PENSIONS POLICY INSTITUTE

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The way forward for university pensions

Pensions Policy Institute

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Summary

- University pensions, particularly those provided by the Universities Superannuation Scheme (USS), have been the subject of much debate and controversy for some years. Unlike most UK DB schemes which have closed to future accruals, USS remains open but faces a number of market and regulatory pressures that have contributed to the difficulties being faced by members and employers.
- In this report, we seek to answer three questions:
 - ➤ How did we arrive at this position regarding university pensions?
 - ➤ What can be done to improve the situation?
 - ➤ How can we ensure the same situation does not arise again?
- The report examines the issue from a member perspective and explores what different pension structures would mean for the membership. It also explores the needs of different segments of university staff with an eye to Equality, Diversity and Inclusion (EDI) issues.
- The current situation can be best described as one of distrust between members, their employers and the pension scheme.
- It has been created by 11 years of turbulence for the scheme with large and fluctuating deficits in funding, in large part the result of difficult market conditions and changing regulations. Benefit and contribution changes have been made in order to ensure that the scheme remains sustainable and pays out to future members.
- The frequent benefit changes that have been made reflect this turbulence and have left members uncertain about their future retirement incomes, unable to calculate what pension they can expect to get and lacking confidence that any stability will return to university pensions.
- Some groups have felt the impact of the changes more than others:
 - A shift from final salary to career average is more detrimental to women (and men) who reach more senior positions (and higher pay) later in their career
 - > Younger staff will lose out more than older staff through all of the changes due to the longer time that they will accrue lower benefits
 - > Younger members of staff are also opting out of the scheme in significant numbers due to affordability issues, a lack of trust in what the scheme will deliver and the lack of flexibility in the scheme
- The loss of benefits is the subject of most dissatisfaction but has also brought an increased focus on other aspects of the scheme including its governance, costs and communications.

Summary contd.

- The analysis in section two of this report suggests that no one benefit structure works perfectly to deliver on the criteria used for the evaluation.
 - ➤ Returning to the previous benefit structure would deliver the best outcomes in terms of inflation protection, deliver a good level of pension and is fairer to different groups than many other options. However, it may not deliver an affordable and sustainable solution and could lead to further changes in benefits in the future.
 - > The current benefit structure delivers a lower pension and continues to deliver longevity protection but is less fair to some groups and provides much weaker protection against inflation. However, it is likely to be more affordable and sustainable.
 - > Tiered contributions could make the current benefit structure somewhat more affordable for those on lower incomes but could increase contributions for other members.
 - ➤ A DC feeder could improve affordability for some groups but it could also remove valuable longevity protection, predictability and protection from stock market falls for some individuals who do not stay in the scheme for long.
 - ➤ DB/DC flexibility could offer some members who feel confident managing their own investments with greater flexibility and could, if taken up, make the scheme more sustainable for those who do not transfer.
 - > CDC offers a number of benefits including longevity protection (but not without some risk to benefits payable), delivers an adequate pension and could be more affordable and sustainable. However, it does not deliver an entirely predictable retirement income or full protection from stock market falls. Moreover, it is not a simple scheme to communicate.
 - > Pure DC has a number of disadvantages for members but does address the issues of affordability and sustainability and could still deliver, on average, an adequate pension.
- Determining what can be done to improve the situation has no simple answer and is a question of trade-off, essentially between adequacy of pension and affordability / sustainability. Answering the question will require further debate to establish how important different values are to different groups of members and non-members and a debate about the balance of importance between affordability (for members and employers) and retirement outcomes.

Summary contd.

- The challenge of resolving the current situation of distrust, dissatisfaction and industrial unrest will not be easy. 11 years of instability have left members fearful and lacking confidence in the scheme and their employers to provide adequately for them in their retirement.
- Resolving and stabilising the benefits delivered by the scheme will contribute towards a restoration of trust in employers and confidence in the scheme but may not be enough in the short term.
- Restoring trust and preventing the situation recurring will require:
 - ➤ Providing benefits that balance adequacy with affordability for members and employers
 - A clear demonstration of why the trade-off is necessary and what impact it will have on different groups of members
 - > Where any future changes are considered, they are not disproportionately detrimental to groups that are already disadvantaged
 - > Evidence that the governance of the scheme acts in the interest of members as well as employers
 - > An explanation of why the costs of the scheme are what they are and whether they deliver good value to members and employers
 - > Clear, consistent and objective information for members.
- While a solution to the problems facing university pensions and staff are complex, a solution that works to provide the right balance should be possible. Restoring trust and confidence may take longer but is worth working towards by all parties. We hope that this paper provides a contribution to the on-going debate.

Introduction

- University pensions, particularly those provided by the Universities Superannuation Scheme (USS), have been the subject of much debate and controversy for some years. Unlike most UK Defined Benefit (DB) schemes which have closed to future accruals, USS remains open but faces a number of market and regulatory pressures that have contributed to the difficulties being faced by members and employers.
- Since 2017, a sequence of reforms have been designed to address the issue of the rising cost of DB provision and as part of an attempt to preserve Defined Benefits for future retirees. They have resulted in a combination of higher contributions for employers and members and reduced future benefits for members.
- The proposed and actual reforms have triggered industrial unrest and action across the university sector; concern about the governance of USS; disputes about the outcome of the valuation process; and concern about the appropriateness of the current benefit structure for different segments of university staff.
- In this report, we seek to answer three questions:
 - ➤ How did we arrive in this position regarding university pensions?
 - ➤ What can be done to improve the situation?
 - ➤ How can we ensure the same situation does not arise again?
- The report also focuses on the needs of different segments of university staff with an eye to EDI issues.
- The report examines the issue largely from a member perspective. It does not explore in detail the regulatory environment, over which members and employers have little control. Nor does it explore the questions of covenant strength, the USS investment strategy or the levels of prudence adopted in the valuation, all of which are the subject of considerable academic debate.
- The research conducted for this report includes:
 - ➤ Desk research on reports, research, articles and social media commentary relating to the current situation regarding university pensions.
 - ➤ The output from a workshop attended by 10 members of Kings College London staff (both academic and non-academic) as well as experts from the pension sector, plus 2 individual interviews and some written submissions.
 - ➤ The draft report was reviewed by several industry experts.



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How did we arrive in this position regarding university pensions?

USS: a long history of delivering university pensions

- In this section of the report, we explore the recent history of university pensions, the drivers of change and the impact that the changes have had on different segments of university staff.
- The Universities Superannuation Scheme (USS) is the largest funded private pension scheme in the UK by asset size. It is a hybrid scheme delivering defined benefit (DB) and defined contribution (DC) pensions to its members.
- Universities Superannuation Scheme (USS) was established in 1974 by the universities sponsoring the scheme to provide pension provision for academics and other senior employees working in higher education and related sectors.
- The scheme trust document establishes the way in which the scheme is run and the scheme is governed by a corporate trustee Universities Superannuation Scheme Limited, who in turn employ a team of administrators with support from Capita to run the scheme. Investment management is overseen by USS Investment Management Limited (USSIM).
- The Joint Negotiating Committee (JNC) is key part of the governance structure and is responsible, among other things, for determining how changes in contribution rates should be shared between members and employers and whether there should be a change to benefits.
- The scheme has grown from 13,000 members in 1974, to around 500,000 today, with the value of assets increasing from just over £10 million to more than £88.8 billion (March 2022).
- USS is funded by contributions from both members and employers (currently 31.2% of salary is split 31% member and 69% employer). These contributions are invested by the Trustee to ensure there is enough money to pay the benefits that have been accrued to date as they fall due in the future. When there is a deficit of assets less liabilities, the contributions cover both the recovery of the deficit and new benefits being accrued.
- The Trustee conducts an actuarial valuation of the scheme at least every three years to determine the level of assets required to pay the DB benefits (also called the scheme liabilities). The March 2020 trienniel valuation revealed a deficit of assets over liabilities of £18bn (with no changes to benefits) or expressed another way, was 78% funded (on a technical provisions basis).
- In its 2022 report and accounts, USS reported following a £1.5bn deficit as at March 2022 (98% funded) following the change in benefits and an improved covenant support package.

A complex interaction of forces are shaping DB pensions

- The reasons for the current position of university pensions are numerous, complicated and complex. Some can be controlled to a greater or less extent by employers and members. Others are outside of the control of any of the stakeholders.
- In common with all other UK DB schemes, the past 11 years of USS history have been influenced by a number of important external forces, including:
 - A strengthening of the regulatory environment for DB schemes that has put more power into the hands of the Pensions Regulator (TPR) which now has a strong influence over the approach used for the valuation and the pricing of benefits. Adequate funding of DB schemes has become a top priority for the regulator which is concerned to prevent schemes entering the Pension Protection Fund. In the case of USS, this could only happen were the entire group of universities sponsoring the scheme to become insolvent. Regulation has also imposed a stronger requirement for prudence in valuations, something that has become a subject of considerable debate among academic commentators.
 - As noted above, investment markets have been volatile and, in early 2020 in particular, values fell swiftly, only to largely recover over the next two years. The value of assets held by the scheme affects one side of the scheme's balance sheet while interest rates and bond yields have an important effect on the value of liabilities.
 - ➤ Rising inflation and rising longevity are also important factors in shaping the value of liabilities. Inflation levels mean that increases in pension values are locked in and rising longevity means that they need to be paid for longer.
 - > The past 11 years have also witnessed important changes to the higher education sector with market forces playing an increasing role in shaping the finances of the sector.

Following many years of relative stability, the past 11 years have been marked by turbulence

- At the time of writing in June 2022, the current position of university pensions, specifically those provided by the Universities Superannuation Scheme could be best described as turbulent; characterised by volatile funding levels for the scheme; rising costs of benefits; industrial unrest and a lack of trust in the role of the employer and the scheme.
- This period of turbulence can be traced back to the 2011 valuation which triggered the first move away from final salary based retirement benefits to benefits defined by a career average for new members of the scheme. For some years from that date, members who joined before the change continued to accrue final salary benefits, leading arguably to some intergenerational unfairness. The changes following the 2011 valuation led to industrial action over pensions; thought to be the first time that such action had been take in the university sector.
- The results of the 2014 valuation led to further changes to the scheme, including closing final salary accrual to all members of the scheme, increasing contributions for both employers and members and capping Defined Benefits (DB) to the first £55,000 of salary with contributions invested in a Defined Contribution (DC) section above that salary level.
- The unrest was revived by the initial outcome of the 2017 valuation, which led to a recommendation to close the DB section of the scheme to all and to move forward with all contributions being used to fund DC benefits.
- Industrial action followed and the recommendation to close the DB section was withdrawn. In an attempt to calm the situation and provide a fresh evaluation of the situation, a Joint Expert Panel (JEP) with an independent chair was convened and tasked with reviewing the 2017 valuation and making recommendations about future valuations. The JEP produced two reports in 2018 and 2019. As described later in this section, several of the JEP recommendations have been adopted.
- The chart on the next page provides a very high level summary of the events that have led up to the 2022 position; showing the main benefit and contribution changes that have taken place.

A high level summary of key events



1975	2011	2014/16	2017/18	2018/19	2020/22
USS established	2011 Valuation	2014 Valuation	2017 Valuation	2018 Valuation	2020 Valuation
	£2.9bn deficit	£5.3bn deficit	£7.5bn deficit	£2.6bn deficit	2020 £14bn deficit March 2022 £1.5bn deficit
Final salary 1/80 th	Career average (for new) Industrial action	Career average for all (1/75 th) and capped. DC top up	Proposals to close DB and move to DC Industrial action Career averag maintair	re JEP II ned reports	Proposed 1/85 ^{th,} lower DB and indexation caps (deferred) Industrial action
Employer 12% Member 6%	Employer 16% Member 7.5%	Employer 18% Member 8%	Employ 18% Member	21.1 /0 Mombor	Employer 21.4% Member 9.8%

2020 valuation delivered large deficit, higher costs and triggered further unrest

- All of the valuations since 2011 have led to a dilution of benefits and an increase in contributions. However, perhaps the most controversial valuation to date was the 2020 valuation which led to further benefit changes determined by the Joint Negotiating Committee (JNC).
- The decision to go ahead with the valuation was itself controversial, in large part due to the timing which coincided with the bottom of a downturn in many investment markets in response to the effects of the COVID-19 pandemic. However, it had been agreed following the 2018 valuation that a 2020 valuation would go ahead and was needed to intercept significant increases in contributions planned for 2021.
- Several commentators noted the unfortunate convergence of conditions that led to the worst deficit for the scheme declared at a triennial valuation.
 - > The value of equities (shares) around the world fell sharply in February and March 2020 as the consequences of the pandemic became more evident. The FTSE100 share index hit a 3-year low in March 2020 (and again in October 2020) but then began a rapid recovery through the last part of 2020 and into early 2022. Other stock markets responded in a similar way. Many of the schemes assets will have dropped in value just before the valuation was struck.
 - ➤ Interest rates around the world and the yield on government bonds also fell in March 2020. In the UK interest rates were cut to 0.1%. In some European countries the yield on government bonds turned negative. This has important consequences as the long term yield on bonds is used to discount the scheme's future liabilities (the benefits that have already been built up by members). The lower the yield, the higher the liabilities and the more money the scheme has to hold today to pay those benefits in the future.
- With hindsight, market conditions were at their worst for many years. However, the finalisation of the valuation in 2022 took these into account and the trustees indicated to employers that they would not have expected a different outcome from a 2021 valuation. Subsequent improvements have been reflected in the valuation monitoring during 2021 and 2022. Assets have improved in value and the value of liabilities has fallen as gilt yields have risen. However, inflation has risen sharply in 2022 and will increase the value of benefits that have to be paid in the future.
- The deficit of assets over liabilities was reported as ranging between £14.9bn and £18.4bn, depending upon the level of (covenant) support offered by employers in the scheme, contributions needed to support future benefits ranged between 33.6% and 37% and deficit recovery contributions ranged from 8.5% to 19.2%.
- The combined contribution rates of between 42.1% and 56.2% were deemed unaffordable by employers (as represented by UUK) and, having challenged some aspects of the valuation, recognised the need for benefit changes to bring contributions back to an affordable level.
- The members' response to the valuation (as represented by UCU) also challenged the level of prudence exercised by USS in the 2020 valuation and criticised the proposals for benefit changes put forward by UUK; putting forward their own solution which was rejected by the employers. Industrial action followed.
- All but one of the proposed benefit changes have now been implemented with a temporary hold on the changes to indexation and revaluation of benefits.

JEP proposed a number of technical changes, new principles and alternative paths to valuations. Some JEP recommendations have been adopted by USS

- Following discussions with ACAS in 2018, the employers, represented by Universities UK (UUK) and the members, represented by University and College Union (UCU) agreed to establish a Joint Expert Panel (JEP). The panel met for two reviews and produced two reports.
- The terms of reference for the first report (Sept 2018) were focused on assessing the 2017 valuation with a view to proposing a set of principles to underpin the future joint approach of UUK and UCU to the USS valuation. The JEP proposed a number of technical changes that could be taken into account and five principles for concluding the valuation:
 - 1. A re-evaluation of the employers' willingness and ability to bear risk this would mean a reassessment of the sponsor covenant.
 - 2. Adopting a greater consistency of approach between the 2014 and 2017 valuations this would mean changing the approach to deficit recovery contributions.
 - 3. Achieving greater fairness and equality between generations of Scheme members this would mean smoothing future service contributions.
 - 4. Ensuring the valuation uses the most recently available information this would mean using latest available data and taking account of recent investment considerations and outcomes.
 - 5. Taking the uniqueness of the Scheme and the HE sector more fully into account.
- During the course of the JEP's work, a further valuation of the scheme was undertaken (2018). The 2018 valuation took into account some of the JEP1 recommendations (the incorporation of the latest mortality and investment return data and a reassessment of the employer covenant). However, smoothing of future service contributions was not taken into account. In the 2020 valuation, USS once again allowed for investment outperformance in calculating deficit recovery contributions and adopted a much larger long-term risk budget. The 2018 and 2020 valuations concluded that the covenant of the sector remained strong, rejecting TPR's view in 2018 that it was 'tending to strong'.
- The terms of reference for the second review required the JEP to agree key principles to underpin the future joint approach of UUK and UCU to USS valuations. The second report (Dec 2019) set out a number of proposals designed to improve levels of trust between the parties, improve governance of the scheme and deliver a different valuation outcome, including: a set of shared valuation principles agreed by UUK and UCU; proposals for changes in valuation governance including greater visibility of trustee directors, a review of the working of the Joint Negotiating Committee (JNC) and the establishment of a joint forum for modelling of valuation assumptions; alternative paths to the valuation that included a simpler and more appropriate valuation methodology and the introduction of a dual discount rate; and the development of a joint road map for implementing the report's recommendations.
- In March 2021, USS published a summary of its response to the JEP's second batch of recommendations, noting that several of the recommendations had been adopted including a joint UUK/UCU purpose statement, agreed principles for future valuations, the establishment of a valuation methodology working group, the adoption of a dual discount rate in the 2020 valuation and a commitment by employers to the mutuality of the scheme. USS also stressed in response to the JEP the repeated view of the regulator that USS was at the limits of, or even beyond the limits of, prudence.
- In July 2022, UUK announced a review of the governance of the scheme and the appointment of an independent chair to undertake the review.

Sconcerning Concerning Odisappointing Frustrating Unaccountable Untrustworthy

"Ever feel like you've been played? I don't need a podcast to achieve a decent income in retirement, I need those benefits back that were stolen from my future. <u>#USSmess</u>" Twitter, June 2022

"Utterly disillusioned and furious. The years of work I've seen colleagues put in to make the sector incrementally more inclusive and equal are entirely dwarfed by this vandalism.

#USSmess" Twitter, Feb 2022

"The #USSMess is pretty high on the list of reasons for leaving my current position and moving to Germany" Twitter, July 2022

> "Whether they care or not, I think UUK has underestimated the massive exodus of talent and diversity that they have just triggered. #USSmess" Twitter, Mar 2022

Members largely negative about USS and the current situation

- Many members have been outspoken about the current situation. Their views have been heard through member research, their union and social media. Views are largely negative, although it should be noted that these views may not be fully representative of the population of USS members and potential members. Some of the negativity may be due to a lack of clarity and understanding about the rationale for the changes made and the need to maintain the viability of the scheme.
- In its member survey in 2020, as reported in the USS 2021 report and accounts, just 31% of members reported a good or very good relationship with USS. The word cloud opposite contains words used to describe the current situation by academics and professional services staff at Kings College London in interviews and a workshop for this project. There were no balancing positive views expressed. The words underpin a lack of trust between members of the scheme and the universities (as employers) and members and USS itself.
- Quotes from Twitter, albeit anecdotal and not representative, reinforce the negative views revealed in this research.
- The characterisation of the current situation reflects deeply-felt concerns about the future of pensions following several reductions in benefits and increases in contributions over recent years. One academic interviewed for this project described the position as having moved from 'gilt-edged to complete chaos'. Another noted that younger members were becoming increasingly concerned about the sustainability of USS and whether it would be there to deliver a pension to them in their retirement.
- Another word which featured strongly in discussions is 'discriminatory' with particular concerns raised about the impact of changes on women; a subject that we return to in more detail later in this section.

Younger members affected most by the changes but higher paid also receive less than expected

- Different members have been affected in different ways by the changes made to the scheme. Some of those affected will see a reduction in their expected retirement income. Others not yet in the scheme will receive less than previous generations would have received for the same or lower contributions.
- The most significant changes are across the generations. Those just joining the scheme will never accrue the same benefits as those who accrued years of final salary benefits. An individual joining the scheme in 2010 could expect to generate 1/80th of their final salary every year with inflation protection up to 10%, in return for a contribution of 6%. Today, a new joiner can expect to generate 1/85th of their career average earnings with less favourable inflation protection, in return for a contribution of 9.8%.
- Almost all active members of the scheme (those currently contributing) will experience a reduction in the amount of retirement income that they will receive due to a combination of the lower rate of accrual (1/85th instead of 1/75th), the lower threshold for Defined Benefit pensions (£40,000 instead of £59,883) and, when implemented, the lower cap on inflation indexation (2.5% instead of 5%+ half of any excess up to 10%).
- Career low to medium earners or those who only exceed the cap for a small part of their career are less affected by the cap on DB than higher earners.
- Modelling by Grant, Hindmarsh and Koposov published in May 2022 illustrated the potential impact of the changes under different inflation scenarios (assuming that all of the proposed changes are implemented, including the more limited CPI protection). The analysis compared benefits accrued from 2022 under the pre and post 2022 benefit structures (the changes relate only to new benefits and not those already accrued). The analysis revealed that:
- Among members earning less than £40,000 in 2022, many could be expected to receive 20% less in future benefits rising to 30% for some (CPI 2.5%).
 - ➤ Some higher earners could expect to receive 30% less.
 - > Age is also an important factor. All of those aged between 20 and 40 can expect to receive 20% + less along with the majority of those aged 40-50, if CPI averages 2.5.
- It is important to note that the overall effect on individuals will depend upon the value of benefits that have already been secured and that will not be changed.
- It is also the case, as reported by the JEP, that many younger members choose to opt out of the scheme, in part due to affordability issues and in part due to uncertainty of job tenure, the latter created by the rise in fixed term contracts among junior academic positions.
- Reductions in benefits (and contributions) will always have a different effect on different groups, particularly as existing accrued benefits remain unaffected. A failure to reduce benefits and maintain higher contributions can also lead to detriment for some groups unable to afford higher contributions.
- It is a normal feature of DB schemes that younger members of the scheme pay the same contribution as older members, even though the 'price' of one year's benefit for an older member will be more due to the fewer number of years in which the fund can grow before retirement. In effect, younger members are cross-subsidising older members, although for those who remain in the scheme for some time, this evens out.

Do the changes disproportionately affect women and other members?

- A number of those who participated in discussions for this research suggested that the changes made to pension benefits in recent years have not been tested against equality legislation and potentially discriminate against women and other protected characteristic groups.
- Occupational pension schemes such as USS have an exemption under the Equality Act, whereas employers are subject to the terms of the legislation. The question is not strictly whether the changes discriminate against women but whether they are fair. DB schemes, by design, incorporate cross-subsidies between different groups of members. This is often done to achieve simplicity within the scheme.
- The issue of whether the pension changes are unfair for women in particular hinges on the career progression and pay of women compared to men. The gender pay and pension gaps have been well-researched by PPI and other organisations. PPI work has focused on DC pensions but some of the drivers of the gap apply equally to the position of women in universities.
 - ➤ Data from UCEA reveals a gender pay gap of 16.2% in 2020/2021 across the higher education sector; down from 22.1% in 2010/2011.
 - ➤ Women are under-represented at senior levels in higher education. Advance HE reports that 77.6 % of all professorial (5A level) posts are occupied by male employees and that the proportion of male staff on a senior contract level was nearly three times higher than for female staff. Reasons for under-representation go beyond women taking career breaks, with women reporting that they are encouraged to hold back on seeking promotion and that women are less assertive in pay negotiations. Anecdotal evidence suggests that women who do progress, tend to be at senior levels for a shorter period than male counterparts. Gender-blind recruitment and assessment of roles and CVs in some universities, including KCL, have gone some way to addressing the issue.
 - ➤ A similar pattern of under-representation is held to exist among ethnic minority staff in senior roles, suggesting that there are barriers to their career progression.
- Given the differences, a shift from final salary to career average is more detrimental to women (and men) who reach more senior positions (and higher pay) later in their career. In a final salary scheme, it mattered less how long an individual was in a senior, well-paid position. Whether three years or 20, an individual would receive the same pension for the same final salary, regardless of how much the individual had paid into the scheme. A final salary pension could be viewed as compensating women for slower career progression. However, final salary pensions also exhibit some aspects of unfairness since the higher paid tend to receive more pension per £ of contribution than the lower paid.
- However, the move to career average can benefit other groups, particularly those who do not progress in real salary terms over their career. There is also less cross-subsidy from the lower paid to the higher paid.
- The subsequent changes to the career average pension have been less obviously unfair to women, other than, by definition, mirroring the slower career and pay progression. However, detailed modelling following typical career progressions has not been conducted. To the extent that women are more prevalent among the lower earners, then the detriment described in the previous slide would apply to them.
- A cap on indexation of benefits will have a greater effect on those who live longer, on average women, as the gradual deterioration in the value of the pension compared to inflation will be experienced for longer.
- One other gender difference in the scheme is that men contributing the same as women for the same benefit at retirement will, on average, receive less during retirement due to lower longevity. Men are effectively cross-subsidising women in the scheme.

The loss of benefits has brought other concerns into focus

- While it is the loss of benefits that is the focus of most of the discontent regarding USS, the fact that there have been so many incremental changes over recent years adds to the uncertainty. There is a sense that the USS pension can no longer be called Defined Benefit due to the sense of constant change.
- Part of the discontent stems from a sense that academic careers have historically been a vocation which involved a trade-off between pay and other benefits. In the past, in return for lower pay than would be available in the private sector, academics received a good pension and other benefits that removed worry, uncertainty, risk and time-consuming activities. There is a strong sense that the position on pay remains the same (i.e., lower than the private sector) but that benefits have been eroded leading to greater uncertainty and more time needing to be spent on financial activities.
- The loss of benefits has also brought concerns about the scheme and USS more sharply into focus:
 - ➤ The governance of the scheme and, in particular, the perceived dominant role of the employer in negotiations and benefit design, can leave members feeling that they lack power in decision making. The JEP report suggested a number of changes which may now resurface as part of the UUK-led governance review. There has also been criticism levelled at the trustees of the scheme for the perceived lack of challenge levelled at the Pension Regulator (TPR).
 - ➤ Some members have expressed concerns about the costs of running USS, in particular the costs of management and investment.
 - ➤ Some members have been critical about the quality and lack of apparent consistency of information that they receive from the scheme, employers and the union and would like access to an independent source of information about the scheme.

"It was just something you did [joined the pension]...
and it was part of the deal; you would not get paid as
much, but you would get a good pension."

JEP research

"Change is so regular, we don't know where we are." PPI interview

"Members feel they have no agency over what happens."

PPI interview

"The quid pro quo [for lower pay] was that all worldly pressures were removed and dealt with by the university – from meals to pensions." PPI interview

"USS is actually amongst many reasons why I am trying to leave academia, because they don't listen to our needs" JEP research

The current situation of distrust is being generated by funding deficits which have led to frequent benefit changes

- The current situation can be best described as one of distrust between members, their employers and the pension scheme.
- It has been created by 11 years of turbulence for the scheme with large and fluctuating deficits in funding.
- The frequent benefit changes that have been made to reflect this turbulence have left members uncertain about their future retirement incomes, unable to calculate what pension they can expect to get and lacking confidence that any stability will return to university pensions.
- Some groups have felt the impact of the changes more than others:
 - ➤ Female academics and professional services staff have lost out more than men with the switch from final salary to career average due to their typically slower career and pay progression.
 - ➤ Younger staff have lost out more than older staff through all of the changes due to the longer time that they will accrue lower benefits.
 - ➤ Younger members of staff are also opting out of the scheme in significant numbers due to affordability issues, lack of trust in what the scheme will deliver for them, and the lack of flexibility in the scheme.
- The loss of benefits has also brought an increased focus on other aspects of the scheme including its governance, costs and communications.

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What can be done to improve the situation?

Improving the situation must start with what academic and professional services staff value in a pension

- Considering how best to improve the situation must start with considering what academic and professional services staff value in a pension and must address the concerns raised in the previous section of this paper.
- The research conducted for JEP and discussions held for this report provide insights into the priorities that employees in higher education place on their benefits and their pension in particular. It is important to note that the JEP research was qualitative in nature and took place in 2019 before the latest round of changes to the USS pension.
- The JEP research explored member and non-member attitudes to pensions in general and USS in particular, the value placed on a pension and what features are most important to them. Similar themes were explored among KCL staff for this project. There was broad agreement on the key themes across the two pieces of research. A good pension is described by many respondents as one which:
 - 1. A retirement income grows with the cost of living
 - 2. Not having to worry about running out of money in retirement
 - 3. A known and predictable retirement income for life (even if what I contribute has to change)
 - 4. Not having to worry about the impact on my retirement income if stock markets fall
- All of these are features of a DB pension, albeit that some features can be expensive to deliver.
- However, a smaller number of respondents were in favour of characteristics of a DC pension, notably:
 - 1. The ability to take a cash lump sum or an income from age 55 even if still working;
 - 2. The ability to pass on money left in your pension to who you choose;
 - 3. The choice to make my own investment decisions;
 - 4. The ability to change the amount of income you get at different stages of your retirement;
 - 5. Knowing how much I am going to contribute each year even if that means I won't know how much pension I'll get.
- For some of this latter group, particularly younger respondents, affordability was an issue whereas for some of the older group, taking control of investments and greater retirement flexibility were more important.
- In the trade-off between certainty of retirement income and certainty of contribution, for most respondents, it is the former that matters most. However, respondents to the JEP research felt that their USS pension was failing to deliver the predictability of retirement income that they would like.
- Both pieces of research suggest that meeting the needs and preferences of all groups will prove difficult.

JEP research suggests that for most, predictable income overrides the need for low, consistent or flexible contributions



"While some knew that the ideal would be predictability of retirement income AND certainty of contributions, when pushed to choose, 78 out of 91 who were asked the question opted for predictability of retirement income over certainty of contributions."

Report of the Joint Expert Panel, 2019

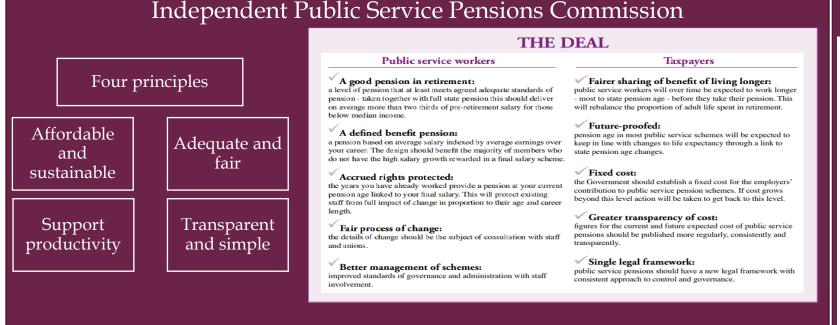
"Some [members] would choose lower contributions which could reduce the opt-out and double the number of members, which would strengthen the scheme."

Report of the Joint Expert Panel, 2019

Some of the issues facing USS are similar to those considered in the 2010 review of public sector pensions and the recent TFL independent review



- The review of public sector (DB) pensions led by Lord Hutton of Furness was driven by concerns about the sharply rising costs of Defined Benefit (particularly final salary) pensions in the public sector and the implications for current and future taxpayers (who effectively pick up the residual costs after member contributions). In its review the Independent Public Service Pensions Commission (IPSPC) proposed that four principles should underpin any reforms of public service pensions and concluded that the reforms should deliver on ten measures, as described below. It was intended that if applied, these should help to restore trust and confidence going forward. However, the review also recognised that trade-offs would be necessary in reaching an acceptable solution; for example delivering an adequate pension could conflict with a desire for affordability.
- More recently, an independent review of TFL pensions also produced a list of principles against which to assess potential options for reform.
- It is possible to see how the principles from these reviews could be applied to the position of the universities with the aspects of the deal that apply to taxpayers being applied to the employer in the case of university pensions.



TFL Independent pension review

Figure 1: Principles for Assessing Potential Options for Reform (Assessment Principles)

- Adequacy of benefit provision at retirement including the provision of ill-health early retirement and death in service benefits.
- A scheme with high take up levels.
- 3. Protection of members' benefits built up to date.
- A pension arrangement within the wider context of TfL's remuneration and reward package that is competitive for recruitment and retention purposes.
- 5. Fairness between different cohorts of members and generations of members.
- An affordable level of regular contributions now and in the future which avoids excessive volatility in pension contribution levels.
- 7. A fair balance of contributions between members and employer.
- A scheme that manages risk by satisfying the desire for employers for confidence in the affordability of providing benefits over the short and longer term and, on the part of the scheme members for a stable benefit structure that generates adequate benefits at retirement.
- Sustainability over the long-term, as benefits will become payable for many decades to come, meaning an ability to pay benefits built up now and in the future and a Scheme that can adapt to the future needs of members and sudden external shocks.

Scheme design is a key element of improving the situation but other factors will be important

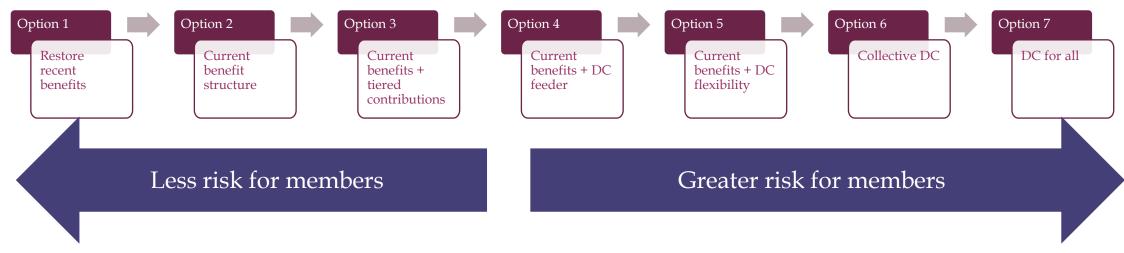


Because benefits (and consistency of benefits) are at the heart of the current discontent, we consider first whether a change in benefit design could contribute to improving the situation.

The seven options considered afford different benefit structures, levels of risk for members and degrees of flexibility in terms of contributions and how retirement benefits are taken.

It is worth noting that there are many variations on and combinations of the options considered in this report but that the ones chosen have been shaped by a combination of the current debates around university pensions, changes taking place elsewhere in the sector and changes taking place in UK pension legislation.

In the final section of this report we return to some of the other concerns that members and non-members have about the scheme and consider how they might contribute to ensuring that the current situation does not happen again.



Options considered are shaped largely by legislation, affordability and the current narrative

- In determining the seven options reviewed below, we have chosen not to consider a return to final salary pensions due to the very high costs involved; on average, in excess of 50% of salary. We have instead considered variations on career average DB, DC and CDC, while some options combine DB and DC in a different way to the current scheme. The seven options under consideration below, were selected based upon a high level view on affordability and some of the options that are being explored in different parts of the university sector and other sectors that continue to enjoy DB pensions and current pension legislation that essentially permits only two main types of pension: Defined Benefit and Defined Contribution;
 - Most Defined Benefit (DB) pensions pay you a pension based upon the number of years of membership of the scheme and your salary, either your final salary or the average through your career. Your pension once in payment is guaranteed and will rise in line with inflation (usually subject to a cap). Benefits also usually include life insurance, a guaranteed pension for a spouse, partner or other dependents and the option of a tax-free lump sum at retirement. Most DB pensions in the private sector have been closed, although benefits already accrued are secure unless the employer becomes insolvent, in which case the scheme may move to the Pension Protection Fund and some benefits may be reduced. DB pensions still exist across the public sector and in the university sector, provided by either USS, SAUL or the Teachers Pension Plan (the latter is not a funded scheme).
 - ➤ With Defined Contribution (DC) pensions the value of any retirement income you have depends on a number of different things:
 - o the amount of contributions made by the member and their employer;
 - o the performance of the investments in the funds that the member chooses or the default fund;
 - o the charges and costs within the scheme;
 - o the way in which the lump sum available at retirement (or from age 55) is used. Members in DC schemes have considerable flexibility in how they use their pension savings in later life. These include: buying an annuity with all or some of their fund, which would secure a guaranteed pension, could offer inflation protection and a pension for a partner; gradually drawing down their fund to provide an income that would not be guaranteed and could run out; or taking the fund as a single or multiple lump sum rather than generating an income. Funds not used up on death can be passed on to a number of nominated beneficiaries.
 - ➤ What is described as a third way, but is still technically DC, is emerging in the UK. This is known as Collective DC (CDC). As yet there are no CDC schemes in the UK, although Royal Mail is in the process of implementing a CDC scheme to replace their DB scheme and there are schemes operating in other countries.
- For each of the seven options, we firstly describe the option and then evaluate against the framework using existing quantitative and qualitative evidence.

Scheme design is a key element of improving the situation but other factors will be important

In the section below, we examine seven different options for future scheme design and assess these against:

- the top four aspects of a pension valued by members in the JEP research; and
- an adapted set of principles from IPSPC and TFL reviews.

In evaluating the options, we have not sought the views of USS or employers on the practicality of implementation; nor have we sought detailed views from the academic and professional services community. The evidence for the evaluation is drawn from existing research and modelling. More detailed evaluation would be required before proposing a particular solution.

The table alongside summarises the evaluation framework used below. Each option is assessed against each criteria and is given a RAG rating according to the extent to which it satisfies the criteria.

This paper is intended as only an initial evaluation based on existing research and modelling. Clearly, any further debate around the subject will require input from a broader range of stakeholders and further detailed research and modelling.

	1. Restore recent benefits	2. Current benefit structure	3. Tiered DB contri- butions	4. Current benefits + DC feeder	5. Current benefits + DB/DC flexibility	6. Collective DC	7. DC for all
Protection from inflation							
Longevity protection							
Known and predictable income							
Protected from stock market falls							
Affordable and sustainable							
An adequate pension							
Transparent and simple							
Fair to different groups							

RAG rating

Largely satisfies the criteria

Partially satisfies the criteria

Largely does not satisfy the criteria

An option largely meets the criteria if...



Longevity protection

• members cannot run out of money during their retirement.

A predictable income

• the income from the scheme can be calculated during a member's career and is known as a member approaches retirement.

Protected from stock market falls

• those in retirement should not see any change in their income as a result of changes in the stock market and those still accumulating their pension should not suffer significant benefit changes due to poor stock market performance.

Affordable and sustainable

• it is demonstrably affordable for both members and employers now and into the future and should offer some degree of consistency of cost over time. The cost should not lead to high levels of optout among lower paid staff (currently 15%).

An adequate pension

• delivers an adequate retirement income for the number of years in the scheme.

Transparent and simple

• the benefits are widely understood and the scheme is easy to understand as possible with a transparent governance structure.

Fair to different groups

• there is no element to the scheme that unfairly favours some groups over others.

PLSA retirement living standards 2021

Measuring adequacy

- In order to calculate whether the options can deliver an adequate pension at retirement, we need several inputs.
 - ➤ We need to assume a career average salary and an average period as a member of the scheme.
 - ➤ We need to add in State Pension at retirement (the full new State Pension is £9,627pa in 2022-2023).
 - Lastly, we need to know what constitutes an adequate retirement income; for which we have used the PLSA Retirement Living Standards (see opposite).
- USS member analysis and research conducted in 2020 tells us that the average salary for a USS member was £41,000 at that time. Given that this represents members across the age spectrum, it is a reasonable proxy for a career average salary for an individual who spends most of their career in the university sector. We have assumed an average length of membership of 40 years (age 26-66) and we assume all the income relates to DB pension (not the current £40,000 cap).
- Under most options, we have compared the amount that could be generated at retirement plus a full State Pension to the PLSA's retirement living standards.
- Individuals on a lower career average salary and/or without 40 years of service would retire on a much lower income. More detailed modelling would reveal different outcomes for different career paths.

	SINGLE	COUPLE
MINIMUM Covers all your needs, with some left over for fun	£10,900	£16,700
MODERATE More financial security and flexibility	£20,800	£30,600 LONDON £36,200
COMFORTABLE More financial freedom and some luxuries	£33,600	£49,700

WHAT ARE THE STANDARDS?

To keep things simple, the Retirement Living Standards are three levels of expenditure to help savers understand how much money they will need to live the lifestyle they want in retirement.

Inspired by, and similar to, the system used in Australia, the Standards provide a benchmark level of annual income to fund different standards of living in retirement. Each Standard is based around a basket of goods and services and also takes into account different circumstances (living inside or outside London; single or couple).

Option 1: restore previous benefits

- The first option evaluated would involve a return to benefits of 2018-2022.
 - \geq 1/75th accrual rate plus cash lump sum of 3x pension.
 - ➤ Higher cap on DB (£60,000 indexed).
 - ➤ Indexation of pensions in payment and revaluation of deferred pensions increased by CPI up to 5%+half of any further increase up to 10%.
 - > Plus ill-health benefits and life insurance.
- The 2020 valuation put a price on this benefit of 37% of salary which, if divided 65:35 would result in contributions of:
 - ≥ 24% for employers.
 - ≥ 13% for members.
 - ➤ Deficit recovery contributions would add to this amount.

Option 1: restore previous benefits

Protection from inflation	If the previous level of indexation and revaluation are maintained, the scheme will offer good protection against inflation under most economic scenarios. Since 1989 inflation has exceeded 5% for three of those 33 years to 2021. The highest level since 1989 was 7.5% but looks set to exceed this in 2022. The Bank of England is predicting a return to levels around 2% within two years.	
Longevity protection	All members are afforded protection against running out of money entirely in retirement. For those on the highest incomes, although they will not run out of money, the DC element could mean a reduction in income in later life.	
A predictable income	Should the funding of the scheme and the benefit structure stabilise, then this option delivers predictability of income. However, the higher the future benefits, the less likely it is that such stability will occur and the funding of the scheme could again lead to either higher contributions and/or a further change in benefits. The highest earners have a less predictable retirement income due to the DC element.	
Protected from stock market falls	Given the volatility of the funding position and the cost of future benefits, there can be no certainty that active and deferred members are protected against future market shocks. Pensioner members are fully protected against falls in stock market with regard to their DB pensions.	
Affordable and sustainable	While the March 2022 monitored level of deficit may make a return to the previous benefits appear more affordable, it is not merely the deficit that determines affordability. The assumptions of low future investment returns in the pricing of future benefits may still make the higher unaffordable to employers and members alike and suggest that the option may not be sustainable for the long term.	
An adequate pension	For any long term member with 40 years of service, these benefits will generate 40/75 th (or more than half of a salary up to £60,000 in today's terms) plus for those earning in excess of £60,000 a top-up of DC pension savings. This would give a single person earning an average salary of £41,000 a pension of £21,867 plus a State Pension of £9,628 (in today's terms), which exceeds the PLSA moderate standard and gets close to a comfortable standard outside of London. The indexation of benefits should help maintain this through retirement.	
Transparent and simple	Each change in the benefit structure adds complexity to the calculation of the benefits of existing members. If stable, then newer members will find it easier to understand how they are building up their retirement income. Given their inherent complexity and cross-subsidies, it is difficult to rate any DB scheme as simple and transparent. The governance of the scheme is complex and lacks transparency (JEP).	
Fair to different groups	Restoring the previous structure would remove the detriment to low and medium earners, particularly in an environment of higher inflation. However, higher contribution rates could make the scheme unaffordable to some and could bring uncertainty for future members.	

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Option 2: current benefit structure

The second option evaluated is the status quo. It would involve accepting and continuing with the current reduced level of Defined Benefits, specifically:

- \geq 1/85th accrual career average plus cash lump sum of 3x pension.
- ➤ DB capped at £40,000, then topped up with DC.
- ➤ Indexation capped at 2.5% (assume that this is implemented).
- ➤ Plus ill-health benefits and life insurance.

Option 2: current benefit structure

Protection from inflation	The reduction (yet to be implemented) in the indexation and revaluation cap significantly reduces the inflation protection. Since 1989, inflation has exceeded 2.5% in 12 of the 33 years and looks set to do so again in 2022, potentially returning to an average of 2% from 2024.	
Longevity protection	The DB element of the scheme affords protection against running out of money altogether in retirement. For those on incomes over £40,000, although they will not run out of money, the greater element of DC benefit could mean a reduction in income in later life.	
A predictable income	For career-long lower to middle earners, the career average, if stable, provides a predictable income in retirement. For higher earners, retirement income as a mix of DB and DC becomes less predictable.	
Protected from stock market falls	For lower to middle earners (below £40,000), the scheme provides considerable protection against stock market falls as long as the scheme remains well-funded. However, as seen in recent years, falls can result in increases in contributions and reviews of benefits. For higher earners, the greater emphasis on DC lessens the degree of protection from stock market falls. Pensioner members are protected in relation to their DB pensions.	
Affordable and sustainable	The lower level of benefits compared to option 1, should make the scheme more affordable and sustainable.	
An adequate pension	The move to $1/85^{th}$ and a cap on indexation reduce the potential for a member to achieve a comfortable income at retirement. $40/85^{th}$ of an average salary of £41,000 would generate a retirement income of £19,294 plus a full State Pension of £9,628 which would deliver a moderate standard in and outside of London.	
Transparent and simple	If benefits stabilise, then the scheme should become simpler for members to understand. However, for those with a mix of old and new benefits, it will remain complex. The governance of the scheme is complex and lacks transparency (JEP).	
Fair to different groups	The low level of inflation protection is particularly detrimental to those on low and medium earners. Older members benefit from a single contribution rate.	

Option 3: tiered DB contributions

The third option is the same as option 2 in terms of benefits but would introduce tiered contributions. It would involve accepting and continuing with the current reduced level of Defined Benefits, specifically:

- ≥ 1/85th accrual career average plus cash lump sum of 3x pension.
- ➤ DB capped at £40,000, then topped up with DC.
- ➤ Indexation capped at 2.5%.
- ➤ Plus ill-health benefits and life insurance.
- Tiered DB contributions for members could be set by income level in a similar way to the Teachers (TPS) or Local Government (LGPS) pension schemes.
 - ➤ In the TPS, member contribution levels range from 7.4% (for those earning up to £29,188) to 11.7% (for those earning in excess of £84,194).
 - \triangleright In LGPS member contributions range from 5.5% (for those earning up to £15,000) to 12.5% (for those earning in excess of £170,101).

Option 3: tiered DB contributions

Protection from inflation	The reduction (yet to be implemented) in the indexation and revaluation cap significantly reduces the inflation protection. Since 1989, inflation has exceeded 2.5% in 12 of the 33 years and looks set to do so again in 2022, potentially returning to an average of 2% from 2024.	
Longevity protection	The DB element of the scheme affords protection against running out of money altogether in retirement. For those on incomes over £40,000, although they will not run out of money, the greater element of DC benefit could mean a reduction in income in later life.	
A predictable income	For career-long lower to middle earners, the career average, if stable, provides a predictable income in retirement. For higher earners, retirement income as a mix of DB and DC becomes less predictable.	
Protected from stock market falls	For lower to middle earners (below £40,000), the scheme provides considerable protection against stock market falls as long as the scheme remains well-funded. However, as seen in recent years, falls can result in increases in contributions and reviews of benefits. For higher earners, the greater emphasis on DC lessens the degree of protection from stock market falls. Pensioner members are protected in relation to their DB pensions.	
Affordable and sustainable	The lower level of benefits compared to option 1, should make the scheme more affordable and sustainable. Tiered contributions should make the scheme more affordable to those on lower incomes and may reduce the opt-out rate, although this would need to be explored in more detail.	
An adequate pension	The move to $1/85^{th}$ and a cap on indexation significantly reduce the potential for a member to achieve a comfortable income at retirement. $40/85^{th}$ of an average salary of £41,000 would generate a retirement income of £19,294 plus a full State Pension of £9,628 which would deliver a moderate standard in and outside of London.	
Transparent and simple	Tiered contributions would add more complexity, and potentially more cost, to the running of the scheme but does not add significantly to the complexity for members.	
Fair to different groups	Tiered contributions would reduce the cross-subsidy that currently exists whereby younger members (typically lower paid) and women (lower paid for longer) pay the same rate as older members.	

Option 4: DC feeder

The fourth option is the same as option 2 in terms of benefits but would introduce a DC feeder account for those in the early years of their career in universities. It would involve accepting and continuing with the current reduced level of Defined Benefits, specifically:

- ≥ 1/85th accrual career average plus cash lump sum of 3x pension.
- ➤ DB capped at £40,000, then topped up with DC.
- ➤ Indexation capped at 2.5%.
- > Plus ill-health benefits and life insurance.
- The Superannuation Arrangement of the University of London (SAUL) is currently in the process of introducing a DC feeder account to its DB scheme. In this, those in the first three years of their career are able to contribute to a DC scheme and only join the DB section of the scheme (and pay higher contributions) after three years in the scheme. The change is designed to help those who do not expect to stay in academia for long and may enable members to pay lower contributions (employers are expected to pay 16% contributions).

Option 4: DC feeder

Protection from inflation	The reduction (yet to be implemented) in the indexation and revaluation cap significantly reduces the inflation protection. Since 1989, inflation has exceeded 2.5% in 12 of the 33 years and looks set to do so again in 2022, potentially returning to an average of 2% from 2024.	
Longevity protection	The DB element of the scheme affords protection against running out of money altogether in retirement. For those on incomes over £40,000, although they will not run out of money, the greater element of DC benefit could mean a reduction in income in later life. For those who do not stay beyond 3 years, it affords no longevity protection.	
A predictable income	For career-long lower to middle earners, the career average, if stable, provides a predictable income in retirement. For higher earners, retirement income as a mix of DB and DC becomes less predictable. For those who do not stay beyond 3 years, benefits will not be predictable.	
Protected from stock market falls	For lower to middle earners (below £40,000), the scheme provides considerable protection against stock market falls as long as the scheme remains well-funded. However, as seen in recent years, falls can result in increases in contributions and reviews of benefits. For higher earners, the greater emphasis on DC lessens the degree of protection from stock market falls. Pensioner members are protected in relation to their DB pensions.	
Affordable and sustainable	The lower level of benefits compared to option 1, should make the scheme more affordable and sustainable. A DC feeder could make contributions more affordable and sustainable for members and employers.	
An adequate pension	The move to $1/85^{th}$ and a cap on indexation significantly reduce the potential for a member to achieve a comfortable income at retirement. $40/85^{th}$ of an average salary of £41,000 would generate a retirement income of £19,294 plus a full state pension of £9,628 which would deliver a moderate standard in and outside of London.	
Transparent and simple	If benefits stabilise, then the scheme should become simpler for members to understand. However, for those with a mix of old and new benefits, it will remain complex. The governance of the scheme is complex and lacks transparency (JEP).	
Fair to different groups	The low level of inflation protection is particularly detrimental to those on low and medium earnings. Older members benefit from a single contribution rate. The DC feeder may serve low earners better but could reduce their overall pension.	

Option 5: flexible DB/DC

Option 5 is the same as option 2 in terms of benefits but would involve adopting the recommendations of the NIESR reported (Miles and Sefton). It would involve accepting and continuing with the current reduced level of Defined Benefits, specifically:

- ≥ 1/85th accrual career average plus cash lump sum of 3x pension.
- ➤ DB capped at £40,000, then topped up with DC.
- ➤ Indexation capped at 2.5%.
- ➤ Plus ill-health benefits and life insurance.
- The Miles and Sefton recommendations call for partial transfers from DB to DC to be permitted (at present, members can transfer deferred pensions in full to DC).

Option 5: Flexible DB/DC

Protection from inflation	The reduction (yet to be implemented) in the indexation and revaluation cap significantly reduces the inflation protection. Since 1989, inflation has exceeded 2.5% in 12 of the 33 years and looks set to do so again in 2022, potentially returning to an average of 2% from 2024. Those who transfer out may find themselves less protected against inflation.	
Longevity protection	The DB element of the scheme affords protection against running out of money altogether in retirement. For those on incomes over £40,000, although they will not run out of money, the greater element of DC benefit could mean a reduction in income in later life. For those who partially transfer it affords even less protection.	
A predictable income	For career-long lower to middle earners, the career average, if stable, provides a predictable income in retirement. For higher earners, retirement income as a mix of DB and DC becomes less predictable. For those who do not stay beyond 3 years, benefits will not be predictable. For those who partially transfer out, it affords less protection.	
Protected from stock market falls	For lower to middle earners (below £40,000), the scheme provides considerable protection against stock market falls as long as the scheme remains well-funded. However, as seen in recent years, falls can result in increases in contributions and reviews of benefits. For higher earners, the greater emphasis on DC lessens the degree of protection from stock market falls. Pensioner members are protected in relation to their DB pensions. Those who transfer out will be more subject to stock market fluctuations.	
Affordable and sustainable	The lower level of benefits compared to option 1, should make the scheme more affordable and sustainable. The Miles and Sefton paper suggests that if partial DB to DC transfers are permitted, it could 'strengthen the covenant of the USS through a reduction in the liabilities and the resultant fall in risk', thereby aiding the sustainability of the scheme.	
An adequate pension	The move to 1/85 th and a cap on indexation significantly reduce the potential for a member to achieve a comfortable income at retirement. 40/85 th of an average salary of £41,000 would generate a retirement income of £19,294 plus a full State Pension of £9,628 which would deliver a moderate standard in and outside of London.	
Transparent and simple	If benefits stabilise, then the scheme should become simpler for members to understand. However, for those with a mix of old and new benefits, it will remain complex. Partial transfers could add to the complexity of running the scheme . The governance of the scheme is complex and lacks transparency (JEP).	
Fair to different groups	The low level of inflation protection is particularly detrimental to those on low and medium earners. Older members benefit from a single contribution rate.	

Option 6: Collective DC for all

- DB is closed to all future accruals leaving any deficit recover contributions to be paid by employers.
- All future contributions flow into a collective DC (CDC) scheme (perhaps a new section of USS).
 - ➤ Members share risks and assets are all pooled into one fund (members do not choose how their money is invested). A more detailed description of CDC is provided below.
 - ➤ Neither employers' or members' contributions to CDC vary with market and funding conditions. Royal Mail's plan is designed with 13.6% employer and 6% employee contributions.
 - ➤ Employers continue to contribute at a high level (but also bear the costs of any deficit in the closed DB scheme).
 - ➤ A spouses / partners pension can also be built into the scheme design and life cover can be provided.
- Royal Mail's CDC scheme is designed to target:
 - ≥ 1/80th of pay each year plus increases of CPI+1%.
 - ➤ In addition, there is a lump sum of 3/80th of pensionable pay (this is not subject to variation).
 - ➤ Any adjustments are applied to all members, whether active, deferred or pensioner.

Option 6: CDC for all

- CDC schemes are described as a middle ground between DC and DB schemes, although technically they are still DC. At present, there are no such schemes operating in the UK but some companies with DB schemes are either considering or in the process of putting CDC into place (Royal Mail).
- In current DC schemes, members have their own account, choose their own investment funds and accumulate a pot of money that moves up and down and that they use to drawdown an income, take as a lump sum or purchase an annuity during retirement.
- In CDC schemes, members do not have their own pot of money but contribute to a collective pool of assets that is used to deliver a target pension in retirement.
- While some DC schemes have the facility to draw down a regular income in retirement, others require the member to transfer their assets to another provider or product to draw an income. Neither arrangement can guarantee an income for life. All require members to transfer if they wish to purchase an annuity that is guaranteed.
- In CDC schemes, members receive a regular income from the scheme for life, although the value of the income is not guaranteed. Both the target pension during working life and the pension paid in retirement can be adjusted upwards and downwards depending on the level of funding in the scheme. Like DB schemes, CDC can suffer from funding gaps due to changes in asset values or increasing longevity that can require adjustments to benefits to be made over time. Unlike DC, the adjustments can be smoothed over time or between different generations in the pension scheme.
- It is also claimed that CDC schemes offer better value to members than current DC.



Risk	7	<u>Key:</u>		
Itisk	DB	DC	CDC	Provider
Investment		Î		employer
Inflation				Individual member
Longevity		Î		
Insolvency	This is somewhat mitigated by the PPF	There is little insolvency risk	There is little insolvency risk	All members collectively

Option 6: Collective DC for all

Protection from inflation	CDC schemes can be designed to offer some protection against inflation. Target benefits and benefits in payment can be increased if the funding position of the scheme allows. However, given that targets and benefits can be reduced and there is no protection against the scheme running out of money, the protection is not as strong as that offered in a good DB scheme (or the purchase of an inflation-linked annuity with DC proceeds).	
Longevity protection	The intention of CDC schemes is to pay a retirement income for life, although the value of this can vary even in retirement. The insolvency risk, albeit low, sits with the members rather than the employer so they are not without risk to members in retirement.	
A predictable income	CDC schemes offer less predictability of retirement income than DB schemes but greater predictability than current DC schemes. PPI modelling has suggested that a CDC scheme could deliver outcomes in a range that is 26% smaller than the outcomes achieved in a pure DC scheme, suggesting that members benefit from less up-side potential but are better protected against downside risks. Most outcomes should be better than DC.	
Protected from stock market falls	Members will not be fully protected from stock market falls but the collective nature of the scheme may afford those retiring with greater protection than a pure DC scheme.	
Affordable and sustainable	Because contributions will not change even if the funding of the scheme drops, CDC schemes can be more affordable and sustainable than DB schemes.	
An adequate pension	Royal Mail's CDC scheme is designed to target 1/80 th of pay each year. 40/80th of an average salary of £41,000 would generate a retirement income of £20,500 plus a full State Pension of £9,628 which would deliver a moderate standard at retirement. There is the potential for the retirement income to fall or rise in retirement.	
Transparent and simple	One of the greatest challenges of CDC will be communicating clearly with members about their target benefit and to ensure that they understand that benefits can be adjusted up and down. CDC will embed some of the complexity of DB in that it will need to calculate the value of future liabilities on a regular basis and will calculate how well the scheme is funded. New regulations will place emphasis on member communications and governance.	
Fair to different groups	One of the DWP's principles for CDC schemes is that schemes should not favour current pensioners but should be intergenerationally fair with genuine risk sharing between members. However, if changing to CDC, some groups may lose out more than others.	



Option 7: DC for all

- All future contributions flow to the DC section of USS.
 - ➤ Neither employers' or members' contributions to DC vary with market and funding conditions.
 - ➤ Employers continue to contribute at a high level.
 - ➤ Member offered some flexibility in contribution rates.
- DB is closed to all future accruals, leaving any deficit recover contributions to be paid by employers.

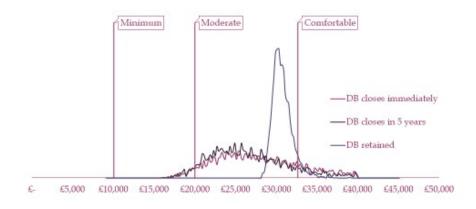
Modelling by PPI reveals a wide range of different outcomes for members in DC

- PPI carried out modelling in 2020 for a project sponsored by the TUC that compared DB and DC scheme outcomes.
- The analysis shown in the chart shows the distribution of outcomes for a male aged 35 on 50th percentile earnings (relative to age and sex) throughout his career for:
 - DB being retained (the steep blue line in the chart showing that in most outcomes deliver a pension of around £30,000, close to a comfortable retirement).
 - DB being closed in 5 years time or immediately (the flatter lines in the chart) and attracting 25% contributions.
 - The results reveal a very different distribution of outcomes for DB and DC with some DC outcomes generating a higher income but most delivering a lower income and potentially a below-moderate retirement living standard.
- While likely to deliver very different outcome for members, DC pensions do afford greater flexibility in retirement in terms of how much income to take and how residual funds can be left to others.

Individual 3: The distribution of income at retirement



Density plot of income in retirement. Gross annual income, current earnings terms. DC contribution rate is 25% of earnings. PLSA income threshold standards marked as bars



Option 7: DC for all

Protection from inflation	A DC scheme member taking a drawdown income from their DC scheme can have some protection from inflation through the money that continues to be invested but the level will depend upon the performance of those assets and how much they draw down. A DC scheme member who purchases a level annuity has no protection from inflation, while a member who purchases an index-linked annuity has some protection against inflation.	
Longevity protection	DC schemes in drawdown do not afford the member any protection from running out of money in retirement. However, a DC member can purchase this protection by buying an annuity with all or part of their fund at any point.	
A predictable income	DC schemes do not give members any ability to predict their income in retirement as the outcome depends upon either the value of the fund at retirement if a member plans to buy an annuity or the performance of their fund during retirement if they are taking an income through drawdown.	
Protected from stock market falls	Members bear all of the investment risks in the scheme.	
Affordable and sustainable	DC schemes offer the most flexibility to employers and members to vary their contributions. To that extent they are affordable and sustainable but volatility means that outcomes are not certain and likely to be lower than CDC.	
An adequate pension	The retirement income that can be generated from a DC pension will depend upon three main factors: contribution rates, investment returns and age at retirement or when drawing the pension. It will also be influenced by the method of taking an income and charges. Various studies have suggested that CDC schemes should generate 30% more pension than an DC scheme plus annuity. If we adjust from the CDC income shown above, that would suggest an equivalent income of around £15,570 plus a State Pension of £9,628 which would provide a moderate income in retirement.	
Transparent and simple	DC pensions are highly transparent. Members are generally able to view the value of their pension at any time, charges and costs are fully disclosed and investment choices are described in detail. However, investment and retirement decisions are complex for members.	
Fair to different groups	DC pensions do not discriminate between different groups but different groups will achieve different outcomes depending upon investment conditions while they are members. However, if changing to DC, younger groups will suffer more potential detriment than older members of the scheme.	4

Evaluating the options

	1. Restore recent benefits	2. Current benefit structure	3. Tiered DB contributions	4. Current benefits + DC feeder	5. Current benefits + DB/DC flexibility	6. Collective DC	7. DC for all
Protection from inflation							
Longevity protection							
A predictable income							
Protected from stock market falls							
Affordable and sustainable							
An adequate pension							
Transparent and simple							
Fair to different groups							

Conditional indexation



- The evaluation above does not consider in detail one of the options currently being explored by USS, UUK and UCU; that of conditional indexation.
- While this change could bring significant changes to the funding level of the scheme and to benefits and contributions as a result, it is a relatively small change to the current benefits.
- Conditional indexation, if introduced to USS, would result in increases to pensions in payment, above the statutory minimum of inflation up to 2.5% pa, being at the discretion of the trustees. However, this would only apply to future accruals and not to pensions already accrued or in payment. These would still be subject to the rules in place when those benefits were accrued.
- The proposal to introduce conditional indexation has met with some support from both employers and UCU. The potential benefits are reported to include:
 - ➤ A reduction in contribution rates;
 - ➤ An improvement in the level of prudence applied to the valuation;
 - ➤ Scope for greater investment in growth-seeking assets.
- Critics of the arrangement point to the scope for moral hazard whereby the funding of the scheme is allowed to fall to a level where discretionary increases are not awarded.
- For members, such an arrangement could deliver a more sustainable and affordable scheme but at the cost of some inflation protection. All other aspects of the scheme would remain the same, although in time higher benefits might be able to be reinstated.

No solution works perfectly for all

- The analysis above suggests that no one solution works perfectly to deliver on the criteria used for the evaluation.
 - ➤ Returning to the previous benefit structure would deliver the best outcomes in terms of inflation protection, delivers a good level of pension and is fairer to different groups than many other options. However, it may not deliver an affordable and sustainable solution and could lead to further changes in benefits in the future.
 - ➤ The current benefit structure delivers a lower pension and continues to deliver longevity protection but is less fair to some groups and provides much weaker protection against inflation. However, it is more affordable and sustainable.
 - > Tiered contributions could make the current benefit structure somewhat more affordable for those on lower incomes.
 - ➤ A DC feeder could improve affordability for some groups but it could also remove valuable longevity protection, predictability and protection from stock market falls for some individuals who do not stay in the scheme for long.
 - ➤ DB/DC flexibility could offer some members who feel confident managing their own investments with greater flexibility and could, if taken up, make the scheme more sustainable for those who do not transfer.
 - ➤ CDC offers a number of benefits including longevity protection (but not without some risk), delivers an adequate pension and could be more affordable and sustainable. However, it does not deliver an entirely predictable retirement income or full protection from stock market falls. Moreover, it is not a simple scheme.
 - > Pure DC has a number of disadvantages for members but could address the issues of affordability and sustainability and could still deliver, on average, an adequate pension.
- This analysis does not consider all of the options available to the scheme and employers. Other options include structuring different benefits for different cohorts of members according to need or preference.
- Determining what can be done to improve the situation has no simple answer and is a question of trade-off, essentially between adequacy of pension and affordability / sustainability. Answering the question will require further debate to establish how important different values are to different groups of members and non-members and a debate about the balance of importance between affordability (for members and employers) and retirement outcomes.
- In the final section below, we return to some of the other concerns raised by members in an attempt to determine how to ensure that the situation does not arise again.

Pensions Policy Institute

How can we ensure the same situation does not arise again?

Stability and confidence will be necessary to prevent a repeat of events

- The analysis above demonstrates that resolving the issue of benefit structure is in itself a contentious and complex issue. No solution satisfies all of the values that members say are important to them and few deliver certainty over affordability and sustainability of the scheme.
- However, preventing a repeat of current events will require more than an agreed benefit structure. It will require a period of stability and restoring trust between employers and staff and confidence in the management and governance of the scheme.
- Preventing a repeat will require a holistic solution that addresses concerns about:
 - unequal effects of benefit changes;
 - ➤ the governance of the scheme and the perceived lack of challenge levelled at the Pension Regulator (TPR) by the trustees;
 - the costs of running USS, in particular the costs of management and investment;
 - ➤ the quality and lack of apparent consistency of information that members receive.
- In the following pages, we consider how each of these might be addressed.

USS has a mix of features that favour some groups over others, in common with most DB schemes

- It is a feature of all DB pension schemes that some individual groups benefit more than others. The pooling nature of the scheme means that there will always be winners and losers. Some will live longer than others and receive more pension. Some will contribute more than others for the same pension.
- There are two dimensions to fairness in relation to university pensions.
 - > The first is whether the benefit structure itself is fair, either directly or indirectly, and
 - ➤ The second is whether or not changes to the benefit structure affect some groups more than others, particularly those with protected characteristics.
- The first question will depend very much upon the design of the scheme. In the USS scheme, as with many other DB schemes:
 - ➤ All members pay the same contribution rate, regardless of gender, age or any other protected characteristic. Occupational pension schemes such as USS do have an exemption under the Equality Act that would permit contribution differences by age of the member but this is not a practice employed by schemes due to the potential for the cost of benefits in later life to be extremely expensive. It is felt to be better to smooth the costs over a working lifetime.
 - ➤ All members have the same normal retirement age in the scheme.
 - ➤ All members have the same range of benefits in the scheme.
- Judgements by the European Court of Justice have determined that pensions are pay for the purposes of Article 119 (141) which establishes the principle of equal pay for male and female workers for equal work or work of equal value.
- However there are elements of benefit structures that result in different outcomes for different groups:
 - ➤ Older members pay less for a £ of benefit than younger members than they would if each group's contribution rate was calculated on the basis of length of time to retirement. In normal circumstances, a £ of benefit due in 5 years' time costs more than a £ of benefit due in 40 years' time. This is one of the cross-subsidies in most DB schemes that is generally smoothed out for individuals who stay in the scheme for more than just a few years.
 - ➤ Higher paid members receive less DB pension per £1 of contribution than lower paid members due to the DC salary cap. There is a cross-subsidy from higher paid to lower paid members in the DB section.
 - ➤ On average women who are members of the scheme will receive more in retirement than men per £ of contribution due to longer life expectancy. Where members die with no partner or dependents, no pension will be paid to a beneficiary whereas a survivor pension will normally be paid out to a spouse, partner or, sometimes, children.

Changes to USS benefits have amplified inequality in the workplace

- The changes made to the USS benefit structures in recent years have amplified inequality in the workplace. Those who have lost out more than others have been those on lower pay and those whose career progression is slower, typically women.
 - A final salary benefit structure compensated women with typically slower career progression than men, although they will not have paid as much in contributions towards their final salary benefits than men earning more for longer.
 - ➤ The switch to career average pensions may have been detrimental to some groups, such as women with slower career progression but may have benefited other groups more than final salary.
 - ➤ Career average pensions can be more beneficial for career-long low earners than a final salary scheme, particularly where pensions are revalued by average earnings. This is because the revaluation factor can increase their benefits by more than their own pay rises over the course of their career.
 - > By contrast, career average can deliver worse outcomes for those with more progressive careers and pay than final salary, often men.
- Initial modelling undertaken by USS suggested an average cut of 12% in retirement pension for those earning under £40,000. Subsequent modelling described above, revealed that over a period of 20 years' in retirement, the difference between the old and new benefits was considerably greater for younger and lower paid members of the scheme, in part due to the longer term impact of lower indexation and revaluation.
- To the extent that younger and lower paid members of the scheme tend to be women, the changes could be said to be indirectly discriminatory.
- Addressing fairness issues related to pensions can be best addressed by:
 - > Tackling the root causes in labour market practices that hinder career and pay development for women and other groups with protected characteristics.
 - ➤ Encouraging USS and the employers to undertake more thorough modelling of the impact on different groups in advance of any changes being agreed.
 - Giving consideration to ways of mitigating any direct or indirect discriminatory features of the scheme or the changes being proposed.

The UUK governance review must engage with members and their needs in order to restore trust

- The JEP 2019 report highlighted a number of ways in which the governance, particularly the governance of valuations, could be improved:
 - ➤ It noted that the trustee of the scheme was felt to be too distant from employers and members and that this has contributed to a decline in levels of trust. They proposed greater visibility of the trustee directors at meetings of the Joint Negotiating Committee (JNC). This is one of the JEP proposals that USS has implemented with greater attendance at JNC events by the trustee directors.
 - ➤ The JNC was felt not to work as well as it might, due in part to the short tenure of some members and questions over the casting vote of the independent chair.
 - ➤ Decisions made following the valuation could be better understood if the trustee and JNC worked together on the assumptions and modelling used in the valuation process. This recommendation has been implemented.
 - ➤ The Panel raised questions of both UUK and UCU regarding their role in representing their respective stakeholder.
- It is clear from the discussions that have taken place for this research that members are not clear about the governance of the scheme and the role of different bodies and have little faith in the processes involved. These include the question of whether the trustee has been sufficiently robust in its dealings with TPR.
- The governance of the scheme is being reviewed by UUK. It will be led by an independent chair and will consider the 'hard and soft wiring' of USS governance and the scheme architecture. Included in the review will be an examination of:
 - ➤ The role and accountability of the trustee.
 - ➤ The appointment of trustee directors.
 - ➤ The role of the JNC.
 - ➤ USS's investment management subsidiary and its relationship with the scheme.
- In order to contribute to the restoration of trust in the scheme, it is critical that the review consults with members and the union and is shown to reflect the views of the membership.



USS per member costs difficult to compare and benchmark

- Members have, through research, social media and academic articles, questioned the structure and cost of USS and the role of its investment management subsidiary.
- USS is the largest private sector pension scheme in the UK (by assets). USS itself reported in their annual report and accounts that in 2021, the total costs of running the scheme were £273 million, an average of £585 per member (476,000 members). Figures published in the USS Value for Money supplement to the 2022 report and accounts put the total 2020 costs at £264m (83% attributable to investment management, 7% for processing and support services and 10% for governance and other costs, including actuarial valuations) which also puts that per member costs at more than £500 a year.
- In its own Value for Money assessment, USS costs are compared to a group of peers by benchmarking company CEM Benchmarking and are shown to be 24% lower than the average. Investment costs are shown to be 30% lower than average while pension costs (processing, support, governance and other) at £68 per member per year are higher than the benchmark schemes. The difference in pension costs is explained by the complexity of the USS scheme and the member support that is delivered by the scheme. In their report, Value for Money is demonstrated by above average investment returns when compared to a low cost passive strategy and higher than average service scores when compared to five large master trusts.
- Comparing scheme running costs is difficult for a number of reasons including the complexity of the scheme structure (USS is not sectionalised, some other DB schemes are), whether the scheme is open or closed and the way in which assets are managed (internally or externally), the amount of money under management, the investment strategy and the average value per member. In the UK, there are no other schemes with a similar profile to USS, making comparisons particularly hard. There are very few funded, open DB schemes with a similar profile. Other DB schemes with published figures include:
 - ➤ In 2021, Railpen, another large multi-employer and open DB scheme also reported per member pension costs (excluding investment management and transaction costs) of £68 per member (£24m across 349,915 members).
 - ➤ In 2022, LGPS (a large multi-employer scheme) reported total management costs (including investment management and transaction costs) of £1,517m across 6.2m members a total cost per member of £244 pa.
- Data from TPR shows that the cost of running a DB pension scheme drops sharply by size of scheme. TPR's cost comparison data does not extend to schemes of the size of USS and the sample for very large schemes is very small. Moreover, many of the schemes that submit returns are closed to future accruals. USS is also a relatively complex scheme with multiple employers that may not be directly comparable to other single employer schemes. However, its per member costs are at the upper end of costs for large schemes and comparable to the average for medium-sized schemes.
- In practice, comparisons between USS and other schemes are difficult but could benefit from further challenge from members and further analysis by an independent source.

"It is very hard to know what state the scheme is in when we are not getting clear information from the pension fund." JEP research "It's hard to know, we get so much information that makes it more complicated to understand." JEP research

Member communications should be consistent and recognise concerns

- The extensive coverage of USS's funding challenges, changes in benefits and the rising costs of delivering university pensions have led to an overload of information for some members, while others have engaged actively in the debate through social media and academic papers.
- Part of the problem lies with so much change over a relatively short space of time. Members have lost faith in the benefits the scheme will deliver. Ideally the scheme itself ought to be a source of trusted, impartial information but that has not been felt to be the case by members.
- A period of stability in benefits and contributions combined with clear, consistent and objective information should contribute to a restoration of trust in the scheme and employers. Information from the scheme and employers should recognise and respond to the concerns of members.
- If USS itself cannot deliver information in this way, members must be able to rely on the information supplied by their employers and union, with each side recognising the perspective of the other.

"Many of us work on projects where the 'single source of truth' is important and we don't have that for our pensions."

JEP research

The challenge of resolving the current situation of distrust, dissatisfaction and industrial unrest will not be easy

- The challenge of resolving the current situation of distrust, dissatisfaction and industrial unrest will not be easy. 11 years of instability have left members fearful and lacking confidence in the scheme and their employers to provide adequately for them in their retirement.
- Resolving and stabilising the benefits delivered by the scheme will contribute towards a restoration of trust in employers and confidence in the scheme but may not be enough in the short term.
- Restoring trust and preventing the situation recurring will require:
 - ➤ Providing benefits that balance adequacy with affordability for members and employers.
 - A clear demonstration of why the trade-off is necessary and what impact it will have on different groups of members, and that any future changes are not discriminatory.
 - ➤ Evidence that the governance of the scheme acts in the interest of members as well as employers.
 - ➤ An explanation of why the costs of the scheme are as high as they are and whether they deliver good value to members and employers.
 - ➤ Clear, consistent and objective information for members.

Sources

- USS website 'Who we are'
- USS website 'Our valuations'
- USS publishes 2021/22 Report and Accounts
- USS website Report and Accounts
- Joint Expert Panel (2018) first report
- Joint Expert Panel (2019) second report
- USS (March 2021), USS briefing: The Joint Expert Panel's recommendations
- USS (Mar 2022), Monitoring of the 2020 Financial Management Plan
- Actuarial Post
- Independent panel report to the Review of Post-18 Education and Funding (publishing.service.gov.uk)
- The Post-18 Education Review (the Augar Review) recommendations (parliament.uk)
- NIESR (Miles & Sefton)
- House of Commons Library (March 2022), Universities Superannuation Scheme (USS)
- Collective Defined Contribution Schemes (parliament.uk)
- Collective defined contribution (CDC) code consultation | The Pensions Regulator
- The-Case-for-Collective-DC_update_2020.aspx (aon.com)
- rsa_cdc-briefing-paper.pdf (thersa.org)
- Data on stock market performance taken from FT market data 5 June 2022



Sources contd



- Grant, Hindmarsh and Koposov (May 2022), The distribution of loss to future USS pensions due to the UUK cuts of April 2022
- Examining the gender pay gap in HE (ucea.ac.uk)
- Staff inequalities | Advance HE (advance-he.ac.uk)
- USS Report and Accounts 2021 (1).pdf
- Independent Public Service Pensions Commission: Interim Report 7 October 2010
- Independent Public Service Pensions Commission: Final Report 10 March 2011
- CPI ANNUAL RATE 00: ALL ITEMS 2015=100 Office for National Statistics (ons.gov.uk)
- How high will inflation go? | Bank of England
- Home PLSA Retirement Living Standards
- USS 2020, Focuss on members
- 20211008-indexation-flexibility-final.pdf (pensionspolicyinstitute.org.uk)
- The Equality Act (Age Exceptions for Pension Schemes) Order 2010 (legislation.gov.uk)
- Governance review of USS UUK consultation on the planned approach July 2022 (ussemployers.org.uk)
- DB scheme costs comparison tool | The Pensions Regulator
- LGPS Scheme Advisory Board Scheme Annual Report (lgpsboard.org)
- Railpen report-and-accounts-2021
- USS value for money supplement