributions. Such changes were effective for accounts approved for signature after 1 April 2016. Accordingly no auditor's statement is provided.

*In 2016/17 we will be required to produce a signed annual Chair's statement on how the scheme has complied with regulations applicable to DC schemes.*

# Risk management framework

The trustee's primary duty is to ensure there are sufficient funds available to provide an income for members in retirement in accordance with the commitments made by employers under the scheme's rules. This means that the trustee must manage the many and varied risks associated with the delivery of these responsibilities.

*Understanding risk lies at the heart of everything we do and every decision we make.*

Guy Coughlan,
Chief Risk Officer

USS has a comprehensive framework for managing the risks faced by the organisation. This framework includes a dedicated group risk team, along with risk management policies, processes and governance arrangements. Together, these ensure that risks are effectively identified, monitored, managed and reported across the business as a whole. The group risk team is independent of USS front-line businesses and its head, the Chief Risk Officer, reports directly to the GCEO.

The risk team's remit is to coordinate and oversee risk management activities across USS with two key objectives in mind:

- **Control:** ensuring risks are identified and managed within risk appetite; and
- **Adding value:** using risk information more effectively in decision making.

These objectives direct the Group Risk team to assist the trustee company to manage risk by:

- Providing risk information, tools, analysis, insight and challenge;
- Facilitating the identification and evaluation of new and emerging risks; and
- Providing assurance to stakeholders through independent oversight and monitoring.

The risk team operates as part of a "three lines of defence" approach to risk management, which includes the USS business units within the organisation (as owners and managers of the risks), the independent oversight functions and the audit function. This is shown diagrammatically below:

| | | |
|---|---|---|
| First Line of Defence | The USS business units directly responsible for the activities containing risks | **Risk management:**<br>• Operate day-to-day risk management processes<br>• Apply internal controls and risks responses |
| Second Line of Defence | The independent oversight functions, including Risk, Legal, Compliance amongst others | **Risk oversight:**<br>• Oversee and challenge risk management<br>• Provide guidance to the first line<br>• Develop and maintain the risk framework |
| Third Line of Defence | The independent assurance functions of internal Audit | **Risk assurance:**<br>• Review first and second line objectively<br>• Challenge the process<br>• Provide assurance |

The first line of defence is that all employees are appropriately trained and alert to risks within their own area and know what action to take to mitigate those risks.

The second line of defence continued to review and improve the control environment. Substantial progress has been made across a number of fronts including improvements to the risk management framework, enhancements to processes and controls, and a continued effort to develop and embed the risk management culture across the business. In terms of the first of these, a new approach to defining risk appetite has been developed, which is reflected in a revised set of trustee risk appetite statements. Improved reporting of risk and control information has been implemented in multiple areas including pension service delivery, USS Investment Management, finance, HR, IT and legal. The oversight and assurance process around the reference portfolio approach to investment has been successfully bedded down. New systems have been acquired to facilitate more effective strategic management of risk, including a new liability modelling system and a new stochastic long-term risk modelling tool for both investments and liabilities.

The process of second-line review and improvement remains ongoing with several initiatives currently underway for 2016/17. These include improvements to data governance, the implementation of a revised model risk policy and further refinements to risk registers and controls across different business units. There is also an initiative to further improve quantitative risk models, with a clear appreciation of their limitations and the importance of informed judgement, qualitative factors and common sense in using them effectively. With the imminent launch of the **USS Investment Builder**, there has been an important focus on the design and development of controls and processes for overseeing and monitoring the performance and risk of this new member benefit. Turning to the subject of information security, USS is in the coming year looking to gain accreditation to ISO27001, the international standard for information security management, to reflect our commitment to protecting personal and sensitive data within the business. All of these projects are set against a backdrop of continued development and embedding of the risk management culture.

An effective third-line of defence is essential to provide oversight and maintain the trust of the members and employers particularly as we embark on a period of change. The internal audit function has continued to provide independent, objective assurance to the trustee through the completion of activities within the annual internal audit plan. The 2016/17 annual plan will seek to provide assurance over a number of support functions including Finance, Compliance, Risk and IT; as well as Service Delivery functions which support pension administration; and key investment processes. In addition, assurance will be provided over the scheme changes programme. A key focus in 2016/17 will be to enhance the reporting provided to the trustee in respect of the timeliness of agreed remediation activities where improvement opportunities are found. This reporting will support not only effectiveness of those specific front line activities but also provide a key indicator about the level of stretch in the organisation in the lead up to the delivery of the USS Investment Builder DC plan.

This approach to risk management is embedded throughout USS via three key pillars:

- Risk appetite;
- Risk management processes; and
- Risk governance.

## Risk appetite

Risk appetite is at the heart of USS's approach to risk management. It expresses the desired or target level of risk that USS is prepared to accept in the pursuit of its objectives. Taking on too much risk, or indeed, too little risk could result in the failure to achieve those objectives.

Risk appetite is set by the trustee board and is expressed in terms of a series of statements for each risk type, linked, where possible, to quantitative metrics that provide a measure of the acceptable tolerance, or operating limits, for different risks.

## Risk management processes

USS has implemented risk management processes to identify, measure, monitor and report risks across the business.

Risks are **identified** both "top-down" at the organisational level and "bottom-up" from within individual business units. In addition, the business conducts regular scanning for emerging risks arising from the external environment. The risks are documented in risk registers and **measured** prospectively against relevant risk appetite statements.

Risks are **monitored** using appropriate metrics against tolerances linked to risk appetite. Adverse outcomes are used to inform the reassessment of the risk response, which may drive changes in the business strategy and operations.

Risks are **reported** to the board, the risk committees and other committees, with a focus on the level of risk relative to appetite and tolerance, and the need for mitigating actions.

## Risk governance

Effective risk governance starts with clear roles, responsibilities and delegations. USS combines these with specific policies, business standards and risk committees. The risk governance processes ensure that the risk management processes are effective and that risk is appropriately assessed against risk appetite.

For risk management to be effective, it is important that the roles and responsibilities of all those involved are defined unambiguously and in accordance with the three lines of defence model. At USS, the trustee board retains ultimate responsibility for risk management across the organisation ensuring that risk management responsibilities are delegated appropriately and risk management processes are delivered effectively. The trustee board has primary responsibility for the group's risk management framework, but delegates the day-to-day activities associated with this responsibility.

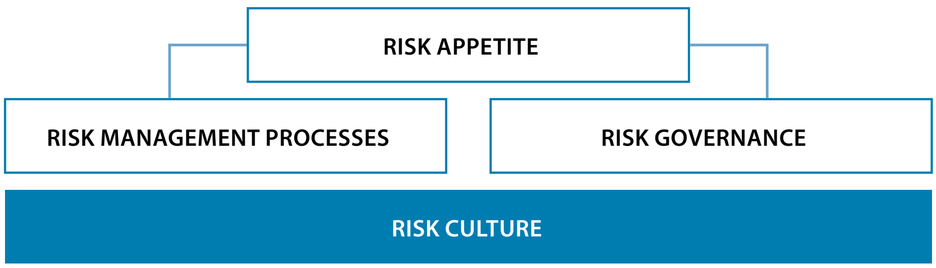
Both the GCEO and the CEO of USS Investment Management Limited are responsible for risk management within their respective legal entities and have established risk committees to review and monitor the effectiveness of internal control and the risk management systems. These risk committees are supported by the functions in the second line of defence, which include the Group General Counsel team (covering governance, legal and regulatory compliance risks) as well as the Group Risk team. In the third line of defence, USS' Internal Audit team audits the policy, framework, and operation of risk management across USS and provides assurance to the Audit Committee on the effectiveness of these arrangements.

## Risk culture

Underlying the risk management processes and risk governance is USS's risk culture. The risk culture, reinforced by employee training and communications, encourages the behaviours and values that support the risk management approach.

All USS employees are required to support the implementation of the risk management framework. In particular, they are required to:

- Think and act with integrity and sound business judgement in the performance of their duties;
- Ensure that risk management is robust, pervasive and has a prominent role in strategy, policy, structures and activities, and is not restricted to particular activities or to internal control; and
- Give appropriate weight to risk information and the views of risk managers at all levels of decision making.



## Principal risks and uncertainties

USS maintains a comprehensive register of the risks that it faces across the various parts of its business. These risks can arise as a result of internal or external factors and can adversely impact the scheme's funding, solvency, investments, operations and reputation. A subset of these – the scheme's principal risks and uncertainties – are assessed by reference to their potential to threaten the ability of the trustee to deliver its strategic objectives. The table below sets out those principal risks, the potential impact and the mitigation in place:

| Risk | Potential Impact | Control/mitigation | Key performance indicator for 2016 |
|---|---|---|---|
| **Funding and solvency risk**<br>Significant increase in the scheme's net pension liability and/or significant deterioration in the ability of employers to make contributions to fund the benefits promised to members. | The inability of the trustee to meet the benefits promised to members. This may lead to the requirement to substantially increase contributions, amend investment strategy and/or reduce future benefits. | Development of a comprehensive financial management plan (FMP), incorporating the strength of the employers' covenant, the contribution rate and investment strategy. Regular monitoring of the funding level, employers' covenant strength and liability in the context of the FMP. 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. | At 31 March, the funding ratio stood at 83% with a deficit of £10.0bn. See page 14. This is somewhat below the level forecasted in the FMP, but within the projected volatility range. |
| **Investment performance risk**<br>A prolonged period of inadequate investment performance, or a sharp fall in the value of investments. This may be due to selection of an inappropriate reference portfolio, under-performance of the implemented portfolio relative to the reference portfolio and for unfavourable conditions. | A significant further increase in the deficit. This may lead to the requirement to substantially increase contributions, amend investment strategy and/or reduce future benefits. | A documented, structured and effective investment process, run by experienced investment professionals, incorporating robust controls and diligent oversight.<br>The investment portfolio is well 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 FMP. Further information with more detailed commentary on investment risks can be found in the Statement of Investment Principles available on the USS website and in note 18 of page 81 in the financial statements of the scheme. | **Target:** investment performance >0.23% relative to the Reference Portfolio and within the risk parameters set by the board.<br>**Update:** investment returns relative to the reference portfolio of 2.38% exceeded the target set at the start of the financial year whilst remaining within the risk parameters set by the board. For further information see the investment matters section on page 38. |
| **Pension service risk**<br>Pension service delivery fails to meet requisite quality standards. | The failure to manage or effectively execute operational processes leads to poor or incorrect outcomes for the scheme's members/beneficiaries. This may lead to rework, additional costs and reputational damage. | Robust operational controls and defined service standards with regular reporting and review of performance across all administration teams.<br>Comprehensive workload forecasting and the deployment of additional resources during key transitional periods.<br>Enhanced and extended quality control checking during transitions. | **Target:** maintain (within five percentage points) satisfaction levels as measured by net promoter scores).<br>**Update:** successful maintenance of service delivery performance standards within defined parameters, allowing for a planned level of operational challenges associated with the implementation of scheme changes. Member result fell by 3 percentage points and employer result improved by 2 percentage points. |

## Principal risks and uncertainties continued

| Risk | Potential Impact | Control/mitigation | Key performance indicator for 2016 |
|---|---|---|---|
| **Business change risk** | | | |
| Failure to deliver strategic business change effectively, especially in relation to ongoing scheme changes. | Change programmes miss deadlines, are poorly implemented and/or lead to low quality outcomes. This leads to increased costs, unfavourable member experience and reputational damage amongst key stakeholders. | Business change governance is closely monitored and controlled with oversight from the executive committee. Specific change initiatives have their own project teams. | **Target:** 100% completed milestones for scheme change programme and >80% for other projects.<br><br>**Update:** 100% achieved for scheme change programme and 84% for other projects. Satisfactory results of change assurance activity. |
| **People risk** | | | |
| Failure to attract and retain sufficient people with the necessary skill sets in the right roles, or to develop appropriate management structures and business culture. | This may lead to an inability to provide the necessary resources to achieve successful completion of the scheme's strategic priorities, lead to poor investment performance, increased incidence of operational error and failure, and ultimately result in reputational damage with key stakeholders. | The trustee has consistently sought to recruit and retain an excellent team. This is supported by clear objective setting linked to strategy, regular performance and remuneration reviews with reference to appropriate benchmarks, training and development programmes, and employee satisfaction reviews. | **Target:** improvement to employee engagement and training satisfaction levels relative to feedback in 2014/15.<br><br>Employee satisfaction metrics, as measured by engagement results, which improved 13 percentage points over prior year.<br><br>**Update:** satisfaction with access to training, as measured through employee feedback increased by nine percentage points over the prior year.<br><br>**Other updates**<br>Only one key role was vacant at the end of March 2016.<br><br>Timeliness and quality of performance reviews, as measured through the calibration process were satisfactory. |

## Principal risks and uncertainties continued

| Risk | Potential Impact | Control/mitigation | Key performance indicator for 2016 |
|---|---|---|---|
| **Regulatory risk** | | | |
| The product and service offering is impacted adversely by changes to pension policy, legislation or regulation. The trustee fails to adopt and apply effective oversight, or legal and regulatory compliance arrangements. | Potential for change to adversely impact the scheme's product 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. | Dedicated professionals focussed on assessing existing and emerging regulatory initiatives. Application of structured change management methodology for the implementation of necessary changes. Ongoing compliance training, advisory and monitoring activity in the relevant business divisions. | **Target:** no significant regulatory issues. Satisfactory completion of all education and awareness activity by relevant staff.<br>**Update:** the trustee prohibits investment in employer-related entities. A technical interpretation of the rules in this area highlighted that certain investments, meet the strict definition of employer-related entities as a result of the corporate structure of the trustee company. Further information on the position at the end of the financial year is set out in note 20 on page 85.<br>The most relevant new or evolving areas of legislation are summarised on page 28. |
| **Data risk** | | | |
| USS fails to protect the confidentiality, integrity or availability of critical data (including personal and commercially sensitive data), or is successfully hacked and subjected to a data breach. | Breach of applicable data protection legislation, potential for regulatory censure or fine, loss of reputation with members and employers. Potential for monetary loss and remediation costs. | Implementation of appropriate information security framework and processes, along with cyber risk controls.<br>Delivery of regular education and awareness training to employees. | **Target:** no breach of legislation. Completion of awareness and prevention training by all staff.<br>**Update:** there were no breaches of legislation. The trustee invested significantly in its cyber defences, improving its ability to prevent, detect and quarantine malware and viruses. All staff have attended education and awareness sessions on cyber risk provided by industry experts.<br>Evidence of conformity to ISO 27001, the internationally recognised information security framework. |

# Looking forward to 2016/17

USS is midway through an important transition of its benefit structure and operating model. Much has been achieved with the introduction of the **USS Retirement Income Builder** and the new pensions administration system provided by Capita. But there is still much to do, as the trustee continues with the phased implementation of the changes to the scheme, develops its use of new technologies and refines its processes and procedures, it will do so with a continued focus on providing value for employers, members and the higher education sector as a whole.

For 2016/17 the trustee's strategic priorities remain:

- **Development of the pension offer for employers and members;**
- **Enhancement of our service to members and employers; and**
- **Development of the governance framework.**

In order to achieve these strategic priorities the trustee will continue to work with stakeholders to understand developments within the sector and how external events are changing the landscape for employers and members. The results of the referendum on UK membership of the European Union may have a significant impact and the trustee shall continue to closely monitor developments. Our actions to date have focussed on ensuring that short-term market turbulence does not materially impact the scheme's efficient operation. We stand ready to act in the best interests of employers, members and the wider higher education sector as circumstances evolve.

## Development of the pension offer for employers and members

In October 2016 the trustee will introduce the **USS Investment Builder**, the new defined contribution section of the scheme. Once fully implemented the trustee will work to enhance the retirement savings option it provides to members. This includes considering the different ways members may wish to access their USS Investment Builder when they retire, and assessing the suitability of the fund choices provided. The trustee will also put in place a robust and transparent performance and monitoring framework providing members with the information they need to make appropriate investment choices.

The trustee will continue to work with employers to support the delivery of high quality retirement saving solutions as part of the overall employee benefits package. Collaboration with employers was critical to the successful launch of the USS Retirement Income Builder (DB) and the transition to the new pensions administration system provided by Capita. This engagement will continue as we develop new online functionality, including the delivery of improved management information within the employer portal. It is the executive's intention to make reporting tools available to employers in future so that they can track administrative performance and create reports for their own purposes.

The phased implementation of the changes to the scheme will continue with the launch of MyUSS, the new online service for members and the introduction of the voluntary salary cap and associated technologies for separating contributions. Later in the financial year the trustee will provide members with a statement confirming any final salary entitlement they have in relation to salary and service up to 31 March 2016. The trustee will continue to engage with sector stakeholders on enhancements to its pension offer with a focus on delivering greater value to employers and members and improving operational effectiveness.

## Enhancement of our service to members and employers

Importantly the trustee's mission is to be the pension service of choice for the higher education sector, recognising that it is the high quality USS service which sets it apart from other private sector pension schemes. That service is not just delivered by USS employees, but is supported by those within employers who are responsible for pensions administration. One of the key activities which we shall undertake in 2016/17 is to look at the full service provided to members, from start to finish, whether provided by USS or by one of the many pensions managers which support the scheme, and consider where improvements can be made. This will involve close collaboration with employers, using the management information gathered by the new pensions administration system to support a thorough analysis, and working with employers to develop practical and effective enhancements to the system.

These improvements will also be informed by feedback from members. During the year we shall launch an inaugural annual member survey. This broad survey will seek feedback on both the day-to-day interactions members have with the scheme; the services they use, and communications they receive; and broader issues including the trustee's responsible investment approach, and features and facilities the trustee may provide in future.

Throughout 2016/17 the trustee's aim is to maintain its high quality service as the phased implementation of the changes continues, and new systems and processes are embedded. Feedback from both employers and members during the year to 31 March 2016 remained broadly positive throughout the first phase of the changes, and that is something the trustee wishes to maintain. It will be challenging, the service delivery team is effectively operating two administration systems over this period, and demand on the service has increased. The executive will make a realistic assessment of any impact anticipated and be transparent about its expectations throughout this period, maintaining a regular dialogue with employers, and through them with the membership.

The most important factor in delivering a good service is our people; the trustee will continue to develop a supportive culture, in which USS employees are clear about what is expected of them. An important development in this area in 2016/17 will be the implementation of a behavioural competency framework, a thorough assessment of how far employees are demonstrating the USS values.

The trustee relies upon its suppliers to support its high quality services. Work has already been carried out to enhance the supplier management approach, measuring value provided to employers and members against the cost of providing services. Effective and commercially valuable supplier relationships are key to achieving good value. The development of a value for money assessment and monitoring framework features highly on the plan of activity for 2016/17 and work is already well underway. Further activity will focus on benchmarking the USS value for money assessment, obtaining assurance over the work performed, prior to reporting externally in the 2016/17 annual report and accounts.

## Development of the governance framework

Strong governance and strict control of risk management processes will remain a key part of the trustee's activities in 2016/17. The introduction of the USS Investment Builder has broadened the regulatory landscape in which the trustee operates, this requires further development of internal expertise in DC and thorough and timely monitoring. Increased delegations to USS Investment Management, and an increased scope of in-house investment activity has inevitably added complexity, which requires proportionate controls and operational processes to ensure effective management and oversight.

Over the course of 2016/17 the trustee will complete its review of USS's governance framework, led by the Group General Counsel team. This review is considering the effectiveness of delegations and assurance frameworks and corporate governance arrangements. The regular review of trustee board effectiveness will be carried out once this broader review is complete.

Additionally, the trustee is currently undertaking a number of activities to facilitate the 2017 valuation process. As with previous valuations, and in line with best practice, the trustee will be reviewing the employer covenant, the valuation methodology and the underlying assumptions, both financial and demographic, in order to compile a view of scheme funding at a particular point in time.

The trustee's first task is to understand how the employer covenant has developed since the previous valuation in 2014. In the interim period the trustee has developed its monitoring of publicly available data, particularly that gathered by the Higher Education Funding Councils (HEFCs) and the Higher Education Statistics Authority (HESA). Engagement with employers, their representatives, and sector-wide bodies, will be an important element of the covenant assessment. The trustee has appointed PWC to assist with this work, with additional specialist support from EY Parthenon. The trustee will provide its initial conclusions to employers towards the end of 2016. Final assumptions for the valuation will be based on conditions prevailing as at 31 March 2017.

*Overall the trustee considers 2016/17 will be another busy year, however, it continues to believe that USS, working in collaboration with the sector is well placed to deliver progress towards the strategic priorities in a manner which offers real value to employers and members at a competitive cost.*

# Investment matters

**Investment outperformance (1 year) of 2.38% (5 years) of 1.1%**

target of 0.55% (1Year) and 0.475% (5 years) was exceeded

**Net value added c. £1.1bn**

over £2.2bn over five years

**Investment income of £1.2bn**

(2014/15 £1.1bn)

*USS is now placed among the global leaders in pension investment, having benefitted from the trustee's sustained support in developing its investment management subsidiary. This has been rewarded by over £2bn in added value over the past five years relative to the scheme's strategic investment benchmark, with contributions from across our business.*

Roger Gray, Chief Investment Officer

## Investment objectives

The trustee's primary duty to ensure sufficient funds are available to provide an income for members in retirement as promised and to do so in a manner which represents value for money is reliant upon a successful investment approach. The trustee believes it is crucial that the investment portfolio is managed in such a way that the amount of funding and solvency risk within the scheme, is proportionate to the amount of financial support available from the scheme's sponsoring employers. Furthermore, whilst the funding ratio will fluctuate daily with market movements, there should be no increase in the reliance placed on that support over time.

The amount of risk that the trustee considers reasonable and within its risk appetite is based on the covenant of the employers and its associated tolerance for the level and variability of contributions. The investment strategy has a relatively long-term horizon in line with the covenant and liability profile and the trustee may justifiably hold some investments over many years.

The trustee recognises that investing in assets which perfectly match the benefits as they fall due is not practical, and that expected returns for the fund can be sufficiently improved, after costs, to justify taking risk above the minimum level which is practically achievable. The probability of 'return-seeking' assets outperforming 'risk-free' assets increases as the investment horizon lengthens, though the sources of risk premia do not provide extra return over all time periods. Investing responsibly and engaging as long term asset owners reduces risk over time and may positively impact fund returns. The trustee does this in a manner which is consistent with its investment objectives, legal and fiduciary duties, and other relevant commitments e.g. the UN-backed Principles for Responsible Investment and the UK Stewardship Code.

The Statement of Investment Principles (SIP), which was revised during the financial year, the scheme's Financial Management Plan (FMP) and the trustee's investment beliefs and principles underpins our considered and consistent investment decisions. The SIP can be found on the USS website. The Investment Committee monitors compliance with the SIP at least annually, and during the year the scheme operated within the agreed framework. One of the trustee's key beliefs is that a well-run and appropriately governed internal investment capability is the best way to meet its long term investment objectives in the most cost-effective manner.

## Investment strategy

The trustee sets a reference portfolio on the recommendation of its Investment Committee. This is a hypothetical portfolio which is expected to deliver the investment returns at an appropriate level of risk, consistent with the trustee's risk appetite and expectations for returns. It is a portfolio which could be implemented passively at low cost and is reviewed at least annually. It provides a benchmark for measuring the manager's performance. The reference portfolio will evolve as circumstances permit incremental risk reduction over the next 20 years. Under the reference portfolio framework, the trustee retains responsibility for the investment strategy, and delegates oversight of its implementation to the Investment Committee.

The day-to-day management of the fund's investments including the specifics of asset allocation, implementation and reporting are delegated to USS Investment Management Limited, the principal investment manager and adviser to the trustee. The objective is to deliver greater returns than those derived from the reference portfolio, whilst simultaneously targeting a similar (or lower) level of risk over the long-term.

Environmental, social and governance (ESG) matters refers to the three central factors in measuring the sustainability and ethical impact of an investment in a company or business. USS Investment Management Limited has a Responsible Investment (RI) function consisting of six professionals who work with investment managers to ensure ESG issues are taken into account in the selection, retention and realisation of the scheme's investments, where the issues are material. The in-house RI team engages with companies and with global policy makers on issues which could impact the long term sustainable returns on investments across the range of asset classes in which the trustee invests. The trustee believes this approach is important to protecting the value of the scheme's assets over the long term and is a key strategic priority for USS; accordingly further information is provided on the approach on page 43 and 44.

As one of the UK's largest pension funds, USS is able to provide employees with the resources, training and career development opportunities needed to attract and retain high quality investment professionals. Talent development allows the executive committee to build the intellectual capital needed to employ sophisticated and innovative strategies. More detail on talent development is found on page 22. Alignment between USS and its investment management subsidiary is ensured through the governance structure, organisational culture and incentive structure. The value added performance of USS Investment Management Limited is assessed on rolling five-year periods relative to the reference portfolio. For the purpose of incentives measurement, that rolling period is defined as the 12 months to end December, the calendar year being selected to align with the availability of external market benchmarks in liquid asset classes.

As outlined on page 9, the scheme actively follows a strategy of in-house investment management where cost effective. Some areas of investment sought for the scheme may not match the existing internal skills, experience or operational capability and therefore it may not be cost-effective, timely or otherwise desirable to build the required capability internally. In these circumstances, USS Investment Management Limited will select external managers to undertake investment on its behalf.

The following table shows the investment managers, their mandate and their share of total scheme managed as at 31 March 2016:

| | Mandate | % Assets |
|---|---|---|
| USSIM Ltd (Internally managed) | Multiple | 69% |
| External funds (Private markets and absolute return) | Multiple | 17% |
| Legal & General Assurance (Pensions management) | Multiple | 9% |
| Investec | Emerging Market Debt | 1% |
| Royal London Asset Management | Sterling Investment Grade Credit | 1% |
| Pictet | Emerging Market Debt | 1% |
| Credit Suisse | Emerging Market Debt | 1% |
| Goldman Sachs | Short Duration Credit | 1% |

USS also uses external investment advisors in respect of its property portfolio and property management services. The contracts currently in place are shown in the following table:

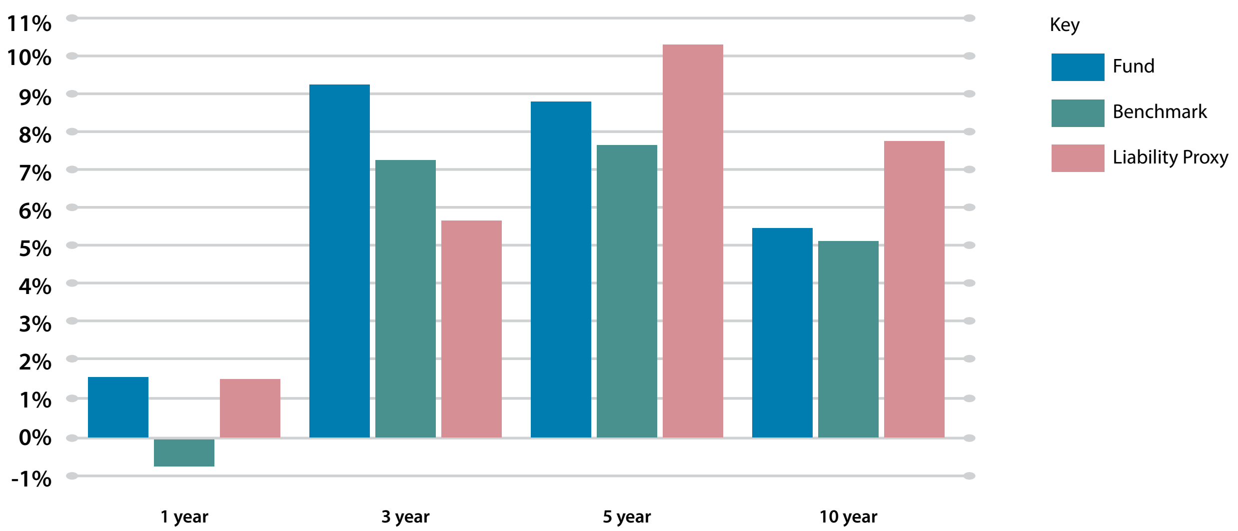
| Role | Portfolio | |
|---|---|---|
| **Investment Advisory** | Retail and Leisure | JLL |
| | Offices and International | DTZ Investors |
| | Industrial | JLL |
| **Property Management** | Grand Arcade Shopping Centre, Cambridge | Cushman & Wakefield LLP |
| | Monks Cross Shopping Park, York | Savills |
| | Whiteley, Fareham and Eden Walk Shopping Centre, Kingston-upon-Thames | Broadgate Estates Ltd |
| | Other Retail and Leisure, Offices and Industrial | Workman & Partners |

## Investment performance

The return objective of the implemented portfolio is to outperform the reference portfolio by 0.55% or more per year on an annualised basis over rolling five-year periods to 31 March, net of applicable costs. Prior to 2015, the outperformance target was 0.45% relative to the scheme's strategic allocation benchmark and therefore the weighted target over five years was 0.475%. The target outperformance represents a strong outcome over periods of five years and longer, given the rarity of sustained outperformance in asset management. Performance exceeded this target throughout the year. However, performance is inherently unstable and at times may fall beneath this target. Monitoring activity and review by the investment committee is triggered if annualised five-yearly outperformance falls below 0.23%. Performance relative to the proxy of the scheme's liabilities (the gilts proxy) is also reported as an indicator of changes in the scheme's funding position, given the importance of this KPI.

The chart below shows the performance of the scheme, its performance benchmark and the gilts liability proxy over 1, 3, 5 and 10 years.

## Annualised returns to March 2016




The scheme outperformed the reference portfolio by 2.38% in the 2015/16 financial year, this is described as the 1 year basis. It also outperformed the gilts proxy for the scheme's liabilities by 0.08%. The majority of the asset classes contributed to relative performance during the year with particularly good results in Private Markets, Government Bonds and Listed Equities. Strategic scheme overlay portfolios had a negative impact on performance over the period. Over the last five years the scheme assets have risen by 8.9% annualised, outperforming its benchmark by 1.1% but underperforming the gilts liability proxy by 1.1% per annum. Over this five year period, net added value from active management has contributed over £2.2bn to the scheme's asset value compared to £547m received in contributions net of benefits paid.

## Distribution of the scheme's assets

The table below sets out the approximate distribution of the scheme's asset exposure, and its position relative to the reference portfolio as at 31 March 2016. The table excludes the money purchase AVC programme, which is separately managed by Prudential.

| % | Implemented Portfolio | Reference Portfolio | Difference |
|---|---|---|---|
| **Equities** | **44.5%** | **62.5%** | **(18.0%)** |
| – UK | 13.6% | 15.6% | (2.1%) |
| – Europe Ex-UK | 7.4% | 6.9% | 0.5% |
| – N America | 10.0% | 25.4% | (15.4%) |
| – Pacific inc Japan | 5.1% | 5.2% | (0.2%) |
| – Emerging Markets | 8.5% | 9.4% | (0.9%) |
| **Non-Government and emerging market debt** | **7.9%** | **10.0%** | **(2.1%)** |
| **Nominal Bonds** | **9.3%** | **0.0%** | **9.3%** |
| **LDI (Funded and Unfunded)** | **6.8%** | **25.0%** | **(18.2%)** |
| **Non-UK Index Linked Bonds** | **4.1%** | **0%** | **4.1%** |
| **Commodities** | **1.3%** | **0.0%** | **1.3%** |
| **Absolute Return** | **3.4%** | **0.0%** | **3.4%** |
| **Private Markets** | **22.8%** | **7.5%** | **15.3%** |
| – Inflation Linked Debt/Equity | 5.8% | 0.0% | 5.8% |
| – Private Debt/Equity | 8.1% | 0.0% | 8.1% |
| – Special Situations | 2.5% | 0.0% | 2.5% |
| – Property | 6.4% | 7.5% | (1.1%) |
| **Tactical Asset Allocation overlays** | **1.0%** | **0.0%** | **1.0%** |
| **Cash*** | **(1.0%)** | **(5.0%)** | **4.0%** |
| **Total Fund** | **100%** | **100%** | **0.0%** |

N.B. Figures in the table may not add up due to rounding

* Includes Liability-Driven investment funding

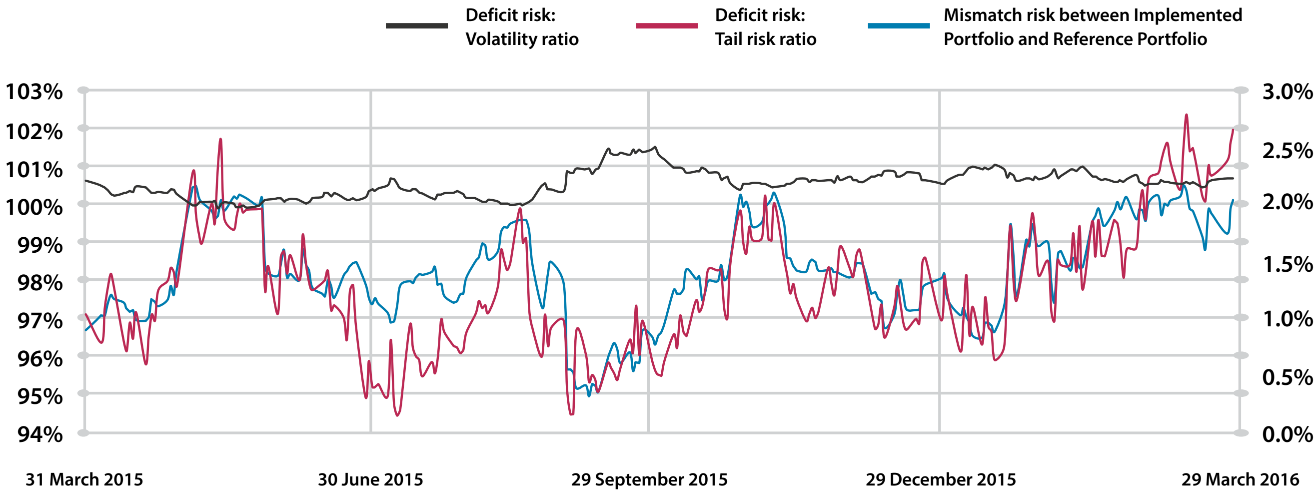
In order to outperform the reference portfolio the implemented portfolio must be invested in a different mix of assets. This difference in investment strategy gives rise to the opportunity for the implemented portfolio to achieve higher returns than the reference portfolio. But it also gives rise to the risk that the realised returns of the implemented portfolio will be lower than those of the reference portfolio. This risk needs to be measured and monitored to ensure it is consistent with the trustee's risk appetite.

The investment risk of the Implemented Portfolio is measured on a daily basis and compared to the investment risk which would have been incurred if the scheme's assets had been invested only in the Reference Portfolio. This investment risk is measured in three ways (see chart). The first measure of investment risk reflects the mismatch between the Implemented Portfolio and Reference Portfolio. This is a risk that should not be too small, because the mismatch between these portfolios is essential to having the potential for outperformance, but it should also not be too large, because that would be outside risk appetite. Over the course of 2015/16 this mismatch risk averaged 2.1%, which is near the middle of the targeted range.

The second and third measures relate to the relative size of the risk to the deficit between the Implemented Portfolio and Reference Portfolio. Both of these averaged 98% over 2015/16, meaning that the deficit risk associated with the Implemented Portfolio was on average just 98% of the deficit risk associated with the Reference Portfolio. These values are also comfortably within the acceptable range.

Arrangements for escalation and reporting have been agreed between the Investment Committee and USS Investment Management Limited to ensure that prompt action is taken if the level of risk according to these measures exceeds the scheme's risk appetite.

## Risk metrics - Implemented Portfolio vs. Reference Portfolio



## Responsible investment

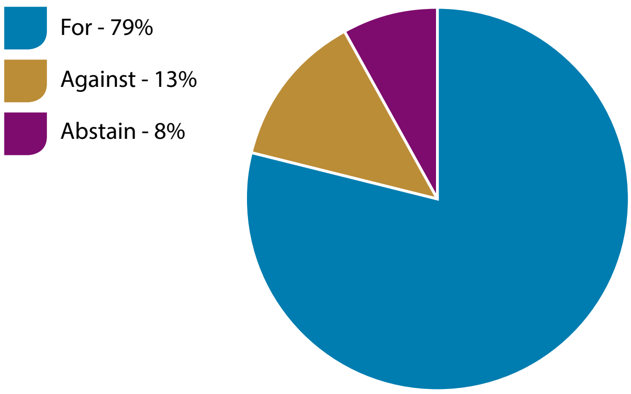
The trustee requires its investment managers to integrate all material financial factors, including ESG considerations, into the decision-making process for its quoted equities investments. The Investment Committee monitors RI activity with the aim of ensuring that its impact and effectiveness are maximised. The trustee's governance, social, ethical and environmental policies are reviewed regularly by the board and updated as appropriate to ensure that they are in line with good practice and meet the scheme's current needs and requirements.

USS has published its own Stewardship Principles which articulate the scheme's approach to voting and engagement so that companies in which USS invests will understand better our expectations of them and how the scheme will interact and communicate with issuers.

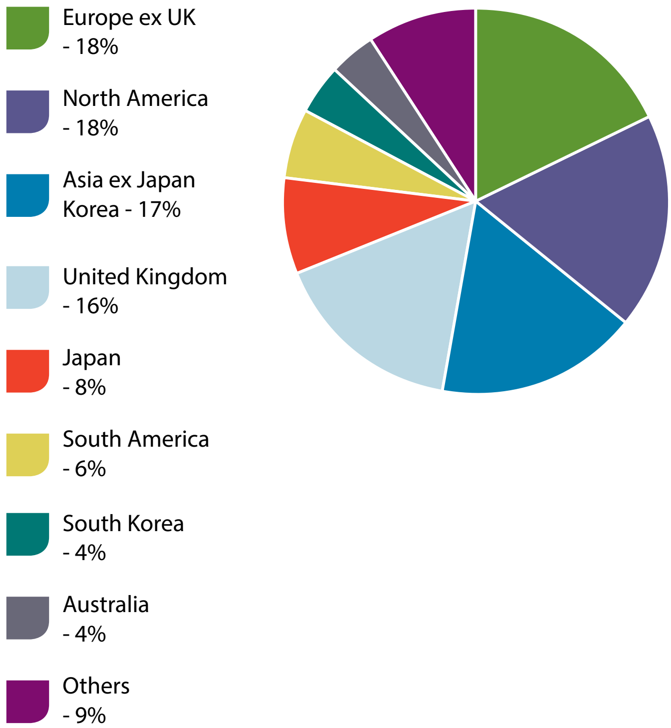
Voting is central to our stewardship and active ownership activities. In 2015 the RI team voted on 6,895 resolutions at 538 events covering 454 separate companies.

### Votes cast January to December 2015

#### USS Global Votes Jan-Dec 2015



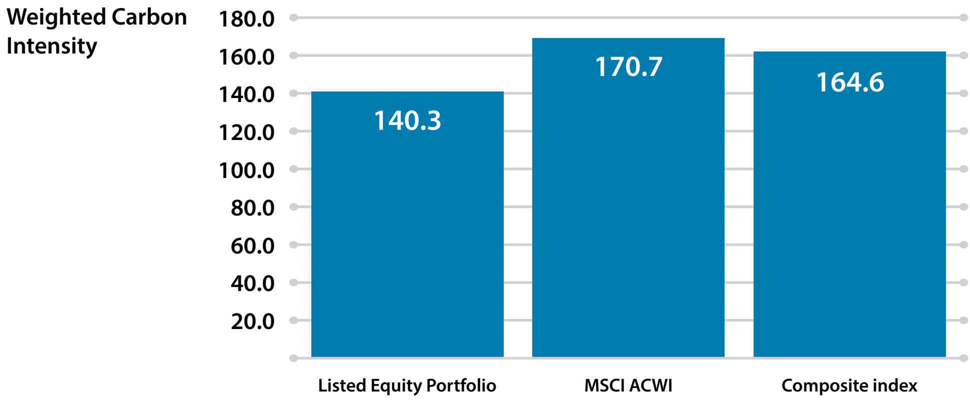

#### Country breakdown of companies




Building on the shareholder resolutions which USS supported at the BP and Royal Dutch Shell Annual General Meetings (AGMs) in 2015, the trustee co-filed shareholder resolutions at two large UK mining companies. The resolutions required that the companies provide shareholders with details of how they are managing climate change related risks, including the global goal of limiting the increase in global average temperatures to below 2º C above pre-industrial levels.

Climate change introduces some additional long term uncertainty to investment returns. USS continues to support and play an active role in the Institutional Investors Group on Climate Change (IIGCC), which USS founded in 2001. The IIGCC led global investor input into the United Nations Climate Change Conference (COP 21) in Paris in December 2015. USS also signed the Montréal Pledge which commits signatories to publishing their carbon footprint of their public equities portfolios.

## Weighted Carbon Intensity of Equities Portfolio v Indices (Sept 2015)




During the year, the scheme also completed its largest investment in the renewable energy space, with a commitment of c. £300 million to acquire a portfolio of wind farm loans.

Shareholder rights have been another area of focus for several years. Investment managers have worked with the Asian Corporate Governance Network and Governance for Owners, Japan to encourage change in the Japanese market which has historically had a particularly poor reputation in this area. USS welcomes the recent introduction of both the Stewardship and Corporate Governance Codes and the changes seen at some individual companies with whom USS Investment Management Limited has engaged.

USS Investment Management Limited believes it is important to apply the scheme's RI policies as consistently as possible to all assets whether they are internally or externally managed. In 2015/16, to assess both how RI is being integrated into investment activities, and to encourage managers to improve practices where weaknesses have been seen, the RI function undertook detailed assessments of USS's small number of external managers active in public equity and debt. In general the findings were encouraging and it is intended that this exercise is repeated every two years. USS Investment Management Limited also continues to undertake detailed due diligence on all of the scheme's investments in private markets, including private equity, infrastructure, and its direct investments in companies such as a new addition to the scheme in the year, Moto, the UKs largest provider of motorway services.

Further information about the USS Investment Management Limited's integrated approach to ESG matters can be found in the SIP and more details of the fund's responsible investment activities, including voting records, are available on the USS website www.uss.co.uk

## Other investment matters

**Custody of the scheme's assets**

The assets of the scheme are held in the name of the trustee company on behalf of the scheme. A range of investment assets are held in custody by JPMorgan Chase and Northern Trust as independent professional custodians. The trustee company is responsible for appointing those custodians, and does so with the benefit of advice and assistance from USS Investment Management Limited and other advisers as necessary.

The independent custodians are responsible for the safekeeping of those of the scheme's assets which are entrusted to them. These are typically all the listed and publicly traded securities held for the scheme. The custodians also perform associated administrative duties (e.g. trade settlement, dividend collection, corporate actions, tax reclaims and proxy voting).

Some assets of the scheme are not capable of being held within the custody network provided by independent custodians (e.g. title to real estate investments) and appropriate safekeeping arrangements are made in respect of those assets.

## Money purchase additional voluntary contributions (AVCs)

The scheme provides for members to pay AVCs to secure additional benefits at retirement. The trustee has selected Prudential to be the scheme's money purchase AVC provider for the financial year. The Investment Committee reviews the range of funds made available to AVC participants to ensure it offers an appropriate range of investment choices.

*There will be changes to the many purchase AVC arrangements with Prudential during 2016/17, for more information please refer to the USS website.*

**Summary of the investments**

Below are the scheme's 20 largest investments in listed equities and in bonds:

| Asset | Value £m | Fund % |
|---|---|---|
| UK Treasury 0.75% IL 22/23/2034 | 1,576.5 | 3.1% |
| UK Treasury 4.5% 07/09/2034 | 1,131.7 | 2.3% |
| UK Treasury 4.25% 07/03/2036 | 1,079.7 | 2.1% |
| UK Treasury Gilt 3.25% 22/01/2044 | 920.4 | 1.8% |
| US Treasury 0.625% IL 15/02/2043 | 865.2 | 1.7% |
| US Treasury 0.75% IL 15/02/2042 | 778.1 | 1.5% |
| UK Treasury 0.625% IL 22/03/2040 | 603.9 | 1.2% |
| UK Treasury Gilt 3.5% 22/07/2068 | 598.1 | 1.2% |
| UK Treasury Gilt 3.5% 22/01/2045 | 483.3 | 1.0% |
| Royal Dutch Shell | 459.5 | 0.9% |
| UK Treasury 4.25% 07/09/2039 | 393.8 | 0.8% |
| UK Treasury 4.25% 07/12/2040 | 392.6 | 0.8% |
| UK Treasury 0.125% IL 22/03/2044 | 287.4 | 0.6% |
| Vodafone Group | 255.2 | 0.5% |
| HSBC Holdings | 237.5 | 0.5% |
| Roche Holding AG | 234.0 | 0.5% |
| US Treasury Bond 1.375% IL 15/02/2044 | 229.6 | 0.5% |
| Flughafen Zuerich AG | 210.3 | 0.4% |
| Alphabet | 193.5 | 0.4% |
| British American Tobacco | 186.0 | 0.4% |

A list of all the fund's equity holdings and a more comprehensive review of RI and ESG issues is available on the USS website www.uss.co.uk

**Self-investment**

The scheme prohibits investment in employer-related entities. A technical interpretation of the rules in this area highlighted that certain investments, which were made on an arm's length basis, meet the strict definition of employer-related entities as a result of the corporate structure of the trustee company. As soon as this interpretation was identified, a plan to restructure these investments commenced to remove the linkage with employer-related entities. Further information on the position at the end of the financial year is set out in note 20 on page 85 of the financial statements.

# Financial reporting compliance matters

## Compliance matters

The information below sets out those matters of importance which are a required communication to members within the annual report and accounts and which are not covered elsewhere within this report.

## Constitution of the scheme

Universities Superannuation Scheme provides a DB section covered by the Trust Deed dated 2 December 1974, as amended from time to time. Benefits payable are based on a member's salary and length of service. Until 31 March 2015, there were two sections of the DB scheme:

- Final Salary (FS); and
- Career Revalued Benefits (CRB).

The FS section, which was already closed to new entrants, closed to future accrual on 31 March 2016. The CRB section was also closed on 31 March 2016. Both sections were replaced by the **USS Retirement Income Builder,** providing DB benefits on a revised CRB basis. The USS Retirement Income Builder was introduced on 1 April 2016 in respect of full salary. From 1 October 2016, the basis for USS Retirement Income Builder entitlement will be capped at earnings of £55,000 per year. Above this threshold, benefits will accrue on a DC basis in the **USS Investment Builder**. Further information is set out on pages 11 and 12.

Throughout the year, members were able to make AVCs to secure additional benefits.

## Rule changes

In November 2015, changes to the scheme rules (the rules) were agreed which became effective on 1 April 2016 (apart from as noted). The purpose of the new rules of the scheme is to reflect the terms of the specification of modifications to scheme benefits which was approved by the Joint Negotiating Committee at its meeting on 9 July 2015. The major changes made under the terms of this specification are:

- the closure of the final salary section and the move towards CRB for all members from 1 April 2016;
- a change in accrual rate to 1/75 from that date; and
- the introduction of a salary threshold from 1 October, with contributions made on salary in excess of that threshold being paid into a new DC section, USS Investment Builder. The trustee company and the JNC have agreed that the DC Effective Date referred to in that specification is 1 October 2016.

On 1 April 2016 the first deed of amendment to those replacement rules was also executed. This deed:

- extended salary sacrifice to additional member contributions;
- updated the auto-enrolment provisions for re-employed pensioners and flexible retirers; and
- amended some minor typographical errors.

## Internal dispute resolution (IDR)

The trustee has a clear process for members who wish to make a complaint. The first stage of the IDR procedure provides for Head of Pensions Operations to review the circumstances and take a decision on the matter. In the event that a complainant is not satisfied with the outcome of the decision, they are able to make a further, second stage application for the trustee to review the matter and either confirm or alter the decision. The second stage review is undertaken by the advisory committee, augmented for this purpose alone by two members of the trustee board (one nominated by Universities UK and one nominated by UCU).

### Stage one
During the year, 21 complaints were received under stage one of the IDR procedure. Of these, one was upheld in part, 15 were not upheld, one was bypassed to stage two and four were pending.

### Stage two
Ten complaints were received under stage two of the IDR procedure. Of these, one was upheld in part (the same complaint that was upheld in part at stage 1), eight were not upheld and one was upheld in full.

### Other
Six complaints were made to the Pensions Ombudsman. Of these three were not upheld, one was withdrawn and two remain pending.

## 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). As the CPI figure for September 2015 was negative at -0.1% USS pensions remained unchanged in April 2016.

## Changes to advisors

The principal advisors are set out on page 61. The only significant change to the advisors stated is the addition of CMS Cameron McKenna as an additional scheme solicitor. USS believes it important to regularly review the advisors to the scheme and the scope of services received. Cameron McKenna is primarily used in the review of pensions law and its application to USS.

## Scheme mergers

There were no scheme mergers during the year.

## Late contributions

During the year there were no late payments of contributions from participating employers.

## Non joiners

During the year, the trustee company was notified of approximately 5,000 employees of participating employers who were eligible to join the scheme but elected not to do so, which equates to 14%. This represents a reduction from approximately 6,000 or 21% seen in 2014/15.

## Actuarial liabilities

The report on actuarial liabilities is included on pages 92 to 96 of the annual report and accounts and by cross reference forms part of this trustee report on the year ended 31 March 2016.

## Statement of Investment Principles (SIP)

In accordance with Section 35 of the Pensions Act 1995, a SIP has been prepared by the trustee which incorporates the investment strategy, a summary of this strategy is provided on page 39 of this annual report. The SIP has been updated in the current financial year and a copy is available at www.uss.co.uk from the Company Secretary of the trustee.

## Enquiries about the scheme

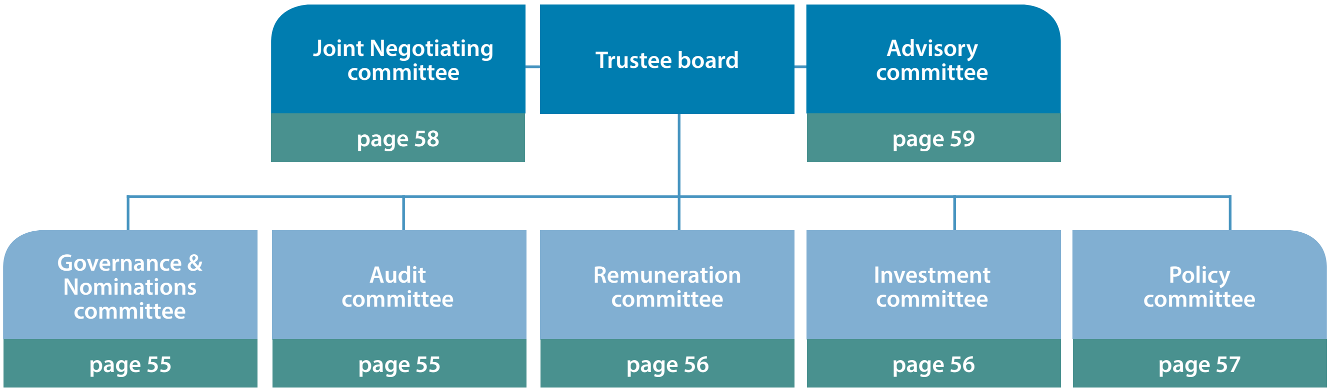
Enquiries should be addressed to the Company Secretary, Mr Jeremy Hill, at Universities Superannuation Scheme Limited, Royal Liver Building, Liverpool, L3 1PY.

# Governance

## Overview

The governance structure of USS is founded by a strong non-executive trustee board that ensures that USS is run efficiently and effectively.

The role of the trustee board and its executive committee is outlined on page 54.




## Trustee board composition

The trustee board consists of between 10 and 12 non-executive members comprising:

- Four directors appointed by Universities UK;
- Three directors appointed by UCU (one of whom is the pensioner member); and
- Between three and five independent directors.

This composition promotes an effective and balanced trustee board with sufficient knowledge and experience of the higher education sector, scheme member viewpoints as well as independent opinion and specialised skills.

Universities UK and UCU each have the authority under the articles of association to remove their appointed directors from office. An Independent Director may be removed prior to the expiration of that person's term of office only by resolution of the Company in General Meeting with the prior approval of the Joint Negotiating Committee. An independent director may be removed prior to the expiration of that person's term of office only by resolution of the trustee company in a general meeting with the prior approval of the Joint Negotiating Committee.

Detailed biographies of the board members are on the following pages.

## The members of the Board (in alphabetical order following the Chair, are set out below.

**Chair**

UUK Appointed

G&N | I

### Professor Sir David Eastwood

**Appointed:** Chair of the trustee board in April 2015, Director in September 2009

David became Vice-Chancellor of the University of Birmingham in April 2009. Previously, he was Chief Executive of the Higher Education Funding Council for England (HEFCE). During his distinguished academic career, David has undertaken various senior roles within notable Institutions, including Vice-Chancellor of the University of East Anglia, and Chief Executive of the Arts and Humanities Research Trustee board.

In January 2012, he was appointed as a Deputy Lieutenant for the county of West Midlands, and in June 2014 he was awarded a Knighthood for services to Higher Education.

David's deep understanding of the higher education sector and significant experience as a director and chair across various bodies, resulting in him being a very effective chair of the trustee board.

**Other roles**

Director of the Russell Group; NED of Universities UK; Vice Chancellor at the University of Birmingham; Member of the University Grants Committee, Hong Kong; Trustee of the Barber Institute of Fine Arts, Birmingham; Member of the Advisory Trustee board of the Higher Education Policy Institute; NED of INTO University Partnerships; Honorary fellow of St Peter's College, Oxford; Honorary fellow of Keble College, Oxford; Chair of Universitas 21; Trustee board Member of Arts & Humanities Research Council.

UUK Appointed

CC | P | R

### Professor Dame Glynis Breakwell

**Appointed:** September 2009

Dame Glynis is one of Europe's leading social psychologists and in 2014 was named as one of the Science Council's '100 leading UK-practising scientists'. Appointed as Vice-Chancellor of the University of Bath in 2001, she was made a Dame Commander of the Order of the British Empire in the Queen's 2012 New Year Honours for services to higher education.

Dame Glynis is an active public policy adviser and researcher, specialising in leadership, identity processes and risk management. She holds a number of senior governance positions, acting as an adviser to the higher education sector, government organisations, and not-for-profit organisations.

Her extensive experience in senior governance roles, as well as her knowledge of the higher education sector and her commitment to its ongoing development and growth, means that she is a highly valued member of the trustee board. Glynis is also Chair of the Policy Committee.

**Other roles**

NED of Universities UK; Vice Chancellor of the University of Bath; NED of the Student Loans Company; NED of the NHS Improvement Board; Council member of the Economic and Social Research Council; Chair of the GW4; Member of the Science and Technology Honours Committee.

**Deputy Chair**
**Senior Independent Director**

Independent

CC | I | P | USSIM

### Dr Kevin Carter

**Appointed:** Deputy Chair in April 2015, Director in September 2012

Kevin is a highly successful investment management professional holding positions at the very highest level. At Old Mutual Asset Managers (UK) Limited, he ran the asset management arm in the UK and US. Kevin also led the set up of JP Morgan's pension practice and was a member of the National Association of Pension Funds' investment council.

In addition to his extensive executive career in investment management, Kevin sits on the investment committee at three of the largest pension funds in the UK; Centrica, BBC and USS. He is also a director of a range of investment funds covering diverse asset classes.

Kevin's expertise in the investment world, and extensive knowledge of pension fund portfolios, enhances the trustee board's investment strategy capability significantly and Kevin is the Chair of the Investment Committee.

**Other roles**

Chair of Murray International Trust PLC; NED of Lowland Investment Company PLC; NED of JP Morgan American Investment Trust PLC; NED of BBC Pension Trust Limited; Chair of the Valuation Committee at Hermes GPE LLP; Former managing director and head of JP Morgan pension advisory group for EMEA; NED of Aspect Capital Limited.

Independent

CC G&N A

## Kirsten English

**Appointed:** May 2014, Appointed Chair of the Governance and Nominations Committee from 1 April 2015.

Kirsten's background is in Financial Services and Financial Technology. Her experience includes roles as CEO, General Manager, and Entrepreneur in residence plus Non-Executive Directorships. These roles have included work with public companies listed on several stock exchanges: FTSE 100, NASDAQ and Oslo. She has also worked for a number of years with Private Equity firms and as CEO of a Fund of Hedge Funds. Her expertise in Financial Services Infrastructure and Telecommunications adds depth to the trustee board's knowledge in this area.

### Other roles

Chief Executive Officer at Style Research (Analytics software for Institutional Investors); NED of Tyman PLC (FTSE Main Market); NED at Innovative Finance (Industry Association for FinTech in the UK).

UCU Appointed

A

## Professor Jane Hutton

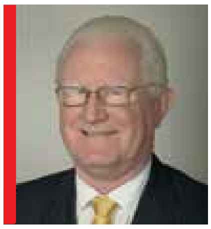
**Appointed:** November 2015, Appointed to Audit Committee from 1 April 2016

Jane Hutton is a Professor of Medical Statistics at Warwick University, with special interests in survival analysis, meta-analysis and non-random data. Her external appointments have included membership of the Core Methodology Panel, National Institute for Health Research (NIHR), 2011-2015, and the Education Committee of the International Biometric Society, 2013-2014.

She brings strong analytical skills to the trustee board and has experience of serving on governance bodies in a senior role.

### Other roles

Professor at The University of Warwick; Royal Society Wolfson Research Merit Fellow.



Independent

I G&N A

## Ian Maybury

**Appointed:** November 2013, Appointed to Audit Committee from 1 April 2016

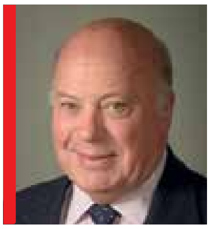
Ian is an experienced trustee and actuary. He has particular expertise in investment and risk management, having worked with such organisations as Schroders, Unilever, Redington and Citigroup. He possesses a wealth of knowledge of many different business areas including: insurance, banking, investment consulting and asset management. Ian brings a broad executive experience and a keen interest in the governance of DB and DC pensions schemes to the trustee board.

### Other roles

Director of CGML Pension Trustee Ltd (Common Trustee of Citi's UK schemes); Trustee of the Mineworkers' Pension Scheme Limited; Trustee of RNIB Retirement Benefits Scheme; an independent member of the DC committee of the Unilever UK Pension Fund; Independent member of the Reed Elsevier Investment Advisory Committee and Investment Adviser to the Investment Committee of the Airways and New Airways Pensions Schemes (BA); Director of Telepathic Ltd.

**Key**

| | |
|---|---|
| G&N | Governance & Nominations Committee |
| A | Audit Committee |
| USSIM | USS Investment Management Limited Board |
| I | Investment Committee |
| R | Remuneration Committee |
| CC | Committee Chair |
| P | Policy Committee |



UUK Appointed

CC | G&N | I | A

## David McDonnell

**Appointed:** April 2007, stepped down March 2016

David, is a chartered accountant, and enjoyed a long and successful career with Grant Thornton, both in the UK and with the wider, global organisation. Having held several senior positions within the company, in 2001 he was appointed global chief executive officer, a position he held until the end of 2009.

David brings a wealth of finance, internal control and risk management experience to the trustee board and was the Chair of the Governance and Nominations Committee until 1 April 2016.

### Other roles

Vice Lord Lieutenant of Merseyside; Pro-Chancellor of the Council of the University of Liverpool; NED of Hill Dickinson LLP; Chairman of the Arena and Convention Centre Liverpool Limited; NED of Liverpool University Press 2004 Limited; Honorary fellow of Liverpool John Moores University; Member of PMI; former partner of Grant Thornton; Member of the EPF.

Independent

CC | A

## Michael Merton

**Appointed:** February 2014

A Fellow of the Institute of Chartered Accountants in England & Wales, Michael has extensive experience in the international resources industry, and previously held various senior executive roles at Rio Tinto. Michael has had considerable Pension Fund involvement and holds a number of non-executive positions, including Chair of the trustee board of the J Sainsbury Pension Scheme and its investment committee.

Michael brings to the trustee board, comprehensive senior-level financial insight combined with wide-ranging experience of senior governance roles.

### Other roles

Chair of the Board and Chair of the Investment Committee of the J Sainsbury Pension Scheme Trustees Ltd; Director of J Sainsbury Common Investment Fund Limited; Director of J Sainsbury Trustees Limited; NED and Chair of the Audit Committee of Cape PLC; Director and Chair of the Audit Committee of Blackrock Commodities Income Investment Trust PLC; Director of Blackrock Commodities Securities Income Company Limited; Trustee of The HALO Trust; a leading land mine removal charity.

UUK Appointed

I

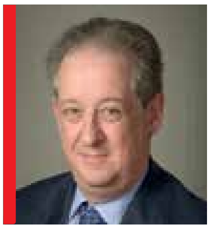
## Professor Anton Muscatelli

**Appointed:** April 2015

Anton Muscatelli became Principal and Vice-Chancellor of the University of Glasgow on 1 October 2009. He studied at the University of Glasgow, where he graduated with an MA in Political Economy and with a PhD in Economics. He was a lecturer in Economics from 1984 and Daniel Jack Professor of Economics from 1992 until 2007. He was Dean of the Faculty of Social Sciences, 2000 to 2004, and Vice-Principal (Strategy, Budgeting and Advancement) from 2004 until 2007. He was Principal and Vice-Chancellor of Heriot-Watt University from 2007 to 2009. Anton brings extensive expertise of economics, as well as intimate knowledge of the higher education sector, to the trustee board.

### Other roles

Principal and Vice-Chancellor of the University of Glasgow; Director of High School of Glasgow; Trustee of Universities UK; NED of Russell Group of Universities; NED of Universitas 21 Group of Universities, Honorary President of the David Hume Institute; Director of Glasgow City Marketing Trustee board; Director of the Beatson Institute; Director of National Centre for Universities and Business; Board Member of Scottish Funding Council; Trustee of Council for the Advancement and Support of Education (Europe); Director of National Centre for Universities and Business; Trustee of Carnegie Trust for the Universities of Scotland (ex officio); Trustee of Newbattle Abbey College Trust (Ex officio); Chair of the Glasgow & Clyde valley Commission on Urban Economic Growth; Member of Scottish Government's Council of Economic Advisers.



**Independent**

CC R P

## Rene Poisson

**Appointed:** November 2012

Rene Poisson joined USS, having retired after a 30 year career with JP Morgan, latterly as Managing Director and Senior Credit Officer for Europe, Middle East and Africa. His extensive executive experience in the financial services industry is complemented by a substantial and long-standing non-executive career, with a particular focus on Pensions and Investment. Rene is the Chair of the Remuneration Committee.

**Other roles**

Chair of the Advisory Committee for Rothschild Five Arrows Credit Solutions; Chair of JP Morgan UK Pension Plan and Member of their Investment Sub-committee; MD at Poisson Management Limited; Chair of the Independent Governance Committee of Standard Life Assurance PLC; Director of Standard Life Master Trust; Patron of the Disability Challengers Charity.

**UCU Appointed**

G&N R I

## Dr Angela Roger

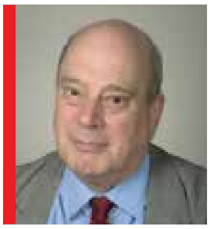
**Appointed:** September 2012

Angela Roger recently retired as a Senior Lecturer in Education at the University of Dundee. Her teaching and research interests included coaching new and experienced staff in higher education, and promoting effective and attuned communication for a range of professions.

Before joining the trustee board as a Director, Angela was Chair of USS's Advisory Committee, on which she served for eight years. She was also a member of the Joint Negotiating Committee for seven years. Her strong knowledge of USS and extensive experience in the Higher Education sector are highly valued by the trustee board.

**Other roles**

Honorary Treasurer of UCU; Member of UCU's National Executive Committee; Honorary Senior Lecturer at the University of Dundee; Chair of Education Support Partnership; Director of TBF Holdings Limited; Director of TBF Trading (no.2) Limited.



**UCU Appointed**

P

## Bill Trythall

**Appointed:** October 2009

Bill is now retired after nearly 40 years teaching History at the University of York. He has had a long involvement in USS, including over 20 years on the Joint Negotiating Committee, and many years as an Association of University Teacher appointed director of the trustee company up to 2005. Bill brings invaluable knowledge and experience of the higher education sector and an extensive and detailed understanding of USS to the trustee board.

**Other roles**

Member of the Superannuation Working Group at UCU; Director, committee member and company secretary of the Association of Member Nominated Trustees Ltd.

# Trustee board key activity 2015/16

There was a significant volume of activity carried out by the trustee board during 2015/16, particularly around the scheme changes programme. The trustee board met formally eight times during the year and held a strategic planning session in September 2015. A summary of some of the key matters that were considered during the year is detailed below.

| Topic | Activity |
|---|---|
| **Strategy** | Oversaw and made critical decisions in relation to a substantial programme of changes to the scheme. A full outline of the scheme changes programme is set out on page 11.<br>Reviewed and approved frameworks for monitoring USS's FMP and for de-risking its investment strategy<br>Reviewed and approved the 2014 actuarial valuation report, the associated recovery plan and Statement of Funding Principles<br>Reviewed and approved, in conjunction with the Joint Negotiating Committee, the scheme changes specification and required amendments to the scheme rules<br>At its strategy session in September, the trustee board discussed:<br>• Possible future higher education sector pension requirements;<br>• An analysis of mutuality and cross subsidies in USS, the advantages and issues that arise; and<br>• Building a governance framework for the future. |
| **Investment** | Reviewed and approved amendments to the investment management advisory agreement, setting out the terms of engagement of USS Investment Management Limited<br>Reviewed and upon recommendation of the Investment Committee, approved changes to the SIP<br>Reviewed and approved amendments to the Reference Portfolio<br>Reviewed and approved revisions to stewardship principles and voting policy as part of USS's RI programme |
| **Financial reporting and controls** | Approved the financial statements for the scheme and the trustee company for the year ended 31 March 2015 following approval by the Audit Committee<br>Reviewed and approved changes to critical accounting methods and policies upon the recommendation of the Audit Committee |
| **Risk management and internal controls** | Reviewed and approved USS's Risk Governance policy and risk appetite statements<br>Reviewed the Group Risk Report on a quarterly basis encompassing all key risks impacting upon the delivery of USS's strategic mission<br>Reviewed annual statements on the effectiveness of company internal controls from the Audit Committee, GCEO and head of internal audit |
| **Corporate governance** | Reviewed outcomes of Phase 1 of a comprehensive review of group governance and agreed a plan to enhance the effectiveness and efficiency of the group governance framework<br>Approved a set of delegation principles to be applied to the group governance framework<br>Reviewed and approved various appointments to the trustee board and its committees (as detailed on page 55) |
| **Performance oversight** | Approved a range of key performance indicators, measures and targets against which performance across the group could be monitored and assessed |
| **Leadership** | Discussed the outcomes of the USS employee engagement survey and the executive response |
| **Stakeholders** | Oversaw member and institution communication and consultation activity in the year<br>Discussed the outcomes of the member and institution satisfaction survey and the executive response |
| **Oversight** | Reviewed performance reports from all key business areas on a quarterly basis<br>Received and discussed reports at each meeting from all principal committees which had met in the reporting period |

# Role of the trustee board and executive

The trustee board is responsible for the effective governance and oversight of the scheme to ensure that the promised benefits are paid to all beneficiaries in accordance with the scheme rules, and in accordance with the governing legislation and regulatory guidance. In order to do this, the trustee board must ensure that:

- USS is adequately funded;
- Its investment strategy is appropriate for the scheme's liabilities, having regard to the support available from the scheme's sponsoring employers;
- It provides effective trusteeship in accordance with applicable law and regulation, ensuring that it has the necessary skills and takes specialist advice where appropriate; and
- Its scheme management, administration and investment services are delivered at a level which the members and participating employers are content, reflecting optimum value for money.

The trustee board has established several committees and delegated authority to them on certain matters as detailed in their terms of reference.

USS's governance framework is designed to promote:

- Effectiveness;
- Accountability; and
- Efficiency.

The trustee board is responsible for strategic decision-making and is focused on providing frameworks and establishing principles to support executive management and overseeing delivery of it.

The trustee board appoints a GCEO to implement the board's strategy and deliver its business plan through the day to day management of the scheme and trustee company. The GCEO has established an executive committee to support him in the delivery of the executive management functions.

The executive is responsible for:

- Advising the trustee board on the company's strategy and producing annual business plans for the trustee board's approval;
- Delivering an effective operating model for USS;
- Driving performance against agreed plans and objectives;
- Ensuring internal control and risk management frameworks are effective; and
- Providing assurance to the trustee board in respect of each delegated matter.

# Induction, training and effectiveness

All new directors undertake a formal induction programme upon joining the trustee board. The objectives of the induction programme are to ensure a full understanding of:

- The nature of the company, its business and the markets in which it operates
- The roles and responsibilities of a trustee and non-executive director
- The USS governance framework
- The roles and responsibilities of key senior employees
- Key external relationships

It includes:

- One-on-one meetings with the trustee chair, GCEO, Company Secretary, members of the executive committee and key staff
- Provision of relevant corporate documentation including the most recent report and accounts, strategic and business plans, governance framework; and trust deed and rules
- Completion of the Pensions Regulator's trustee toolkit
- Delivery of a tailored training programme based on the outcome of a skills audit exercise

The ongoing review work led by the group general counsel of USS's governance framework, including the effectiveness of delegation and assurance frameworks, and corporate governance arrangements is due for completion later in 2016.

There is significant cross-over between the scope of the governance review and the areas assessed as part of USS's annual review of trustee board effectiveness. In light of this, and to allow the governance review findings to be implemented and enhancements embedded, a review of trustee board effectiveness will be carried out in 2016/17 and annually thereafter, with an independently facilitated assessment undertaken on a periodic basis.

# Governance & Nominations Committee Report

## Introduction

The committee was established by the trustee board to (i) provide assurance on relevant matters relating to USS' corporate governance capability; and (ii) ensure the effective operation of governance arrangements and oversee trustee board and committee performance. It comprises five members, each of whom are also serving non-executive directors of the trustee board. It has been chaired from 1 April 2016 by Ms Kirsten English, an independent director.

## Role & Effectiveness

The committee continues to monitor membership of the trustee board and its principal committees to ensure that there is an appropriate balance and mix of skills and experience.

The committee also monitors the executive succession plan on an annual basis, providing assurance to the trustee board that appropriate arrangements are in place to ensure effective business continuity and to identify and develop future talent pipeline.

The committee has continued to develop its remit and influence in ensuring that USS's governance arrangements are designed to deliver a framework that is effective, efficient and demonstrates appropriate accountability.

An internal review was conducted in the year, assessing committee activity against the responsibilities delegated to it by the trustee board. It is intended to conduct a more comprehensive review of effectiveness in 2016/17.

## Key Activity in 2015/16

The committee has had a busy year, overseeing several changes to trustee board and committee membership. It managed the recruitment process for appointing successors on the trustee board and committees following the retirement of Mr Joseph Devlin and Mr David McDonnell. Similarly, the committee played a key part in successfully appointing a new non-executive director to USS Investment Management Limited, Mr Tony Owens, and a new specialist member of the Investment Committee, Mr Mark Fawcett.

A key focus in the year has been the development of enhanced induction and training programmes for new and existing directors and committee members. These are in the process of being finalised and will be implemented later in 2016.

USS initiated a comprehensive review of its governance framework in late 2014. The committee has played an invaluable role providing non-executive oversight and guidance to the executive and assurance to the trustee board.

## Membership

Appointed by the trustee board.

Mr David McDonnell (Chair), Ms Kirsten English (appointed as Chair with effect from 1 April 2016), Professor Sir David Eastwood, Dr Angela Roger, Mr Ian Maybury (from 14 January 2016) and Mr Bill Galvin.

# Audit Committee Report

## Introduction

The committee was established by the trustee board to provide it with assurance (i) on all matters relating to the appropriateness and effectiveness of USS's risk management and internal control systems (ii) that financial and business reporting arrangements are appropriate. The committee comprised four members for the full year, three of whom are also directors of the trustee board. Mr Michael Merton, an independent director, has chaired the committee since February 2014.

## Role & Effectiveness

The committee continues to play a key role in ensuring that there is appropriate challenge around risk and internal control frameworks and providing assurance to the trustee board on these matters.

In addition to receiving reports at each meeting from the GCEO, head of internal audit and head of operational risk, it also has regular 'in camera' sessions with USS's external audit and the head of internal audit.

The committee actively monitors the controls in place at USS and challenges their effectiveness. Where actions are identified to strengthen the control environment, the committee oversees their completion and impact.

The committee approves the external audit plan annually and oversees the process around drafting USS's Report and Accounts before submission to the trustee board for approval. It provides assurance to the trustee board that the financial statements and accompanying information in the trustee's annual report are true and fair and have been prepared properly.

In the year, a comprehensive review of committee effectiveness was carried out, which included a comparison of committee arrangements against the provisions of the UK Corporate Governance Code (for indications of best practice) and the Financial Reporting Council's Guidance on Audit Committees.

Overall the review showed that the committee was operating effectively. No material weaknesses or concerns were identified. Several actions were identified to enhance committee effectiveness even further and these are in the process of being completed.

## Other Activity in 2015/16

During the year, the committee oversaw a comprehensive, independent assessment of USS's internal audit services.

It also played a role in monitoring the assurance framework established for the scheme changes programme.

## Membership

Appointed by the trustee board.

Mr Michael Merton (Chair), Mr David McDonnell (until 31 March 2016), Mr Joseph Devlin (until 10 October 2015), Mr Gordon Coull, Ms Kirsten English, and post year end: Mr Ian Maybury (from 1 April 2016), Mr Tony Owens (from 1 April 2016), Professor Jane Hutton (from 1 April 2016).

# Remuneration Committee Report

## Introduction

The committee was established by the trustee board to set and oversee the implementation of policy for the recruitment, motivation and retention of group employees. The committee is also responsible for reviewing and making recommendations to the trustee board on director remuneration within an overall cap set by the Joint Negotiating Committee. The committee comprises five members, each of whom are also serving non-executive directors of the trustee board. Mr Rene Poisson, an independent director, has chaired the committee since April 2014.

## Role & Effectiveness

The committee continues to provide robust challenge to executive remuneration proposals for staff, in order to provide assurance to the trustee board that compensation complies with agreed remuneration principles.

The committee reviews total remuneration costs, including the bonus (annual incentive) and long-term incentive plans for investment staff, to satisfy itself that they are appropriate to balance stakeholder and member's interest between:

- low costs;
- a long-term stable organisation; and
- an incentive structure to drive behaviours and performance aligned with stakeholder and member needs.

The committee challenges the executive to clearly demonstrate a robust link between reward and performance.

During the year, a comprehensive review of committee effectiveness was carried out. The overall finding of the review was that the committee carries out its responsibilities effectively and diligently, however, it was agreed that clarity was required over the committee's roles and responsibilities within the wider USS governance framework. This will be addressed as part of the governance review during 2016/17.

## Other Activity in 2015/16

The committee oversaw a review of non-executive remuneration for the trustee company to ensure that compensation represented value for money and allowed appropriately skilled individuals to be recruited.

The committee also reviewed the annual staff appraisal process to ensure that there was appropriate rigour over individual performance and links to long-term performance.

## Membership

Appointed by the trustee board

Mr Rene Poisson (Chair), Professor Dame Glynis Breakwell, Mr David McDonnell, Mr Joseph Devlin (until 10 October 2015), Dr Angela Roger (from 14 January 2016), Mr Michael Merton (from 14 January 2016).

# Investment Committee Report

## Introduction

The committee was established under article 49 of the Articles of Association of USS and rule 63 of the scheme rules by the trustee board to advise the trustee company on all strategic matters relating to, and provide oversight of, the investment of the scheme's assets. The committee has nine members and comprises non-executive directors and special members who have investment experience. It is chaired by Dr Kevin Carter, an independent non-executive director.

## Role & Effectiveness

The committee continues to provide oversight of the performance of USS' investment strategy and the delivery of services under the investment management and advisory agreement with USS Investment Management Limited. At each committee meeting, investment performance reports are reviewed and challenged by the committee in order to provide assurance to the trustee board that performance is in line with the agreed strategy and targets.

Revisions to key documents including the Statement of Investment Principles are reviewed in detail by the committee, on behalf of the trustee board.

The committee continued to play a significant role in the ongoing development of the investment risk management framework and oversaw the development of a journey plan for investment management, designed to achieve a fully-funded position.

## Other Activity in 2015/16

The committee has been active and has taken on significant responsibility in relation to the scheme changes programme. The trustee board delegated governance oversight of the investment elements of the new DC section of the scheme to the committee and it has been very active in developing the investment response to the product specification.

## Membership

Appointed by the trustee board.

Dr Kevin Carter (Chair), Professor Sir David Eastwood, Professor Anton Muscatelli, Mr David McDonnell, Mrs Virginia Holmes, Mr Ian Maybury, Ms Sarah Bates, Dr Angela Roger, Mr Mark Fawcett (from 1 November 2015).

# Policy Committee Report

## Introduction

The committee was established to (i) provide advice to the trustee board on issues of strategy and policy (ii) keep the scheme rules under review and (iii) oversee the scheme rule amendment process. The committee comprises four members, each of whom are also serving non-executive directors of the trustee board. It has been chaired since 1 April 2015 by Professor Dame Glynis Breakwell, a UUK nominated director.

## Role & Effectiveness

The committee continues to undertake, on behalf of the trustee board, detailed review of proposals for changes to the scheme rules.

It monitors at each meeting policy developments that may impact on USS' operating environment and potentially the scheme.

## Other Activity in 2015/16

The committee has had a very busy year and has taken on significant responsibility in relation to the scheme changes programme. As part of its delegated governance oversight, the committee made a significant contribution to the development of the product design and specification of the defined contribution section, and its integration with the terms of the scheme overall.

The trustee board entrusted the committee and its rules sub-group, with oversight of the detailed work defining the required changes to the scheme rules required to support the scheme changes programme.

The committee also oversaw and approved a plan for the effective transition of current arrangements for money purchase additional voluntary contributions to the new defined contribution scheme section.

## Membership

Appointed by the trustee board.

Professor Dame Glynis Breakwell (Chair), Dr Kevin Carter, Mr Rene Poisson, Mr Joseph Devlin (until 10 October 2015) and Mr Bill Trythall.

# Joint Negotiating Committee Report

## Introduction

The Joint Negotiating Committee (JNC) is established under the rules of the scheme, and its powers are derived from those rules.

The committee's purpose is to decide on changes to the scheme rules, to consider the application of the cost-sharing arrangements in the event that they are activated, and to consider and decide on specific governance issues as set out in the rules.

The committee comprises six representatives of Universities UK and six representatives of UCU, together with an independent committee member who acts as chairman. Sir Andrew Cubie has chaired the committee since 2008.

The committee met five times in the year with its funding and benefits sub-committee meeting on 13 occasions.

## Role & Activity in 2015/16

The committee, with the support of its funding and benefits sub-committee, has dedicated the majority of its time over the course of the year to contributing to the drafting of the scheme changes specification and resulting revisions to the scheme rules. Following substantial work and the outcome of the employers' consultation with affected members and their representatives, the committee finalised the specification for scheme changes in July 2015 and subsequently finalised the replacement rules which became effective on 1 April 2016 in October 2015.

It has received regular reports throughout the year on the implementation plan for the scheme changes programme and has provided an invaluable employer and member perspective.

The committee also received regular updates on the scheme change communication plans for both employers and members.

Other substantive matters considered by the committee are auto-enrolment, where the committee decided that the arrangements for re-employed pensioners and flexible retirers should be extended for a further two years to April 2018 (the required rule changes were included in the first deed of amendment), and the proposals in relation to the USS money purchase AVC and how that facility should be affected with the introduction of the **USS Investment Builder** in October 2016.

Following a review of fees paid to directors and committee members, the committee received and reviewed a series of proposals for a revised fee structure.

## Membership

**UUK appointees** Dr Tony Bruce (until April 2015), Mr Cliff Vidgeon, Ms Mary Lambe, Mr Phil Harding, Mr John Neilson, Mr Will Spinks

**UCU appointees** Professor Jimmy Donaghey, Dr Roger Brooks, Ms Geraldine Egan, Dr Marion Hersh, Ms Pauline Collins, Mr Gordon Watson (until April 2015), Independent Committee Member (Chairman), Sir Andrew Cubie

# Advisory Committee Report

## Introduction

The Advisory Committee is established under the rules of the scheme, to advise the trustee company on (i) the exercise of its powers and discretions (other than those relating to investment matters), (ii) on difficulties in the implementation or application of the rules, (iii) on complaints received from members or participating institutions and (iv) any other matters on which the trustee company requires advice.

The committee met three times in the year, and a sub-committee (Chair plus one UUK and one UCU appointee) met once.

## Role & Activity in 2015/16

The committee considered 37 cases related to members requesting full commutation of their benefits on the grounds of serious incapacity and in each case the full commutation was granted.

Ten cases were considered at stage two of the IDR procedure. These included:

- Eight cases rejected in full. These included a complaint about the suitability of the appointment of one of the trustee directors, and complaints about flexible retirement, enhanced opt out election, transfer values, incapacity retirement applications and a full commutation application;
- One case upheld in full, concerning the need for the support of a member's former employer to the decision to back-date incapacity retirement benefits to the date of leaving service; and
- One case upheld in part, concerning the provision of an incorrect retirement quotation.

In addition to making adjudications on these individual cases the committee considered a number of other areas of the scheme. Administration procedures, which include the right for a member to appeal against the trustee company's determination of a member's incapacity, were reviewed by the committee and revisions recommended to the trustee board. The committee also reviewed areas of the scheme rules requiring clearer definition in order to achieve consistent application of the scheme rules.

## Membership

**UUK appointees** Mr Cliff Vidgeon (Chair), Dr Tony Bruce, Mr Denis Linfoot

**UCU appointees** Mr Gordon Watson, Ms Pauline Collins, Professor Denis Leech

Professor Dame Glynis Breakwell and Dr Angela Roger act as trustee board representatives when the committee considers cases raised under the Internal Dispute Resolution procedure.

## Trustee Board Meetings and Committee Attendance

The trustee board met eight times during the year and held a strategic planning session in September 2015. A summary of trustee board activity in the year is outlined on page 53.

An overview of the attendance of board and committee meetings is provided below:

| | Trustee Board | Investment | Policy | Audit | Remuneration | Governance & Nominations |
|---|---|---|---|---|---|---|
| Meetings held in the year | 8 | 7 | 8 | 4 | 4 | 6 |
| **Trustee board members** | | | | | | |
| Professor Dame Glynis Breakwell | 7 | | 8 | | 4 | |
| Professor Sir David Eastwood | 8 | 3 | | | | 6 |
| Ms Kirsten English | 8 | | | 4 | | 6 |
| Mr David McDonnell | 8 | 4 | | 4 | 4 | 6 |
| Mr Bill Trythall | 8 | | 8 | | | |
| Dr Angela Roger | 7 | 7 | | | 2(ii) | 6 |
| Mr Rene Poisson | 8 | | 7 | | 4 | |
| Dr Kevin Carter | 8 | 7 | 8 | | | |
| Mr Ian Maybury | 8 | 7 | | | | 1(iv) |
| Mr Michael Merton | 7 | | | 4 | 1(iii) | |
| Professor Jane Hutton | 3(i) | | | | | |
| Professor Anton Muscatelli | 7 | 6 | | | | |
| Mr Joe Devlin | | | 4(v) | 3(vi) | 1(vi) | |
| **Committee members** | | | | | | |
| Mr Gordon Coull | | | | 4 | | |
| Ms Sarah Bates | | 7 | | | | |
| Mr Mark Fawcett | | 2(vii) | | | | |
| Mrs Virginia Holmes | | 6 | | | | |

(i) Professor Hutton was appointed as a Director on 1 November 2015 and attended all trustee board meetings in the year following her appointment

(ii) Dr Roger was appointed as a member of the Remuneration Committee on 14 January 2016 and attended both meetings in the year following her appointment

(iii) Mr Michael Merton was appointed as a member of the Remuneration Committee on 14 January 2016 and attended one of the two meetings in the year following his appointment

(iv) Mr Maybury was appointed as a member of the Governance and Nominations Committee on 14 January 2016 and attended the meeting in the year following his appointment

(v) Mr Devlin attended four out of five Policy Committee meetings in the year prior to his retirement on 10 October 2015

(vi) Mr Devlin attended all Audit and Remuneration Committee meetings in the year prior to his retirement on 10 October 2015

(vii) Mr Fawcett was appointed as a member of the Investment Committee on 1 November 2015 and attended two out of the four meetings in the year following his appointment.

# Principal officers & advisers

The principal officers of the trustee company are (L to R):

Left to right: **Bill Galvin**, Group Chief Executive Officer; **Kevin Smith**, Chief Service Delivery Officer; **Roger Gray**, Chief Investment Officer and Chief Executive of USS Investment Management Limited; **Howard Brindle**, Chief Technology Officer and Chief Operating Officer (USS Investment Management Limited); **Jennifer Halliday**, Chief Financial Officer; **Jeremy Hill**, Group General Counsel; and **Guy Coughlan**, Chief Risk Officer.

The principal external advisers of the scheme or the trustee company are:

### Scheme Actuary
Ali Tayyebi of Mercer,
Birmingham
B1 2LQ

### Bankers
Barclays Bank Plc,
Manchester
M2 1HW

### Solicitors
DLA Piper UK LLP,
Liverpool
L2 0NH

CMS Cameron McKenna LLP
Cannon Place
78 Cannon Street
London
EC4N 6AF

### Independent Auditor
Grant Thornton UK LLP,
Royal Liver Building
Liverpool
L3 1PS

# Statement of Trustee's responsibilities for the financial statements

The financial statements, which prepared in accordance with UK Generally Accepted Accounting Practice, are the responsibility of the trustee. Pension scheme regulations require the trustee to make available to scheme members, beneficiaries and certain other parties, audited financial statements for each scheme year which:

- 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 the assets and liabilities, other than liabilities to pay pensions and benefits after the end of the scheme year, and
- contain the information specified in the Schedule to the Occupational Pension Schemes (Requirement to obtain Audited Accounts and a Statement from the Auditor) Regulations 1996, including a statement whether the accounts have been prepared in accordance with the Statement of Recommended Practice "Financial Reports of Pension Schemes".

The trustee has supervised the preparation of the financial statements and has agreed suitable accounting policies, to be applied consistently, making estimates and judgements on a reasonable and prudent basis. The trustee is also responsible for making available certain other information about the scheme in the form of the Annual Report.

The trustee also has certain responsibilities in respect of contributions which are set out in the statement of trustee's responsibilities accompanying the trustee's summary of contributions on page 90.

The trustee is responsible for the maintenance and integrity of the financial information of the scheme included on the scheme's website. Legislation in the United Kingdom governing the preparation and dissemination of the financial statements may differ from legislation in other jurisdictions.

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 appropriate internal controls.

Signed on behalf of the trustee on 12 July 2016.

**Professor Sir David Eastwood**
**Chairman**

**Bill Galvin**
**Chief Executive**

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

We have audited the financial statements of Universities Superannuation Scheme for the year ended 31 March 2016 which comprise the fund account, the statement of net assets and the related notes. 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 FRS102, the Financial reporting Standard applicable in the UK and Republic of Ireland.

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 scheme's trustee 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 and the scheme's trustee as a body, for our audit work, for this report, or for the opinions we have formed.

## Respective responsibilities of trustee and auditor

As explained more fully in the Statement of Trustee's Responsibilities set out on page 62, the scheme's trustee are responsible for the preparation of financial statements which show a true and fair view. Our responsibility is to audit and express an opinion on the financial statements in accordance with applicable law and International Standards on Auditing (UK and Ireland). Those standards require us to comply with the Auditing Practices Board's Ethical Standards for Auditors.

## Scope of the audit of the financial statements

A description of the scope of an audit of financial statements is provided on the Financial Reporting Council's website at www.frc.org.uk/auditscopeukprivate

## Opinion on financial statements

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 2016, 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 scheme year;
- have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice; and
- contain the information specified in Regulation 3 and Regulation 3A of, and the Schedule to, the Occupational Pension Schemes (Requirement to obtain Audited Accounts and a Statement from the Auditor) Regulations 1996, made under the Pensions Act 1995.

Grant Thornton UK LLP
Statutory Auditor, Chartered Accountants
Liverpool
12 July 2016

# Fund Account
# for the year ended 31 March 2016

| | Note | 2016 £m | 2015 £m |
|---|---|---|---|
| **Contributions and benefits** | | | *restated* |
| Employers' contributions receivable | 4 | 1,651 | 1,555 |
| Employee contributions receivable | 4 | 206 | 204 |
| Augmentation | | 6 | 6 |
| Total contributions | | 1,863 | 1,765 |
| Transfers in | 5 | 63 | 66 |
| | | 1,926 | 1,831 |
| Benefits paid or payable | 6 | 1,780 | 1,642 |
| Payments to and on account of leavers | 7 | 75 | 61 |
| Administrative expenses | 8 | 43 | 29 |
| | | 1,898 | 1,732 |
| **Net additions from dealings with members** | | 28 | 99 |
| **Return on investments** | | | |
| Investment income | 9 | 1,173 | 1,131 |
| Taxation | | (17) | (15) |
| Change in market value of net investments | 10 | (379) | 6,385 |
| Investment management expenses | 11 | (75) | (67) |
| **Net return on investments** | | 702 | 7,434 |
| **Net increase in the fund during the year** | | 730 | 7,533 |
| **Net assets of the scheme at start of the year** | | 49,547 | 42,014 |
| **Net assets of the scheme at the end of the year** | | 50,277 | 49,547 |

The notes on pages 66 to 88 form part of these financial statements.

# Statement of Net Assets as at 31 March 2016

| | Note | 2016 £m | 2015 £m |
|---|---|---|---|
| **Investment assets** | | | *restated* |
| Equities | | 20,602 | 21,288 |
| Bonds | | 15,471 | 13,730 |
| Pooled investment vehicles | 13 | 10,062 | 9,887 |
| Derivatives | 14 | 428 | 286 |
| Property | 15 | 2,130 | 1,999 |
| Cash and cash equivalents | | 1,454 | 2,934 |
| Money purchase AVC investments | | 434 | 433 |
| Other investment balances | 16 | 1,040 | 906 |
| | | 51,621 | 51,463 |
| **Investment liabilities** | | | |
| Derivatives | 14 | (363) | (297) |
| Other investment balances | 16 | (967) | (1,674) |
| | | (1,330) | (1,971) |
| **Total net investments** | | 50,291 | 49,492 |
| **Current assets** | 21 | 206 | 200 |
| **Current liabilities** | 22 | (220) | (145) |
| **Net assets of the scheme at 31 March** | | 50,277 | 49,547 |

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 Summary Funding Statement and Certificate of Technical Provisions on page 96 and should be read in conjunction with this report.

The money purchase AVC investments included within net assets represent additional voluntary contributions invested with the Prudential. These assets are specifically allocated to secure extra benefits for those members that have made these additional voluntary contributions.

The financial statements on pages 62 to 88 were approved by the trustee, Universities Superannuation Scheme Limited, on 12 July 2016 and were signed on its behalf by:

**Professor Sir David Eastwood**
**Chair**

**Bill Galvin**
**Chief Executive**

The notes on pages 66 to 88 form part of these financial statements.

# Notes to the financial statements for the year ended 31 March 2016

## 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 (Revised 2015) (the SORP). This is the first year that FRS 102 and the revised SORP have been applied to the scheme's financial statements.

In preparing the financial statements of the scheme, the trustee has amended certain accounting, valuation and disclosure methods applied to comply with FRS 102 and the revised SORP. The comparative figures in respect of the year ended 31 March 2015 were restated to reflect these adjustments.

Reconciliations and descriptions of the effect of the transition from UK GAAP to FRS 102 and the revised SORP on the financial statements of the scheme can be found in Note 27, Explanation of Transition to Financial Reporting Standard 102 and 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.

## 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 revised 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. The results are included in the net assets at fair value within investment assets (see note 19). Details of these companies may be obtained by writing to the Company Secretary of Universities Superannuation Scheme Limited, Mr J P Hill, 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 years.

### (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 includes 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 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.

# 3 Accounting policies (continued)

## (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.

## (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 trade 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;

(iii) **Unquoted equities and bonds** - Unquoted equities and bonds are stated at fair value estimated by the trustee using appropriate valuation techniques. Significant direct investments are valued by independent 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 Guidelines; and

#### Hedge funds

Hedge funds are stated at fair value based on published prices.

# 3 Accounting policies (continued)

(vi) **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)

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 within cash, 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 or payments are reported within change in market value. Realised gains or 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 the forward contracts are reported within the change in market value in the fund account.

(vii) **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 - Professional Standards Global – January 2014 and the RICS Valuation Professional Standards UK January 2014 (revised April 2015), taking into consideration the current estimate of rental value and market yields.

(viii) **Money purchase AVCs**

Money purchase AVC investments are stated at net asset value provided by the AVC provider at the year end date.

(ix) **Repurchase agreements (repos)**

The scheme continues to recognise and value the securities that are delivered out as collateral from repurchased 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 amount.

## (h) 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.

# 4 Contributions receivable

| | 2016 £m | 2015 £m |
|---|---|---|
| **Employer contributions** | | |
| Employers' contributions | 1,191 | 1,140 |
| Employers' salary sacrifice contributions | 440 | 415 |
| S75 debt | 20 | - |
| | 1,651 | 1,555 |

| | | |
|---|---|---|
| **Employee contributions** | | |
| Members' basic contributions | 70 | 72 |
| Main section AVCs | 49 | 48 |
| Money purchase AVCs | 62 | 60 |
| Supplementary section | 25 | 24 |
| | 206 | 204 |
| | 1,857 | 1,759 |

The scheme offers two Additional Voluntary Contribution (AVC) facilities:

Main section AVC's referred to above, represent contributions made to purchase additional benefits under the rules of the scheme.

A money purchase AVC facility was administered throughout the current and prior years by the Prudential Assurance Company Limited (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 towards the past service deficit of 0.7% of total salaries are included within employers' contributions above. Future deficit contributions of 2.1% p.a. of salaries are due for the period 1 April 2016 – 31 March 2031.

MIRA Limited withdrew from the scheme with effect from July 2015. The S75 debt determined to £20m. This debt was settled by the employer during the scheme year.

# 5 Transfers in

| | 2016 £m | 2015 £m |
|---|---|---|
| Individual transfers in from other schemes | 63 | 66 |

# 6 Benefits paid or payable

| | 2016 £m | 2015 £m |
|---|---|---|
| **Main section** | | |
| Pensions | 1,322 | 1,260 |
| Lump sums on or after retirement | 406 | 336 |
| Lump sums on death in service | 16 | 14 |
| Taxation where lifetime and annual allowance exceeded | 17 | 14 |
| | 1,761 | 1,624 |
| **Supplementary section** | | |
| Pensions | 14 | 14 |
| Lump sums on death in service | 3 | 4 |
| | 17 | 18 |
| **Money purchase AVCs** | | |
| Pensions | 70 | 62 |
| Lump sums on death in service | 1 | 1 |
| Transferred to Universities Superannuation Scheme | (69) | (63) |
| | 2 | - |
| | 1,780 | 1,642 |

Money purchase AVCs transferred to Universities Superannuation Scheme represent amounts transferred from the Prudential to Universities Superannuation Scheme on members' retirement for inclusion within Universities Superannuation Scheme benefits.

# 7 Payments to and on account of leavers

| | 2016 £m | 2015 £m |
|---|---|---|
| Individual transfers out to other schemes | 69 | 58 |
| Payments for members joining state scheme | 1 | 1 |
| Refunds of contributions in respect of non-vested leavers | 5 | 2 |
| | 75 | 61 |

# 8 Administrative expenses

| | Note | 2016 £m | 2015 £m |
|---|---|---|---|
| | | | *restated* |
| Personnel costs (administrative and management staff) | 12 | 24 | 16 |
| Pension Protection Fund levies | | 2 | 4 |
| Premises costs | | 5 | 1 |
| Other costs | | 12 | 8 |
| | | 43 | 29 |

Administrative costs are incurred by the trustee company and, in accordance with the trust deed, the costs of managing and administering the scheme, are chargeable to Universities Superannuation Scheme.

# 9 Investment income

| | 2016 £m | 2015 £m |
|---|---|---|
| Dividends from equities | 554 | 502 |
| Net property income | 96 | 97 |
| Income from pooled investment vehicles | 101 | 126 |
| Income from bonds | 363 | 375 |
| Interest on cash deposits | 7 | 14 |
| Interest paid on repurchase agreements | (7) | (3) |
| Other income | 59 | 20 |
| | 1,173 | 1,131 |

Income from property is net of property related expenses of £7m (2015: £7m).

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 shown as irrecoverable tax.

# 10 Investments reconciliation

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

| | Note | Market value 2015 £m | Purchases and derivative payments during the year at cost £m | Proceeds of sales and derivative receipts during the year £m | Changes in value during the year £m | Market value 2016 £m |
|---|---|---|---|---|---|---|
| Equities | | 21,288 | 7,248 | (7,042) | (892) | 20,602 |
| Bonds | | 13,730 | 6,599 | (5,004) | 146 | 15,471 |
| Pooled investment vehicles | 13 | 9,887 | 3,347 | (3,847) | 675 | 10,062 |
| Derivatives | 14 | (11) | 2,873 | (2,345) | (452) | 65 |
| Property | 15 | 1,999 | 32 | (43) | 142 | 2,130 |
| Money purchase AVC investments | | 433 | 63 | (75) | 13 | 434 |
| | | 47,326 | 20,162 | (18,356) | (368) | 48,764 |
| Cash and cash equivalents | | 2,934 | | | (11) | 1,454 |
| Other investment balances (net) | 16 | (768) | | | | 73 |
| Total | 17 | 49,492 | | | (379) | 50,291 |

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.

Included in the amount for derivatives are realised and unrealised losses of £654m (2015: £390m) from forward currency contracts, which are used to hedge the currency risk relating to overseas investments (see note 14, Derivatives). These are offset by gains in the values of the corresponding overseas assets. Turnover in derivatives primarily represents the rolling of these forward currency contracts. Included within the change in value of property are realised and unrealised foreign currency gains and losses of £4m (2015: £1m loss).

At the year end, within other investment balances, amounts payable under repurchase agreements amounted to £595m (2015: £764m). At the year end £548m (2015: £800m) of bonds reported in scheme assets are held by counterparties under repurchase agreements.

# 10 Investment reconciliation (continued)

### 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.

Transaction costs analysed by main asset class and type of cost are as follows:

| | Fees £m | Commission £m | Taxes £m | 2016 £m | 2015 £m |
|---|---|---|---|---|---|
| Equities | - | 8 | 7 | 15 | 14 |
| Bonds | 1 | - | - | 1 | - |
| Private equity | 4 | - | - | 4 | 5 |
| Property | 2 | - | - | 2 | 4 |
| | 7 | 8 | 7 | 22 | 23 |
| 2015 | 7 | 7 | 9 | - | 23 |

In addition to the transaction costs disclosed above, indirect costs are incurred through the bid-offer spread on investments.

# 11 Investment management expenses

| | Note | 2016 £m | 2015 £m |
|---|---|---|---|
| **Investment costs** | | | *restated* |
| Securities research costs | | 9 | 10 |
| External manager base fees | | 12 | 8 |
| External manager performance fees | | 1 | 2 |
| Professional fees | | 2 | 2 |
| | | 24 | 22 |
| **Property management** | | | |
| External manager fees | | 1 | 1 |
| Rent review and letting fees | | 2 | 1 |
| Other | | 1 | 1 |
| | | 4 | 3 |
| Legal and professional fees | | 1 | 1 |
| Custodial services | | 1 | 2 |
| | | 2 | 3 |
| **Total investment costs** | | 30 | 28 |
| **Other costs** | | | |
| Personnel costs (investment and investment support staff) | 12 | 36 | 26 |
| Premises costs | | 1 | 3 |
| Sundry costs | | 8 | 10 |
| **Total other costs** | | 45 | 39 |
| **Total investment management costs** | | 75 | 67 |

Investment management costs 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.

## 12 Supplementary information in respect of personnel costs

| | Note | 2016 £m | 2015 £m |
|---|---|---|---|
| **Personnel costs** | | | *restated* |
| Included in administration expenses | 8 | 24 | 16 |
| Included in investment management expenses | 11 | 36 | 26 |
| | | 60 | 42 |
| **Analysed as:** | | | |
| Wages and salaries | | 41 | 32 |
| Pension costs | | 8 | 3 |
| Social security costs | | 4 | 3 |
| Other | | 7 | 4 |
| | | 60 | 42 |

Included in the above are the emoluments of Mr Galvin, Group Chief Executive, comprising salary and benefits amounting to £484,000 (2015: £432,000). Mr Galvin is also a member of the career revalued benefits section of the scheme and at 31 March 2016 his accrued pension was £12,610 (2015: £7,696) and accrued lump sum of £37,830 (2015: £23,088). This accrued pension relates to amounts earned in respect of services to the scheme and excludes transfers-in from other schemes. Mr Galvin is eligible to participate in an individual three year LTIP, which will comprise of an annual maximum amount of £100,000 which will be entirely related to performance and the achievement of set objectives.

The aggregate amount of compensation payable for loss of office to employees during the year was £0.4m (2015: £0.6m) of which £0.2m (2015: £0.5m) was payable to employees whose remuneration exceeded £100,000 during the year.

## 13 Pooled investment vehicles

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

| | Note | 2016 £m | 2015 £m |
|---|---|---|---|
| Equities | | 1,048 | 1,330 |
| Bonds | | 53 | 267 |
| Hedge funds | | 1,670 | 1,876 |
| Private equity | | 6,275 | 5,499 |
| Property | | 1,016 | 915 |
| **Total pooled investment vehicles** | 10, 17, 18 | 10,062 | 9,887 |

# 14 Derivatives

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

| | Note | 2016 £m | 2015 £m |
|---|---|---|---|
| **Assets** | | | |
| Options | 14 (a) | - | - |
| Futures contracts | 14 (b) | 92 | 89 |
| Swaps | 14 (c) | 159 | 93 |
| Forward foreign exchange contracts | 14 (d) | 177 | 104 |
| | | 428 | 286 |
| **Liabilities** | | | |
| Options | 14 (a) | - | (7) |
| Futures contracts | 14 (b) | (42) | (38) |
| Swaps | 14 (c) | (74) | (15) |
| Forward foreign exchange contracts | 14 (d) | (247) | (237) |
| | | (363) | (297) |
| **Net asset/(liability)** | 10, 17 | 65 | (11) |

### 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:

(a) Contributing to a reduction of risks;

(b) 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 to a single counterparty and to other derivative operations 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.

# 14 Derivatives (continued)

## 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 2016.

### a) Options

The scheme had no exposure to options at the year end to date.

### b) Futures (exchange traded)

| Type of future | Expires | Economic exposure £m | Asset £m | Liability £m |
|---|---|---|---|---|
| Equities | 4 years | 3,725 | 59 | (21) |
| Bonds | 1 year | 4,004 | 4 | (7) |
| Commodity | 2 years | 406 | 29 | (13) |
| Currency | 1 year | 44 | - | (1) |
| Interest Rate | 1 year | 75 | - | - |
| | | 8,254 | 92 | (42) |

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

### c) Swaps (OTC)

| Contract | Expires within | Nature of Swap | Notional principal £m | Asset £m | Liability £m |
|---|---|---|---|---|---|
| Interest Rate | 0-30 years | Fixed for Floating | 1,693 | 84 | (40) |
| Commodity index | 0-1 year | Oil futures index | 511 | - | - |
| Bond total return | 0-4 years | CS EM Bond index | 491 | 62 | - |
| Credit default | 0-48 years | Index and single | 591 | 7 | (24) |
| | 0-6 years | Single | 84 | - | (3) |
| Dividend | 0-7 years | S&P 500 Index | 207 | 6 | (7) |
| | | | 3,577 | 159 | (74) |

# 14 Derivatives (continued)

## d) Forward foreign exchange (OTC)

| Currency bought | Currency sold | Notional Principal £m | Asset £m | Liability £m |
|---|---|---|---|---|
| AUD | OTHER | 376 | - | - |
| CAD | GBP | 798 | 18 | - |
| CAD | USD | 162 | 14 | - |
| EUR | GBP | 175 | 3 | - |
| EUR | OTHER | 111 | 4 | - |
| GBP | AUD | 1,228 | - | (50) |
| GBP | CHF | 619 | - | (23) |
| GBP | EUR | 2,399 | - | (62) |
| GBP | JPY | 1,285 | 5 | (37) |
| GBP | OTHER | 704 | - | (13) |
| GBP | USD | 8,895 | 73 | (3) |
| JPY | GBP | 162 | 10 | - |
| MXN | USD | 275 | 12 | - |
| OTHER | EUR | 147 | - | (2) |
| OTHER | GBP | 122 | 1 | - |
| OTHER | USD | 607 | 20 | - |
| RUB | USD | 91 | 5 | - |
| SEK | USD | 106 | 6 | - |
| USD | CAD | 144 | - | (11) |
| USD | CHF | 224 | - | (11) |
| USD | GBP | 985 | - | (3) |
| USD | JPY | 193 | - | (3) |
| USD | OTHER | 665 | - | (23) |
| USD | ZAR | 76 | - | (6) |
| ZAR | USD | 96 | 6 | - |
| | | 20,645 | 177 | (247) |

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 £238m in the form of cash and government bonds in respect of OTC derivatives.

## 15 Property

| | Note | 2016 £m | 2015 £m |
|---|---|---|---|
| UK completed properties | | 2,107 | 1,909 |
| UK developments in progress | | 23 | 90 |
| | 10, 17 | 2,130 | 1,999 |
| **Properties analysed by type:** | | | |
| Freehold | | 1,702 | 1,611 |
| Leasehold | | 428 | 388 |
| | 10, 17 | 2,130 | 1,999 |

The completed investment properties and developments have been valued externally by CBRE Limited, Chartered Surveyors, who have broad experience and knowledge of the locations and type of properties held by the scheme.

## 16 Other investment balances

| | Note | 2016 £m | 2015 £m |
|---|---|---|---|
| **Assets** | | | |
| Amount due from stockbrokers | | 141 | 120 |
| Dividends and accrued interest | | 148 | 168 |
| Initial margin | | 272 | 284 |
| Variation margin | | 92 | 66 |
| Broker cash | | 387 | 268 |
| | | 1,040 | 906 |
| **Liabilities** | | | |
| Amount due to stockbrokers | | (95) | (501) |
| Variation margin | | (42) | (15) |
| Broker cash | | (235) | (392) |
| Repurchase agreements | | (595) | (764) |
| Accrued interest | | - | (2) |
| | | (967) | (1,674) |
| **Net other investment balances** | 10, 17 | 73 | (768) |

## 17 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 (a) The quoted price for an identical asset in an active market at the reporting date.

Category (b) When quoted prices are unavailable, the price of a recent transaction for an identical asset adjusted if necessary.

Category (c) Where a quoted price is not available and recent transactions of an identical asset on their own are not a good estimate of fair value, the fair value is determined by using a valuation technique that uses:

(c) (i) observable market data; or

(c) (ii) non-observable data.

The scheme's investment assets and liabilities have been fair valued using the above hierarchy categories as follows:

| | | 2016 Category | | | | |
|---|---|---|---|---|---|---|
| | Note | (a) £m | (b) £m | (c) (i) £m | (c) (ii) £m | Total £m |
| Equities | | 19,246 | - | - | 1,356 | 20,602 |
| Bonds | | - | - | 14,621 | 850 | 15,471 |
| Pooled investment vehicles | 13 | 147 | 942 | - | 8,973 | 10,062 |
| Derivatives | 14 | 50 | - | (70) | 85 | 65 |
| Property | 15 | - | - | - | 2,130 | 2,130 |
| Cash and cash equivalents | | 1,454 | - | - | - | 1,454 |
| Money purchase AVC investments | | - | - | 434 | - | 434 |
| Other investment balances | 16 | 73 | - | - | - | 73 |
| | 10 | 20,970 | 942 | 14,985 | 13,394 | 50,291 |

| | | 2015 Category | | | | |
|---|---|---|---|---|---|---|
| | Note | (a) £m | (b) £m | (c) (i) £m | (c) (ii) £m | Total £m |
| Equities | | 19,769 | - | - | 1,519 | 21,288 |
| Bonds | | - | - | 13,206 | 524 | 13,730 |
| Pooled investment vehicles | 13 | 295 | 1,299 | - | 8,293 | 9,887 |
| Derivatives | 14 | 44 | - | (133) | 78 | (11) |
| Property | 15 | - | - | - | 1,999 | 1,999 |
| Cash and cash equivalents | | 2,934 | - | - | - | 2,934 |
| Money purchase AVC investments | | - | - | 433 | - | 433 |
| Other investment balances | 16 | (768) | - | - | - | (768) |
| | 10 | 22,274 | 1,299 | 13,506 | 12,413 | 49,492 |

# 18 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:

(i) 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.

(ii) 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.

(iii) 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 scheme has exposure to these risks because of the investments it makes to implement its investment strategy described in the Trustees' Report. 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 manager and monitored by the trustee by regular reviews of the activity and performance of the internal manager relative to the reference portfolio.

Further information on the trustees' 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 AVC investments as these are not considered significant in relation to the overall investments of the scheme.

## (i) 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.

| | 2016 | | | |
|---|---|---|---|---|
| | Investment grade £m | Non-investment grade £m | Unrated £m | Total £m |
| **Direct** | | | | |
| Bonds | 13,998 | 905 | 650 | 15,553 |
| OTC derivatives (fair value) | 615 | - | - | 615 |
| Cash | 1,454 | - | - | 1,454 |
| Repurchase agreements | 1 | - | - | 1 |
| Unsettled trades | 112 | - | 28 | 140 |
| Securities on loan | 4,364 | - | - | 4,364 |
| Property rent debtors | - | - | 4 | 4 |
| **Indirect** | | | | |
| Pooled investment vehicles | 53 | - | 8,612 | 8,665 |
| | 20,597 | 905 | 9,294 | 30,796 |

## (i) Credit risk (continued)

| | 2015 | | | |
|---|---|---|---|---|
| | Investment grade £m | Non-investment grade £m | Unrated £m | Total £m |
| **Direct** | | | | |
| Bonds | 12,727 | 495 | 679 | 13,901 |
| OTC derivatives (fair value) | 243 | - | - | 243 |
| Cash | 2,934 | - | - | 2,934 |
| Repurchase agreements | 42 | - | - | 42 |
| Unsettled trades | 120 | - | - | 120 |
| Securities on loan | 3,032 | - | - | 3,032 |
| Property rent debtors | - | - | 3 | 3 |
| **Indirect** | | | | |
| Pooled investment vehicles | 267 | - | 7,830 | 8,097 |
| | 19,365 | 495 | 8,512 | 28,372 |

Credit risk arsing on bonds and private credit is mitigated:

(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 £40m (2015: £33m).

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 14). OTCs are valued daily and counterparty exposures are fully collateralised subject to de-minimis limits.

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 on repurchase agreements is mitigated through collateral arrangements as disclosed in note 10.

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

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 losses arising from stock lending exposure to counterparties.

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.

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. Therefore credit risk arising from pooled investment vehicles is all deemed to be indirect for the purpose of this disclosure. Due diligence checks are carried out on the appointment of new pooled investment managers and on an ongoing basis thereafter.

## (i) Credit risk (continued)

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

| | Note | 2016 £m | 2015 £m |
|---|---|---|---|
| Unit trusts | | 1,928 | 1,843 |
| OEIC's | | 193 | 547 |
| Partnership Interests | | 6,271 | 5,621 |
| Shares of limited liability partnerships | | 1,670 | 1,876 |
| | 10,13,17 | 10,062 | 9,887 |

## (ii) Currency risk

The scheme is subject to currency risk because some of the scheme's investments are held in overseas markets, either as segregated investments or via pooled investment vehicles. Currency exposures are monitored and mitigated through a currency hedging policy, through which 50% of developed market equity and 100% of developed market fixed interest foreign currency exposures are hedged to sterling, in accordance with reference portfolio. Derivative holdings are represented on an economic exposure basis within the table below.

| | 2016 £m | 2015 £m |
|---|---|---|
| **Direct** | | |
| Australian Dollar | 1,218 | 793 |
| Brazilian Real | 511 | 448 |
| Canadian Dollar | 516 | 265 |
| Euro | 3,816 | 4,106 |
| Hong Kong Dollar | 1,105 | 1,256 |
| Indonesian Rupee | 336 | 619 |
| Japanese Yen | 288 | 1,653 |
| Mexican Peso | 607 | 439 |
| South African Rand | 350 | 209 |
| South Korean Won | 585 | 492 |
| Swedish Krona | 321 | 225 |
| Swiss Franc | 1,065 | 1,050 |
| Taiwan Dollar | 434 | 404 |
| United States Dollar | 15,041 | 14,709 |
| Other | 1,137 | 1,318 |
| | 27,330 | 27,986 |
| Less: Foreign currency hedging | (10,530) | (11,526) |
| | 16,800 | 16,460 |
| **Indirect** | | |
| Pooled investment vehicles | 7,155 | 7,825 |
| | 7,155 | 7,825 |

## (iii) Interest rate risk

The scheme's investments are subject to interest rate risk because they include public and private credit, swaps, liabilities under repurchase agreements and money market instruments, either as segregated investments or through pooled investment vehicles. 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.

| | 2016 £m | 2015 £m |
|---|---|---|
| **Direct** | | |
| Bonds | 9,562 | 8,834 |
| Equities | 798 | 1,412 |
| OTC derivatives (economic exposure) | 2,859 | 1,171 |
| Cash | 1,454 | 2,934 |
| Repurchase agreements | 595 | 764 |
| **Indirect** | | |
| Pooled investment vehicles | 8,610 | 7,827 |
| | 23,878 | 22,942 |

## (iv) 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, bonds, equity futures, loans, hedge funds, private equity and investment properties. Derivative values are based on absolute economic exposure rather than market value.

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

| | 2016 £m | 2015 £m |
|---|---|---|
| **Direct** | | |
| Equities | 20,602 | 21,288 |
| Bonds | 15,471 | 13,730 |
| Derivatives (economic exposure) | 11,830 | 11,212 |
| Property | 2,130 | 1,999 |
| **Indirect** | | |
| Pooled investment vehicles | 10,062 | 9,887 |
| | 60,095 | 58,116 |

## 19 Subsidiaries controlled by Universities Superannuation Scheme

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

| | 2016 £m | 2015 £m |
|---|---|---|
| Equities | 1,161 | 1,141 |
| Bonds | 428 | - |
| Pooled investment vehicles | 785 | 388 |
| Derivatives | (3) | 1 |
| Property | 546 | 280 |
| Cash | 982 | 814 |
| Other investment balances | (428) | (201) |
| | 3,471 | 2,423 |

## 20 Self investment

The scheme had no Employer Related Investments (ERI) at year end, as defined by relevant legislation, except equity and loan investments made in the normal course of business to certain investment vehicles. The funding of these investment vehicles, which are held for investment purposes and not operating subsidiaries as explained on page 66, amounts to less than 5% (2015: 6%) of the net assets of the scheme.

## 21 Current assets

| | 2016 £m | 2015 £m |
|---|---|---|
| Contributions receivable; | | |
| - employers' contributions | 103 | 93 |
| - members' basic contributions | 46 | 41 |
| - members' additional voluntary contributions | 4 | 4 |
| Other debtors | 17 | 19 |
| Cash at bank and in hand | 36 | 43 |
| | 206 | 200 |

Contributions due at the year end have been paid to the scheme subsequent to the year end in accordance with the Schedule of Contributions.

## 22 Current liabilities

| | 2016 £m | 2015 £m |
|---|---|---|
| Rents & service charges received in advance | (83) | (70) |
| Benefits payable | (99) | (51) |
| Taxation creditor | (1) | (2) |
| Due to trustee company | (32) | (17) |
| Other creditors | (5) | (5) |
| | (220) | (145) |

## 23 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.

| | 2016 £m | 2015 £m |
|---|---|---|
| **Value of stock on loan at 31 March** | | |
| Equities | 2,134 | 1,403 |
| Bonds | 1,162 | 1,629 |
| | 3296 | 3,032 |
| Value of collateral held at 31 March | 3,518 | 3,269 |

## 24 Financial commitments

| | 2016 £m | 2015 £m |
|---|---|---|
| **Direct Property** | | |
| Contracts placed but not provided for | 28 | 22 |
| **Pooled investment vehicles** | | |
| Outstanding commitments to private equity partnerships | 3,889 | 3,280 |

These represent amounts subscribed and committed to private equity partnerships that had not been drawndown at the year end.

## 25 Contingent liability

As at year end the scheme issued legal proceedings relating to one of its investments. The events to which the proceedings relate occurred wholly before 31 March 2016. Should the outcome of the proceedings be unfavourable, the scheme would be liable to incur a proportion of the defendant's legal costs. No provision has been made in these financial statements for these costs, which if the case is successful, would be recovered as the liability cannot currently be quantified and the timing of the resolution of the action is unknown.

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 changes.

## 26 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 20. 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 years 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 institutions 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 notes 8 and 11. All transactions are solely for the purposes of effectively administering the scheme.

## 27 Explanation of transition to Financial Reporting Standard 102 and SORP

This is the first year that the scheme has presented its financial statements under the SORP and FRS 102 issued by the Financial Reporting Council and the following disclosures are required in the year of transition. The last financial statements under previous UK GAAP were for the year ended 31 March 2015 and the date of transition to FRS 102 and SORP was therefore 1 April 2014. As a consequence of adopting FRS 102 and SORP, a number of accounting policies have changed to comply with that standard and as a result, amounts due to and from the trustee company and its investment management subsidiary have been restated.

| | At 1 April 2014 £m | At 31 March 2015 £m |
|---|---|---|
| Net assets of the scheme as previously stated | 42,017 | 49,550 |
| Effect of transition - recharges from Universities Superannuation Scheme Limited | (3) | (3) |
| Net assets of the scheme as restated | 42,014 | 49,547 |

| | 2015 £m |
|---|---|
| Net increase in the fund as previously reported | 7,533 |
| Effect of transition - recharges from Universities Superannuation Scheme Limited | - |
| Net increase in the fund as restated | 7,533 |

# Statements of trustee's responsibilities in respect of contributions

The trustee is responsible under pensions legislation for ensuring that there is prepared, maintained and from time to time a revised schedule of contributions showing the rates of contributions (other than voluntary contributions) payable towards the scheme by or on behalf of the employer 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 of contributions received in respect of any active member of the scheme, and for monitoring whether contributions are made to the scheme 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.

## Trustee's summary of contributions payable under the schedule in respect of the scheme year ended 31 March 2016

This summary of contributions has been prepared by and is the responsibility of the trustee. It sets out the employer and member contributions payable to the Scheme from 1 April 2015 to 31 March 2016 under the schedule of contributions certified by the actuary on 24 July 2015 and on 15 June 2012.

## Contributions payable under the schedule in respect of the scheme year

| **Employer** | **£m** |
|---|---|
| Employers' contributions | 1,191 |
| Employers' salary sacrifice contributions | 440 |
| Augmentation | 6 |
| **Member** | |
| Members' basic contributions | 70 |
| Supplementary section | 25 |
| Contributions payable under the schedule | 1,732 |

## Reconciliation of contributions payable under the schedule to total contributions payable to the scheme in respect of the scheme year

| | **£m** |
|---|---|
| Contributions payable under the schedule | 1,732 |
| Contributions payable in addition to those payable under the schedule | |
| Main section AVCs | 49 |
| Money purchase AVCs | 62 |
| S75 debt | 20 |
| Total contributions (including augmentation receipts) | 1,863 |
| *Less augmentation receipts* | *(6)* |
| Total contributions (excluding augmentation receipts) in the fund account | 1,857 |

Signed on behalf of the trustee on 12 July 2016

**Professor Sir David Eastwood**
**Chair**

**Bill Galvin**
**Chief Executive**

# Actuary's certification of schedule of contributions

MERCER

## CERTIFICATION OF SCHEDULE OF CONTRIBUTIONS

| | |
|---|---|
| **Name of 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 2014 to be met by the end of the period specified in the recovery plan dated 24 July 2015.

### 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 24 July 2015.

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** | |
| **Scheme Actuary** | A Tayyebi |
| **Qualification** | Fellow of the Institute and Faculty of Actuaries |
| **Date of signing** | 24 July 2015 |
| **Name of employer** | Mercer Limited |
| **Address** | 4 Brindley Place<br>Birmingham<br>B1 2JQ |

# Report on actuarial liabilities

***Latest full actuarial valuation 31 March 2014***

**Funding ratio 89%**

***Annual update 31 March 2016***

**Funding ratio 83%**

31 March 2015 86%

## Overview

Last year the scheme's stakeholders, through the Joint Negotiating Committee within USS and following a consultation with affected employees and their representatives, decided upon a set of changes to the scheme to address some of the recent funding challenges (as set out for members on www.uss.co.uk). The final form of the scheme changes was decided upon in July 2015, and the rule changes were formally executed in November 2015 with an effective date of April 2016.

Following agreement of these changes, the trustee completed its formal actuarial valuation of the scheme, taking these into account and as noted above, the valuation date being as at 31 March 2014. This process involved a fundamental review of scheme data including the financial support available from employers, the overall scheme risk, and the underlying financial and demographic assumptions which underpin the way that the liabilities are valued. The outcomes of the 2014 actuarial valuation, and of the updates as at 31 March 2015 and 2016, are set out in this report on actuarial liabilities.

## Some fundamentals regarding the USS benefit structure

From 1 April 2016 there are changes to the benefits provided by USS. From that date the final salary arrangements which formerly applied to some members came to an end and all members now build up benefits on a Career Revalued Basis (CRB) in the new **USS Retirement Income Builder**. From 1 October 2016 USS Retirement Income Builder will only be built up in respect of salary up to a threshold of £55,000. Contributions in respect of salary above £55,000 will be paid into the new DC section of the scheme, the **USS Investment Builder**. This salary threshold will be revalued each year in line with CPI (subject to certain restrictions and reviewed in 2020). For more information about changes to the benefits provided please refer to the USS website, at www.uss.co.uk

The financing of scheme benefits is through contributions from the sponsoring employers and from the scheme members. These contributions are paid into the scheme and, together with the investment returns earned on these amounts, are used to pay benefits to members and/or their eligible dependants when they fall due, as well as meeting the costs of operating the scheme.

## How is the financial position of the scheme measured?

The scheme's financial position is measured by comparing the current value of its assets with the trustee's estimate of the current value of the scheme's liabilities. The current value of the scheme's assets is relatively easy to determine at a particular point in time, using their market value at that date. There are uncertainties inherent in estimating the current value of the liabilities, for example, the length of time for which a future pension might be paid, the possibility that a survivor's benefit might be paid, and the future rate of return on investment. Estimates of all these factors are used to determine the amount of assets that would be required today in order to meet, in full, the benefits members have already earned up to the date of the valuation.

As noted above the most recent full review of scheme funding, the actuarial valuation was last undertaken as at 31 March 2014. In any actuarial valuation, the trustee places a value on the liabilities which assumes 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. However, in addition to this the trustee is also required by law to value the scheme's liabilities assuming those liabilities had to be bought out by an insurance company. This latter measure is known as the 'buy-out' basis and provides a further reference point by which the health of the scheme can be assessed, but members should note that neither the trustee board, nor the scheme's stakeholders, have any plans to buy-out the scheme with an insurance company.

The actuarial valuation is the time when the trustee reviews all of the underlying assumptions relating to the scheme. The assumptions agreed and used for the 2014 actuarial valuation are shown on page 95. These assumptions will next be reviewed as part of the 2017 actuarial valuation. The actuarial report for 2015 and 2016 can also be found online.

## What was the position at the last actuarial valuation?

The latest actuarial valuation calculated that, as at 31 March 2014, the scheme's assets as a percentage of liabilities (described as the funding ratio) stood at 89% on a technical provisions basis and 54% on a buy-out basis. These funding ratios reflect the changes to future benefits as decided by the scheme's stakeholders. The technical provisions basis reflects the assumptions, described above, whereas the buy-out basis uses assumptions intended to approximate those that an insurer would use.

## How has the funding position changed since then?

During the period since 31 March 2014 there has been a great deal of volatility in financial markets, which has been reflected in the volatility of the scheme's deficit and funding ratio. The real yield on government bonds has continued to decline, and the continuation of this more pessimistic outlook for investors has resulted in an increase in the value placed on the scheme's liabilities.

As at 31 March 2015, the actuarial report showed the funding level of the scheme on a technical provisions basis had fallen to 86%, despite the trustee securing strong investment performance. The value of the scheme's assets rose by 18% or £7.5bn over the preceding 12 months; this included strong outperformance above the scheme's investment benchmark which contributed an additional £703m to the fund.

However, the increase in liabilities outweighed the growth in the fund's investments, leading to an increased deficit of £8.2bn, with the funding ratio falling from 89% to 86% in the year to 31 March 2015. On a buy-out basis the funding ratio similarly weakened from 54% to 47%.

During the current financial year (to 31 March 2016) the assets of the fund increased from £49.1bn to £49.8bn however the liabilities increased from £57.3bn to £59.8bn, leading to an increase in the deficit. This is largely due to the continued decreases to the low return environment. The results are summarised in table below.

## Funding position

For the year ended 31 March, in £billions

| | Actuarial valuation as at 31 March 2014 | Funding update as at 31 March 2015 | Funding update as at 31 March 2016 |
|---|---|---|---|
| Value of assets | 41.6 | 49.1 | 49.8 |
| Value placed on liabilities | 46.9 | 57.3 | 59.8 |
| Deficit | 5.3 | 8.2 | 10.0 |
| **Funding ratio** | 89% | 86% | 83% |

The 31 March 2015 and 2016 funding updates are based on projecting forward the assumptions used for the 2014 actuarial valuation (updated for market conditions); they do not involve the same detailed review of the underlying assumptions (including the financial, economic, sectoral assumptions for example) that takes place as part of the full actuarial valuation which will next be completed as at 31 March 2017. Assumptions are shown on page 95.

The trustee regularly monitors the scheme's funding position as part of the overall monitoring of Financial Management Plan introduced followed the 2014 valuation. The trustee remains of the view that, whilst the current position is undoubtedly difficult with considerable volatility, these circumstances should not, at this time, be considered to provide any definitive perspective on the long-term outcome. The trustee continues to focus on the long term, a perspective which is backed by the nature of the financial support that is available from the scheme's sponsoring employers. In addition to periodic monitoring, the long term investment outlook will again be reviewed more fundamentally at the next actuarial valuation.

A reconciliation of the change in deficit and a comparison with that expected in the 2014 valuation is set out in the performance overview section on page 14.

## What is the trustee board's funding plan?

The trustee's 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, and specifically that there should be no increase in the reliance placed on that support over time. The trustee is 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 2014 actuarial valuation the trustee incorporated this long-term, gradual de-risking into its funding approach, with the intention of reducing the amount of investment risk within the scheme over a 20-year period. Details of the trustee's investment approach can be found in the Statement of Investment Principles which is available online.

The 2014 actuarial valuation recovery plan requires employers to contribute 2.1% of salaries towards the deficit over a period of 17 years. The trustee has extended the period of the recovery plan (from 10 years in 2011) following an extensive piece of work undertaken by its advisor on the ability of the scheme's sponsoring employers to financial support the scheme (which is generally referred to as the employers' 'covenant'). The conclusion from that work was that there is good visibility of the ongoing strength of the covenant over the next 20 years thereafter it becomes less visible.

In calculating the contributions required for the recovery plan allowance for additional investment return, over and above that which the trustee allows for in its prudent assessment of the scheme's liabilities was assumed. The additional allowance being half the difference between the discount rate used to calculate the technical provisions and the expected return on assets.

## 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, which 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, but 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.

Further information about the PPF is available on its website at www.pensionprotectionfund.org.uk or you can write to Pension Protection Fund, Renaissance, 12 Dingwall Road, Croydon, Surrey, CR0 2NA.

## Principal actuarial assumptions

| Principal actuarial assumptions | 31 March 2014 | 31 March 2015 | 31 March 2016 |
|---|---|---|---|
| Investment return | 5.2% in year 1, decreasing linearly to 4.7% p.a. over 20 years | 3.98% in year 1, decreasing linearly to 3.5% p.a. over the next 19 years | 3.84% in year 1, decreasing linearly to 3.4% p.a. over the next 18 years |
| Market derived price inflation | 3.6% p.a. | 3.2% p.a. | 3.15% p.a. |
| Inflation risk premium | 0.2% in year 1, decreasing linearly to 0.1% p.a. over 20 years | 0.2% in year 1, decreasing linearly to 0.1% p.a. over the next 19 years | 0.19% in year 1, decreasing linearly to 0.1% p.a. over the next 18 years |
| Price inflation – Retail Prices Index | Market derived price inflation less inflation risk premium | Market derived price inflation less inflation risk premium | Market derived price inflation less inflation risk premium |
| RPI/CPI gap | 0.8% p.a. | 0.8% p.a. | 0.8% p.a. |
| Price inflation – Consumer Prices Index | RPI assumption less RPI / CPI gap | RPI assumption less RPI / CPI gap | RPI assumption less RPI / CPI gap |
| **Salary increases** | | | |
| 1) General pay growth * | CPI in year 1, CPI +1% in year 2 and RPI + 1.0% p.a. thereafter | CPI in year 1, RPI + 1.0% p.a. thereafter | RPI + 1% p.a. |
| 2) Salary scale for past service | Scale adopted (in first two years) reflecting recent experience | Scale adopted (in first year) reflecting recent experience | N/A |
| Pension increases in payment | CPI assumption (for both pre and post 2011 benefits) | CPI assumption (for both pre and post 2011 benefits) | CPI assumption (for both pre and post 2011 benefits) |
| Mortality base table | 98% of SAPS S1NA "light" YOB unadjusted for males and 99% of SAPS S1NA "light" YOB with a -1 year adjustment for females | 98% of SAPS S1NA "light" YOB unadjusted for males and 99% of SAPS S1NA "light" YOB with a -1 year adjustment for females | 98% of SAPS S1NA "light" YOB unadjusted for males and 99% of SAPS S1NA "light" YOB with a -1 year adjustment for females |
| Future improvements to mortality | CMI_2014 with a long term rate of 1.5% p.a. | CMI_2014 with a long term rate of 1.5% p.a. | CMI_2014 with a long term rate of 1.5% p.a. |

* This assumption used only in deficit recovery contributions for periods after 31 March 2016.

# Actuarial certificate of technical provisions

## CERTIFICATION OF TECHNICAL PROVISIONS

| | |
|---|---|
| **Name of 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 2014 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 24 July 2015.

| | |
|---|---|
| **Signature** | |
| **Name** | Ali Tayyebi |
| **Qualification** | Fellow of the Institute and Faculty of Actuaries |
| **Date of signing** | 24 July 2015 |
| **Name of employer** | Mercer Limited |
| **Address** | 4 Brindley Place<br>Birmingham<br>B1 2JQ<br>United Kingdom |

# Notes

USS

UNIVERSITIES SUPERANNUATION SCHEME

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