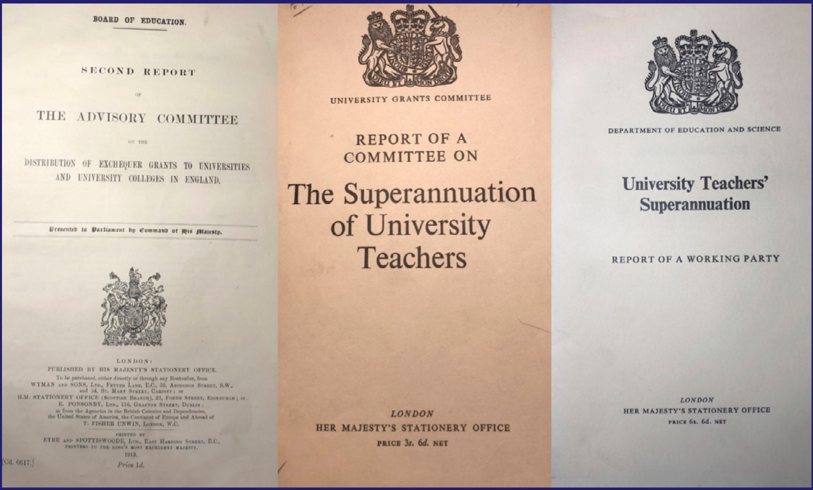
The USS: How did it come to this?

Nick Hillman



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About the author

Nick Hillman has been the Director of HEPI since 2014. He previously worked as the Special Adviser to David Willetts during his time as the Minister for Universities and Science.

Before starting to work on higher education policy in 2007, Nick spent eight years working on pensions policy – initially, at Westminster (2000-03) for the Shadow Secretary of State for Social Security (later Work and Pensions) and, subsequently, in the City of London for the Association of British Insurers (2003-07).

Nick led the insurance industry's response to the Pensions Act 2004, the legislation that has contributed to some of the recent USS issues, and he was a member of the Joint Working Group, which advised the Government on work-based pensions.

He is the author of *Quelling the Pensions Storm: Lessons from the past* (Policy Exchange, 2008) and various publications on higher education, but this is the first time that he has combined his interests in pensions and universities.

Acknowledgements

As the endnotes make clear, this paper makes fairly heavy use of Sir Douglas Logan's book *The Birth of a Pension Scheme: A History of the Universities Superannuation Scheme* (Liverpool University Press, 1985). Along with the Hale and Maddex reports, this idiosyncratic book should be the first point of call for anyone who wishes to know more about the origins of the USS and its antecedent, the FSSU.

Part of Chapter 6 is based on the House of Commons Library Research Briefing Paper on the *Universities Superannuation Scheme (USS)* by Djuna Thurley. The House of Commons Library is a fantastic resource on a wide range of issues, and their Briefing Paper provides a useful and objective summary of recent changes.

A draft version of this paper was circulated in early 2019 to a variety of people with a deep interest in the USS. Their comments have considerably improved the paper but any errors or opinions remain the complete responsibility of the author.

Contents

Glossary

AUT – Association of University Teachers
FSSU – Federated Superannuation System for Universities
CVCP – Committee of Vice-Chancellors and Principals
UCU – University and College Union
USS – Universities Superannuation Scheme
UUK – Universities UK

1. Introduction

Major changes can emerge from unexpected places. So it was with the establishment of the Universities Superannuation Scheme (USS) in 1975.

A Federated Superannuation System for Universities (FSSU) had been established just before the First World War. But it was a defined contribution rather than a defined benefit scheme. This means the investment risk was on members, that is university staff, not university employers. It seemed to some people inferior to pensions in other sectors and appeared increasingly out of date over time.

Then, in the 1950s, there were concerns that senior university staff were avoiding tax via extra pension arrangements on top of the FSSU. A committee of the great and the good considered what should be done.

In 1960, their report outlined potential new pension arrangements for university staff. These took a 'terminal-salary' approach. In other words, the level of pension would be based for the first time on providing a fixed proportion of each member's final salary over their last three years in work. Yet, rather than recommending this model, the report left the decision over whether to adopt such a change with universities and the University Grants Commission.

Gradually, bolstered by a second influential report and tax changes that made the FSSU less attractive over time, the tide turned in favour of a final salary scheme. But the USS had modest beginnings. At the first proper planning meeting in December 1970, it was declared the Scheme should be headed by someone on a salary of £7,000 to £7,500 overseeing 15 to 20 staff. It was thought 'the organisation should not require its own computer.'[1]

Differences between defined contribution and defined benefit pension schemes[2]

Defined contribution These can be workplace pensions arranged by an employer or private pensions, such as personal pensions, arranged by an individual. They are sometimes called 'money purchase' schemes. What you will receive depends on how much is paid in, how well the investments perform and how the money is taken out. **Defined benefit** These are usually workplace pensions based on your salary and how long you have worked for your employer. They include 'final salary' and 'career average' schemes. What you will receive depends upon your pension scheme's rules rather than investment performance or how much you have paid in, for the pension provider promises a certain amount each year when you retire.

Since the USS began in 1975, it has become the largest private pension fund in the UK, with over £60 billion of assets and around 420,000 members. There are approximately:

- 200,000 active members;
- 150,000 deferred members; and
- 70,000 pensioners.[3]

The USS is in the top 50 biggest pension funds in the world.[4]

The USS owns a chain of motorway service stations, Moto, in partnership with a private equity firm. It also owns the Grand Arcade, a shopping centre in Cambridge city centre.

Its acquisition of the Australian transport company Brisbane Airtrain prompted the question: 'Is it a bird? Is it a train? No, it's the Universities Superannuation Scheme Limited'.[5]

By 2018, 128 USS employees were earning over £100,000 (with two on more than £1,000,000) and there were almost 500 staff in total – and, presumably, a similar number of computers.

> ***'Is it a bird? Is it a train? No, it's the Universities Superannuation Scheme Limited'.***

The USS was established on a 'joint-and-several' basis, rather than each employer having its own ring-fenced section with its own assets and liabilities. So all the member institutions are in it together and they are collectively responsible for resolving any challenges.

The size of the USS has not insulated it against controversy: for example, in 2017, the Scheme was reported to have the largest pension deficit in the UK at £17,500,000,000 (on a FRS17 accounting basis).[6] Questions over the existence and scale of the shortfall, the acceptable level of future contributions from employers and employees and the appropriate level of benefits led to a proposal from Universities UK (UUK) to end the defined benefit nature of the Scheme, prompting a major industrial dispute among staff at over 60 UK universities during 2018.

This led to stike action and, after it had ended, a legacy of tension remained. The dispute was complicated by the fact that some senior staff at the affected institutions had different views on the industrial action. A number of vice-chancellors veered away from the official position of their representative body, Universities UK, and towards that of the strikers. Some even joined their staff on picket lines.[7]

Students were divided between those who backed the strikers, as the National Union of Students did, and others who thought their high fees should insulate them against disruptions.[8] Thousands of students, including supporters and sceptics of the strike, sought refunds for lost teaching time.[9]

The dispute was eventually paused when Universities UK and the University and College Union agreed on a Joint Expert Panel to consider the valuation of the USS. In response to the Panel's first report in September 2018, the University and College Union (UCU), which had started the industrial action, claimed victory in 'turning back the tide which has swept away the guaranteed pensions of so many other workers.'[10]

Timeline of the FSSU / USS

1913: Launch of the Federated Superannuation System for Universities (FSSU)

1920: Increase in employers' contributions to the FSSU

1975: Launch of the Universities Superannuation Scheme (USS)

1983: Increase in employers' contributions to the USS

1997: Reduction in employers' contributions to the USS

2009: Increase in employers' contributions to the USS

2011: Increase in contributions and new career-average scheme for new members

2016: Increase in contributions and final salary section closed to existing members, with a new defined contribution section for higher salaries.

2018: Proposal to close career-average scheme leads to industrial action

Acres of print have been published about the state of the USS, the dispute and what should happen in the future. But the recent discussions on the USS have been unusual. They have focused to an excessive degree on the – admittedly crucially important – finer technical points of pensions policy, particularly on how the value of a pension fund should be assessed. Sight of the bigger picture has been lost.

HEPI has not written in detail about the USS before, in part because it has been covered in such detail by others. We are doing so now because it is important to stand back, see the wood as well as the trees and to understand how the wood came to exist in the first place.

2. Babyboomers and university pensions

Babyboomers

The story of the USS outlined in the following pages provides a clear example of how the post-war baby boomers have often done well at the expense of others when it comes to acquiring financial assets, including pension wealth.[11]

For example, an academic born in 1950 was likely to be:

1. aged 25 and just settling down in their career in 1975 when the USS was founded, enabling them to achieve 40 years' service and a full pension on reaching the USS retirement age of 65; and

2. aged 66 and newly retired in 2016, when the final salary scheme was closed to existing staff.

One specific example of how babyboomers have done better than academics born later is the first major reforms to the USS, which occurred in 2011. The final salary scheme was closed to new members and replaced with a career average scheme, which typically means lower pensions because each member's salary history, rather than just their final salary, comes to determine the level of their pension. The change protected the financial position of existing employees but was predicted to reduce the future benefits of new staff significantly. According to one analysis:

> *In October 2011 future members of USS lost 65% of their pension wealth (or roughly £100,000 per head), equivalent to a reduction of roughly 11% in their total compensation, while those aged over 57 years lost almost nothing.*[12]

This all confirms the general verdict of David Willetts (born 1956) who, before becoming the Minister for Universities and Science in 2010, said:

> *Because the baby boom is such a big cohort we can track their progress through society like a python eating a pig – watching the bulge work its way through … We've ended up with a world which very much operates in our economic interest.*[13]

There was not much Willetts could do in public to address the USS issues while he was the Minister responsible for higher education because it is a private sector, rather than a public sector, pension scheme. He did, however, send a warning shot across the bows in 2013: 'It would be wrong to expect students to bail out pension deficits to support pension schemes that are far more generous than students are likely to enjoy when they're older.'[14]

> ***'It would be wrong to expect students to bail out pension deficits to support pension schemes that are far more generous than students are likely to enjoy when they're older.'***

Indeed, the big increases in tuition fees over which first Labour and then the Conservative and Liberal Democrat Coalition presided, along with the concomitant decline in direct public funding to universities, removed some of the moral authority held by Government Ministers in relation to the USS. This is because the fee changes emphasised the autonomy and independence of universities and no longer could it be said that taxpayers were covering the majority of the burden for employers' contributions. (If fees were to be significantly reduced in future, this could conceivably change back.)

Additionally, there is a long-held fear among officials in Whitehall that government intervention in the governance of the USS could prove counter-productive. It could, for example, potentially influence the actions of any independent Chair of the Joint Negotiating Committee, who – in those circumstances – could need to emphasise their independence. It could also be tricky for policymakers, who have made their own unfunded pension commitments in relation to the public sector, to take action to stop the university sector from doing so in relation to a funded scheme. In December 2017, the Government's position on the USS was summarised by David Gauke, who was then the Work and Pensions Secretary, in the House of Commons: 'It would be improper for the Government to tell the joint negotiation [*sic*] committee how to run the scheme.'[15]

Meanwhile, those running the USS have had their hands tied. They were left having to operate within a restrictive legal framework put in place just before the first babyboomer generation retired. For example, the Pensions Act 2004 compelled pension schemes to be better funded than had often been the case in the past, starting in 2005. This was the year that the first post-war babies, born in 1945, reached the age of 60 (then, the State Pension Age for women as well as the age at which non-reduced benefits could first be taken from the USS).

'We will not know if there has really been a cross subsidy between generations of members until after the event.'

Intergenerational fairness

Successful pensions policy, especially in relation to collective occupational pension schemes, has to find an appropriate balance between future members, current staff, former staff who are not yet pensioners and pensioners as well as the sponsoring employer(s). This is excessively difficult. In the words of the first report of the Joint Expert Panel on the USS:

We will not know if there has really been a cross subsidy between generations of members until after the event. The Panel believes that it is unlikely that any outcome can provide complete fairness between generations.[16]

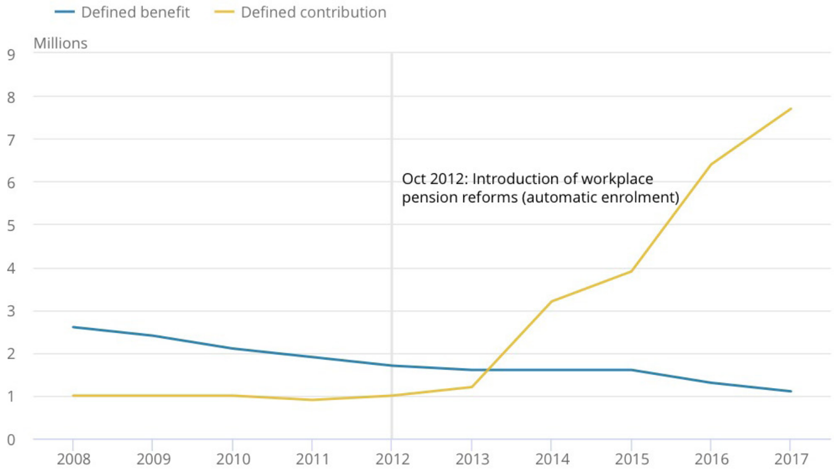
In the corporate world, it has been typical to close defined benefit pension schemes (such as final salary schemes), in which members are told to expect a certain level of pension and employers take the risks. They have often been closed first to new members and subsequently to everyone, while the value of pensions in payment has been protected in law. The schemes have typically been replaced with cheaper defined contribution schemes, in which employers tend to take on no risk and which have no predetermined benefit levels.

In the main public services, this process has proved harder to effect even though the cost pressures (such as rising longevity) are the same as those in the private sector. Factors such as higher staff membership of trades unions, the absence of shareholders looking for a profit and a desire to ensure positive working conditions relative to the private sector seem to have made a difference. While reforms have been made to ensure public sector schemes become more affordable, the entitlement of current employees to defined benefit pensions has been protected to some extent, although it has typically meant shifting from final salary to career average benefits.

Universities are generally independent charitable institutions offering substantial public services partially at taxpayers' expense. But they are not part of the public sector. So they sit somewhere between the corporate world and the public sector. Recent disputes have been over whether changes like those undertaken in the private sector should be applied to the USS, when – for example – members of the Teachers' Pension Scheme remain entitled to a defined benefit pension.

So far, defined benefit provision has survived, but alternative cost-saving measures have occurred, including increasing the proportion of academic staff on cheaper short-term contracts.[17]

Active membership of private sector occupational pension scheme by benefit structure



Source: Office for National Statistics

What this report does not cover

Since the wave of new universities in 1992 created from the former polytechnics, the Teachers' Pension Scheme (TPS) has had substantial coverage of university staff.[18] The TPS has undergone major changes in recent years, including shifting from final salary to career average provision. Further increases to contribution levels for active members (which are tiered from 7.40 per cent to 11.70 per cent) and sponsoring institutions (16.48 per cent since 2015) are expected following the Budget of 2018.[19] The Government has announced a consultation on the effect of changes to employer contributions on higher education institutions and others and promised a new assessment on the long-term viability of the Scheme.[20] Comparisons are often made between the USS and the TPS, but the latter is not covered in any detail in this report. Nor is the Local Government Pension Scheme, which covers many other university staff. Other pension schemes exist in the university sector too, for example for support staff and students' union staff, but these are also not discussed.

In addition, while the pages that follow discuss the recent row over the true size of the USS deficit, they exclude a detailed consideration of it. This is because the issue has been covered in considerable detail elsewhere – the Wikipedia entry for the dispute alone is over 12,000 words (and similar in length to this whole paper).[21]

Instead, the following chapters look at how the USS came to face the tricky challenges it does today.

3. University pensions before the USS

At the end of the nineteenth century, university staff were not entitled to pensions. This contrasted unfavourably with the position of school teachers, thanks to the Elementary School Teachers (Superannuation) Act 1898.

In the early years of the twentieth century, the position started to change: Owens College, which became the Victoria University of Manchester, and the University College of Liverpool set up their own schemes.[22] Others followed. But the lack of a single pension scheme for different institutions risked hampering the transfer of staff.

By 1913, the Board of Education's Advisory Committee on grants to universities backed a single scheme. It assigned £8,400 a year to 14 institutions – including £1,000 each to Liverpool and Manchester, £950 to University College, London, and £800 to Birmingham – out of a total annual grant to institutions of £149,000.[23]

Establishing the first pension scheme for universities[24]

The *Second Report* from the Board of Education's Advisory Committee on the *Distribution of Exchequer Grants to Universities and University Colleges in England* (1913) reported considerable support for new pension arrangements:

> *The establishment of a federated superannuation system is so essentially a matter for the Universities and Colleges themselves that, however desirable its institution may be, we should not have felt justified in making this recommendation unless we had satisfied ourselves, in the course of our informal visitations, that an attempt to facilitate such a scheme would be generally welcome.*

The lack of transferability may have helped institutions in the short term but it was thought to be against the long-term interests of higher education and contrasted with arrangements in the civil service:

> *Many of the regulations contained in existing schemes are, and are probably intended to be, in restraint of retirement or acceptance of a post elsewhere. In many cases the beneficiary after years of service can only take a post in another University by sacrificing a portion of the sum which has been accumulated for his benefit. This restraint can only be justified, if it can be justified at all, by regarding the service of a single University as a profession comparable with the Civil Service. The truer view is that the teachers in all the Universities constitute a profession, and that transference from one University to another should not be accompanied by a financial penalty any more than is transference from one Government Office to another.*

Better pension arrangements were also regarded as a way to attract high-quality staff:

> *It should be to the interest of the Universities as a whole to co-operate in providing a moderate pension for all their teachers, as the excellence of the staff will in certain measure depend on the pecuniary inducement to enter University service.*

The Committee recommended contributions worth 10 per cent of salary 'and that not more than half of this percentage should be contributed by the beneficiary.'[25] In 1920, employers' contributions to the Federated Superannuation System for Universities (FSSU) doubled to 10 per cent, but the scheme was otherwise relatively stable for decades.[26]

The key features of the FSSU differed in important ways from many other occupational pension schemes.

1. It was common for people who left a job that came with a pension to recoup their own contributions but to lose access to any contributions paid by their employer. But the FSSU allowed all contributions to be retained by the member, allowing people to move between universities without financial loss.[27]

2. Member's benefits were unrelated to their final salaries but were dependent on factors such as the performance of whichever one of the insurance companies associated with the FSSU their contributions were invested with.

3. On leaving the employment of a university, someone's FSSU policy could be paid in cash, meaning the money could be used for any purpose. But it could run out or fail to offer protection to any dependants.

The FSSU grew far beyond its original scope: in 1915, it covered 22 institutions and 500 members; by 1966, it covered 276 institutions (including 154 university institutions, 45 research associations and 29 agricultural institutions) and had almost 37,000 active members.[28]

The scheme's main features were, however, effectively placed in aspic when the Finance Act 1947 ruled that only one-quarter of any superannuation scheme should be paid as a lump sum. There was an exemption for existing schemes like the FSSU that had more generous rules, but only if no significant changes were made.[29] While the FSSU stood still, the rest of the world moved on and the scheme came to look more and more dissimilar to other occupational pension schemes.

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From the early 1950s, some university staff also had so-called 'top-hat' pension schemes. These were additional pensions, the contributions of which replaced part of an employee's salary. The employee would receive less in taxable salary but more in pension contributions with no tax taken off. Such schemes were particularly advantageous for people in higher tax bands.[30]

It may not have been obvious at the time, but this put a nail in the coffin of the FSSU.

The Treasury baulked at the use of top-hat schemes, pointing out that institutions with public sector pensions were not allowed to offer such arrangements. They raised the possibility that universities would be subject to public criticism if the details were more widely known. They also offered to talk.

In 1958, this resulted in a review by a committee of the University Grants Committee, the Committee of Vice Chancellors and Principals (CVCP) and the Treasury, under the Chairmanship of Sir Edward Hale, the Secretary of the University Grants Committee.[31]

4. The origins of the USS

The Hale report

When the Hale report appeared two years later, in 1960, it began by noting that the benefits from the FSSU tended to be lower than for other professionals and that retired staff suffered from declining real incomes after retirement.[32] The paper focused on the first of these problems as the second was felt to be out of scope.[33] Yet it also noted 80 per cent of recent retirees needed to have their pensions supplemented by their former institution under the Scheme for the Alleviation of Superannuation Hardships (established in 1953) as the benefits from the FSSU had often turned out to be inexcusably low.[34]

The report noted that the public services and nationalised industries tended to have final salary pension schemes, which provided better protection against inflation before retirement than schemes like the FSSU, while also reflecting pay rises in the final benefit calculations.[35] However, introducing such a scheme for university staff would necessitate a diminution of institutional autonomy:

> *a scheme which is operated by means of separate insurance policies for each individual member involves a minimum of central administration and a minimum surrender of institutional autonomy. A scheme of the type which is now normal in the public sector involves a pooling of financial resources and risks over all the members of the scheme, and consequently needs a central organisation wielding considerable powers.*[36]

The report specifically rejected the idea that university staff might pay their contributions to the Exchequer and then receive benefits from the public purse, via a notional fund:

It would not really reduce the surrender of institutional autonomy involved. It would merely transfer to a government department the powers and responsibilities of the trustees, and turn retired university teachers into pensioners of the state. Such an arrangement seems to us to have little advantage over the creation of a body of trustees with the powers we envisage, and to be open to objections of its own on which we need not enlarge.[37]

The report instead shaped a potential 'fully-funded' final salary scheme based on the pensions available to public servants, although it admitted the features were not as advantageous as many staff wanted: 'They fall short, however, in certain respects of desiderata laid before us by the Association of University Teachers.'[38]

The outline scheme's details included the following features.

- Men and women who retired age 65 after 40 years of employment would be entitled to a pension worth two-thirds of their average final salary over their last three years of work.[39]

- As a lump sum payment worth three years of pension would be payable on retirement, the actual pension received would be reduced commensurately to half of a member's final salary.

- The scheme was forecast to cost a total of 12 per cent of salary for new members (assuming investment returns of 3.25 per cent), with an additional cost of 5.2 per cent of salary if existing staff were allowed to transfer in and to receive the new pension even for past years' work.[40]

Bizarrely, the report briefly admitted its own costings were not worth the paper they were written on: 'we think that it would be generally agreed that there is no real possibility that the scheme will ever run on a contribution of only 12 per cent.' This was mainly because it ignored future salary increases. These were passed by on two grounds. First, 'None of the existing contributory schemes in the public sector are financed by contributions which assume a future increase in salary levels.' Secondly, 'In general, future economic trends cannot be foreseen with sufficient confidence to justify making specific allowance for their effects in planning the finances of superannuation schemes.'[41]

'we think that it would be generally agreed that there is no real possibility that the scheme will ever run on a contribution of only 12 per cent.'

The report did, however, note that salary increases of 2 per cent each year would necessitate contributions of 17 per cent even before the extra costs of admitting existing staff were accounted for (and these extra costs would also be affected by salary increases). It was suggested that any extra costs could be picked up by higher employers' contributions:

> *deficiencies have arisen since the war in other comparable schemes in the public sector, and have been met without either a reduction in benefits or an increase in the employee's contribution above 6 per cent*.[42]

The report also refused to consider the impact of post-retirement inflation eating away at the real value of any pensions received, against the wishes of the Association of University Teachers (AUT). So the proposed scheme was far from guaranteed to solve the two most important issues: the need to provide a sustainable fund; and protecting pensioners against poverty.

The haughty tone of the Hale report was especially clear where it stated that it was for universities to decide whether to shift to the proposed arrangements or to stick with the FSSU: 'we have given the universities all the help we can. The choice between the alternatives must be theirs.'[43]

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Afterwards, the CVCP set up a steering committee to consider the question and came out against any change, though it also recommended another look at the question within the subsequent five years.[44]

The Maddex report

The pressure continued to mount. For example, in 1963, the Robbins report foresaw a much larger higher education sector and 'stressed the desirability of freer movement of staff between higher education, government and other research establishments and industry.' It declared, 'Arrangements for superannuation payments should be such as to facilitate this movement.'[45]

In 1964, an official working party was set up by Government and other interested parties – including the CVCP and the AUT – under the Chairmanship of Sir George Maddex, the former Government Actuary, to deliberate further.

Their report appeared in 1968 and it began by noting that post-war inflation and university salary increases had left new retirees with pensions from the FSSU that were below a reasonable proportion of their salary, meaning they faced a big reduction in their standard of living on retirement. This had needed to be tackled through the supplementation arrangements (which had been made more generous in the light of the work by the Hale committee).[46]

The Maddex report considered the establishment of a final salary scheme, which it said should have the following features:

- contributions of 13 per cent of salary (5 per cent of which would come from employees);
- post-retirement pension increases, to be paid for from surpluses or the Government via its funding for universities, rather than by staff; and
- a 2 per cent surcharge on universities to cover both the costs associated with people transferring from the FSSU and any potential economic downturn.[47]

'we do not think it reasonable to expect university teachers to pay additional contributions'.

Like the Hale report, the Maddex report drew comparisons with public sector schemes, especially in relation to any shortfalls exposed by actuarial valuations, noting 'we do not think it reasonable to expect university teachers to pay additional contributions'.[48] It resembled the Hale report too in avoiding backing its own outline scheme over the existing FSSU arrangements: 'we feel unable to make a clear recommendation in favour of either system.'[49]

There was also a huge sting in the tail. The report claimed that, on three important assumptions (two of which it admitted had 'questionable' validity):

> *the great majority of university teachers entering university service for the first time will do better with F.S.S.U. than with a terminal salary scheme. This is true regardless of their family circumstances and for all except those whose final promotion comes late in their careers.*[50]

This finding was one of many questioned by actuaries. One criticised the Maddex report for the certainty with which it claimed the FSSU offered higher benefits: 'No comment is made on the apparent conflict between this conclusion and the current experience as regards supplementation.'[51]

The only certain outcome was that debate would continue.

Other models

Further work was undertaken on the design of a scheme, propelled by the clumsily-titled Joint Consultative Committee of the Committee of Vice-Chancellors and Principals and the Association of University Teachers on University Teachers' Superannuation.

In 1969, at the Joint Consultative Committee's request, a potential final salary scheme was drawn up by the consulting actuary of the FSSU, Geoffrey Heywood. The major issues still under discussion included whether a final salary scheme should be limited to new university staff (as Heywood modelled) and whether pensions in payment should be increased to counteract the effects of inflation (which Heywood initially assumed would not happen but which was simultaneously coming to be seen as a necessity for civil service pensions). Subsequently, in January 1970, Heywood and the Government Actuary's Department costed a new final salary scheme as needing total contributions of 13 per cent, with allowance for some increases to pensions in payment.[52]

In spring 1970, just before the party left office, Labour's new tax code for approved pension schemes put a spanner in the works of the FSSU. It limited the tax-free lump sum payment on retirement to 3/80ths of an employee's annual final salary.[53] This was to be applied retrospectively as well as to new schemes.

The FSSU had much more generous terms, and this decision has been described as 'penal, if not lethal' for it.[54]

Intense lobbying of the incoming Conservative Government was successful only in delaying rather than blocking the change. In the 1971 Budget, Anthony Barber, the Chancellor of the Exchequer, said:

> *I recognise the practical difficulties facing the F.S.S.U. (the Federated Superannuation System for Universities) and similar schemes in coming to terms with the new rules and, though I cannot accept their claim to be allowed to remain as they are indefinitely, even as closed schemes, I think that the case has been made out for a fairly long transitional period before existing schemes must conform with the new tax code. I propose accordingly to defer to 1980 the appointed day for universal conformity with the new rules.*[55]

While waiting for this decision, the plans for a final salary scheme for university staff were further developed. The changes to tax rules meant a dependants' scheme could be incorporated as part of the main scheme, rather than as an add-on, and there were to be increases of up to 3 per cent to limit the impact of inflation on pensions in payment. As a result, the necessary contributions were calculated to be 15 per cent of salary, split with 9 per cent to come from employers and 6 per cent from employees. Meanwhile, the University Grants Committee decided that existing staff should have access to the proposed new scheme too.[56]

So began an extensive consultation exercise with the Government, who were keen to try and provide parity with public sector schemes. This resulted in agreement on a precise scheme in late summer 1972 with contributions of 16 per cent, split between 10 per cent from employers and 6 per cent from employees. Any increase in costs would have to be paid by employers. There was also a 2 per cent surcharge on institutions to cover back service and a ¼ per cent for employees to cover an add-on Universities Supplementary Dependants Pension Scheme that was to top up the basic dependants' benefits in the main USS.

The USS was sold to university staff as being 'among the most generous of its kind in the country'

The USS was sold to university staff as being 'among the most generous of its kind in the country' and nearly all (96 per cent) of the members of the FSSU, who were allowed to transfer in on favourable terms, did so.[57]

5. The operation of the USS

The establishment of the USS

Once the details of the new pension to be offered had been finalised, the governance and management arrangements had to be resolved. The AUT insisted on equal representation with the CVCP on the USS management committee. However, this was a big ask because:

- not all expected future USS members were in the AUT;
- employers were set to make much larger contributions than employees; and
- the employers were taking on the risk of higher contributions in future.

The AUT did not receive all they wanted but they did secure considerable influence as the discussions ended with agreement on a Joint Negotiating Committee. This was to have five CVCP and five AUT representatives and an independent chairman. It would propose or evaluate potential changes to the USS rules and its decisions would be binding on management, assuming the University Grants Committee and – where necessary – the actuaries agreed.

Whitehall tried but failed to secure a veto for the Department of Education and Science over future changes to the rules.[58] Despite the failure of this attempt, the establishment of the USS did not just help cement the new higher education system; it also confirmed the closer links between publicly-funded universities and the state.

Finally, on April Fool's Day 1975, the USS was launched.

Despite issues on the transfer in of existing staff, the USS was notable for its stability over the next thirty years. The CVCP became Universities UK in 2000 and the AUT merged with the National Association of Teachers in Further and Higher Education (NATFHE) to become the University and College Union (UCU) in 2006. Despite their increasing breadth, the two new organisations took up the places on the Joint Negotiating Committee, which continued to be overseen by an independent Chair.

This explains why it was Universities UK that was in the eye of the storm during the 2018 strike. It meant that, at a moment when universities were facing unprecedented media criticism, their most powerful voice was hampered by having to focus on a pensions dispute that only directly and seriously affected around half of their member institutions.

The central role of UUK in the USS mystified people who thought the job could have been done by a subset of UUK institutions – those with large numbers of staff in the USS – or by the Universities and Colleges Employers' Association (UCEA), which negotiates pay deals on behalf of the sector but which was only established in 1994, 19 years after the USS gave a formal role to the Joint Negotiating Committee.

The level of contributions from employers to the USS bounced around and, as with the FSSU, it was deemed necessary to raise the employer contributions after just a few years of operation:

- in 1980, employers' contributions rose to 14 per cent;
- in 1982, employees' contributions rose too but by a mere by 0.1 per cent of salary to 6.35 per cent, which related to the member-funded elements of death-in-service and incapacity benefits – this was the only change to member rates in the first 36 years of the Scheme;

- in 1983, employers' contribution rose again to 18.55 per cent, to address a deficit;
- in 1997, employers' contributions fell back to 14 per cent as the 1996 valuation suggested the Scheme was in surplus; and
- In 2009, the employers' portion jumped up once more, this time to 16 per cent of salary.[59]

Contributions to the defined benefit parts of the USS

	Member	Employer	Total
1/4/75 to 31/3/80	6.25%	12.00%	18.25%
1/4/80 to 31/3/82	6.25%	14.00%	20.25%
1/4/82 to 31/3/83	6.35%	14.00%	20.35%
1/4/83 to 31/3/95	6.35%	18.55%	24.90%
1/4/95 to 31/12/96	6.35%	18.55%	24.90%
1/1/97 to 30/9/09	6.35%	14.00%	20.35%
1/10/09 to 30/9/11	6.35%	16.00%	22.35%
1/10/11 to 31/3/16	7.5% (FS) 6.5% (CRB)	16.00%	23.50% (FS) / 22.50% (CRB)
1/4/16 to 1/4/19	8.00%	18.00%	26.00%

FS stands for final salary and CRB stands for career-revalued benefits. Until 1995, the first £100 of salary was exempt for pension contributions.

The collapse in private sector defined benefit schemes

Rising life expectancy, changing regulations and lower returns have all added to the costs of running any pension scheme with a pre-defined level of benefits. Universities with their own separate pension schemes for non-academic staff have typically been part of this shift, with – for example – the University of Southampton closing its defined benefit scheme to new members at the end of 2018.[60]

In the past, pension schemes had a 'Get Out of Jail Free' card.[61] When a solvent employer wanted to reduce their exposure to high pension costs, they could close their pension scheme and share the remaining assets out among the members according to a statutory formula. But this could mean big reductions in the amount that had been expected.

In 2002, the shipping firm Maersk sought to do this after its takeover of SeaLand Services (although substantial negative press coverage eventually helped produce a change in mind).[62] This episode contributed to a change in the law. Since June 2003, it has not been legally possible for a solvent employer to wind up their pension scheme unless it is fully funded, sufficient to cover any promises in full.

At the time, the Government said:

> *We need to act to make sure that a pension promise made by employers is a pension promise honoured by employers. … As from now, trustees will have the power to make solvent employers who choose to wind up their schemes buy out members' accrued rights in full.*[63]

It was also announced the schemes of insolvent employers would obtain support from a new Pension Protection Fund, paid for by a risk-based levy on pension schemes.

Since then, transparent new accountancy standards, tougher regulations, lower interest rates and rising life expectancy have also led to higher contribution levels.

Generally, the replacement schemes at private companies have had lower levels of employer contributions, meaning younger employees are typically accruing less generous pension entitlements than their predecessors, with the savings helping to plug the deficits in the more generous schemes since closed to new members.

As Charles Cowling, director of JLT Employee Benefits, puts it:

> *A typical final salary pension scheme now costs employers more than three times the cost of 30 years' ago, largely as a result of increased longevity and changing market conditions. A DB pension scheme that might have had an employer cost of 10% to 15% of payroll in the late 1980s now costs the same employer well over 40% of payroll – and that is before any allowance for the costs of paying for large deficits. … Employees in much poorer defined contribution (DC) schemes will cast a jealous eye on those lucky individuals still enjoying DB benefits …*[64]

The 2011 changes

In 2011, far more dramatic changes occurred to the USS – when it was thought the deficit had reached £2.9 billion – thanks in part to the casting vote of the independent Chair of the Joint Negotiating Committee, Sir Andrew Cubie.

The USS was split in two:

i. the final salary part, which was shut to new members; and

ii. a career average revalued earnings section, which meant lower pension entitlement for new staff.

Other simultaneous changes included:

- higher employees' contributions of 7.5 per cent for the final salary section;

- a 'cap and share' rule, meaning employers would only cover 65 per cent of any extra contributions and employees would have to find the other 35 per cent;
- linking the retirement age to the State Pension Age, which was set to increase; and
- reducing the maximum possible indexation of pensions and deferred pensions by replacing the use of the Retail Prices Index (RPI) with the Consumer Prices Index (CPI).[65]

These changes were unpopular and some university staff voted to strike. In 2014, the UCU said presciently:

> *Our consistent view has been that the changes imposed in 2011 were not only bad for new entrants but that they also threatened the protection that we won for existing members. The gap between the schemes is so great that we pointed to the major financial incentive for the [Universities Superannuation] scheme to come back and force existing members onto the poor CRB [career revalued benefits] scheme for their future service.*[66]

Despite the 2011 alterations being the biggest set of changes in the history of the USS, the reforms were quickly deemed insufficient to cover future costs: 'a further redesign of USS is needed in the medium term to cope with progressively higher contribution rates and lower funding ratios [assets:liabilities].'[67]

The 2016 changes

In 2016, similarly significant changes were made:

- the final salary section was closed to existing members;

- contributions for the career-average section increased to 26 per cent, split between 18 per cent for employers and 8 per cent for employees;

- pensionable pay for the open career average part was capped (at £55,000), while higher earnings were eligible for a new defined contribution section called USS Investment Builder – as benefits from the FSSU had also not been linked directly to earnings, this was in some respects a return to the *status quo ante* before the USS had been established.[68]

At the same time, the pension entitlement for people in the career-average section changed from 1/80th of salary for each year worked, plus a 3/80ths tax-free cash lump sum, to 1/75th and 3/75ths in cash. This partly offset the other changes by increasing the costs and raising the benefits.

After these changes, the employers' contribution of 18 per cent of payroll was split between:

- 13.0 per cent for future service defined benefits;

- 2.1 per cent for tackling the deficit;

- 2.5 per cent for the USS Investment Builder defined contribution element; and

- 0.4 per cent for expenses.[69]

6. The current position of the USS

The 2017 valuation

After a lengthy period of pre-consultation discussions between the USS, Universities UK and UCU, the USS Trustee began a consultation on the Scheme's 2017 valuation at the start of September 2017.

- The 'best estimate' forecast, which represents a 50 per cent probability that the investment forecasts would be met or bettered, suggested the USS had a surplus of £8.3 billion.
- But a more prudent confidence level of 67 per cent resulted in a deficit figure of £5.1 billion, which was considered to necessitate increased contributions of between 6 or 7 per cent of payroll.[70]

According to a report in the *Financial Times*, The Pensions Regulator wrote a letter to the USS later the same month which indicated the Scheme was less secure than the USS's own assessment had suggested: 'It appears to us that the sector covenant is weaker than the Trustee's assessment.'[71]

'It appears to us that the sector covenant is weaker than the Trustee's assessment.'

The UCU strongly disagreed, publishing a paper they had commissioned by First Actuarial that suggested, 'There is no need to change either the contribution rate or the benefits to have a prudent funding plan.' It argued for higher investment targets and complained Universities UK were following a strategy designed to limit their exposure to increased contributions that would actually lead to higher contributions by encouraging the Trustee to aim for a bigger fund and lower returns: 'The advantages of having an open scheme with sponsoring employers of excellent aggregate covenant will have been discarded.'[72]

After consulting the relevant employers, Universities UK raised their concerns about the level of risk. This Universities UK consultation has since been fiercely criticised for, among other things, giving too much weight to individual Oxbridge colleges. As small institutions with strong covenants, colleges felt exposed given the USS's status as a last-man-standing rather than a joint-and-several scheme.[73] Moreover, because the Universities UK response reflected The Pensions Regulator's advice, it was unlikely that the Trustee would push back on it.[74]

In November 2017, the USS Trustee responded by adopting a more moderate approach which reduced their expected returns. This had the effect of increasing the deficit from £5.1 billion to £7.5 billion. Without reducing benefits, this would necessitate total contributions rising from 26 per cent of payroll to 37.4 per cent (including an element for deficit recovery that would rise from 2.1 per cent to 6 per cent).[75]

Immediately afterwards, Universities UK proposed replacing future defined benefit pension provision with the defined contribution part of the USS.[76] This turned earlier widespread assumptions that any shortfalls would be addressed by changes to contributions and other reforms that fell short of wholesale reform on their head. Hundreds of discontented academics pointed out in a letter to *Times Higher Education* that First Actuarial believed the changes could mean £208,000 less pension entitlement for a lecturer than previously and £400,000 less than provided by the Teachers' Pension Scheme.[77]

So, in January 2018, Universities UK published some revised proposals, which included:

- closing the career average part, though with the possibility of reintroducing it, and ensuring all future benefits (except for death-in-service and ill-health retirement benefits) would be built up in the defined contribution section;

- giving members the chance to pay in just 4 per cent, half of the regular 8 per cent, without having any negative impact on the level of the employer contribution to the defined contribution part (13.25 per cent); and

- dividing the employer contributions, which would remain at 18 per cent until at least March 2023, between employees' defined contribution pension pots (13.25 per cent) and deficit recovery, investment charges and the employers' part of death and incapacity benefits as well as running costs (4.75 per cent).

According to Universities UK, no change could mean 'significantly higher DRCs [deficit recovery contributions]' that would 'constrain funding for future service benefits' and have 'serious ramifications for the higher education sector.'[78] On the other hand, as one pensions consultancy firm noted, the shift to a fully defined contribution basis could actually lead to greater demands for subsidies from current members to cover previously accrued pension rights:

> *if the USS moves fully to a DC [defined contribution] basis, then the USS trustees are likely to focus even more on protecting the past DB [defined benefit] benefits. This could lead to a more prudent approach being taken and/or shorter recovery periods at future valuations – leading again to an increased demand for contributions towards the deficit in the future.*[79]

The major changes proposed by Universities UK were passed by the Joint Negotiating Committee on the casting vote of the independent Chair, Andrew Cubie. The UCU were vehemently opposed, leading to the major strike. The effectiveness of this industrial action was bolstered by a lack of unity among university leaders, sympathetic media coverage and smart use of social media. In private, senior university managers realised those on strike gained the upper hand: 'They were fighting a digital war in a digital age, while USS and UUK were fighting an analogue war in a digital age'.

'They were fighting a digital war in a digital age, while USS and UUK were fighting an analogue war in a digital age'

Talks at the Advisory, Conciliation and Arbitration Service (known as ACAS) led to an agreement between Universities UK and the UCU's leadership: to keep meaningful defined benefit arrangements for all members (capped at an annual salary level of £42,000) for three years from 2019; to increase employer and employee contributions for the same period; and to explore risk-sharing alternatives, such as collective defined contribution schemes.[80]

The Joint Expert Panel

In March 2018, just a day after it had been agreed, the UCU's members rejected this settlement. However, the agreement had also included a new independent expert group to inform the next USS valuation. In a modified form, this survived the fallout when – in April 2018 – the UCU members voted to accept a group that would look at the 2017 and future valuations. At which point, the strike action was suspended.

The Joint Expert Panel, chaired by Joanne Segars, was expected 'to review the basis for the Scheme's 2017 valuation, assumptions and associated tests.'[81] Their first report, issued in September 2018, discussed the USS Trustee's three tests:

1. distance to self-sufficiency within 20 years;
2. stability of contributions and / or benefit design; and
3. the ability of higher education institutions to underwrite the Scheme in a disastrous situation.

It claimed that the first test was highly sensitive and had been given too much weight. In contrast, too little regard had been paid to the other two tests.

The Joint Expert Panel recommended various changes, including re-evaluating employers' willingness to bear more risk and 'Taking the uniqueness of the Scheme and the HE [higher education] sector more fully into account.' Together, their changes could 'have a material impact on the scale of the 2017 deficit and resulting contribution increases.'[82]

'insufficient weight has been given to the fact that the USS is a large, open, immature scheme which is cashflow positive'

They concluded:

> *insufficient weight has been given to the fact that the USS is a large, open, immature scheme which is cashflow positive and can adopt a very long time-horizon. By giving this strength and diversity a greater weight, the Panel believes that the Trustee and the employers may be able to agree a larger risk envelope.*[83]

This tended to be seen as a victory for the UCU, with one academic declaring: 'The report has given validation to staff who felt compelled to strike over what they saw as a grey area but which was really being painted as a black and white issue'.[84] Not everyone welcomed the Joint Expert Panel's report, however. For example, their recommendation of 'taking account of expected future investment returns in calculating contribution rates' proved controversial.[85] A group of international pension experts led by the influential UK consultant John Ralfe, Professor Zvi Bodie of Boston University and Theo Kocken of VU University Amsterdam wrote a letter to the Chief Executive of USS warning that:

> *In our view, 'taking account of expected future investment returns' fundamentally misrepresents the economics of DB [defined benefit] pensions, and understates the annual cost of new pension promises, the total liabilities from past pension promises, and any deficit payments needed.*[86]

In public, the USS employers – as represented by Universities UK – gave a cautious welcome to the Joint Expert Group's work.[87] But, in private, some senior figures asked why, given the Joint Expert Panel were so unrelentingly optimistic about future returns, they were so keen to defend defined benefit pensions: while defined contributions put downside risks on individuals, they also give them all the upside.

Timeline of activity, 2018

23 January:	The Joint Negotiating Committee agree to the UUK proposals
29 January:	UCU announce their members have voted overwhelmingly to strike
23 February:	Strike begins
12 March:	Universities UK and UCU agree: i) to retain a defined benefit scheme until 2022, with higher contributions from employees (8.7%) and employers (19.3%); ii) to lower benefits (lower salary threshold of £42,000 and lower accrual rate of 1/85th); iii) to consider risk-sharing options; and iv) to convene an independent expert valuation group to look at the next valuation of the USS

13 March:	UCU members reject the proposal
23 March:	Universities UK and UCU propose a panel of independent experts to review USS valuations, while contributions and benefits would be fixed until April 2019
13 April:	UCU members accept a Joint Expert Panel and plans for further strike action are postponed
27 April:	The Joint Negotiating Committee withdraw their proposals
3 May:	USS Trustee announce increase in contributions
13 September:	Joint Expert Panel issues its first report, with a retrospective review of the 2017 valuation and suggestions for possible adjustments to the methodology on USS valuation
22 November:	USS says it will reopen discussions on 'risk capacity and appetite' with employers, with an additional valuation for 31 March 2018

The industrial relations problems had led some – including Vince Cable, the Leader of the Liberal Democrats, and Stuart Croft, the Vice-Chancellor of the University of Warwick – to call on the Government to take on the USS's risks by underwriting it.[88] Arguably, this would have had something in common with the Royal Mail pension scheme, the assets and deficits of which were absorbed by the Coalition Government to ensure a successful privatisation in 2013. But this change had prompted fears of intergenerational inequity, for it put the costs on the shoulders of future taxpayers, and, unlike the USS, the Royal Mail pension fund had started on the Government's books.[89] So there was no clear incentive for the Government to do something similar for the USS and it was quickly ruled out by the Minster for Universities, Science, Research and Innovation, Sam Gyimah, in response to a parliamentary question:

> *government has no role in relation to the USS beyond regulation as applied to all work-based pension schemes by The Pensions Regulator. The government has no plans to underwrite the USS … The cost to the taxpayer of underwriting such a scheme could be significant.*[90]

Moreover, it was not at all clear that the full consequences of such a takeover for institutions were widely understood. For example, had it occurred, it is likely it would have led to a reduction in university autonomy by bringing many universities much closer to the state. However, it is understood this message was flagged privately to the sector by Whitehall.

The Trustee acts

The USS Trustee, concerned about the June 2018 legal deadline for addressing the fund's deficit, had announced higher employee and employer contributions in line with the statutory procedures back in May 2018. The rises were to be phased in gradually between April 2019 and April 2020 and were set to increase the total contributions from 26 per cent of salary to 36.6 per cent, split between 11.7 per cent from employees and 24.9 per cent from employers, of which 6 per cent were to be for deficit recovery. (To hold the costs down, the 1 per cent 'Match', an extra 1 per cent employer contribution to the USS Investment Builder for employees voluntarily opting to make an extra 1 per cent employee contribution, would end.)[91]

In July 2018, the Trustee confirmed these extra payments would take effect irrespective of the recent industrial action (and after a statutory consultation by employers with affected employees).[92]

Future contributions to the USS

	Member	Employer	Total
1/4/19 to 1/10/19	8.8%	19.5%	28.3%
1/10/19 to 1/4/20	10.4%	22.5%	32.9%
1/4/20 onwards	11.7%	24.9%	36.6%

But, after the Joint Expert Panel's work had been welcomed by both Universities UK and the UCU, they announced a new valuation of the USS for the end of March 2018.[93] In a consultation paper launched in January 2019, this suggested the deficit may have fallen from £7.5 billion to £3.6 billion. It also suggested future contributions could be reduced from 36.6 per cent (including 6 per cent for deficit recovery) to 33.7 per cent (including 5 per cent for deficit recovery).[94] The number could fall further, to just below 30 per cent, if there were to be a greater level of risk and a greater commitment to contingency support (most notably, higher contributions once any key metric moved in the wrong direction):

> *Each of the [Joint Expert] panel's recommendations is worthy of consideration in isolation, but each one introduces varying degrees of additional risk. … The potential consequences of taking greater risk must be quantified, and credible options for managing material downsides must be available.*[95]

In 2017, private sector defined benefit pension schemes had average contributions of 25.2 per cent of pensionable earnings, split by 19.2 per cent from employers and 6.0 per cent from employees. This is not wholly out of line with the 26 per cent (18 per cent and 8 per cent) paid to the USS before April 2019 and the USS contributions were even more in line with average payments to career average pension schemes, which are a subset of all defined benefit schemes (17.9 per cent from employers and 8.0 per cent from employees). However, USS contributions were many multiples of those typically paid to private sector defined contribution schemes, which had an average total contribution rate of just 3.4 per cent (2.1 per cent from employers and 1.2 per cent from employees).[96]

7. Conclusion

Plus ça change, plus c'est la même chose

The USS dispute was unprecedented in its ferocity. But, in the main, it resembled nothing so much as earlier conversations about university pensions. History is, in many respects, repeating itself. A number of issues echo down the decades. They include:

- tension between governing multi-employer pension schemes and the autonomy of individual institutions;
- difficulties in fixing the level and balance of contributions from employers and employees;
- the appropriate type and level of benefits;
- differences in actuarial forecasting;
- challenges in ensuring fairness between members and pensioners; and
- the optimal relationship between university pension arrangements and the state, given universities are generally charities providing education at least partly at public expense.

Managers and unions

Arguably, the industrial action over the proposed changes to the USS is notable partly for exposing facts that conflict with common perceptions about UK higher education.

In apparent contrast to the perception that universities have become subject to excessive managerialism, whereby administrators take precedence over academics, the response to recent proposed pension changes suggest the reality is more complex. For example, changes to the USS have been harder to effect than in either the private or charitable sectors – 58 per cent of the largest charities have already closed their defined benefit (DB) pension schemes to future accruals.[97] Despite the so-called 'marketisation' and 'commodification' of higher education, university pension reform more closely resembles the public sector.

The primary trades union (the AUT and its successor the UCU) have often sought more than seems feasible in the short term, so have tended to look as if they have failed to achieve their objectives. But their positions have sometimes turned out to be prescient. On issues like protecting the value of pensions through increases after retirement, the union position shifted from being out-of-the-ordinary to mainstream (and even statutory). A similar pattern may now be taking place on retaining coverage of universities' defined benefit pension provision.

The UCU's campaigning has also, however, put the organisation in some apparently contradictory positions, such as hoping for stellar investment returns for the USS despite a general scepticism among a notable proportion of their members towards stakeholder capitalism. Moreover, the demands have arguably helped lead to funding problems because the union have wanted employees to pay little towards any improvements. The union's robust position on pensions may even have exacerbated the shift, which they have themselves strongly opposed, towards cheaper and more casualised labour.

Public discussion of the most recent USS dispute may well have led people to believe the employers have acted miserly. But, originally, the lead for generous defined benefit pensions came from the top as much as the bottom. Employers have regularly pushed for better pensions for their staff and sought to be generous, lobbying policymakers, finding resources and agreeing to take on the burden of increased costs. In one sense, this is unsurprising because it is in their interests to ensure just rewards if they want to recruit large numbers of excellent staff.

According to Bill Galvin, the Chief Executive of the USS:

> *If the scheme had been established on a cost-sharing basis from inception, with the base rates being 6.25% and 12%, members would have paid more overall as the required contribution rate has generally risen and never returned to the initial 18.25% aggregate rate.*[98]

The only increase of employees' contributions for the best part of three decades was a rise of just 0.1 per cent of salary from 6.25 per cent to 6.35 per cent in 1982. Or, to put it another way, between 1913 and early 2019 (the time of writing) the contribution of employees rose from 5.0 per cent to 8.0 per cent (that is, by 60 per cent) while that of employers grew from 5.0 per cent per cent to 18.00 per cent (that is, 260 per cent).

- If one opts for 1920 as the comparator year, however, then employers' contributions have risen by 80 per cent, which is more in line with the changes for employees.

- Or, if dated from the start of the USS in 1975, then employees' contributions have increased by 28 per cent and employers' contributions by 50 per cent.

- Moreover, if the Trustee's current set increases in contributions take place, then since 2011, the contributions of employees will have increased by 84 per cent, which is a great deal for a scheme that was meant to put the increases in costs on employers (and subsequently share them with employees 65:35) as well as less (56 per cent) than the increase in employers' contributions.

But if employees choose only to pay 4 per cent in future, they will be paying less than back in 1913 while employers will be paying nearly five times as much.

Fairness across the generations

In 1958, the President of the Institute of Actuaries, Frank Mitchell Redington, said:

> *It would clearly be quite unconscionable for one generation to vote for itself luxury increases in pensions at half price to itself and the rest at the expense of following generations and then to speak of them as pensions 'as of right'.*[99]

This is arguably what the babyboomers did in the half century afterwards. Yet it was not foreseen in the university world at the time the USS was launched. Despite recognising its own proposals might lead to short-term underfunding, the 1960 Hale report, one of the parents of the USS alongside the 1968 Maddex report, then went on to claim incorrectly that:

> *A contributory terminal-salary scheme for any group will have been so designed that if at any moment*

> *the organisation which it covers is dissolved, so that contributions cease, the accumulated funds will suffice to meet the cost of the benefits which have accrued to the pensioners and to the existing staff in respect of the service to which they have already completed.*[100]

Changes such as growing life expectancy, flawed regulation and insufficient contributions all meant it was common to run a final salary pension scheme in such a way that the assets did not match the liabilities. This became more difficult when the Pensions Act 2004 confirmed defined benefit pensions at solvent employers were to be treated as a guaranteed benefit built up, at least in part, with deferred salary.

The Pensions Regulator insists defined benefit pension schemes meet a ‘statutory funding objective’, commission regular valuations by actuaries to ensure a scheme is ‘appropriately funded’ and have a ‘recovery plan’ where necessary.[101] The assumptions must be ‘chosen prudently’. But, as the Joint Expert Panel confirmed in September 2018, different methodologies show the position of the USS to be radically different and somewhere between:

- a £9 billion surplus on a best-estimates basis, which assumes a 50/50 chance of paying all the accrued benefits without seeking more contributions; and

- a £20.9 billion deficit on a self-sufficiency basis, which ensures it would be almost certain to be able to pay the benefits.[102]

John Kay, who supports the collective nature of the USS, whereby different employers balance risk by joining together in a single pension scheme, has claimed:

> *The pension fund world is in a doom loop, one which aggravates yawning intergenerational inequity – people in retirement have great security, while those earlier in their career look forward to less. As with so much recent financial regulation, good intentions have led to counterproductive outcomes.*[103]

Between the Hale report and the Pensions Act 2004, there were also a series of changes that significantly increased the cost of delivering a defined benefit pension. With the notable exception of the 2011 change that allowed pension schemes to use CPI rather than RPI as a measure of inflation for uprating deferred pensions and pensions in payment (where their scheme rules allow it, as the USS did), everything seems to have pushed in one direction: higher costs for schemes.

In 2008, I wrote a report for the think-tank Policy Exchange entitled *Quelling the Pensions Storm: Lessons from the past*. This noted that recent reforms had led to inferior employer-sponsored pensions for younger staff as a way of protecting the generous retirement benefits of older staff. I concluded: 'Until this is tackled, the pensions crisis will continue.'[104]

The problem for universities as employers seeking to be fair to all their employees and unions hoping to help their members is that the baby boomers set the rules governing pensions. This makes pension changes exceptionally difficult and it protects their retirement income at the expense of others because the moveable variables do not include pensions in payment but do include future contributions and future benefits.

Work by the Institute for Government that seeks to learn from the experience of the major Pensions Commission (2002-06) reveals various important essentials for successful pension reform, including:

1. independent oversight to cope with the sensitivity and analytical complexity;

2. splitting the process into diagnosis and prescription to aid broad consultation;

3. an open process, with active engagement and a communications strategy;

4. sufficient time for deep analytical and consultative work;

5. political leadership; and

6. managing trade-offs between different stakeholder groups: 'Though they were all set to lose, they could see that everybody was giving something up in order to achieve a better situation overall. Indeed, Dr Leandro Carrera from the LSE commented at our policy reunion that this is a common feature in successful pension reforms.'

'Though they were all set to lose, they could see that everybody was giving something up'

Until the Joint Expert Panel began its work, it is not clear that points one to four in this list had been sufficiently achieved in relation to reforming the USS. Some might think the university employers had failed in their duty to deliver them, triggering major industrial action. Point five is perhaps of less direct relevance, given the private nature of the USS, even though policymakers put in place the current regulation that affects the USS. Successful reform, however, depends above all on the final point in the list, and that cannot be delivered without a greater willingness by the union, their branches and the staff that striked to compromise. Given the way the USS is governed and the nature of the university sector, such compromise may in turn be dependent on the employers offering something of material value to incentivise such a response.

Pension schemes like the USS are now rare, at least in the private and charitable sectors, because of their generosity and the lack of risk-sharing. Without reform, they can only be offered with historically high contributions from employers and employees. But these may be increasingly hard to deliver given the financial challenges UK universities are expected to face in the early 2020s.

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