Students' Union Superannuation Scheme

Actuarial valuation as at 30 June 2019

Scheme Funding Report

Paul Hamilton FIA
Barnett Waddingham LLP

21 September 2020

1 Summary

In accordance with Section 224(1) of the Pensions Act 2004 the Trustees have asked me to prepare an actuarial valuation of the Students' Union Superannuation Scheme (the Scheme) as at 30 June 2019.

A summary of the results of the valuation is as follows:

- Using the method and assumptions agreed by the Trustees, the Scheme had assets sufficient to cover 46% of its Technical Provisions as at 30 June 2019, corresponding to a deficit of £140,907,000.

- The material issue affecting the increases payable on pensions accrued before 1 January 1994 has increased the Scheme's liabilities by £29,199,000, but this has been offset to some extent by the impact of the compromise exercise carried out by the Trustees during 2019. This has reduced the total impact to £20,502,000.

- In light of the results of this valuation, the Trustees have agreed with the Principal Employer that:

  - Participating unions will make deficit contributions of £604,825 per month from 1 October 2020 to address the deficit revealed by the valuation.

  - From 1 October 2021 participating unions will make deficit contributions of £713,810 per month, increasing by 5% each subsequent 1 October to address the deficit revealed by the valuation. This results in an 8% increase to contributions as at 1 October 2021 for unions which have been unaffected by the 7% pension increase issue. For affected unions, contributions will be increased by an extra amount determined by their share of the additional liabilities that have arisen as a result of the exercise. On average, affected unions will see contributions increase by 18% as at 1 October 2021.

  - These contributions include an allowance of £400,000 per annum, which has increased by 5% each year since 1 October 2017, in respect of the ongoing expenses of running the Scheme and are expected to eliminate the deficit in 14 years and 10 months. Deficit contributions have been apportioned between participating unions in line with the split of liabilities accrued, apportioned by service with each union. Participating unions have also been given the option of paying a discounted lump sum instead of their monthly contributions between October 2017 and September 2020.

  - The PPF levy and related expenses will be paid by the participating unions in addition to these contributions as and when it falls due. The levy will be apportioned between participating unions based on each union's share of the liabilities accrued and their Experian PPF score.

- The Trustees' assessment of the Technical Provisions assumes the continued support of NUS ("the Principal Employer") and the participating unions. The Trustees have taken independent advice on the affordability of deficit contributions for the participating unions and have determined the level of the Technical Provisions and the manner in which the deficit is to be corrected on this basis.

- If the Scheme had secured benefits with an insurance company using deferred and immediate annuities, I estimate it would have enough assets to cover 32% of its liabilities as at 30 June 2019, corresponding to a deficit of £252,000,000. This means that, had the Scheme wound up at the valuation date with no further funds available from the participating unions, there would not have been sufficient assets available to secure members' full benefit entitlements.

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- Using the assumptions prescribed for the Section 179 valuation, the Scheme had sufficient assets to cover 47% of its liabilities in respect of the compensation that would be paid by the Pension Protection Fund. The Section 179 valuation is one of the factors that determine the levy that is paid to the Pension Protection Fund by the Scheme and the results should be provided via The Pensions Regulator's "Exchange" system.

The next actuarial valuation should be carried out with an effective date no later than 30 June 2022 and the contributions payable by the participating employers will be reviewed as part of that valuation.

Paul Hamilton FIA
Barnett Waddingham LLP
21 September 2020

2 Methodology and assumptions

Actuarial valuations under the Pensions Act 2004

In accordance with Section 224(1) of the Pensions Act 2004 the Trustees have asked me to prepare an actuarial valuation of the Students' Union Superannuation Scheme (the Scheme) as at 30 June 2019.

This report summarises the results of the valuation, including the information required by Regulation 7 of the Occupational Pension Schemes (Scheme Funding) Regulations 2005 and Appendix A of TAS 300: Pensions issued by the Financial Reporting Council. This report complies with Technical Actuarial Standards issued by the Financial Reporting Council – in particular TAS 100: Principles for Technical Actuarial Work and TAS 300: Pensions. These are the only TASs that apply to this work.

This report is addressed to the Trustees, but it has been written so that an informed reader can understand the financial position of the Scheme, including how it has developed since the previous valuation and how it might develop in the future. However, this report is not intended to assist any user in making decisions, and valuations required for specific purposes (e.g. employer accounting, corporate transactions and advice to individual members) should be calculated in accordance with the specific requirements for such purposes. Neither I nor Barnett Waddingham LLP accepts liability to third parties in respect of this report.

A copy of this report should be provided to NUS within seven days of the Trustees receiving it.

Membership data

A summary of the membership data used for the valuation, along with a comparison with the data used for the previous valuation, is set out in Appendix A.

I am not aware of any significant changes to the membership since the previous valuation.

Benefits

The Scheme provides pension benefits in retirement and benefits on death either before or after retirement. The benefits provided by the Scheme are set out in the Trust Deed & Rules dated 31 March 2008 and are summarised in Appendix B. I have made no allowance for discretionary benefits.

Pension increase issue

During the period since the 30 June 2016 valuation was carried out, a material issue was identified affecting the level of pension increases that are due to members who accrued benefits in the Scheme before 1 January 1994. In summary, the majority of pensions accrued over this period were entitled to 7% pa increases in payment, whereas the increases actually granted to members had been at a lower level.

Work to quantify and mitigate this issue was carried out during 2019. All historic pension increases were adjusted to reflect the higher level of pension increases to which members were legally entitled, and affected members were then asked to accept a compromise offer that would entitle them to a lower level of pension increases in the future (although still at least as much as had been the case before the issue was identified).

Benefits were updated and any necessary back-payments made for the large majority of affected members during December 2019.

The impact of those actions is reflected in the results of this valuation.

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Guaranteed Minimum Pension (GMP) equalisation

I have included a reserve equivalent to 0.3% of the Scheme's liabilities to allow for GMP equalisation. Given the legal uncertainties and extensive project required to carry out accurate member-level calculations, I have adopted an approximate approach which takes into account the Scheme's benefit design and member characteristics.

The actual cost of GMP Equalisation may be materially higher or lower than this estimate. It is difficult to accurately calculate the increase in liability before carrying out what will be a thorough and potentially complex exercise in due course. I believe this approximate estimate is appropriate for the purposes of this valuation.

Assets

I have been provided with a copy of the Trustees' audited Report and Accounts for the period ending 30 June 2019. This shows that the market value of the Scheme's assets, excluding members' Additional Voluntary Contributions (AVCs), is £119,103,000.

The Trustees' current investment strategy is set out in a Statement of Investment Principles dated September 2019. A breakdown of the actual investments held at the valuation date along with the Trustees' target asset allocation is set out in Appendix C. I have also included in Appendix C a summary of the contributions paid and the investment performance since the previous valuation.

The Trustees hold a number of historic annuity policies. These have been excluded from both the assets and the liabilities of the Scheme as the benefits are exactly matched. AVCs have also been excluded.

Funding objectives

The Trustees' funding objectives are described in a Statement of Funding Principles dated 21 September 2020, a copy of which is included in Appendix F. In summary, the Trustees have adopted the "Statutory Funding Objective", which is that the Scheme should have sufficient and appropriate assets to meet its liabilities.

The principal purpose of the valuation is therefore to examine the financial position of the Scheme at the valuation date and to agree the contributions payable to ensure that the Statutory Funding Objective is expected to be met.

Methodology used to achieve objectives

The valuation has been carried out on a "market-related" basis. This means that assets are taken into account at their market value. For comparison with the assets, a consistent measure is needed for the liabilities that are expected to arise in respect of benefits already earned at the valuation date – otherwise known as the "Technical Provisions". This is achieved by projecting the benefits that are expected to be paid to members of the Scheme as a result of:

- pensions already in payment;
- pensions arising from future retirements;
- lump sums payable to future retirees in exchange for part of their pension;
- lump sums payable following the death of a member; and
- pensions payable to eligible dependants following the death of a member.

To estimate the amount of these future benefit payments, assumptions need to be made regarding:

- how benefits will increase prior to payment;
- how pensions will increase while in payment;

2 Methodology and assumptions

- whether members will die before reaching retirement;
- how long members will live in retirement;
- whether members will have an eligible dependant on death and, if so, the age of their dependant; and
- whether members will exercise certain options, such as exchanging pension for cash at retirement.

However, the benefits are expected to be paid over a long period of time and, during that time, the assets held are expected to earn investment returns. Therefore, for comparison with the assets, the projected benefit payments are reduced to allow for the investment return that is anticipated prior to payment. This methodology is commonly referred to as "discounting" and the investment return allowed for is referred to as the "discount rate". For consistent comparison with the market value of the assets at the valuation date, the choice of discount rate reflects relevant market indicators at the valuation date.

Valuations on other bases

As part of the valuation, I am required to include an estimate of whether the Scheme would have had sufficient assets to secure benefits with an insurance company and meet the expenses associated with winding-up the Scheme. This is referred to as "the solvency estimate".

The solvency estimate is expected to be significantly higher than the Scheme's Technical Provisions, as insurers will assess the liabilities assuming investment only in low-risk asset classes such as gilts and bonds, whereas the assumptions used for the calculation of the Technical Provisions make allowance for expected outperformance from investment in riskier asset classes.

The Trustees are also required under Section 179 of the Pensions Act 2004 to obtain a valuation at least every three years on a basis that is set by the Pension Protection Fund (PPF). The results of this valuation are used by the PPF to determine the levy that is paid by the Scheme to the PPF to provide compensation for members of pension schemes that are underfunded and the employer has become insolvent. Although not strictly part of the actuarial valuation, I have included details of the Section 179 valuation in this report.

Assumptions

The assumptions agreed by the Trustees for the purpose of the Statutory Funding Objective as at 30 June 2019, along with the assumptions used at the previous valuation, are summarised in Appendix D.

The assumptions I have used for the solvency estimate are also summarised in Appendix D. Whilst I am satisfied that these assumptions are appropriate for the purpose of the solvency estimate, and in particular that they satisfy the requirements of Regulation 7(6a) of the Occupational Pension Schemes (Scheme Funding) Regulations 2005, the Trustees should understand that:

- The assumptions are only intended to give a broad indication of likely annuity costs, and that an actual quotation could differ materially from this estimate.

- The expenses associated with discontinuing a pension scheme are difficult to predict and the expense assumption should not be seen as a quotation of the likely expenses involved.

The assumptions for the Section 179 valuation are prescribed by the PPF.

3 Results

Statutory Funding Objective

Using the methodology described above and the assumptions set out in Appendix D, the results of the valuation are as follows.

Benefits already earned at the valuation date:	£000s
Deferreds	146,992
Pensioners	113,018
Technical Provisions	260,010
Market value of assets	119,103
Deficit	(140,907)
Funding level	46%

It should be understood that these results indicate the expected cost of providing the Scheme benefits using the chosen method and assumptions. The actual cost of providing the benefits will depend on the actual experience. The sensitivity of the results to the key assumptions is included as Appendix E.

My certificate confirming that the calculation of the Technical Provisions has been carried out in accordance with the relevant legislation is included in Appendix F.

Contribution requirements

Details of the contributions agreed between the Trustees and the Principal Employer are set out in a formal Schedule of Contributions and Recovery Plan. These documents are included in Appendix F. My certificate confirming that the Statutory Funding Objective is expected to be met by the end of the period covered by the Schedule of Contributions is also included in Appendix F.

Reconciliation to previous valuation

The previous valuation was carried out as at 30 June 2016. The results are summarised in my report dated 28 June 2017 and show a funding level of 46%, corresponding to a deficit of £119,700,000. The key factors that have influenced the funding level of the Scheme over the period are as follows:

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Reconciliation of funding position	£000s
Surplus / (deficit) at previous valuation:	**(119,700)**
Interest on deficit	(7,132)
Deficit contributions	14,220
Actual vs. assumed investment returns	17,528
Revaluation experience	(2,948)
Changes in financial assumptions (including changes in market conditions)	(21,426)
Changes in demographic assumptions	7,036
Full impact of 7% pension increases	(29,199)
Impact of compromise exercise	8,697
GMP equalisation	(732)
Other experience and data cleansing	(7,251)
Surplus / (deficit) at this valuation:	**(140,907)**

Solvency estimate

The results of the valuation using the assumptions for the solvency estimate described in Appendix D are as follows:

Solvency estimate:	£000s
Deferreds	241,257
Pensioners	119,070
Expenses	10,810
Estimate of solvency liabilities	371,137
Market value of assets	119,103
Deficit	(252,034)
Funding level	32%

As at 30 June 2016 the solvency funding level was estimated to be 27%.

The Scheme would not have had sufficient assets at the valuation date, based on the assumptions, to secure full benefits with an insurance company. If the Scheme had wound up at the valuation date, the participating employers would have been obliged to make good any shortfall. However, if the employers were unable to do so, for example due to insolvency, the assets would have been applied to secure benefits in line with the statutory priority order that applied at the valuation date. The coverage of benefits falling into each priority class is estimated in the following table:

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Category of benefit	Coverage level
Expenses	100%
Benefits equivalent to PPF compensation	42%
Other benefits	0%

This shows that the Scheme would not have had sufficient assets to secure benefits equivalent to the compensation provided by the PPF. Therefore, had the Scheme wound up with no further funds available from the Employer, it is likely that the Scheme would have entered the PPF and members would only receive benefits up to the PPF compensation level rather than their full Scheme benefits. Broadly speaking, this means that:

- Members below their normal pension age would only receive 90% of their pension subject to a cap. The amount of the cap depends on retirement age and increases in line with average earnings, but assuming retirement at age 65 the cap that applied at the valuation date was £38,000.
- All members would receive no increases in payment on pensions accrued prior to 6 April 1997 and increases linked to inflation but capped at 2.5% pa for pensions accrued after 6 April 1997.

Projected future results

The progression of the funding level over time is influenced by a large number of factors, including the experience of the Scheme's membership, the investment return achieved and the contributions paid.

I estimate that three years after the valuation date (i.e. at the next valuation) the funding position on a Technical Provisions basis will be 52% and on a solvency basis will be 37%. This allows for contributions to be paid as described in Appendix F and assumes that investment returns and other experience over the next three years is in line with the assumptions used for the Technical Provisions.

Section 179 valuation

A certificate setting out the results of the Section 179 valuation using the method and assumptions prescribed by the PPF is included in Appendix F. The details set out on this certificate must be provided to the PPF via The Pensions Regulator's Exchange System no later than 30 September 2020.

4 Risks

There are many factors that affect the financial position of the Scheme which can lead to the Scheme being unable to pay members' benefits. In this section I comment on some of the factors that could have a material impact.

Employer Covenant risk

One of the greatest risks to the ability of the Scheme to pay members' benefits is that the participating employers may be unable to fund future deficits.

The Trustees' chosen assumptions and deficit recovery period reflect an objective assessment of the risk that the employers will not be able to support the Scheme in the future. The Trustees should monitor the strength of the employers over time, so that any sudden changes in the employers' position can be mitigated.

Investment risk

Allowance is made in the assumptions for the expected long-term performance of asset classes such as equities. There is a risk that these returns will not be achieved in practice, which would result in further contributions being required.

Further, the value of the Scheme's assets may not move in line with the Scheme's liabilities – either because the Scheme invests in volatile assets whose value might fall, or because the value of the liabilities has increased due to falling interest rates and the assets are not of sufficient duration to keep up (or a combination of these).

The sensitivity of the valuation results to changes in the investment return assumptions is included in Appendix E. The Trustees should regularly review their investment strategy to ensure they understand the risks being taken and that those risks are being appropriately managed.

Inflation

In projecting the expected future benefit payments, assumptions are made regarding future price inflation. There is a risk that the actual rate of inflation will be higher than assumed which will increase the cost of providing the benefits. This would result in additional contributions being required and a deterioration in the financial position unless investment returns are similarly higher than expected.

The sensitivity of the results to the choice of inflation assumptions is included in Appendix E. The Trustees should consider the inflation risk present within the Scheme when reviewing the investment strategy.

Mortality

It is not possible to predict with any certainty how long members of the Scheme will live, and if members live longer than expected, additional contributions will be required and the Scheme's financial position will deteriorate.

The sensitivity of the results to the choice of mortality assumptions is included in Appendix E. The Trustees should review their mortality assumptions at each valuation, taking into account all available evidence, to ensure they remain appropriate for the Scheme.

Member options

Certain benefit options may be exercised by members without requiring the consent of the Trustees or the Employer, for example exchanging pension for cash at retirement or taking a transfer value. Generally the terms for exercising these options should leave the Scheme no worse off as a result and may in some cases be favourable to the financial position of the Scheme. Therefore there is limited risk of further contributions being required or a deterioration of the financial position as a result of members exercising these options.

4 Risks

However, allowance is made in the assumptions for members to exchange pension for cash at retirement. If the terms for members to exchange pension for cash or the number of members doing so are not as assumed then further contributions could be required from the participating employers.

The sensitivity of the results to the assumed exercise of options by members is included in Appendix E. The Trustees should regularly review the transfer value basis and other actuarial factors to understand the financial implications of members exercising options and to ensure that the terms for doing so remain appropriate.

Appendix A - Summary of membership data

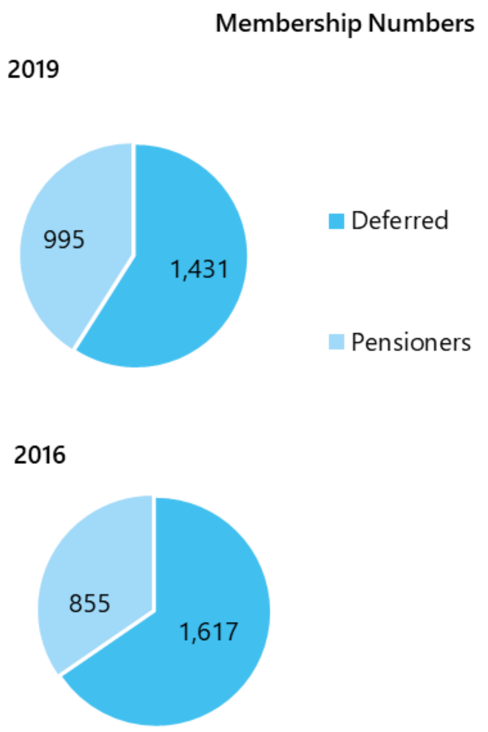
A summary of the membership data used in the valuation is as follows. The membership data from the previous valuation is also shown for comparison. All average ages are weighted by Scheme Funding liability.

Deferred Members

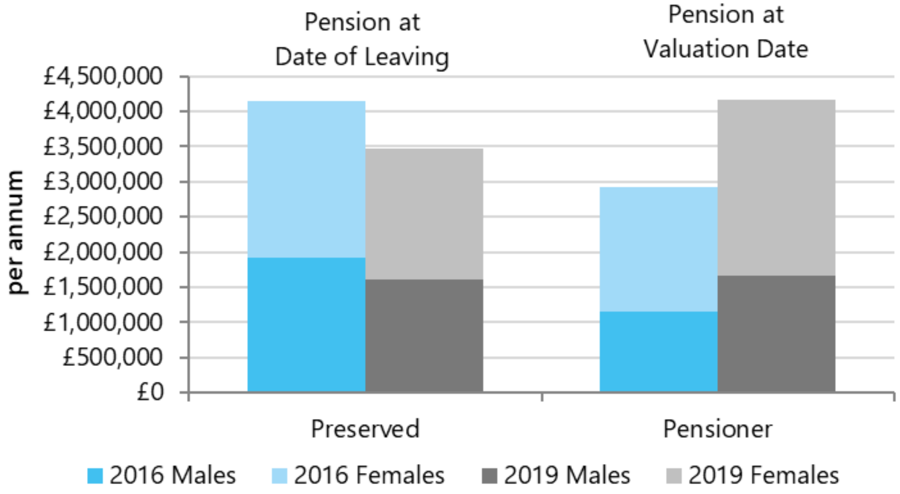
	30 June 2019			30 June 2016		
	Number	**Average age**	**Pension at Date of Leaving £000s pa**	**Number**	**Average age**	**Pension at Date of Leaving £000s pa**
Males	546	53	1,611	603	52	1,921
Females	885	53	1,864	1,014	52	2,230
	1,431	53	3,475	1,617	52	4,151

Pensioner Members

	30 June 2019			30 June 2016		
	Number	**Average age**	**Pension at Valuation Date £000s pa**	**Number**	**Average age**	**Pension at Valuation Date £000s pa**
Males	272	68	1,671	223	66	1,151
Females	723	69	2,492	632	68	1,767
	995	69	4,163	855	67	2,918



Appendix A - Summary of membership data



Appendix B - Summary of benefits

The following is a summary of the main Scheme benefits only. Full details are set out in the Scheme's documentation. No action should be taken based on the summary below without referring back to the formal documentation.

General provisions	
Eligibility:	All Employees who are over the age of 18 are eligible to join the Scheme having completed the relevant Service Qualification

Pension benefits	
Normal Retirement Date:	Age 60 for males and females for benefits earned on or before 30 September 2000 and age 65 for all benefits earned thereafter
Pensionable Service:	Years and complete months of continuous service from date of joining the Scheme until the earlier of the date the pension comes into payment, death or leaving employment
Pensionable Salary:	Basic fixed annual remuneration plus the annual average of bonuses, commissions, overtime or other fluctuating emoluments received over the previous three years (or shorter periods if applicable) and determined each 1 October
Final Pensionable Salary:	Annual average of the member's Pensionable Salary in any 36 months of Pensionable Service preceding the date of leaving Pensionable Service or death, if earlier
Pension on normal retirement:	For pension accrued prior to 1 October 2003, 1/60th x Final Pensionable Salary x Pensionable Service For pension accrued after this date, 1/60th x Revalued Pensionable Salary x Pensionable Service
Commutation of pension:	A member may receive a pension commencement lump sum at retirement
Increases in payment:	• For pension accrued before 1 October 1988, fixed increases of 7% pa on pension in excess of GMP. • For pension accrued between 1 October 1988 and 31 December 1993, either increases of 7% pa on excess pension and statutory increases on GMP, or increases on all pension in line with RPI to a minimum of 3% and maximum of 7% pa. • For pension accrued between 1 January 1994 and 5 April 1997, fixed increases of 3% pa. • For Pension accrued between 6 April 1997 and 30 September 2000 increases in line with RPI to a minimum of 3% and maximum of 5% pa. • Pension accrued after 1 October 2000 increases in line with RPI to a maximum of 5% pa.

Appendix B - Summary of benefits

Increases in deferment:	• Pension accrued before 5 April 2009 is revalued in line with LPI capped at 5%. • Pension accrued after this increases in line with LPI capped at 2.5%.
Death benefits	
Death in deferment:	A spouses' minimum contracting-out pension is payable (i.e. 50% of a member's GMP and, after 6 April 1997, reference scheme test pension).
Death after retirement:	The pension payable shall not exceed the amount that would otherwise be payable to the member's Spouse (i.e. 50% of a member's pre-commutation pension).

Appendix C - Summary of assets and contributions

Assets at 30 June 2019

	£000s	Actual allocation	Target allocation
UK equities	5,917	5%	25%
Overseas equities	17,790	15%	20%
UK fixed interest	15,938	13%	10%
UK index linked	16,026	13%	20%
UK corporate bonds	6,076	5%	0%
Overseas bonds and government securities	27,381	23%	15%
Property	7,857	7%	10%
Insurance	11,981	10%	0%
Alternatives	6,842	6%	0%
Cash	3,892	3%	0%
Total investments	119,701	100%	100%
Net current assets	(597)		
Total market value of assets	119,103		

The actual return achieved on the Scheme's investments since the previous valuation was approximately 7.4% pa.

Contributions since previous valuation

The previous valuation resulted in a formal Schedule of Contributions being put in place with effect from 28 June 2017. The contributions payable under this schedule can be summarised as follows.

- Contributions of £232,422 per month until 30 September 2017.
- Contributions of £522,470 per month from 1 October 2017, increasing each subsequent 1 October by 5% or such greater amount as agreed between the Trustees and the Principal Employer. This amount includes an allowance for the expenses of administrating the Scheme of £400,000 per annum.

I understand that contributions have been paid in accordance with this schedule. Over the period since the previous valuation, the actual contributions that have been paid to the Scheme were as follows.

Contributions (£000s) for the year ending:	30 June 2019	30 June 2018	30 June 2017
Normal contributions – Employer	0	36	2
Deficit contributions	5,565	7,473	2,758
Contributions to meet expenses	898	364	317
Special Contributions	0	3	2

Appendix D - Summary of assumptions

	30 June 2016 Technical Provisions	30 June 2019 Technical Provisions	30 June 2019 Solvency estimate
Pre-retirement discount rate	4.3% pa*	4.0% pa*	Bank of England swap yield curve less 0.4% pa
Post-retirement discount rate	2.3% pa*	2.0% pa*	Bank of England swap yield curve plus 0.3% pa for pensioners, 0.2% pa for non-pensioners
Price inflation (RPI)	3.0% pa*	3.6% pa*	3.6% pa*
Price inflation (CPI)	2.2% pa*	2.6% pa*	2.6% pa*
Pension increases for service:			
1988-1993 (RPI min 3% max 7%)	n/a	3.9% pa*	3.9% pa*
Post 1997 (RPI min 3% max 5%)	3.6% pa*	3.7% pa*	3.7% pa*
Post 2000 (RPI max 5%)	3.1% pa*	3.4% pa*	3.4% pa*
Mortality table	95% of S2PxA tables	100% of S3PxA tables	100% of S3PxA tables
Allowance for improvements in life expectancy	CMI_2015 with a long-term improvement rate of 1.25% pa	CMI_2018 with LTR of 1.25% pa and IAP of 1%	CMI_2018 with LTR of 1.25% pa and IAP of 1%
Age difference between husbands and wives	3 years	3 years	3 years
Proportion married	90%	90%	90%
Allowance for early retirements	None	None	None
Allowance for cash commutation	75% of the maximum permitted	75% of the maximum permitted	None
Allowance for expenses	None	None	3% of liabilities

Appendix D - Summary of assumptions

Allowance for GMP equalisation	None	0.3% of liabilities	0.3% of liabilities

* In practice, the financial assumptions are based on the full Bank of England yield curves. For simplicity, the figures shown here are at a duration of 21 years, which is approximately the duration of the Scheme's liabilities.

Some further notes on the method and assumptions for the solvency estimate are as follows:

- I have used principles which I consider may be adopted by insurance companies for determining annuity costs.
- Whilst I am satisfied that these assumptions are appropriate for the purpose of the solvency estimate, and in particular that this estimate satisfies the requirements of Regulations 7(4b) and 7(6a) of the Occupational Pension Schemes (Scheme Funding) Regulations 2005, the Trustees should understand that my calculations are only intended to provide a broad indication of likely annuity costs, and that an actual quotation could differ materially from this estimate.
- Assets have been taken at market value as set out in the final accounts.

The expenses associated with discontinuing a pension scheme are difficult to predict and can be significant. For the purposes of my calculations I have made an allowance for expenses of £10,810,000, being 3% of the solvency liabilities, in addition to insurer expenses which are allowed for in the solvency basis assumptions. I believe this allowance to be a reasonable provision for the purposes of the valuation, however it should not be seen as an estimate or quotation of the likely expenses involved.

Appendix E - Sensitivity analysis

The statutory funding position is sensitive to the assumptions made regarding future experience. The following table illustrates the impact on the funding position of making different assumptions at the valuation date.

	Impact on liabilities £000s	Impact on funding level %
Increase investment returns by 0.5% pa	(23,766)	4.6
Decrease investment returns by 0.5% pa	27,381	-4.4
Increase inflation by 0.25% pa	3,761	-0.7
Decrease inflation by 0.25% pa	(3,691)	0.7
Adjustment of 90% to standard S3 tables (increased life expectancy)	6,735	-1.2
Adjustment of 110% to standard S3 tables (reduced life expectancy)	(5,830)	1.1

Appendix F - Valuation documents

The following documents have been agreed between the Trustees and Employer as part of the valuation process and are included in this appendix:

- Statement of Funding Principles, setting out the Trustees' funding objectives and the action to be taken if those objectives are not met.
- Schedule of Contributions, setting out the contributions payable to the Scheme by the Employer from 1 October 2020 to 1 August 2035.
- Recovery Plan, setting out further details of how the funding shortfall revealed by the valuation is being addressed.

The following actuarial certificates are required as part of the valuation process and are included in this appendix:

- Certification of the calculation of the Technical Provisions, which confirms that the Technical Provisions have been calculated in accordance with the regulations and the Trustees' Statement of Funding Principles.
- Certification of the Schedule of Contributions, which confirms that the Statutory Funding Objective is expected to be met by the end of the period covered by the Schedule of Contributions.

Section 179 valuation

A certificate setting out the results of the Section 179 valuation using the method and assumptions prescribed by the PPF is also included in this appendix.

Students' Union Superannuation Scheme
Statement of Funding Principles

Status

This Statement of Funding Principles has been prepared by the Trustees of the Students' Union Superannuation Scheme (the Scheme) to satisfy the requirements of section 223 of the Pensions Act 2004, after obtaining the advice of the Scheme Actuary appointed by the Trustees.

This document has been agreed by NUS (the "Principal Employer"). This document is dated 21 September 2020 and is to be taken into account in the actuarial valuation as at the effective date of 30 June 2019 and subsequent actuarial valuations.

Policy for ensuring that the Statutory Funding Objective is met

Under the Pensions Act 2004 the Trustees must set a funding policy after negotiating with the Principal Employer which complies with the "Statutory Funding Objective" – to have "sufficient and appropriate assets" to cover the Scheme's "Technical Provisions". The Trustees have interpreted this requirement to mean that the Scheme should have a sufficient level of assets to have a reasonable chance that in the normal course of events, the assets would cover the continuing payment of benefits already in payment as well as the commitments to pay deferred pensioners' pension rights earned so far.

This will be achieved by agreeing with the Principal Employer appropriate contributions to make good any shortfall in the Scheme's assets compared to the amount required to cover the Technical Provisions over a suitable period.

In determining the level of contributions required for the Scheme, assumptions about the future experience of the Scheme will be made. Further details of the assumptions made are given below.

Funding objectives in addition to the Statutory Funding Objective

The Trustees have no other funding objectives.

Policy on discretionary increases and funding strategy

The Trustees make no allowance for discretionary increases in setting the contribution requirement, because any discretionary benefits that may be granted will be paid for separately at the time.

Frequency of valuations and circumstances for extra valuations

An actuarial valuation will, in normal circumstances, be carried out every three years or when the Trustees determine that significant events have occurred such that the existing Schedule of Contributions is no longer appropriate, having sought the advice of the Scheme Actuary and consulted the Employer.

An actuarial report on developments affecting the Scheme's Technical Provisions and funding level will be obtained annually between actuarial valuations.

Commissioning a valuation will not be necessary if agreement can be reached with the Principal Employer to revise the Schedule of Contributions in a way satisfactory to the Trustees on the advice of the Scheme Actuary.

Method and assumptions used in calculating the "Technical Provisions"

The actuarial method to be used in the calculation of the Technical Provisions is the Projected Unit Method.

The principal assumptions to be used in the calculation of the Technical Provisions are:

Inflation

By looking at the cost of investing in UK government bonds with payments linked to inflation compared to the cost of investing in UK government bonds not linked to inflation, it is possible to arrive at a figure for the average market view of future price inflation. This will then be compared to the latest Treasury targets for inflation in the UK, and other relevant information such as inflation swap pricing, when deriving the assumption to use.

Pension increases

Assumptions for future pension increases which are linked to inflation will be set with reference to the relevant inflation assumption, adjusted to take account of any minimum and maximum increases that apply.

Discount rate

The discount rate will normally be determined by the Trustees based on professional advice, taking into account relevant market indicators at the valuation date, the long-term strategic asset allocation, the liability profile of the Scheme, and the perceived strength of the Employer covenant.

As a proportion of the Scheme's assets are invested in assets which would be expected to outperform UK government bonds over the long term, an allowance may be made for this in the discount rate, depending on the perceived strength of the Employer covenant. However, if the Trustees have material concerns over the strength of the Employer covenant, the discount rate may need to be determined looking solely at the yield available on gilts and other low risk asset classes.

Retirement

Members will be assumed to retire at the earliest age at which they can take their benefit without an actuarial reduction applying, which may be different for different elements of pension.

Member options

If the Trustees consider it to be appropriate, allowance may be made for member options such as commuting pension for cash at retirement or taking early retirement.

Mortality

The rates of mortality assumed will reflect information published by the Continuous Mortality Investigation of the Actuarial Profession deemed most relevant to the membership of the Scheme, including an appropriate allowance for expected future improvements in longevity. This assumption will also reflect any available evidence relating to the actual mortality experience of the Scheme, as well as any other factors considered relevant.

Dependant details

Assumptions regarding the proportion of members with a dependant at death, and the age difference between the member and the dependant, will be set taking into account professional advice and the experience of the Scheme.

Period within which and manner in which a failure to meet the Statutory Funding Objective is rectified

If the assets of the Scheme are less than the Technical Provisions at the effective date of any actuarial valuation, a "Recovery Plan" will be put in place, which requires additional contributions from the participating unions. These additional contributions will pay off the shortfall over an appropriate period, taking into account unions' ability to pay.

Recovery Plan contributions will usually be expressed as fixed monetary amounts. Unless the Trustees consider it appropriate in the circumstances, such deficit contributions will be equal amounts throughout the period payable on either an annual or monthly basis.

The assumptions to be used in these calculations will be those set out below for calculating the Technical Provisions but allowing for an additional pre-retirement investment return of 1% pa for the duration of the Recovery Plan.

Arrangements for other parties to make payments to the Scheme

Payments to the Scheme may be received from any subsidiary company of the unions, in lieu of contributions otherwise due from the unions.

Directions by The Pensions Regulator as to the funding of the Scheme

No directions under section 231(2) of the Pensions Act 2004 have been made by The Pensions Regulator as to the funding of the Scheme.

Basis of Cash Equivalent Transfer Values

Members of the Scheme are entitled to transfer the value of their Scheme benefits to another pension arrangement. If this option is chosen a "cash equivalent transfer value" (CETV) is payable.

The Trustees have agreed that CETVs will normally be calculated so as to represent their best estimate of the cost of providing the benefits in the Scheme. As such the assumptions used will be similar to those used for the calculation of the Technical Provisions, but without any margins for prudence included. As the financial assumptions are market-related, they will normally be updated on a monthly basis for the purpose of calculating CETVs.

Every three years following completion of an actuarial valuation, the Trustees will consider whether to obtain advice from the Scheme Actuary on the financial position of the Scheme and its ability to pay full CETVs. The Trustees may decide, depending on the outcome of such advice, to reduce transfer values to the full amount permitted under legislation.

Surplus refund to the Employers

There are no provisions in the Trust Deed and Rules to make payments to the unions out of the funds held for the purposes of the Scheme.

Assumptions as at 30 June 2019

The assumptions used to calculate the Technical Provisions as at 30 June 2019 are as follows:

Pre-retirement discount rate	4.0% pa
Post-retirement discount rate	2.0% pa
Retail Prices Index (RPI) inflation	3.6% pa
Consumer Prices Index (CPI) inflation	2.6% pa
Pension increases	
1988-1993 (RPI min 3% max 7%)	3.9% pa
Post 1997 (RPI min 3% max 5%)	3.7% pa
Post 2000 (RPI max 5%)	3.4% pa
Cash commutation	Members commute 75% of their maximum allowance for cash
Mortality tables	100% of S3PA tables
Mortality improvements	CMI_2018 with a long-term rate of 1.25% pa and initial addition parameter of 1% pa
Proportion of members with a dependant at retirement or earlier death	90%
Age difference between member and dependant	3 years
Allowance for GMP equalisation	0.3% of liabilities

In practice the financial assumptions are based on the full Bank of England yield curves. For simplicity the figures shown here are at a duration of 21 years which is approximately the duration of the Scheme's liabilities.

These assumptions have been chosen by the Trustees in light of their long-term investment objectives and the Scheme's liability profile based on advice from the Scheme Actuary, along with their views on the strength of the employer covenant.

Dates of review of this statement

This Statement of Funding Principles will be reviewed by the Trustees and the Employer no later than 15 months after the effective date of each actuarial valuation, due every three years.

This statement has been agreed by the Trustees and the Principal Employer

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Signed on behalf of the Trustees of the Students' Union Superannuation Scheme

21 September 2020
Date

Signed on behalf of NUS

21 September 2020
Date

Students' Union Superannuation Scheme
Recovery Plan

Status

This Recovery Plan has been prepared by the Trustees of the Students' Union Superannuation Scheme (the Scheme) on 21 September 2020 after obtaining the advice of the Scheme Actuary appointed by the Trustees.

Steps to be taken to ensure that the Statutory Funding Objective is met

The actuarial valuation of the Scheme as at 30 June 2019 revealed a funding shortfall (Technical Provisions minus value of assets) of £140,907,000. To eliminate this funding shortfall, the Trustees and NUS (the "Principal Employer") have agreed that additional contributions will be paid to the Scheme by the participating unions as follows:

£576,025 per month until 30 September 2021, increasing by 5% on 1 October 2020, which allows for the fact that some participating unions have paid lump sum contributions in advance.

£713,810 per month from 1 October 2021, increasing each subsequent 1 October by 5% or such greater amount as agreed by the Trustees and Principle Employer or where a special arrangement is in place.

These amounts include an allowance for the expenses of administering the Scheme of £400,000 per annum, increased by 5% per annum since 1 October 2017.

These contributions are payable monthly in arrears, within 19 days of the end of each month. A participating union may, at their discretion, pay all or part of the contributions in advance. Participating unions will be given the option of paying a discounted lump sum instead of their monthly contributions between October 2020 and September 2023.

Period in which the Statutory Funding Objective should be met

The funding shortfall is expected to be eliminated in 14 years and 10 months, which is by 1 August 2035.

This expectation is based on the following assumptions:

- Technical Provisions calculated according to the method and assumptions set out in the Statement of Funding Principles dated 21 September 2020; and
- The return on existing assets and the return on new contributions during the period averaging 3.6% pa, which is consistent with the calculation of the Technical Provisions as at 30 June 2019 but with an allowance for an additional pre-retirement investment return of 1% pa for the duration of the Recovery Plan.

This statement has been agreed by the Trustees and Principal Employer

.... 21 September 2020

Signed on behalf of the Trustees of the Students' Union Superannuation Scheme .... Date

21 September 2020

Signed on behalf of NUS .... Date

Students' Union Superannuation Scheme
Schedule of Contributions

Status

This Schedule of Contributions has been prepared by the Trustees of the Students' Union Superannuation Scheme (the Scheme), after obtaining the advice of the Scheme Actuary appointed by the Trustees.

Contributions to be paid by the Employer from 1 October 2020 to 1 August 2035

In respect of the shortfall in funding as set out in the Recovery Plan dated 21 September 2020:	Each participating employer will contribute an amount as set out in the attached Appendix 1. The amounts commencing on 1 October 2020 will be increased by 8% as at 1 October 2021, and then by a further 5% at each subsequent 1 October or such greater amount as is agreed between the Trustees and the Principal Employer. An additional increase will be applied as at 1 October 2021 to allow for the 7% pension increase issue for affected unions. The total increase will vary between unions depending on the additional liabilities arising from the issue, but on average will be around 18%. These contributions are payable monthly in arrears, within 19 days of the end of each month. A participating employer may, at their discretion, pay all or part of the contributions in advance. The Trustees have given the participating employers the option of paying a single lump sum contribution instead of their monthly contributions from October 2020 to September 2023. These lump sum contributions are set out in Appendix 2. If a participating employer chooses to pay this lump sum (which they are under no obligation to do) then they will not pay any contributions set out in Appendix 1 for the period from 1 October 2020 to 30 September 2023. Contributions payable under Appendix 1 for periods outside these dates remain payable by participating employers taking up this offer. Participating employers taking up the offer must pay the lump sum contribution by 19 November 2020, and may at their discretion pay all or part of the lump sum contribution in advance.
In respect of expenses:	The amounts set out in the appendices include an allowance of £400,000 pa, increasing since October 2017 at 5% pa, in respect of the ongoing administrative and operational expenses of running the Scheme.

In respect of the Pension Protection Fund levy:	The amount of the PPF levy as shown in the levy invoice, plus associated expenses, will be payable in addition to the contributions set out in the appendices. Once the PPF levy has been paid by the Trustees, the amount due from each participating employer will be determined by the Trustees and notified to each participating employer for payment within 30 days.

This schedule has been agreed by the Trustees and the Principal Employer

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Signed on behalf of the Trustees of the Students' Union Superannuation Scheme

21 September 2020

Date

Signed on behalf of NUS

21 September 2020

Date

Appendix 1

This Schedule forms part of the Schedule of Contributions certified on 21 September 2020.

Name of Union	Monthly Contribution until 30 September 2020	Monthly Contribution until 30 September 2021	Monthly Contribution from 1 October 2021
REDACTED	REDACTED	REDACTED	REDACTED

Appendix 2

This schedule forms part of the Schedule of Contributions certified on 21 September 2020. If a participating employer chooses to pay this optional lump sum contribution by 2 November 2020 then no contributions under Appendix 1 are payable by that participating employer for the period from 1 October 2020 to 30 September 2023.

Name of Union	**Optional lump sum contribution**
REDACTED	REDACTED

Students' Union Superannuation Scheme

Certification of the Schedule of Contributions

Adequacy of rates of contributions

I certify that, in my opinion, the rates of contributions shown in this Schedule of Contributions are such that the Statutory Funding Objective could have been expected, on 30 June 2019, to be met by the end of the period specified in the Recovery Plan dated 21 September 2020.

Adherence to Statement of Funding Principles

I hereby certify that, in my opinion, this Schedule of Contributions is consistent with the Statement of Funding Principles dated 21 September 2020.

The certification of the adequacy of the rates of contributions for the purpose of securing that the Statutory Funding Objective can be expected to be met is not a certification of their adequacy for the purpose of securing the Scheme's liabilities by the purchase of annuities, if the Scheme were to be wound up.

Signature:		Date:	21 September 2020
Name:	Paul Hamilton	Qualification:	Fellow of the Institute and Faculty of Actuaries
Address:	St James's House St James's Square Cheltenham Gloucestershire GL50 3PR	Employer:	Barnett Waddingham LLP

Students' Union Superannuation Scheme

Certification of the calculation of Technical Provisions

Calculation of Technical Provisions

I certify that, in my opinion, the calculation of the Scheme's Technical Provisions as at 30 June 2019 is made in accordance with regulations under section 222 of the Pensions Act 2004. The calculation uses a method and assumptions determined by the Trustees of the Scheme and set out in the Statement of Funding Principles dated 21 September 2020.

Signature:		Date:	21 September 2020
Name:	Paul Hamilton	Qualification:	Fellow of the Institute and Faculty of Actuaries
Address:	St James's House St James's Square Cheltenham Gloucestershire GL50 3PR	Employer:	Barnett Waddingham LLP

Section 179 certificate

Scheme details	
Scheme name	Students' Union Superannuation Scheme
Pension Scheme Registration Number	10149211
Address of Scheme	
Effective date of this valuation	30 June 2019
Guidance and assumptions	
s179 guidance used for this valuation	G8
s179 assumptions used for this valuation	A9
I have taken account of the 'Information note to assist schemes preparing to submit s179 valuations and certify Deficit-Reduction Contributions (DRCs)' published by the Board of the Pension Protection Fund in September 2019. This states that, where a s179 valuation includes an interim allowance for GMP equalisation, such allowance (and such allowance only) may be calculated using a best estimate basis rather than applying the principle of prudence.	
Assets	
Total assets	£119,103,000
Date of relevant accounts	30 June 2019
Percentage of the assets shown above held in the form of a contract of insurance where this is not included in the asset value recorded in the relevant scheme accounts	0%
Liabilities	
Liabilities, excluding expenses, for:	
Active members	£0
Deferred members	£165,228,000
Pensioner members	£80,643,000
Estimated expenses of winding up	£3,959,000
Estimated expenses of benefit installation/payment	£2,127,000
External liabilities	£0
Total protected liabilities	£251,957,000
Insured benefits	
Percentage of the liabilities shown above that are matched by insured annuity contracts for:	
Active members	0%
Deferred members	0%
Pensioner members	0%

Proportion of liabilities which relate to each member type:	Pre 6 April 1997	6 April 1997 to 5 April 2009	Post 5 April 2009
Active members	0%	0%	0%
Deferred members	13%	87%	0%
Pensioner members	47%	53%	0%

Number of members and average ages as at the effective date for:	Number of members	Average age (weighted by protected liabilities)
Active members	0	0
Deferred members	1431	51
Pensioner members	995	69

Certification

I certify that this valuation has been carried out in accordance with the Pension Protection Fund (Valuation) Regulations 2005 and with the appropriate section 179 guidance and assumptions issued by the Board of the Pension Protection Fund. I also certify that the calculated value of the protected liabilities is, in my opinion, unlikely to have been understated.

Signature:		Date:	21 September 2020
Name:	Paul Hamilton	Qualification:	Fellow of the Institute and Faculty of Actuaries
Address:	St James's House St James's Square Cheltenham Gloucestershire GL50 3PR	Employer:	Barnett Waddingham LLP