Actuarial Valuation as at 30 April 2019

Clifford Chance Pension Scheme

Prepared for	Clifford Chance Pension Trustees Limited (the Trustee)
Prepared by	Keith Poulson FIA
Date	29 July 2020

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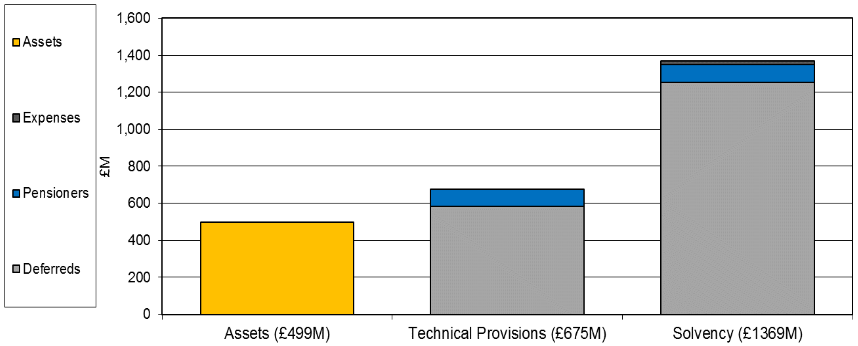
Executive Summary

The key results of the valuation at 30 April 2019 are set out below.

There was a deficit of £176M relative to the technical provisions
(i.e. the level of assets agreed by the Trustee and the Employer as being appropriate to meet member benefits, assuming the Scheme continues as a going concern).

There was an estimated deficit of £870M relative to the solvency liabilities
(i.e. the estimated level of assets needed to buy insurance policies for benefits earned to the valuation date).



Following discussions, it has been agreed that the Employer will pay the following contributions in respect of deficit repair:

- £6,642,360 by 31 May 2019; and
- £17,899,275 by 31 May 2020; and
- £6,000,000 by 31 August 2020; and
- In respect of each 31 May, commencing 31 May 2021, up to and including 31 May 2030, £22.0M pa.

The amount of each of the above payments (other than that in respect of 31 May 2019, and 31 May 2020 and 31 August 2020) shall be increased annually in line with the increase in the Retail Prices Index (as defined in the Scheme rules) for the period from 1 January 2021 to 1 January immediately preceding the 31 May for which the payment is due.

The payments due by 31 May 2019 and 31 May 2020 were paid under the previous recovery plan dated 24 July 2017. The payment due by 31 August 2020 is in addition to the £22.0M due by 31 May 2021.

In addition to the above contributions in respect of deficit repair it has also been agreed that the Employer will pay the costs of administering the Scheme, the Pension Protection Fund and other levies collected by the Pensions Regulator and the cost of any augmentations to benefits.

As part of the funding negotiations Clifford Chance LLP has agreed to provide a further guarantee to cover all present and future obligations and liabilities of Clifford Chance London Limited to make payments to the Scheme under a schedule of contributions or under sections 75 or 75A of the Pension Act 1995. This is referred to as 'the new LLP guarantee'.

Contents

Introduction

This report has been prepared for the Trustee to meet the requirements of Section 224(2)(a) of the Pensions Act 2004. It sets out the results and conclusions of the actuarial valuation as 30 April 2019.

This is a scheme funding report, it summarises the key aspects of the valuation process, including:

- The funding objective and background details;
- The technical provisions;
- The agreed recovery plan and other contributions;
- The results on the solvency basis;
- Further information required for compliance purposes, including:
  - The legal framework within which the valuation has been completed
  - A summary of the membership and asset data, the benefits valued, and details of the assumptions used for the valuation
  - My statutory certification of the technical provisions
  - A glossary of some technical pension terms

Throughout the body of this report, defined contribution (DC) benefits (including DC AVCs) have been excluded from the valuation results because in my view this provides a clearer picture. In order to comply formally with the legislation.

Shorthand

Scheme
Clifford Chance Pension Scheme

Trustee
Clifford Chance Pension Trustees Limited

Employer
Clifford Chance London Limited

Rules
The Scheme's Trust Deed and Rules dated 13 December 2001

Important Note: The report concentrates on the Scheme's financial position at the valuation date. As time moves on, the Scheme's finances will fluctuate. If you are reading this report sometime after it was produced, the Scheme's financial position could have changed significantly.

Previous valuation results

A summary of the results, recovery plan and agreed contributions following the previous valuation is set out below.

The key results from the previous valuation at 30 April 2016 were:

- There was a deficit of £146M relative to the technical provisions, which corresponded to a funding level of 72%.
- There was an estimated deficit of £1,011M relative to the solvency liabilities.

The Trustee and the Employer agreed a recovery plan that was designed to restore the funding level to 100% by 31 May 2026 through a combination of:

- £4.9M by 31 May 2016 and £13.3M by 31 May 2017, followed by
- £17M each year for 9 years from with the first payment by 31 May 2018. The 31 May 2019 and subsequent payments were to be increased annually in line with RPI.

It was also agreed that the Employer would pay the following contributions:

- the costs of administering the Scheme;
- The Pension Protection Fund and other levy payments collected by the Pensions Regulator; and
- The cost of any augmentations to benefits.

As part of the funding negotiations Clifford Chance LLP agreed to continue to provide a guarantee to cover the contributions, if not paid, set out in the current Schedule of Contributions in respect of the 2016 valuation and the following three Schedules of Contribution (based on similar principles). This was referred to as 'the LLP guarantee'.

Data and benefits valued

This valuation is based on the membership data as at 30 April 2019 supplied to us by Clifford Chance on your behalf.

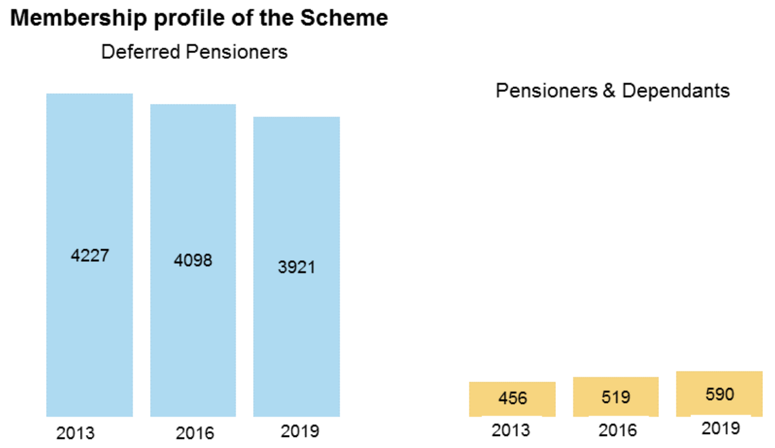
Membership data

A summary of membership data in included in appendix B.

The chart shows how the membership profile of the Scheme has changed over the last three valuations. I have carried out some general checks to satisfy myself that:

- The information used for this valuation is sensible compared with the information used for the previous valuation and also with that shown in the Scheme's Trustee Report and Accounts.
- The results of this valuation can be traced from the results of the previous valuation.

However, the results in this report rely entirely on the accuracy of the information supplied. If you believe the data I have used may be incomplete or inaccurate, please let me know.



Benefits valued

Members are entitled to benefits defined in the Rules and summarised in Appendix C. No allowance has been made for discretionary benefits as the Scheme has no recent history of granting such benefits.

Funding objectives and investment strategy

The Trustee's funding objective is to hold assets which are at least equal to the technical provisions (i.e. to meet the statutory funding objective).

In order to calculate the technical provisions, the benefits paid out by the Scheme are estimated for each year into the future. The estimated benefit payments are then 'discounted back' to the valuation date using an agreed rate of interest known as the discount rate.

A key factor in setting the funding objective is the Trustee's assessment of the employer covenant. The Trustee commissioned an independent review of the employer's covenant and this concluded that on an ongoing basis it is tending to strong. The covenant strength has been enhanced by the new LLP guarantee and this has been taken into account in setting the assumptions to be adopted for the technical provisions and in agreeing the recovery plan.

The current assets are described in Appendix D.

The Trustee's investment strategy is set out in its statement of investment principles.

Summary of assumptions

The Trustee and Employer have agreed the assumptions used to calculate the technical provisions. The table below summarises the key assumptions, together with those used for the previous valuation, and the reasons for any change. Further details of all of the assumptions are set out in the statement of funding principles.

Assumption	Previous valuation	This valuation	Rationale for change
Pre-retirement discount rate	Set as RPI inflation plus 2.80% pa representing a 90% of the 'best estimate return' or a 60% prudence level, reflecting the prudent expected return from the assets held.	Gilt yield curve plus 3.4% pa	Moving to a yield curve approach reflects that yields vary by term to maturity and is a more accurate approach to value benefits, particularly when assets are held to match the expected outgo.
Post-retirement discount rate	Set as 0.50% pa over the gilt yield at 25-year duration	Gilt yield curve plus 0.5% pa	Update for yield curve approach and update of market conditions.
RPI inflation	Market implied inflation at 25-year duration with an inflation risk premium of 0.1% pa	"Break-even" RPI curve with 0.10% pa inflation risk premium deduction.	Update for market conditions only.
Pensionable increases in payment	Consistent with RPI inflation assumptions and allowing for	No change other than the movement to the RPI curve and	Update for market conditions and latest views only.

	Aon's best-estimate of future inflation uncertainty of 1.4% pa.	change in Aon's best-estimate of future inflation uncertainty	
Post-retirement mortality assumption - base table	100% for males and 90% for females of SAPS S2 'Light' tables.	105% for males and 100% for females of SAPS S3 'Light' tables.	Updated to the most recently published standard tables (S3) with appropriate scaling factors to reflect the population.
Post-retirement mortality assumption – future improvements	CMI 2014 core projections with long-term improvement rate of 1.50% p.a. for men and women	CMI 2018 (S7.0, A0.5) core projections with long-term improvement rate of 1.50% p.a.	Allows for the latest CMI core future improvements model with an 'A' parameter of 0.5 to reflect the higher average socio-economic weighting of the Scheme's membership compared to the population in general (on which the CMI2018 projections are based)
Family details	93% of men and women are assumed to be married or have a dependant at retirement or earlier death. A man is assumed to be three years older than his wife or dependant.	88% of men and 75% of women are assumed to be married or have a dependant at retirement or earlier death. A man is assumed to be three years older than his wife or dependant.	Recommended change based on latest analysis of Scheme data. No change in age difference assumption
Cash Commutation	Assumed 20% of pension commuted for cash at a factor of 13.9 at age 65	Assumed 20% of pension commuted for cash at a factor of 13.9 at age 65	No change

As for the previous valuation, the technical provisions have been calculated using the projected unit method.

Past service results

The Trustee's technical provisions and resulting funding position are shown below.

	Technical Provisions (£M)
Value of past service benefits for:	
Deferreds	581
Pensioners	94
Expenses	-
Value of liabilities	675
Value of assets	499
Past service surplus/(deficit)	(176)
Funding Level	74%

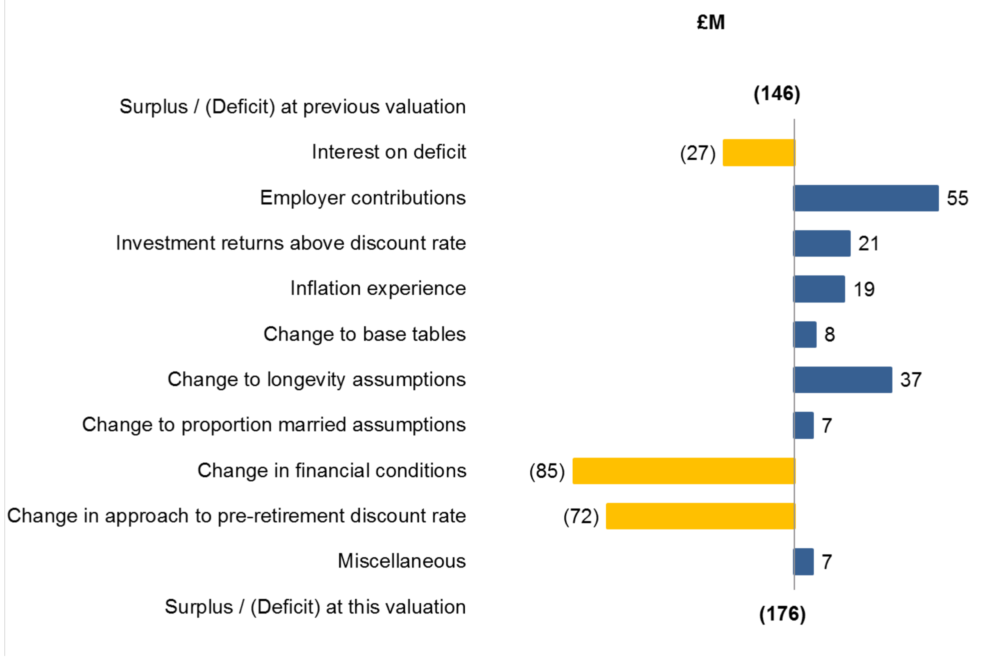
The key assumptions are the discount and inflation rate. The sensitivity of the technical provisions to these key assumptions is as follows:

- A 0.25% pa decrease in the pre-retirement discount rate increases the technical provisions by £18M.
- A 0.25% pa decrease in the post-retirement discount rate increases the technical provisions by £23M.
- A 0.1% p.a. increase in the RPI inflation assumption (also allowing for the consequent impact on the assumptions derived directly from that assumption) increases the technical provisions by £14M.

Reasons for change in past service funding position

The past service results show that the deficit of £146M in the Scheme at the previous valuation has increased to £176M at this valuation. The funding position has therefore worsened by £30M over the period.

The chart below shows the key reasons for the change in funding position.



The analysis shows that the main factors affecting the funding position since the previous valuation have been:

- Financial conditions, and in particular gilt yields have fallen, increasing liabilities.
- Expected returns on growth assets have also reduced, increasing the liabilities.
- Asset returns have been higher than expected over the inter-valuation period, reducing the deficit.
- Deficit contributions made by the Employer have also reduced the deficit.

Approximate developments since the valuation date

Since the valuation date, the funding position has worsened.

To 15 July 2020 we estimate the deficit has increased by around £100M as a result of:

- Further falls to bond yields, which have increased the liabilities to a greater extent than the assets.
- Falls in growth assets following the Covid-19 pandemic.

To reflect the worsening position since the valuation date the it has been agreed that a schedule of contributions will be put in place that targets the £176M deficit at the valuation plus a further £50M, to broadly reflect half of the deterioration since the valuation date.

Recovery plan

Following discussions, the Trustee and the Employer, have agreed a recovery plan as described below.

Taking into account a number of considerations, including the worsening of the funding position since the valuation date, the Trustee have agreed to extend the recovery plan end date from 31 May 2026 to 31 May 2030.

The recovery plan is designed to eliminate the deficit at the valuation date plus a further £50M by the end of the recovery period.

The assumptions underlying the recovery plan are the same as for the technical provisions.

Full details of the agreed contributions are set out in the later section of this report.

The Employer's recovery plan contributions include:

- A one-off payment of £6M payable by 31 August 2020.
- Annual deficit contributions of £22M, with the first payment due by 31 May 2021 and increasing annually thereafter in line with RPI inflation.

Solvency position

The statutory estimate of the Scheme's solvency position is set out below.

	Solvency (£M)
Value of past service benefits for:	
Deferreds	1,252
Pensioners	98
Expenses	19
Value of liabilities	1,369
Value of assets	499
Past service surplus/(deficit)	(870)
Funding Level	36%

This solvency estimate represents the estimated cost of purchasing annuities at the valuation date from an insurance company to meet the Scheme's benefits. The assumptions include an allowance for the expenses of winding-up the Scheme. Further details and the assumptions used in the solvency estimate are summarised in Appendix F.

The solvency estimate is higher than the technical provisions, the broad reasons for which are set out below:

- Insurers will typically hold less risky assets which provide lower investment returns than are expected to be achieved on the Scheme's assets;
- Insurers typically hold larger margins, for example by assuming that members will live longer than is assumed in calculating the technical provisions; and
- Insurers need to cover costs, including administering the benefits, and also make a profit.
- Allowance is made for the cost of winding up the Scheme.

In practice, if the Scheme were to be discontinued with no solvent employer then the assets are unlikely to be sufficient to provide the benefits in full. If this were the case, then:

- Benefits corresponding to those covered by the PPF would be met first (either through the PPF or, if there were sufficient funds, by securing these benefits with an insurance company).

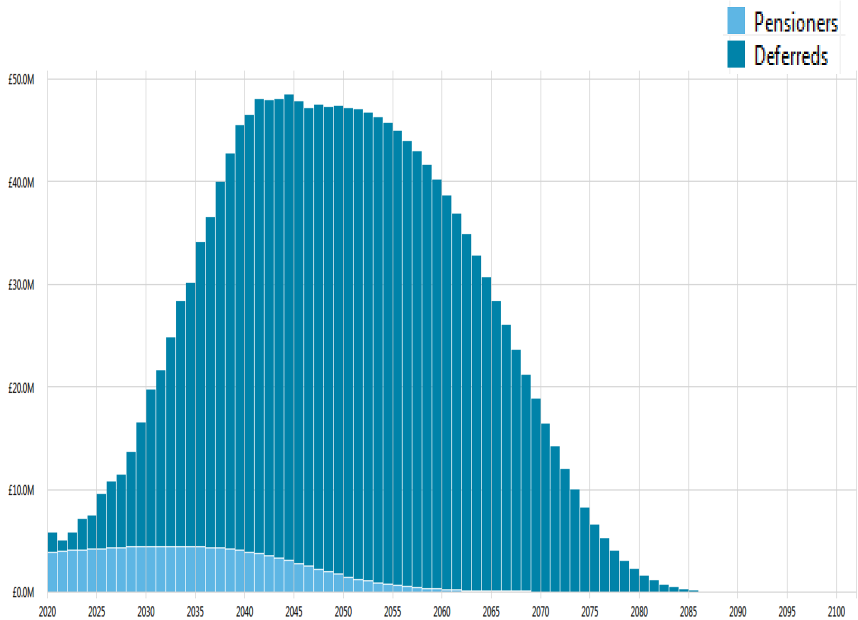
- Any remaining assets would be used to secure part of the remaining benefits with an insurance company.

The proportion of full benefits provided will vary from member to member and may be higher or lower than the statutory estimate of solvency ratio quoted above.

Funding and investment risks

The funding level is likely to exhibit volatility. This is discussed below.

The benefit payments from the Scheme are expected to be made for a very long period – the chart below shows the projected cashflows on the technical provisions basis for the Scheme.



The Scheme faces a number of key risks which could affect its future cashflows and funding position, including:

- Funding risk – the risk that the technical provisions are set too low and prove insufficient to meet the liabilities (e.g. in the event of unexpected discontinuance).
- Investment risks – the risk that investment returns are lower than assumed in the valuation, and also that the assets are volatile and move out of line with the liabilities, so the funding position is volatile.
- Liquidity risk – the risk that cashflows are higher than expected as member's commute more than is assumed or take transfer values, possibly leading to the sale of assets at inopportune times.
- Longevity risk – the risk that Scheme members live for longer than assumed and that pensions would therefore need to be paid for longer.
- Inflation risk – the risk that inflation is higher than assumed, increasing the pensions that need to be paid.
- Sponsor risk - this is the risk that the sponsor is no longer willing or able to support the Scheme, if anything goes wrong.
- Other risks – issues relating to climate change and other environmental risks as well as long-term uncertainty around geopolitical, societal and technological shifts may also impact on the funding, investments and sponsor covenant of the Scheme.

Agreed contributions and projections

The contributions agreed as a result of this valuation are summarised below.

Contributions

Following discussions, the Employer will pay:

- £6,642,360 by 31 May 2019; and
- £17,899,275 by 31 May 2020; and
- £6,000,000 by 31 August 2020; and

In respect of each 31 May, commencing 31 May 2021, up to and including 31 May 2030, £22.0m.

The amount of each of the above payments (other than that in respect of 31 May 2019, and 31 May 2020 and 31 August 2020) shall be increased annually in line with the increase in the Retail Prices Index (as defined in the Scheme rules) for the period from 1 January 2021 to 1 January immediately preceding the 31 May for which the payment is due.

The payments due by 31 May 2019 and 31 May 2020 were paid under the previous recovery plan dated 24 July 2017. The payment due by 31 August 2020 is in addition to the £22.0m due by 31 May 2021.

In addition to the above contributions in respect of deficit repair it has also been agreed that the Employer will pay the costs of administering the Scheme, the Pension Protection Fund and other levies collected by the Pensions Regulator and the cost of any augmentations to benefits.

A full review of the Employer’s contributions will be undertaken no later than following the next valuation, which is due to take place at 30 April 2022.

These contributions are set out in the schedule of contributions. As agreed, my certification of the schedule is based on the position at the valuation date.

Projections

I estimate that, by the next valuation, these contributions will have:

- Increased the technical provisions funding level to about 78% and
- Increased the solvency level to about 40%

These estimates assume that:

- The experience of the Scheme between the two valuation dates is in line with the assumptions underlying the technical provisions and recovery plan.
- The assumptions underlying the technical provisions and solvency bases remain unchanged.

Next steps

Actions required to finalise the valuation process are summarised below.

The next steps are:

- For the Trustee to provide a copy of this report to the Employer within 7 days.
- For the Trustee and the Employer to sign the recovery plan and schedule of contributions by 31 July 2020 i.e. within 15 months of the valuation date.
- To submit the valuation summary and supporting documentation to the recovery plan to the Pensions Regulator via Exchange.
- To provide a summary funding statement to members by 31 October 2020 i.e. within 18 months of the valuation date.

Checklist

The valuation process is complete when all of the following have been agreed and are in place:

- This scheme funding report, including my certification of the technical provisions
- Recovery plan
- Statement of Funding principles.
- Schedule of contributions.
- Actuarial certification of the adequacy of the schedule of contributions

Appendix A – Legal framework and alternative presentation

This report is produced in compliance with:

- Clause 17.1 of the Scheme's rules.
- Section 224 of the Pensions Act 2004.
- The terms of the Scheme Actuary Agreement 12 March 2008 between the Trustee and me, on the understanding that it is solely for the benefit of the addressee.

Appendix B – Membership data

The results in this report are based on membership data which is summarised below.

Deferred members	Number	Average age*	Total pension (£000 pa)	Average pension (£ pa)
2016	4,098*	48.2	24,579	6,042
2019	3,921*	51.0	26,313	6,711

Note: The deferred pension amounts shown above are at valuation date.
**These figures include a small number of members with more than one record.*

Pensioners	Number	Average age*	Total pension (£000 pa)	Average pension (£ pa)
2016	519	70.1	3,081	5,936
2019	590	71.0	3,869	6,558

Note: The pension amounts shown above do not include the increase awarded in April 2019.

I have conducted high level checks on the membership data provided and I am satisfied with its adequacy for the purpose of this actuarial valuation.

Appendix C – Benefits Valued

The Scheme is defined benefit in nature and is not contracted out of the State Second Pension. The benefits of the Scheme used for the purposes of this valuation are summarised in the following table (note the details below are not intended to be an exhaustive list of the benefits which are set out in the Scheme's Trust Deed and Rules).

Eligibility	The scheme closed to new entrants with effect from 1 January 2005 and closed to future accrual from 30 April 2011.
Normal Retirement Age	65
Pensionable Service	Complete years and months of Scheme membership plus any earlier service credited under previous schemes.
Pensionable Salaries	Basic annual salary (limited to the Earnings Cap, which was £123,600 at the valuation date, for Post 1 June 1989 joiners) including any guaranteed bonus. For leavers after 1 May 2006, Pensionable Salary is restricted so that increases after this date are the lower of the member's actual salary increase and inflation (capped at 5% pa over the period to retirement or leaving).
Final Pensionable Salaries	Pensionable Salaries, applicable at the date of leaving, death or retirement.
Normal retirement pension	i. 1/100th of the Final Pensionable Salaries below the Upper Earnings Limit for each year of Pensionable Service; plus ii. 1/60th of Final Pensionable Salary above the Upper Earnings Limit for each year of Pensionable Service
Normal retirement lump sum	Pension can be exchanged for cash in accordance with the rules of the Scheme

Early retirement	Members may take benefits from age 55 with Trustee consent; the benefit will be reduced actuarially for early payment
Pension increases (in payment and deferment)	RPI (with a maximum of 5% pa). Pension increases in payment for benefits accrued after 5 April 2005 receive pension increases of inflation capped at 2.5% pa.
Death after retirement spouse's pension	50% of the member's pension at date of death before any exchange for cash
Death after retirement lump sum	Balance of first 5 years pension instalments
Death before retirement benefits	Spouse's pension of 50% of the member's pension revalued to the date of death

Since 2008 the Scheme has applied a Scheme specific Upper Earnings Limit (UEL).
There are no further practices of discretionary benefits being provided by either the Trustee or the Employer.

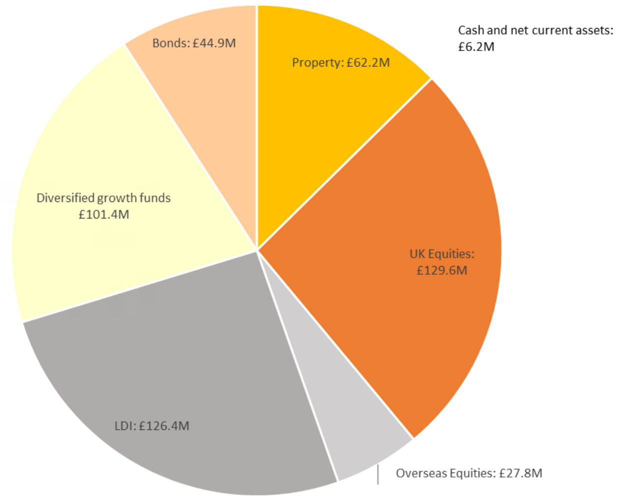
Appendix D – Assets

Information on the assets used in this valuation is covered here.

The audited accounts for the Scheme for the year ended 30 April 2019 show the total net assets of the scheme to be £498.5M, which has been derived as:

- Total net assets of the Scheme (£539.6.M)
- *Less* the value of assets attributable to the Money Purchase Section and the Final Salary Section AVCs (£41.1M)

The chart shows how the balance of the assets of £498.5M is broadly invested.



Appendix E – Assumptions for solvency estimate

The key assumptions used in calculating the solvency estimate are summarised below.

The solvency estimate has been calculated in line with statutory requirements. I have taken into account the investment strategies that a life assurance company is likely to use to back its annuity business and the resulting pricing we would expect to see under the market conditions at the valuation date, taking into account the size of the Scheme.

However, this estimate is only a guide. The true position can only be established by conducting a competitive buy-out auction and fully defining the scope and likely cost of a wind-up process for the Scheme.

The basis used is described on the next page.

Solvency estimate

This considers the position if:

- The Scheme were discontinued on the valuation date.
- Member benefits were crystallised.
- Discretionary benefits were suspended permanently.
- The assets were used to buy immediate and deferred annuities from an insurer.

The solvency estimate is a regulatory requirement and also provides a useful benchmark against which the Trustee and others can assess the prudence of other funding measures.

Assumption	Solvency
Pre-retirement discount rate	Aon Bulk Annuity Market Monitor yield curve for pensioners, which is constructed from swap and UK corporate bond market curves
Post-retirement discount rate	Aon Bulk Annuity Market Monitor yield curve for non-pensioners, which is constructed from swap and UK corporate bond market curves
RPI inflation	Term-dependent rates derived from the RPI swap markets
Pension increases	Derived from the price inflation assumptions with allowance for caps and floors and with the aim of approximately reflecting the cost of hedging these increases using LPI-linked swaps
Post-retirement mortality assumption - base table	105% for males and 100% for females of SAPS S3 'Light' tables, as adopted for the Technical Provisions
Post-retirement mortality assumption - projection	As for the technical provisions, except using CMI_2017 Core Projections and a long-term rate of improvement of 1.75% pa for both men and women
Commutation	No allowance
Family details	A man is assumed to be three years older than his wife/partner. 88% of male and 75% of female members are assumed to have eligible dependants at retirement or earlier death.
Expenses	Allowance made to cover expenses and insurance company charges associated with winding-up.
Discretionary benefits	No allowance.

Appendix F – Certificate of technical provisions

Actuarial certificate given for the purposes of Regulation 7(4)(a) of the Occupational Pension Schemes (Scheme Funding) Regulations 2005

Clifford Chance Pension Scheme

Calculation of technical provisions

I certify that, in my opinion, the calculation of the Scheme's technical provisions as at 30 April 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 Trustee of the Scheme and set out in the Statement of Funding Principles dated 29 July 2020.

Signature:

Name: Keith Poulson

Qualification: Fellow of the Institute and Faculty of Actuaries

Date: 29 July 2020

Address: Aon

Verulam Point, Station Way,
St Albans, AL1 5HE

Appendix G – Glossary

Current Unit Method
One of the possible methods used by actuaries to calculate actuarial liabilities and contribution rates. This method only allows for increases applicable to deferred pensioners beyond the effective valuation date when calculating liabilities or the end of the control period when calculating contribution rates and so does not allow for any further projected future increases to pay.

Control period
This is the period of time from the valuation date that is considered when calculating the future service cost for schemes still open to accrual.

Deficit
This is the funding target less the value of assets. If the value of assets is greater than the funding target, then the difference is called the surplus.

Defined Accrued Benefits Method
One of the possible methods used by actuaries to calculate actuarial liabilities and contribution rates. This method assumes that the scheme will be discontinued at the effective valuation date when calculating liabilities or at the end of the control period when calculating contribution rates and so does not allow for any further projected future increases to pay or any other terms applicable to active members.

Discount rate
This is used to place a present value on a future payment. A 'risk-free' discount rate is usually derived from the investment return achievable by investing in government gilt-edged stock. A discount rate higher than the 'risk-free' rate is often used to allow for some of the extra investment return that is expected by investing in assets other than gilts.

Discretionary benefits
Benefits that are not guaranteed under a scheme's rules and which are only granted to members at the discretion of the trustees and/or the sponsor.

Funding level
This is the ratio of the value of assets to the funding target.

Funding target
An assessment of the present value of the benefits that will be paid from the scheme in the future, normally based on pensionable service prior to the valuation date. Often, the funding target is equal to the technical provisions.

Gilt yield curve
The term-dependent yields on gilts derived from fixed-interest gilts published by the Bank of England which is extended by Aon Hewitt for years beyond those published.

Guaranteed Minimum Pensions (GMPs)
Most schemes that were contracted out of the State Earnings Related Pension Scheme (SERPS) before April 1997 have to provide a pension for service before that date at least equal to the Guaranteed Minimum Pension (GMP). This is approximately equal to the SERPS pension that the member would have earned had the scheme not been contracted out. GMPs ceased to build up on 6 April 1997 when the legislation changed.

Hedging
A liability is said to be hedged if a scheme holds investments which respond in the same way as it does to changes in the risk being hedged (eg interest rates or inflation). Gilts and swaps are examples of investments which are commonly used to hedge liabilities.

Limited Price Indexation (LPI)
The Pensions Act 1995 required schemes to provide a minimum level of annual increase to pensions in payment. The minimum level is the smaller of 5% and the increase in inflation* and applies to the pension earned from 6 April 1997 to 5 April 2005. With effect from 6 April 2005, the cap for statutorily required LPI for future service was reduced from 5% to 2.5%.

*Until 2010, inflation for the purpose of this minimum was defined with reference to changes in the Retail Prices Index. From 2011, inflation was defined with reference to changes in the Consumer Prices Index.

Partly Projected Unit Method

One of the possible methods used by actuaries to calculate actuarial liabilities and contribution rates.

This method allows for some, but not full, projected future increases to pay between the valuation date and retirement or date of leaving service.

Pension Protection Fund (PPF)

The PPF was established with effect from 6 April 2005. The PPF will normally take over the assets of a pension scheme in the event of its employer becoming insolvent and the scheme having insufficient assets to provide the PPF benefits. The PPF will not provide the scheme benefits in full. The PPF is financed by a levy on most defined benefit pension schemes.

The PPF benefits are broadly 100% of benefits for pensioners over normal retirement age and 90% of benefits up to a cap for all other members. Pension increases granted on benefits are at lower levels than apply in many schemes, in particular, benefits earned before 6 April 1997 would not be given any pension increases within the PPF.

Present value

Actuarial valuations involve projections of pay, pensions and other benefits into the future. To express the value of the projected benefits in terms of a cash amount at the valuation date, the projected amounts are discounted back to the valuation date by a discount rate. This value is known as the present value. For example, if the discount rate was 6% a year and if we had to pay a lump sum of £1,060 in one year’s time the present value would be £1,000.

Projected Unit Method

One of the common methods used by actuaries to calculate actuarial liabilities and contribution rates. This method allows for full projected future increases to pay through to retirement or withdrawal.

Prudent

Prudent assumptions are assumptions that, if a scheme continues on an ongoing basis, are more likely to overstate than understate the amount of money actually required to meet the cost of the benefits.

Recovery plan

Where a valuation shows a funding shortfall against the technical provisions, trustees must prepare a recovery plan setting out how they plan to meet the statutory funding objective.

RPI inflation curve

The term-dependent RPI inflation expectations derived from fixed-interest and index-linked gilts published by the Bank of England which is extended by Aon Hewitt for years beyond those published.

Schedule of contributions

Trustees of pension schemes must prepare and maintain a schedule of contributions. This shows the dates and amounts of contributions due from the employer and members. Under the Pensions Act 2004 the schedule must be put in place within 15 months of the valuation date.

Solvency ratio

This is the ratio of the market value of a scheme's assets to the estimated cost of securing a scheme's liabilities in the event of the discontinuance of the scheme.

The Statement of Funding Principles

The Pensions Act 2004 requires trustees to prepare (and from time to time review and if necessary revise) a written statement of their policy for securing that the statutory funding objective is met. This is referred to as a statement of funding principles.

Statutory estimate of solvency

This is the difference between the market value of a scheme's assets and the estimated cost of securing a scheme's liabilities in the event of the discontinuance of the scheme.

Statutory funding objective

Under the Pensions Act 2004, every scheme is subject to the statutory funding objective, which is to have sufficient and appropriate assets to cover its technical provisions.

Swap yield curve

The term-dependent yields on fixed-interest swaps derived by Aon Hewitt from market data.

Surplus

This is the value of assets less the funding target. If the funding target is greater than the value of assets, then the difference is called a deficit.

Technical provisions

This is the present value of the benefits members are entitled to based on pensionable service to the valuation date, assessed using the assumptions agreed between a scheme's trustees and the company. It generally allows for projected future increases to pay through to retirement or date of leaving service.

Transfer value

Members generally have a legal right to transfer their benefits to another pension arrangement before they retire. In taking a transfer, members give up their benefits in a scheme, and a sum of money (called the transfer value) is paid into another approved pension scheme; this is used to provide pension benefits on the terms offered in that scheme.

Withdrawal

Members may leave a pension scheme before their normal retirement age (typically because they leave employment with the sponsor). When they do so, their accrued benefits will no longer be linked to future salary increases (where applicable), and will instead be linked to future inflation. Benefits will still be payable at normal retirement age.

Report Framework

This report has been prepared in accordance with the framework below.

TAS compliant

This report, and the work relating to it, complies with 'Technical Actuarial Standard 100: Principles for Technical Actuarial Work' ('TAS 100') and 'Technical Actuarial Standard 300: Pensions' ('TAS 300').

The compliance is on the basis that Clifford Chance Pension Trustees Limited is the addressee and the only user and that the report is only to be used as a summary of the outcome of the valuation as at 30 April 2019. If you intend to make any other decisions after reviewing this report, please let me know and I will consider what further information I need to provide to help you make those decisions.

The report has been requested by the Trustee. It has been prepared under the terms of the Scheme Actuary Agreement between the Trustee and me on the understanding that it is solely for the benefit of the addressee.

This report should be read in conjunction with:

- Statement of Funding Principles for the previous valuation dated 24 July 2017.
- My report "Actuarial Valuation at 30 April 2016, dated 24 July 2017.
- The Aon Hewitt report "Guidance on Actuarial Valuations" dated Q2 2019 which should be considered as an appendix to this report.
- My report "Actuarial valuation at 30 April 2019 – initial results", dated 5 June 2019.
- My report "Actuarial valuation at 30 April 2019 – assumptions advice and initial results", dated 17 July 2019.

If you require further copies of any of these documents, please let me know.