JO Plowright & Co (Holdings) Limited Pension and Assurance Scheme

Scheme funding report on the Actuarial Valuation as at 31 March 2019

2 December 2019

Executive summary

The Trustees have completed a valuation of the Scheme as at 31 March 2019. This report sets out the approach adopted by the Trustees, the results obtained and the actions taken in the light of those results.

The key results are as follows.

105%

Funding level

£2.1m

Estimated scheme funding surplus

Scheme funding assessment

In funding the Scheme, the Trustees' key objective is to ensure that there will be sufficient and appropriate assets to meet all benefit payments as they fall due. The Scheme funding assessment assumes that the Scheme continues until the last member or beneficiary dies.

The Scheme funding valuation showed a surplus of £2.1m with the value of the assets covering 105% of the value of the liabilities.

Employer contributions

A recovery plan is not required as the scheme is currently in surplus.

It has been agreed that some of the surplus assets in the Scheme will be used to cover the expenses of running the Scheme and so no contributions are required from the Employer. A new schedule of contributions has been agreed on this basis and is included within Appendix E.

77%

Solvency funding level

£14.0m

Estimated solvency deficit

Solvency assessment

I have also completed a solvency assessment of the Scheme. This estimates the extent to which the Scheme's assets would be sufficient to secure members' benefits by the purchase of insurance policies if the Scheme were to be wound up at the effective date of the valuation.

The solvency valuation showed a deficit of £14.0m with the value of the assets covering 77% of the value of the liabilities.

£21.6m

Estimated section 179 surplus

Section 179 assessment

I have also completed a section 179 assessment of the Scheme. This compares the value of the assets with the value of benefits equal to the compensation provided by the PPF calculated using assumptions prescribed by the PPF.

The PPF levy valuation showed a surplus of £21.6m with the value of the assets covering 184% of the value of the liabilities. Once submitted, the Pension Protection Fund (PPF) will base the Scheme's levy on the results of this valuation.

Contents

Throughout the report:

'Scheme' refers to the JO Plowright & Co (Holdings) Limited Pension and Assurance Scheme

'Trustees' refers to the trustees of the JO Plowright & Co (Holdings) Limited Pension and Assurance Scheme

'Employer' refers to Clarkson PLC

01 **Introduction**

This report should be made available to the Employer within 7 days of receipt.

Background

The Trustees of the Scheme have undertaken a formal valuation of the Scheme as at 31 March 2019.

I have already provided the Trustees with all of my advice in relation to the valuation, including the results, in a number of previous presentations. The purpose of this report is to set out in one place the final results of the valuation and to satisfy the legislative requirement for reporting and certifying the results of the valuation within 15 months of its effective date.

The report is addressed to the Trustees. Legislation requires the Trustees to make it available to the Employer within 7 days of receipt.

The following documents are relevant to the results in this report:

> My presentation “Regulatory background Report for the actuarial valuation as at 31 March 2019”, dated May 2019;

> My presentation “Advice on setting actuarial assumptions and preliminary results”, dated May 2019;

> My report “Scheme funding report for the actuarial valuation as at 31 March 2016”, dated March 2017; and

> Minutes of the Trustees’ meetings held on 29 May and 9 September 2019.

02 Funding objectives and assumptions

The methodology used in deriving the assumptions are described in detail in the statement of funding principles, dated 2 December 2019

The funding objective

The Trustees' key funding objective is to ensure that there will be sufficient and appropriate assets to cover the value of the liabilities on the Scheme's funding assumptions (known as technical provisions).

The Trustees have identified a long term funding target of reaching full funding on a more cautious basis, similar to the cost of securing all benefits with an insurance company. If recent bulk annuity market pricing is maintained, it is anticipated that in around 5 years' time (when most members are retired), this cost might be in line with the technical provisions but with a lower out-performance allowance in the discount rate (0.25% rather than 0.75% above gilts). The expectation is that investment performance should provide sufficient assets to meet this target within 5-7 years. However, this target is not a formal funding objective that the Employer is required to pay contributions towards.

Method and assumptions

In carrying out the valuation of the Scheme, a number of assumptions need to be made. For the scheme funding valuation the method and assumptions are set out in the Trustees' statement of funding principles dated 2 December 2019, which has been agreed with the Employer. The statement of funding principles is included in Appendix E.

Strong Employer Covenant

Trustees have adopted a working assumption that the Employer covenant is strong

Employer covenant

The Trustees assessed the covenant of the Employer as strong when carrying out the 2016 valuation.

Following an internal review of the Employer's covenant in 2019, the Trustees consider that the covenant remains strong and are comfortable that the Employer is able to support the Scheme. If this assessment changes in the future, the Trustees will consider what action to take.

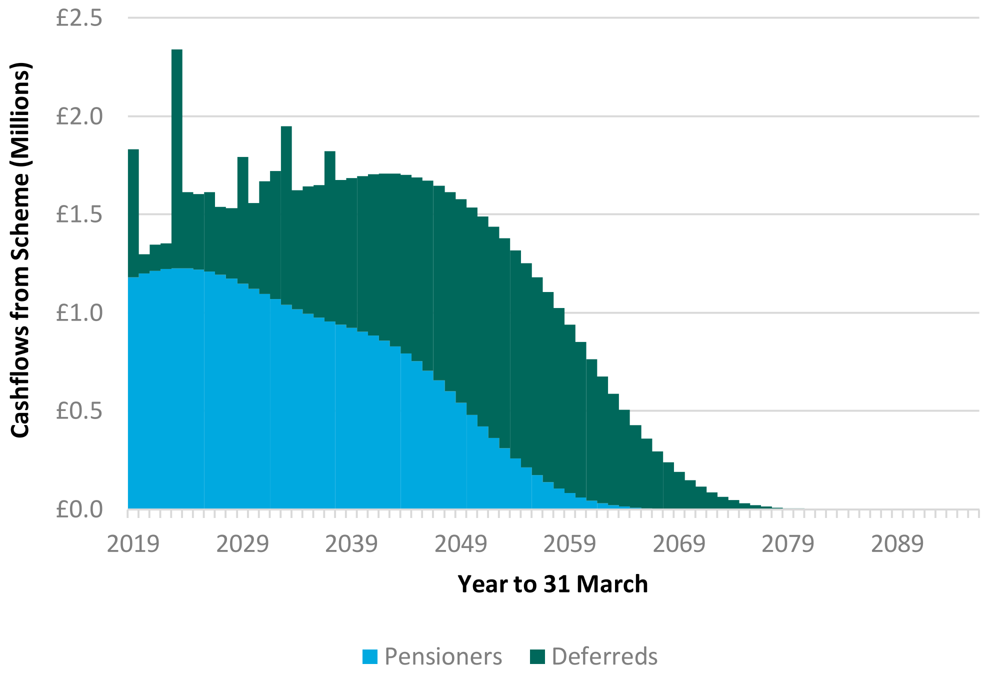
03 Scheme funding results

Projected benefit payments

2035

Projected peak of Scheme benefit payments (ignoring cash at retirement)

I have used the scheme funding assumptions to project the estimated benefits that will be paid to all members in respect of their entitlements at the valuation date. These projections are set out in the chart below and represent all cash payments expected to be made over the lifetime of the Scheme.



2038

Last member expected to retire

The Scheme is made up of those members who have already retired (pensioner members) and those who have not yet retired (deferred members). The last deferred member is expected to retire in 2038, at which point the benefits of all members will be in payment.

The projected cashflows are calculated on the scheme funding assumptions, and are therefore dependent on these assumptions being realised.

The level of benefits paid will depend on the actual level of future inflation compared to that assumed (which affects increases to pensions in deferment and in payment).

The timing of the cashflows will be dependent on factors such as:

> how long members and dependants live compared to assumed;

> whether members take cash at retirement and the factors in place (it is assumed that maximum allowable cash is taken on cost neutral terms),

> whether members retire early or late (all members are assumed to retire on their normal retirement date); and

> whether members transfer their benefits out of the Scheme (which is not allowed for in the assumptions).

Scheme funding results

£2.1m

Surplus at 31 March 2019

£3.3m

Increase in funding position over the valuation period

The funding position

The technical provisions are compared to the present value of the assets to give the funding position at the valuation date below. The corresponding results of the last valuation are shown for comparison purposes.

	As at 31 March 2016 £000s	As at 31 March 2019 £000s
Past service liabilities		
Deferred pensioners	19,173	20,546
Current pensioners	20,023	24,350
Insured pensioners	140	135
Total past service liabilities (L) ('Technical provisions')	**39,336**	**45,031**
Assets		
Total assets shown in accounts	38,008	47,022
Insured pensioners	140	135
Total assets (A)	**38,148**	**47,157**
Funding surplus / (deficit) (A minus L)	**(1,188)**	**2,126**
Funding level (A as a percentage of L)	**97%**	**105%**

Scheme funding results

Reconciliation with the results of the previous valuation

£7.2m

Asset gain over the valuation period due to investments being higher than expected

The funding position has improved since the last valuation. The most significant influences on the funding position have been as follows:

> returns on the Scheme's investments were higher than expected, which has improved the position;

> deficit reduction contributions have also improved the position; while

> changes in financial conditions underlying the actuarial assumptions used to value the liabilities have placed a significantly higher value on the liabilities and hence have partially offset these improvements.

Since the last valuation the Trustees have reconciled the Guaranteed Minimum Pensions (GMPs) in the Scheme with HMRC, including the revaluation methodology for each member. The final result was to reduce the Scheme's liabilities slightly.

The full reconciliation of the changes in the Scheme's funding position since the valuation carried out as at 31 March 2016 is set out below:

£6.4m

Net increase in Scheme liabilities over the valuation period due to changes in market conditions

	£m
Surplus/(Deficit) at 31 March 2016	(1.2)
Interest on deficit	(0.1)
Investment performance	7.6
Deficit reduction contributions	1.4
Pension increases in payment and deferment lower than expected	0.1
Impact of mortality experience	(0.2)
Impact of members opting to take cash at retirement	0.1
Expenses greater than expected	(0.3)
Change in financial conditions	(6.4)
Correction of GMP revaluation method from fixed to S148 for some deferred members	0.9
Change in derivation of assumptions	0.2
Surplus/(Deficit) at 31 March 2019	2.1

Further information on the investment returns and the contributions paid in the period between the two valuations can be found in Appendix C.

Scheme funding results

Developments since the effective date

Since the effective date of the valuation, 31 March 2019, to the date of this report, financial conditions have been volatile with significant movements in the equity and gilt markets.

The Trustees and the Employer have agreed that they will not explicitly take any account of any post-valuation experience in the 2019 valuation results (which is consistent with the approach adopted at previous valuations). However, the Trustees monitor the funding position of the Scheme by way of quarterly updates which show that the position at date of signing has improved further from that at the valuation date.

Projected funding level to the next valuation

I have projected the funding position to 31 March 2022 when the next formal valuation of the Scheme is due, when the funding position and future contributions are required to be reviewed again.

Assuming that experience is in line with the assumptions as set out in the statement of funding principles (which are by definition prudent) my projection is for the funding position to remain unchanged. However, in practice the Scheme's investments are expected to achieve higher returns than assumed in the calculation of the technical provisions and therefore I anticipate an improvement in the funding position over the next three years which is in line with the Trustees' long term funding target.

In practice the Scheme is exposed to a number of risks as set out in the next section, which means that the funding level at the next valuation date is uncertain.

Scheme funding results

Risk and prudence

Key Risks

There are a number of risks which might ultimately affect the Trustees' ability to pay benefits to members. Foremost among these are the risks relating to:

> Funding risks – if experience turns out to be less favourable than was assumed for the funding assessment, for example members living longer than assumed, inflation is higher than assumed or legislation introduces unanticipated liabilities, additional contributions may be required from the Employer.

> Employer covenant – the Employer may become less able to make contributions or unwilling to support the Scheme. As the Scheme is well funded on a cautious and largely de-risked investment strategy the strength of the covenant is not likely to be a restrictive factor.

> Investment risks – where future investment returns are below those assumed or there is an asset/liability mismatch where an increase in liabilities (e.g. from a decrease in bond yields) is not matched by an increase in asset values.

Risk mitigation measures

The Trustees have taken a number of actions to mitigate the risks. These include:

> Funding - the assumptions used in the funding assessment have been chosen prudently, making it less likely that experience will turn out to be worse than assumed.

> Monitoring - regular updates are received by the Trustees to keep abreast of any changes in the Employer's covenant and the funding position. More detail can be found in the Scheme's integrated risk management plan.

> Investment - the Trustees have invested the majority of the Scheme assets in bonds. Movements in the value of these assets act to partially offset movements in the technical provisions when bond yields change.

Scheme funding results

Sensitivity to assumptions

To give an idea of the extent of some of the key risks, I set out below the sensitivity of the technical provisions to some of the key assumptions. These show the impact on the technical provisions of changing each assumption in isolation. Please note that these calculations are approximate and intended for illustration only.

Impact of change in assumptions on technical provisions

Assumption	Change	Impact on surplus (£m)
Discount rate	Pre-retirement +/- 0.25%	+/- 0.3
Discount rate	Post-retirement +/- 0.25%	+/- 1.7
Inflation	RPI +/- 0.25% p.a.	-/+ 1.7
Post retirement mortality	Change long-term rate from 1.5% to 1.25%	+0.5

Level of prudence in funding results

£4.1m

Approximate level of prudence in funding basis

The assumptions used in calculating the technical provisions must be chosen prudently, usually including an appropriate margin for adverse deviation.

The approximate level of prudence allowed for in the technical provisions can be seen by the difference between the technical provisions and a "best estimate" basis, the latter which is calculated using assumptions that are the best estimate of the future, taking out the prudence in the key assumptions as set out below:

> Discount rate: 0.25% a year higher (gilt yield +1% per annum)

> Price Inflation (RPI): 0.2% a year lower

> S148 revaluation in deferment: 0.5% a year lower

> Post retirement mortality, assumed long term rate of improvement: 0.5% a year lower

If the margins for prudence set out above were removed from the technical provisions assumptions, the technical provisions would reduce by approximately £4.1m.

04 Solvency assessment

Background

I am required to assess the winding-up or "solvency" position of the Scheme assuming that it ceases at the valuation date, where all benefits would be secured by the purchase of insurance policies. This differs from the scheme funding valuation, which assumes that the Scheme operates until its last member dies.

Methodology

The only accurate way to assess the true cost of winding up would be to obtain quotations from a number of insurance companies. I have not done this, but instead have estimated the cost using assumptions that have been derived with reference to general pricing information received from insurers.

Clearly, this approach will not be as accurate as obtaining actual quotations, but I am satisfied that it is sufficient for the present purpose. An actual wind-up, at a different date, could have a significantly different funding position and would depend on investment market conditions and the terms available from insurance companies at the date of securing benefits or obtaining a firm quotation.

While it is difficult to say if my estimate is prudent relative to buy-out terms which might have been available at the valuation date, I have not added explicit margins for prudence. Full details of the assumptions used are set out in Appendix D.

The solvency valuation is also my statutory estimate of the Scheme as required under section 7 of the Occupational Pension Scheme (Scheme Funding) Regulations 2005 and I have set the assumptions for the estimate based on the principles set out above.

Solvency assessment

Results

A breakdown of the solvency assessment results at the 2019 and 2016 valuation dates (for comparison) is set out below.

£14.0m

Estimated Solvency deficit at 31 March 2019

	Solvency Assessment as at 31 March 2016 £000s	**Solvency Assessment as at 31 March 2019** £000s
Solvency liabilities		
Deferred pensioners	31,460	29,958
Current pensioners	22,865	27,933
Insured pensioners	152	130
Solvency and payment expenses	1,638	3,111
Total Solvency liabilities (L)	**56,115**	**61,132**
Assets		
Total assets shown in accounts	38,008	47,022
Insured pensioners	152	130
Total assets (A)	**38,160**	**47,152**
Solvency surplus / (deficit) (A minus L)	**(17,955)**	**(13,980)**
Solvency funding level (A as a percentage of L)	**68%**	**77%**

Comparison to scheme funding results

The funding level on the solvency basis is much lower than the scheme funding basis set out in Section 3 of this report. This is due to the different assumptions used to reflect the difference between the anticipated cost of providing the benefits from the Scheme on an ongoing basis and the cost of securing those benefits through the purchase of insurance policies.

The cost of winding-up the Scheme is larger than the expected cost of running the Scheme on an ongoing basis, due principally, to the more conservative assumptions insurers are required to adopt and the profit margins expected to be targeted by the insurance market.

It should also be noted that the cost shown here reflects the premium charged by insurers for taking on deferred liabilities. Insurance company pricing is much more competitive for current pensioners than for deferreds and the “gap” between the funding level on the solvency and scheme funding bases is therefore expected to narrow considerably over the next 5 or so years by which point the majority of the Scheme’s liabilities are expected to be in respect of retired members.

Solvency assessment

Effect on member's benefits

If the Scheme had begun winding up as at 31 March 2019, and the Employer was unable to pay all of the Employer's wind-up debt due to insolvency (i.e. the difference between the assets and the liabilities on the solvency basis), as the Scheme is over 100% funded on the PPF's Section 179 basis, the Scheme would, in theory, be required to purchase benefits with an insurance company. In this situation, members' benefits would be reduced and secured in line with the Scheme's rules.

If there were insufficient assets to purchase benefits at least as great as the compensation levels paid by the PPF, the Scheme would, in theory, be eligible to enter the PPF. In this situation, members' benefits would be reduced to the compensation levels paid by the PPF.

The "compensation" paid by the PPF is based on the benefits accrued by each member within their own pension scheme, but with some adjustments. For example:

> Members yet to reach their Normal Pension Age have their benefits reduced by 10% and restricted so that they are no greater than a cap set by the PPF.

> No increases are applied to pension accrued before April 1997.

> Increases to pension accrued after April 1997 are limited to a maximum of 2.5% each year (or the increase in the Consumer Prices Index if lower).

05 **Section 179 valuation**

Background

I have carried out a Pension PPF levy (section 179) valuation of the Scheme as at 31 March 2019 and enclose, in Appendix F, a copy of my certified results. The assumptions are set by the PPF and are designed to broadly reflect the cost of buying out the PPF benefits with an insurance company. We will arrange for the information shown in the certificate to be entered onto Exchange. From there it will be shared with the PPF who will use it to calculate the Scheme's annual PPF levy.

Methodology

The PPF prescribes the calculation methodology to be used for the section 179 valuation. This can be found in version G8 of its paper "Guidance for undertaking the valuation in accordance with Section 179 of the Pensions Act 2004". I have followed these prescriptions in my valuation. Details of the assumptions used are set out in Appendix D.

I have estimated the value of the Scheme's section 179 liabilities as at 31 March 2019 using the same data as used for the scheme funding assessment.

As noted in Appendix A the expected impact of GMP equalisation is small. No adjustment has been made to the results of the section 179 valuation for GMP equalisation as the Scheme is over 180% funded on this valuation assessment and it is not material to the results

Results

184%

Section 179 funding level at 31 March 2019

On the section 179 basis, as at 31 March 2019, the Scheme had assets of £47.1m and liabilities of £25.6m, equivalent to a funding level of 184% and surplus of around £21.6m. Further details are provided in Appendix F. This compares with assets of £38.2m and liabilities of £25.3m assessed at 31 March 2016, equivalent to a funding level of 151% and surplus of £12.9m.

Experience analysis since the previous valuation

The improvement in the surplus on the section 179 basis is primarily due to actual investment returns being higher than expected. However this has been partially offset by changes in financial market conditions which have served to slightly increase the liabilities.

06 Next steps

Next steps

The signing of this document, the statement of funding principles and the schedule of contributions concludes the valuation formalities. The next step is for the Trustees to submit details of the valuation to TPR (noting that as the Scheme is in surplus at the valuation date this will be via the annual scheme return rather than a separate submission).

Between now and the next valuation

30 June 2020

Deadline to complete the valuation

As the Scheme has fewer than 100 members and is closed to new entrants, no interim reports on the funding level are required and the next formal actuarial valuation is due as at 31 March 2022. However the Trustees continue to monitor the funding position of the Scheme on a quarterly basis and, after consulting the Employer, may obtain a full valuation if they believe that events make this appropriate.

Signature

Date
2 December 2019

Name
Emma Whitehouse
Scheme Actuary

Qualification
Fellow of the Institute
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Address
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Onslow Street
Guildford
GU1 4SS

Employer
XPS Pensions Limited

Appendix A
Scheme benefits

The Scheme benefits are described in the Scheme's definitive trust deed and rules dated 26 March 2018 and subsequent amending deeds and announcements for the Scheme. A summary of the benefits is set out below.

The Scheme closed to both new entrants and future accrual of benefits on 31 December 2005.

Equalisation

The Scheme appears to comply with the main equal treatment requirements of the European Court, as far as these are known, and the valuation has been prepared on this basis. I have assumed that these requirements have been validly incorporated in the trust deed and rules and the benefits supplied by the administrators reflect the rules.

Like many UK pension schemes, however, the Scheme's benefits still differ between men and women as a result of differences in Guaranteed Minimum Pension (GMP). My valuation makes no allowance for any additional liabilities that would arise if benefits were to be equalised to remove these differences for the members with GMP.

The recent judgement in the case of Lloyds Banking Group confirmed that trustees must take the necessary actions to equalise benefits for the effect of unequal Guaranteed Minimum Pensions. As the method to be used is still to be agreed my valuation makes no allowance for any additional liabilities. The Trustees must therefore consider holding a reserve for potential costs.

I have not undertaken any detailed calculations in respect of equalising GMPs, but am comfortable that an allowance for equalisation of GMPs in line with information which is currently available would be small. In particular it is unlikely to use up the Scheme's current surplus, nor restrict it to the extent that expenses cannot be met from the surplus and so an allowance would not change the outcome of the valuation. I am therefore comfortable that the Trustees do not including an explicit reserve in the Scheme's liabilities at this point in time. The Trustees plan to equalise GMPs shortly and therefore the 2022 valuation is expected to allow fully for equalisation.

Discretionary practice

There has been no recent history of discretionary increases or discretionary benefits being awarded under the Scheme. In line with this past practice, I have therefore made no allowance in the valuation for discretionary increases or benefits being granted in future.

Scheme and legislative developments since the 2016 valuation

Since the previous valuation the Trustees have carried out a review of the definitive trust deed and rules, the updated version is dated 26 March 2018. There were no material changes impacting on the valuation.

A number of legislative developments have occurred or have been proposed since the 2016 valuation. These developments have been brought to the Trustees' attention where appropriate or are covered in my 'Regulatory background report' dated May 2019 and are covered in this report where they are relevant to the valuation.

Appendix B
Membership data

59

Total Scheme membership at current valuation date

I have been provided with membership data as at 31 March 2019 by the XPS administration team. I have performed a number of checks on the data and I am satisfied that it is sufficiently accurate for the purposes of this valuation. A summary of the data is set out below.

Deferred members	**31 March 2016**	**31 March 2019**
Number	30	27
Total annual pension at date of leaving (£000s)	408	313
Average age*	52	54

Pensioner members	**31 March 2016**	**31 March 2019**
Number	30	32
Total annual pension at date of valuation (£000s)	987	1,170
Average age*	75	76

* Average ages are un-weighted

60

Total Scheme membership at previous valuation date

The member data above includes the two pensioners who are insured with Legal & General Life Assurance.

Appendix C
Assets and investment strategy

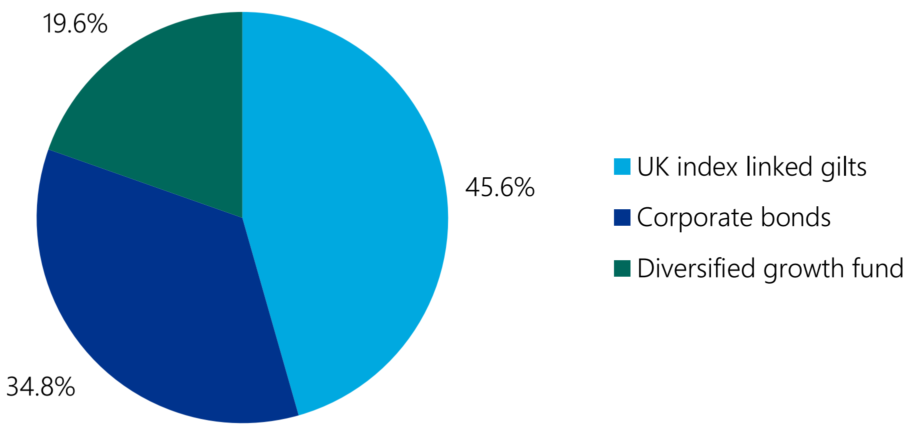
Assets held at the valuation date

I have taken the value of the Scheme's assets from the Trustees' audited Report and Accounts as at 31 March 2019. The accounts state that at that date the Scheme had invested assets of £47.0m (excluding insured pensioners). The following chart illustrates how those assets were invested.

20%

Benchmark allocation to return seeking assets

Distribution of Invested Assets as at 31 March 2019



80%

Benchmark allocation to matching assets

In addition to the assets set out above, the accounts show that there were net current assets. This gives a total asset value (excluding insured pensioners) for use in my assessment, as follows.

	Assets as at 31 March 2016 £000s	**Assets as at 31 March 2019** £000s
Invested assets	37,871	47,028
Net current asset / (liability)	137	(6)
Total available assets	38,008	47,022

Assets and investment strategy

9.4%

Actual average annual return on Scheme investments over the valuation period

3.7%

Expected average annual return on Scheme investments over the valuation period

£1.2m

Contributions paid by the Employer over the valuation period

Two Scheme pensions are paid from annuity policies held in the name of the Trustees. In the valuation calculations, I have shown the value of these as both an asset and liability, with the value of this asset measured on the assumptions for the basis under consideration in each case.

Investment strategy

The assets held at the effective date of the valuation broadly reflected the Trustees' investment strategy, as set out in the Trustees' statement of investment principles. This strategy consists of investing approximately 20% of the assets in a multi-asset absolute return fund and approximately 80% of assets in matching assets such as bonds.

Investment returns

The scheme funding assumptions adopted for the 31 March 2016 actuarial valuation anticipated returns on the fund assets averaging around 3.7% per annum. The actual returns on the Scheme's assets during the period were 9.4% per annum.

Contributions paid to the Scheme

The Employer paid £1.2m to the Scheme over the valuation period in order to help remove the Scheme's deficit. In addition the Employer contributed towards the expenses of running the Scheme.

Appendix D
Summary of key assumptions

Key financial assumptions – Solvency basis

	As at 31 March 2016	As at 31 March 2019
Discount rate for non-pensioners (before and after retirement)	1.70%	Market-adjusted swap curve
Discount rate for pensioners	1.80%	Market-adjusted swap curve
Future price inflation (RPI)	3.25%	Swap RPI curve
Future price inflation (CPI)	3.00%	Swap RPI curve less 0.4%

Pension increase assumptions – Solvency basis

	As at 31 March 2016	As at 31 March 2019
Revaluation of deferred pensions before retirement:		
Deferred revaluation – Statutory (non-GMP)	3.00%	CPI
Pension increases after retirement:		
Pension accrued before 23 May 1994 (uncapped)	7.00%	7.00%
Pension accrued before 23 May 1994 (capped)	3.25%	RPI
Pension accrued between 22 May 1994 and 6 April 2005	3.25%	RPI capped at 5%
Pension accrued from 6 April 2005	2.20%	RPI capped at 2.5%

Demographic assumptions – Solvency basis

	As at 31 March 2016	As at 31 March 2019
Mortality after retirement	S2PA light base table projected on a year of birth basis with standard CMI 2015 model using a long term annual improvement rate of 2.00% for males and 1.50% for females	S3PA light base table projected with a year of birth basis with standard CMI 2015 model using a long term annual improvement rate of 1.50% for males and 1.25% for females
Commutation	No allowance	
Proportion married	Actual if known for pensioners, otherwise 100%	Actual if known for pensioners, otherwise age dependant table*
Age difference of dependants	Males 3 years older than females	

* Different tables for males and females. For male members it is assumed that 75% are married at age 60, tapering down to 60% at age 85, 39% at age 90. For female members it

is assumed that 68% are married at age 60, tapering down to 24% at age 85 and 11% at age 90.

Expenses – Solvency basis

	As at 31 March 2016	As at 31 March 2019
Allowance for insurer wind-up expenses	3% of total liabilities	4.5% of total liabilities
Allowance for non-insurer wind-up expenses	£1,000 per non-pensioner and £500 to £900 per pensioner depending on age	£0.5m

Section 179 valuation basis

The PPF prescribes the assumptions and the calculation methodology to be used for the section 179 valuation and can be summarised as follows.

	As at 31 March 2016	As at 31 March 2019
Version of the guidance for undertaking a valuation in accordance with section 179	G6	G8
Version of the assumptions to use when undertaking a valuation in accordance with section 179	A7	A9

Appendix E
Documents and certificates

Statement of Funding Principles

JO Plowright & Co (Holdings) Limited Pension and Assurance Scheme

This statement was prepared by the Trustees of the JO Plowright & Co (Holdings) Limited Pension and Assurance Scheme (the "Scheme") on 2 December 2019 for the purposes of the actuarial valuation as at 31 March 2019 after obtaining the advice of Emma Whitehouse, the actuary to the Scheme. This statement has been agreed by Clarkson plc, the sponsoring employer of the Scheme.

The Statutory Funding Objective

This statement sets out the Trustees' policy for securing that the statutory funding objective, namely that the Scheme must have sufficient and appropriate assets to cover its technical provisions, is met.

Technical Provisions

Method
The actuarial method used to calculate the technical provisions is the Projected Unit Method.

Assumptions
A full list of all assumptions that have been used to calculate the technical provisions can be found in Appendix A.

An explanation of the most significant assumptions is set out below.

Discount interest rate pre and post retirement
Following discussions between the Trustees and Employer, it was agreed that some allowance for additional returns (above those available) on gilts would be anticipated in on the Scheme's assets. Therefore, in order to determine a suitable rate to use, it is necessary to consider the Scheme's investment strategy.

The Scheme's long term investment strategy is to broadly invest 20% in absolute return multi-assets and 80% in a mix of government and corporate bonds. There is no plan to further de-risk the Scheme's investment strategy over time.

The Trustees have therefore agreed to use a single equivalent discount rate equal to the best estimate return on the long term investment strategy (1.0% per annum above the yield on long dated gilts) less a margin for prudence of 0.25% per annum. The discount rate pre and post retirement is therefore 2.24% per annum at 31 March 2019.

Price inflation
Price inflation affects the assumptions for some pension increases in deferment and for some pensions in payment.

Price inflation, based on the Retail Price Index ("RPI"), has been derived from market expectations, by considering the yields available on over 15 year fixed interest and index-linked gilts. This gives an expectation of future RPI inflation of 3.35% per annum at 31 March 2019.

An assumption for price inflation based on the Consumer Price Index ("CPI") has been derived as RPI inflation less a deduction of 0.8% per annum. This gives an expectation of future CPI inflation of 2.55% per annum at 31 March 2019.

Mortality
The base tables adopted for the post retirement mortality assumptions are the "Light" SAPS Series 3 ("S3PA_L") tables.

The Trustees and the Employer have agreed a prudent allowance for future improvements in longevity in line with the CMI_2018 model projected on a year of birth basis with an initial addition of 1.5% and with long term rates of improvement of 1.5% per annum for both males and females.

The AC00 tables have been used for the pre-retirement mortality assumptions.

Discretionary Benefits
There is no history of discretionary increases awarded within the Scheme and therefore no allowance for discretionary benefits or increases has been made in the calculation of the technical provisions.

Recovery Period

The Trustees and the Employer have agreed that any funding shortfalls identified at the valuation should be eliminated as quickly as the Employer can reasonably afford by the payment of additional contributions.

The assumptions to be used in the calculations are the same as those used to calculate the technical provisions.

In determining the actual recovery period at any particular valuation the Trustees' principles are to take into account a number of factors, including:

- the size of the funding shortfall;
- the business plans of the Employer;
- the asset and liability structure of the Scheme;
- the Trustees' assessment of the financial covenant of the Employer; and
- any contingent security offered by the Employer.

Frequency of Valuations

The Scheme's latest valuation under Part 3 of the Pensions Act 2004 was carried out as at 31 March 2019 and subsequent valuations are expected to be obtained every 3 years after that. As the Scheme has fewer than 100 members and is closed to new entrants, no interim reports on the funding level are required.

The Trustees may obtain a full valuation if they believe that events have made it unsafe to continue to rely on the results of the previous valuation as the basis for the current level of contributions. However, the Trustees will consult the Employer before doing so.

Further information

Information on payments to the Employer, contributions to the Scheme by other parties and Cash Equivalent Transfer Values is set out in Appendix C.

Signed on behalf of the Trustees	**Date** 2. XII. 19.
Signed on behalf of Clarkson plc	**Date** 2nd December, 2019

Appendix A
Technical Provisions Assumptions

Market Conditions as at 31March 2019

Yield	Amount
FTSE Actuaries Government Securities over 15 years yield index ("gilt yield")	1.49%
FTSE Actuaries Government Securities over 15 years yield index assuming 2.5% inflation ("index-linked gilt yield")	-1.80%

Financial Assumptions as at 31 March 2019

Item	Assumption (p.a.)	Derivation
Discount interest rate pre and post retirement	2.24%	Gilt yield plus 0.75% per annum
Price inflation (RPI)	3.35%	Difference between the gilt yield and index-linked gilt yield
Price inflation (CPI)	2.55%	RPI less 0.8% p.a.
Pension increases pre retirement:		
> excess over GMP	2.55%	Statutory (based on CPI)
> GMP revaluing in line with fixed rates	Fixed	Statutory
> GMP revaluing in line with S148	3.85%	RPI plus 0.5% p.a.
Pension increases post retirement:		
> Pension accrued before 23 May 1994 (uncapped)	7.00%	Fixed rate
> Pension accrued before 23 May 1994 (capped)	3.35%	RPI
> Pension accrued between 22 May 1994 and 6 April 2005	3.32%	RPI maximum 5% per annum*
> Pension accrued from 6 April 2005	2.38%	RPI maximum 2.5% per annum*

*Using Black-Scholes methodology with 1.00% volatility

Demographic Assumptions

Item	Assumption	Derivation
Mortality pre retirement	AC00 base tables	Standard assumption
Mortality post retirement	S3PA light base tables projected on a year of birth basis from 2013 in line with the CMI 2018 projections with an initial addition of 1.5% and with long term annual improvement rates of 1.5% for both males and females.	Scheme specific assumption of current mortality base tables with projections to allow for future improvements in mortality
New entrants	No allowance	Closed scheme
Withdrawals	No allowance	Closed scheme
Ill health retirements	No allowance	Scheme specific assumption
Early retirement	No allowance	Scheme specific assumption
Late retirement	No allowance	Scheme specific assumption
Age difference of dependants	Actual if known for pensioners, otherwise males 3 years older than females	Scheme specific assumption, based on actual data for pensioners and a standard assumption for non-pensioners
Proportion married	Actual if known for pensioners, otherwise 100%	Scheme specific assumption, based on actual data held for pensioners and a prudent assumption for non-pensioners
Commutation	Maximum allowable on cost neutral terms	Prudent assumption
Expenses (including PPF levies)	No explicit allowance	No expense reserve is included in the technical provisions; however, the Trustees and Employer have agreed that the expenses of running the Scheme can be met from the Scheme's surplus. The risk based PPF levy (if any) will still be reimbursed by the Employer.

Appendix B
Sample life expectancies in retirement

Life expectancies in retirement

Age	Male future life expectancy (years)	Female future life expectancy (years)
60	29.2	30.6
65	24.2	25.6
70	19.5	20.8
75	15.0	16.1
80	10.8	11.7

Appendix C
Additional information required to meet Scheme Funding Regulations

Payments to the Employer

If the Scheme is not being wound up and the assets of the Scheme exceed the estimate by the actuary of the cost of buying out the benefits of all beneficiaries with an insurance company, including the associated expenses, then our understanding is that the Employer may request a payment of the excess funds in accordance with Clause 10.3 of the Trust Deed and Rules dated 26 March 2018. If the actuary certifies that the requirements of the Pensions Act 2004 have been met and certifies the maximum amount that may be payable then the Trustees will need to agree and then give notice to members of the proposal.

If the Scheme is wound up and the assets at that time are more than sufficient to secure the benefits of all beneficiaries with an insurance company, the Trustee has discretion to augment the benefits subject to the consent of the Principal Employer. Any remaining funds will then be refunded to the Employer once the Scheme's liabilities have been fully discharged, notice has been issued to Scheme members and the relevant confirmation has been received from the Pensions Regulator.

Contributions to the Scheme by Other Parties

No party may contribute to the Scheme other than the participating employers and the Scheme members.

Cash Equivalent Transfer Values ("CETVs")

At each valuation the Trustees may ask the actuary to advise them of the extent to which the assets are sufficient to provide CETVs for all members without adversely affecting the security of the benefits of other members and beneficiaries. Where coverage is less than 100% of benefits, the Trustees may consider reducing CETVs as permitted under legislation, after obtaining actuarial advice as to the appropriate extent and taking into account other material considerations such as the strength of the Employer's covenant.

If at any other time, after obtaining advice from the actuary, the Trustees are of the opinion that the payment of CETVs at a previously agreed level may materially worsen the security of the benefits of other members and beneficiaries, the Trustees will consider commissioning an insufficiency report from the actuary and will decide whether, and to what extent, CETVs should be reduced.

The insufficiency report may also take into consideration to what extent and in what way the liabilities should be divided having regard to different priorities on winding up, with the highest priority being given to the benefits that would apply were the Scheme to enter the PPF.

Schedule of contributions

JO Plowright & Co (Holdings) Limited Pension and Assurance Scheme

This schedule of contributions has been prepared by the Trustees after obtaining the advice of Emma Whitehouse, the actuary to the Scheme. It sets out the contributions Clarkson plc (the "Employer") must pay and the dates these contributions must be paid to the Trustees, and has been agreed by the Principal Employer.

This schedule covers contributions payable for five years from 1 December 2019.

Contributions by Employer

Shortfall in funding

As the statutory funding objective was met at the valuation date, no contributions are due to the Scheme from the Employer.

Expenses

The Trustees and Employer have agreed that the expenses of running the Scheme will be met from the surplus assets and therefore there are no contributions due in respect of administration expenses.

Any risk based element of the Pension Protection Fund Levy will be paid from the Scheme and reimbursed by the Employer within three months of payment. Other levies are payable directly from the Scheme without reimbursement.

Notes

Nothing in this Schedule shall prevent any Employer paying contributions in addition to those payable in accordance with this Schedule. In particular, contributions payable in respect of individual augmentations or general benefit improvements are to be paid in addition to those set out in this Schedule.

Signed on behalf of the Trustees	**Date** 2.XII.19.
Signed on behalf of Clarkson plc	**Date** 2nd December, 2019

Actuary's certification of schedule of contributions

JO Plowright & Co (Holdings) Limited Pension and Assurance Scheme

Adequacy of rates of contributions

1. I certify that, in my opinion, the rates of contributions shown in this schedule of contributions are such that the statutory funding objective could have been expected on 31 March 2019 to continue to be met for the period for which the schedule is to be in force.

Adherence to statement of funding principles

2. I hereby certify that, in my opinion, this schedule of contributions is consistent with the Statement of Funding Principles dated 2 December 2019.

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

Signature

Date
2 December 2019

Name: Emma Whitehouse

Qualification
Fellow of the Institute
and Faculty of Actuaries

Address:
XPS Pensions
Tempus Court
Onslow Street
Guildford
GU1 4SS

Employer
XPS Pensions

Actuary's certification of technical provisions

JO Plowright & Co (Holdings) Limited Pension and Assurance Scheme

Calculation of technical provisions

I certify that, in my opinion, the calculation of the Scheme's technical provisions as at 31 March 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 2 December 2019.

Signature

Date
2 December 2019

Name: Emma Whitehouse

Qualification
Fellow of the Institute
and Faculty of Actuaries

Address:
XPS Pensions
Tempus Court
Onslow Street
Guildford
GU1 4SS

Employer
XPS Pensions

Appendix F
Section 179 Certificate

Scheme/section details:

Full name of scheme:	JO Plowright & Co (Holdings) Limited Pension Scheme
Name of section, if applicable:	N/A
Pension Scheme Registration Number:	10077294
Address of Scheme (or section, where appropriate):	XPS Administration Wellbar Central 36 Gallowgate Newcastle NE1 4TD

s179 valuation

Effective date of this valuation (dd/mm/yyyy)	31/03/2019

Guidance and assumptions

s179 guidance used for this valuation	G8
s179 assumptions used for this valuation	A9

Assets

Total assets (this figure should <u>not</u> be reduced by the amount of any external liabilities and should include the insurance policies referred to below)	£ 47,123,000
Date of relevant accounts (dd/mm/yyyy)	31/03/2019
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

Please show liabilities for:

Deferred members (excluding expenses)	£ 8,585,000
Pensioner members (excluding expenses)	£ 16,238,000
Estimated expenses of winding up	£ 745,000
Estimated expenses of benefit installation/payment	£ 47,000
External liabilities	£ 0
Total protected liabilities	£ 25,615,000

Please provide the percentage of the liabilities shown above that are fully matched by insured annuity contracts for:

Deferred members:	0.0 %
Pensioner members:	0.4 %

Proportion of liabilities

Please show the proportion of liabilities which relate to each period of service for:

	Before 6 April 1997	6 April 1997 to 5 April 2009 (inclusive)	After 5 April 2009
Deferred members:	44%	56%	0%

	Before 6 April 1997	After 5 April 1997
Pensioner members:	76%	24%

Number of members and average ages

For each member type, please show the number of members and the average age (weighted by protected liabilities) as at the effective date of this valuation. Average ages should be rounded to the nearest whole year.

	Number	Average age
Deferred members:	27	54
Pensioner members:	32	71

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: 2 December 2019

Name: Emma Whitehouse

Qualification: Fellow of the Institute and Faculty of Actuaries

Employer: XPS Pensions

As required, under Part 6 of the Guidance on undertaking a s179 valuation, the s179 certificate should form part of the Scheme actuary's s179 valuation report. The details contained in this certificate should be separately submitted to the PPF as part of the annual Scheme return via the Pension Regulator's system "Exchange".

This certificate should not be sent directly to the Pension Protection Fund.

Contact us

xpsgroup.com