Protecting against Affordability Risk

A Primer for Employers

STONEPORT
PENSIONS

Executive Summary

The purpose of this report is to provide an overview of the protections in place within the Stoneport Pension Scheme to mitigate the risk that arises under a centralised structure that the liabilities each sponsoring employer is required to support increase beyond a manageable level due to insolvencies arising within the pool of sponsoring employers. We refer to this risk as Additional Affordability Risk.

This report is aimed at sponsoring employers of defined benefit pension schemes considering transferring to the Stoneport Pension Scheme.

Additional Affordability Risk is well-known and has had a significant impact on some other centralised arrangements, typically industry-wide schemes. The Stoneport Pension Scheme is not an industry-wide arrangement. Therefore, it is not exposed to the same concentration of covenant risks (including Additional Affordability Risk) as these historic centralised arrangements.

We are confident that the protection mechanisms included within the Stoneport Pension Scheme structure mitigate Additional Affordability Risk to a manageable level.

The protections in place within the Stoneport Pension Scheme to mitigate Affordability Risk are:

The Combined Covenant Test

- The most significant protection in place to protect sponsoring employers from Additional Affordability Risk is the Combined Covenant Test.
- The Combined Covenant Test requires the pool of sponsoring employers at centralisation to be assessed to be both sufficiently strong and diverse to mitigate, to a manageable extent, the impact of Additional Affordability Risk on the sponsoring employers.
- The Trustees of the Stoneport Pension Scheme must be satisfied, having taken suitable advice, that the Combined Covenant Test is met in order for the Stoneport Pension Scheme to become centralised and the Principal Employer must give its agreement, reflecting the outcome of a vote of the sponsoring employers.
- This provides the sponsoring employers with a very high degree of protection from Additional Affordability Risk.

The “run-off” strategy

- All sponsoring employers are required to implement the same “run-off” strategy post centralisation.

- Under this strategy each sponsoring employer commits to pay contributions into the Stoneport Pension Scheme under an individually agreed Funding and Investment Plan so that the liabilities notionally allocated to each sponsoring employer become 100% funded on a buy-out basis by 31 December 2045, the Target Date.

- The shortfall in buy-out funding at the end of the individual sponsoring employer contribution periods will be met through investment returns and the unwinding of prudence in the buy-out measure over the remaining period to 31 December 2045.

- As a result, the period over which sponsoring employer insolvencies are expected to create a cash strain for the remaining solvent sponsoring employers is limited to the length of the individual sponsoring employer contribution periods agreed under each Funding and Investment Plan. It is not the full period between centralisation and the Target Date.

- We expect the average sponsoring employer contribution period to be around 5 years at centralisation assuming existing Recovery Plans for sponsoring employers in the target market are in line with the latest data published by the Pensions Regulator. Beyond this point, sponsoring employer insolvency events are not expected to require additional cash funding from any of the remaining solvent sponsoring employers.

The Covenant Test

- The application of the Covenant Test on entry and at centralisation means that those sponsoring employers that would be categorised as having "weak" employer covenants (using the Pensions Regulator's covenant gradings) will be unlikely to be eligible to join the Stoneport Pension Scheme or to become part of the centralised structure.

- This means that sponsoring employers in Pension Protection Fund Levy Bands 8, 9 and 10 are unlikely to be accepted into the Stoneport Pension Scheme. This implies an average Insolvency Risk for the pool of sponsoring employers on centralisation (weighted by number of schemes) of 0.58% per annum.

- As a result, the Stoneport Pension Scheme universe of prospective sponsoring employers (after the application of the Covenant Test) broadly corresponds to those sponsoring employers in the target market with a creditworthiness broadly equivalent to a credit rating of Ba or above, based on data from Moody's Investor Services.

- Due to the high level of covenant visibility in the short to medium term the risk of insolvency for any of the sponsoring employers is expected to be extremely low in the five years immediately following centralisation, as evidenced by data produced by Moody's Investor Services.

- However, we can consider an extremely pessimistic scenario by ignoring the impact of the high level of covenant visibility in the short term. The above insolvency probabilities imply that in the 1 in 200 scenario (i.e. the scenario that has a 0.5% chance of occurring) 7 insolvencies will occur in the 5 years post centralisation, assuming there are 100 sponsoring employers at centralisation.

- If we assume that all sponsoring employers have a contribution period of 5 years post centralisation and that these 7 insolvencies all occur at the end of Year 3 (which is an extremely pessimistic scenario given the covenant visibility arising from the Covenant Test), this would result in a reduction in the total cash contributions being paid to the Stoneport Pension Scheme of 3%.

- Even in this very pessimistic scenario the Additional Affordability Risk within the centralised Stoneport Pension Scheme structure is not significant and is below a number of other keys risks that the sponsoring employers already support e.g. interest rate and inflation risk.

Recoveries from departing sponsoring employers

- Under the current regulatory regime a Section 75 debt is triggered on the insolvency of a sponsoring employer reflecting the sponsoring employer's notional buy-out deficit.

- We expect any recoveries on the Section 75 debts triggered to be low. We note that the Pension Protection Fund assumes a recovery rate of 5% on the Section 75 debt falling on insolvent employers in its July 2018 Long Term Funding Strategy update.

- However, even a recovery rate of 5% on the Section 75 debt would serve to address the additional contribution strain that might be expected under the extremely pessimistic scenario outlined above.

- Further, any recoveries achieved in respect of insolvencies occurring between the end of the sponsoring employers' agreed contribution periods and the Target Date will be a positive experience item for the Stoneport Pension Scheme.

- A voluntary withdrawal of a sponsoring employer is not allowed except in the exceedingly rare event of genuine Affordability Risk arising such that a compromise is required.

Conclusion

This summary demonstrates the extent of the Additional Affordability Risk that may be expected to arise following the centralisation of the Stoneport Pension Scheme. We are confident that the protections in place within the Stoneport Pension Scheme structure will prevent the liabilities each sponsoring employer is required to support from increasing beyond a manageable level.

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This report and the work involved in preparing it are within the scope of and comply with Technical Actuarial Standard 100: Principles for Technical Actuarial Work (TAS 100).

We note that there is an increasing body of evidence demonstrating that climate-related issues represent a material risk to future economic stability affecting environmental, societal and governance matters. Sectors that are likely to be most heavily impacted by these risks include oil and gas, transport, power generation, and agriculture. As advisors to the Trustees of the Stoneport Pension Scheme we adopt a proportionate approach in considering climate risks in relation to assessing and monitoring the employer covenant. These risks are outside of the scope of this report.

1. Introduction

This report is intended to provide an overview of the protections in place within the Stoneport Pension Scheme to mitigate the risk arising under the centralised structure that the liabilities each sponsoring employer is required to support increase beyond a manageable level due to the insolvencies of the other sponsoring employers. We refer to this risk as Additional Affordability Risk.

The main protections for sponsoring employers arise from the Covenant Test and the Combined Covenant Test, described in Appendix A. The Covenant Test is applied to each sponsoring employer individually on entry and at centralisation while the Combined Covenant Test is applied collectively as a condition of centralisation.

The Covenant Test and the Combined Covenant Test are designed to ensure the presence of a sufficiently strong and diverse pool of sponsoring employers to make centralisation effective. However, agreement must also be given by Stoneport Pensions Alliance Limited, the Principal Employer, to centralise reflecting the outcome of a vote of the sponsoring employers.

The actual composition of the pool of the sponsoring employers, either at the point of centralisation (expected to be 31 December 2022) or at any point thereafter, cannot be known in advance. Therefore, we have illustrated the extent of the Additional Affordability Risk and the protections in place to mitigate this risk using various assumptions about the possible pools of sponsoring employers that could arise.

We have included in Appendix B a brief outline of several other well-known centralised pension schemes and summarised the main difficulties they have encountered. These difficulties have arisen primarily from a concentration of employer covenant risk due to their industry-wide nature.

We have designed the protections that have been incorporated into the Stoneport Pension Scheme structure to mitigate Additional Affordability Risk. We are confident that these protection mechanisms mitigate Additional Affordability Risk for sponsoring employers to a manageable level.

2. Additional Affordability Risk

Before considering the protection mechanisms in place for sponsoring employers within the Stoneport Pension Scheme we set out below some background information on employer covenant risk in a centralised scheme, and in particular Additional Affordability Risk, to provide a contextual framework for the analysis set out in this report.

Prior to centralisation there will be no change to the employer covenant risks arising for the sponsoring employers as the Stoneport Pension Scheme would act as a de facto sectionalised defined benefit Master Trust.

2.1. The Employer Covenant

Defined benefit pension schemes are reliant on their sponsoring employer(s) to provide contributions towards any deficit that exists or might arise in the future. A scheme is reliant on its sponsoring employer(s) until such time as it has either paid all benefits due in full or has settled its liabilities with a life insurance company and wound-up.

The employer covenant is the ability of a sponsoring employer to meet these contribution requirements as and when they fall due. A sponsoring employer can fail to meet its obligations in these regards through two distinct routes, insolvency and (lack of) affordability.

2.2. The risk of insolvency of the sponsoring employer(s)

We define "Insolvency Risk" as the risk of having to reduce members' benefits due to the insolvency of the sponsoring employer(s) prior to the settlement in full of the liabilities of the scheme.

In the event of the insolvency of the sponsoring employer in a single employer scheme, a claim is made in the insolvency proceedings for the shortfall in the scheme relative to the cost of securing the scheme's benefits with a life insurance company under Section 75 of the Pensions Act 1995 (the "Section 75 debt"). It is very rare that this claim is settled in full.

If the claim is not recovered in full, the benefits must be reduced either by securing a level of benefits with a life insurance company equal to or above the level of compensation provided by the Pension Protection Fund ("PPF") or, in the event that insufficient assets are available to the scheme to provide that level of benefits, entering the PPF.

In either event, if the sponsoring employer becomes insolvent and the Section 75 debt is not recovered in full, benefits for the members will be reduced.

In a centralised scheme, such as the Stoneport Pension Scheme, the Insolvency Risk will only crystallise on the insolvency of all of the sponsoring employers.

In the event that an individual sponsoring employer becomes insolvent in the Stoneport Pension Scheme the Section 75 debt will fall due and a claim will be made in the insolvency proceedings in respect of the debt due in the usual way. However, assuming other solvent sponsoring employers remain, the Stoneport Pension Scheme will continue to operate as before, with the liabilities and assets (including any recovery on the Section 75 debt) of the insolvent sponsoring employer being notionally allocated between the remaining solvent sponsoring employers.

2.3. The risk of the scheme becoming unaffordable to the sponsoring employer(s)

We define "Affordability Risk" as the risk that the scheme becomes too onerous for the sponsoring employer(s) to realistically support and therefore becomes completely unaffordable to the sponsoring employer(s) even if they remain solvent in the long term.

Whilst solvent, the sponsoring employer(s) has to meet the funding requirements of the scheme from time to time. If these requirements become too onerous for the sponsoring employer(s), it is possible, with the approval of the Pensions Regulator and the PPF, that its obligations to the scheme can be "compromised". This is only possible if there is no conceivable way that the sponsoring employer(s) can agree a credible recovery plan to address the deficit (when measured appropriately).

Such a scenario results in members receiving a reduced level of benefits, in line with the rules of the PPF.

These scenarios (and therefore Affordability Risk) are entirely different to the more common experience of schemes with regards to cash flow affordability whereby the sponsoring employer(s) is constrained by near-term cash flows such that contributions need to be temporarily reduced or reshaped (for example by extending the period of the recovery plan).

We note that it is usually in the best interests of the members of the scheme for the trustees to grant leniency on cash contributions to any sponsoring employer(s) experiencing a short-term downturn in cash generation because the shortfall in cash contributions can be made good if and when the sponsoring employer(s) recovers.

In such situations the outcome is usually binary; either the sponsoring employer(s) recovers or they become insolvent (albeit with so called "zombie schemes" this period to insolvency may be significant). These sorts of cash flow affordability issues are either therefore temporary or part of the path of the sponsoring employer(s) to insolvency and are therefore separate from "Affordability Risk" as defined in this report.

The nature of Affordability Risk changes in a centralised scheme when compared to a single employer scheme due to the support provided to any insolvent sponsoring employers' liabilities by the remaining solvent sponsoring employers. As a result, there are two forms of Affordability Risk in a centralised scheme: Traditional Affordability Risk and Additional Affordability Risk.

2.3.1 Traditional Affordability Risk

In a single employer scheme, Affordability Risk crystallises either when the sponsoring employer shrinks relative to its pension liabilities or adverse deviation arises in respect of the pension liabilities, leaving the sponsoring employer unable to provide the necessary support to its scheme. In such scenarios a compromise is required with a Regulated Apportionment Arrangement ("RAA") used to transfer the liabilities to the PPF. We refer to this as "Traditional Affordability Risk".

Provisions in the Trust Deed & Rules for the Stoneport Pension Scheme permit a similar mechanism to be operated for sponsoring employers unable to meet their obligations in the Stoneport Pension Scheme. If one of the sponsoring employers has no realistic prospect of making good its liabilities then the Trustees and their advisors may negotiate a compromise with that sponsoring employer. The Trustees will act to protect the remaining sponsoring employers from the "dumping" of liabilities in the same way that the PPF and the Pensions Regulator act to protect levy payers when negotiating an RAA.

Any such compromise will mean that the remaining sponsoring employers have to support the departing sponsoring employer's liabilities. However, it may be the case that the assets received in the compromise from the departing sponsoring employer may be such that the departing sponsoring employer's liabilities are fully funded on a Technical Provisions measure or above, with sufficient margin for future adverse deviation on these liabilities without additional contribution requirements being passed onto the remaining sponsoring employers.

This is more likely to be the case when Traditional Affordability Risk crystallises further along the timeline to the Target Date (when the liabilities notionally allocated to each sponsoring employer are expected to become 100% funded on a buy-out basis) as the departing sponsoring employers become better funded through the payment of deficit recovery contributions and the liabilities are run off over time.

Based on a Freedom of Information request for the nine years 2009-2018 we see that only 28 schemes have been granted a RAA whereby the Pensions Regulator has allowed a separation of the scheme from its sponsoring employer(s) in a compromise arrangement due to the scheme becoming unaffordable.

Therefore, such compromises, based on the experience of the Pensions Regulator and the PPF, are likely to be extremely rare and can be expected to only have a very limited impact on the sponsoring employers.

Due to the entry criteria applied to the sponsoring employers (in the form of the Covenant Test described in Appendix A) which ensures that the sponsoring employer are sufficiently robust we expect that any such impact can be absorbed within the centralised employer covenant. Therefore, the Stoneport Pension Scheme is much better placed for dealing with these rare events than a single employer scheme where such scenarios lead to PPF entry and benefit reductions.

2.3.2 Additional Affordability Risk

A different form of Affordability Risk arises in relation to centralised schemes that is not present in a single employer scheme due to the nature of the system, whereby the remaining solvent sponsoring employers support the liabilities of sponsoring employers who become insolvent.

Historically, in some centralised schemes exits by other sponsoring employers have led to the burden on the remaining sponsoring employers spiralling out of control. (Some of these centralised schemes are described in Appendix B.) We refer to this risk as "Additional Affordability Risk".

In developing the Stoneport Pension Scheme structure care has been taken to ensure the issue of potentially spiralling liabilities caused by insolvencies amongst the sponsoring employers has been addressed having regard to the underlying factors that determine the extent of the Additional Affordability Risk, namely:

- the *length of time* over which sponsoring employers are exposed to a cash strain arising from insolvencies within the pool of sponsoring employers;
- the *likelihood of sponsoring employer insolvencies* i.e. the Insolvency Risk for each individual sponsoring employer; and
- the *likely size of any shortfall* between the liabilities and the assets of the insolvent sponsoring employers that is allocated to remaining solvent sponsoring employers;

As the actual composition of the pool of sponsoring employers, either at the point of centralisation or at any point thereafter, cannot be known in advance we have illustrated the extent of the Additional Affordability Risk and the protections in place to mitigate this risk in the sections that follow using various assumptions about the possible pools of sponsoring employers that could arise.

3. The Combined Covenant Test

Many well-known centralised pensions schemes have suffered from a concentration of Insolvency Risk and Affordability Risk because they were established as industry-wide arrangements where all the sponsoring employers in the structure were from the same industry and thus exposed to very similar covenant risks creating a concentration of risk.

As a result, the underlying employer covenants were not sufficiently diversified and Insolvency Risk and/or Affordability Risk became unmanageable. This was the case, for example, for the Merchant Navy Schemes, the Milk Pension Fund and the Plumbing and Mechanical Services Pension Scheme.

The experience of these industry-wide arrangements is considered in more detail in Appendix B.

The Stoneport Pension Scheme is not an industry-wide arrangement and will accept sponsoring employers from all industries and sectors subject to them satisfying the Covenant Test. In addition, the Combined Covenant Test will provide a further check that the overall pool of sponsoring employers is sufficiently strong and diverse. These tests are described in Appendix A.

The full range of protections in place within the Stoneport Pension Scheme structure to mitigate Additional Affordability Risk can be considered in the context of the three underlying factors that determine the extent of the Additional Affordability Risk:

Factor	Protection
Time Period	Run-off strategy
Insolvency Risk	The Covenant Test
Amount of Shortfall	Section 75 recoveries

Each of these protections are considered in the sections that follow.

However, the most significant protection in place for the sponsoring employers is the Combined Covenant Test which is applied as a condition of centralisation. The Combined Covenant Test is applied collectively to ensure that the pool of sponsoring employers is sufficiently strong and diverse to mitigate, to a manageable extent, the impact of Additional Affordability Risk on the sponsoring employers.

Under the Combined Covenant Test direct consideration is given to the extent of the Additional Affordability Risk arising reflecting the actual pool of sponsoring employers and their underlying covenant strength at centralisation.

The Trustees must be satisfied, having taken suitable advice, that the amount of Additional Affordability Risk can be managed by the sponsoring employers. Agreement to centralise must also be given by the Principal Employer, reflecting the outcome of a vote of the sponsoring employers.

This provides a very high degree of protection for the sponsoring employers who could vote against centralisation if they considered the pool of sponsoring employers to be insufficiently strong or diverse.

4. The "run-off" strategy

In the period between centralisation and the Target Date all sponsoring employers are required to implement the same "run-off" strategy such that they commit to pay contributions under an individually agreed Funding and Investment Plan ("FIP"). The liabilities notionally allocated to each sponsoring employer are expected to become 100% funded on buy-out basis by the Target Date under each FIP.

As part of the "run-off" strategy the investments notionally allocated to each sponsoring employer will be gradually de-risked until each sponsoring employer is 100% in the Matching Fund by the Target Date.

The measurement of the liabilities on the Technical Provisions basis and the agreed aggregate Recovery Plan for the centralised Stoneport Pension Scheme as a whole act as an underpin to the "run-off" strategy adopted.

We expect that the Stoneport Pension Scheme will be able to buy-out with an insurer at the Target Date at an aggregate price lower than expected from the individual components because:

- The membership of the Stoneport Pension Scheme is expected to be highly diversified by occupation and by geographical location, so there will extremely limited idiosyncratic risk.
- The assets held by the Stoneport Pension Scheme will be suitable for an insurer to hold and hence can be transferred in-specie rather than incurring the cost and risks associated with realising and reinvesting them.
- The scale of the deal is likely to attract interest from a greater number of insurers and the competitive tension created is likely to lead to a reduced price.
- The fixed expense loadings applied by insurers will be spread over a larger membership and liability base.
- The winding-up costs of the Stoneport Pension Scheme will be significantly lower than the aggregate cost of the underlying schemes.
- The portfolio will be significantly mature consisting almost entirely of pensioner members which are more attractive to the insurance market.

Alongside these expected savings in securing the liabilities of the Stoneport Pension Scheme with an insurance company the sponsoring employers will also benefit from more efficient operations over the period from centralisation to the Target Date.

Contributions will be paid by sponsoring employers for an appropriate period as agreed under their FIP. Any shortfall in buy-out funding at the end of the appropriate period will be met through investment returns and the unwinding of prudence in the buy-out measure (and in particular the improvement in buy-out terms as deferred pensioners retire and become pensioners) over the period to the Target Date.

Crucially, individual insolvencies only create a cash strain for the other remaining solvent sponsoring employers if they occur during the years when sponsoring employer contributions remain due under the agreed FIPs.

After this time, even though a buy-out deficit may remain, no further cash contributions would be due from the insolvent sponsoring employer.

As a result, the time period over which insolvencies create a negative cash strain for the remaining solvent sponsoring employers is only in the immediate period post centralisation whilst contributions are being paid by the sponsoring employers. It is not the full period between centralisation and the Target Date (expected to be 23 years).

4.1. Expected contribution periods

In agreeing the FIP with individual sponsoring employers the Trustees and the Scheme Actuary will take into account the Technical Provisions and Recovery Plan for the Stoneport Pension Scheme as a whole.

It is expected that most sponsoring employers will be able to continue paying contributions at the same rate as under their currently agreed Recovery Plan.

The period over which contributions will be paid by sponsoring employers into the Stoneport Pension Scheme post centralisation can therefore be approximated by looking at the sponsoring employers existing Recovery Plan lengths.

The table that follows sets out the data provided by the Pensions Regulator (Scheme funding analysis 2020 Annex) showing the average Recovery Plan length in years for all schemes in deficit split by number of members. This illustrates the current average Recovery Plan length in years for schemes within the Stoneport Pension Scheme's target market (schemes with fewer than 1,000 members).

Tranche	1	2	3	4	5	6	7	8	9	10	11	12	13
All schemes	8.0	7.6	8.5	9.5	8.4	7.6	8.3	8.3	7.8	7.3	7.5	7.1	6.1
Size by number of members													
Fewer than 100 members	7.9	7.7	8.1	8.5	8.0	7.3	8.0	7.9	7.5	6.6	6.8	6.9	5.4
100 to fewer than 500 members	8.1	7.8	8.9	10.0	8.5	7.7	8.6	8.2	8.2	7.7	7.8	7.5	6.5
500 to fewer than 1,000 members	8.1	7.4	8.3	9.7	8.1	7.8	7.8	8.6	7.4	6.5	7.5	7.2	6.6
1,000 to fewer than 5,000 members	8.0	7.1	8.8	9.8	8.9	8.0	8.4	9.0	7.9	7.9	8.1	6.9	5.8
5,000 members or more	7.8	7.0	8.0	10.5	8.9	7.9	9.1	8.4	8.0	8.6	8.5	6.9	6.9

The average recovery plan length has fallen to 6.1 years for all schemes in deficit in Tranche 13 (i.e. those schemes with effective valuation dates between 22 September 2017 and 21 September 2018).

However, for those Tranche 13 schemes that are in the Stoneport Pension Scheme's target market (i.e. have below 1,000 members) the average Recovery Plan length ranges between 5.4 years and 6.6 years for those schemes in deficit in Tranche 13.

The application of the Covenant Test means that those sponsoring employers with a covenant categorised as "Weak" using the Pensions Regulator's grading scale (see Appendix C) will be unlikely to be able to join the Stoneport Pension Scheme and those sponsoring employers with a covenant categorised as "Tending to Weak" will require a greater level of due diligence in order to join.

The table below summarises the average Recovery Plan lengths in years for all schemes in deficit by covenant grading (using the Pensions Regulator's gradings, as set out in Appendix C) based on data from the Pensions Regulator(Scheme funding analysis 2020 Annex).

Tranche	1	2	3	4	5	6	7	8	9	10	11	12	13
CG1 Strong							6.3	6.6	6.0	5.4	5.3	5.3	4.7
CG2 Tending to Strong							7.9	7.5	7.2	6.6	6.9	6.4	5.2
CG3 Tending to Weak							9.1	8.8	8.8	8.2	8.3	7.7	7
CG4 Weak							10.4	9.9	9.4	9.5	9.9	10.0	8.5

Based on the above sets of data we expect the sponsoring employers who join the Stoneport Pension Scheme to currently have Recovery Plan lengths of around 7 years or below.

Centralisation is not expected to occur until 31 December 2022 i.e. approximately 5 years after the start of any most recently agreed Recovery Plan for tranche 13 schemes (and after approximately 6 years and 7 years for tranche 12 and tranche 11 schemes respectively). These schemes could therefore be expected to have shorter Recovery Plan lengths at centralisation than suggested in the data above (noting that Recovery Plan lengths have not reduced linearly over time).

However, recent events, and in particular the impact of COVID-19, will not have been reflected in the Recovery Plan periods included within the Pensions Regulator's data shown above.

Due to the application of the Covenant Test applied to sponsoring employers on entry and at centralisation any sponsoring employer and scheme that has been adversely impacted by recent events (or suffered from adverse experience from other causes) such that their Recovery Plan is significantly longer than the above average periods (suggesting potential affordability constraints) is unlikely to be eligible to join the Stoneport Pension Scheme.

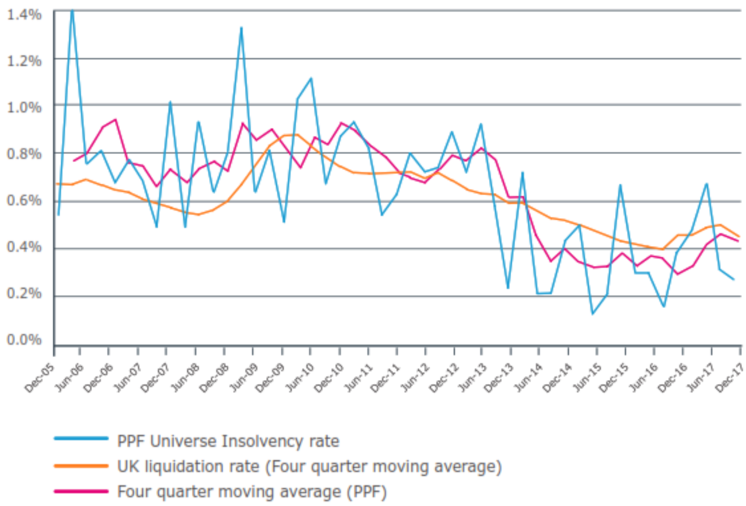
Therefore, based on the Pensions Regulator's data and allowing for the target market, the application of the Covenant Test and the passage of time as well as any potential adverse experience, we expect that the average sponsoring employer contribution period agreed at centralisation for each of the individual sponsoring employers will be around 5 years.

As a result, the period over which Additional Affordability Risk arises for the sponsoring employers is expected to be around 5 years post centralisation. Beyond this point, any sponsoring employer insolvency event is unlikely to require additional cash funding from any of the remaining solvent sponsoring employers.

5. The Covenant Test

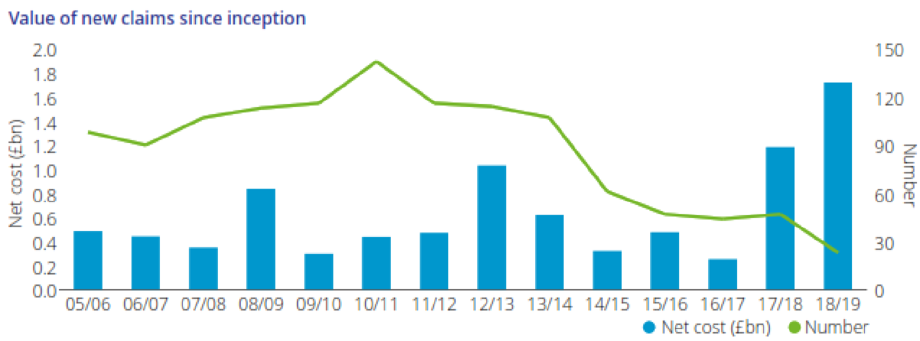
The Insolvency Risk faced by schemes varies enormously and is difficult to consider with a high degree of accuracy given sponsoring employers vary considerably and the probability of insolvency is low in any one year.

The following graph produced by the PPF in its Strategic Plan 2018 demonstrates that Insolvency Risk, as measured for the PPF universe taking a four quarter moving average, was lower than 1% per annum in the period between December 2005 and December 2017 and has followed a similar pattern to national UK insolvency rates over this period.



However, the insolvency rate in each year is highly volatile and therefore we do not expect insolvencies to arise evenly over the period between centralisation and the Target Date.

New claims data of the PPF is shown in the following chart (taken from the PPF's 2018/2019 Annual Report). A total of 1,277 schemes have suffered an insolvency event and entered assessment for the PPF between the introduction of the PPF in April 2005 and March 2019 i.e. a period of 14 years, noting that when the PPF was established the defined benefit universe was approximately 7,800 schemes. (The data is not available on a consistent basis annually such that various simplifications are required in the early years of the PPF to produce these indicative figures.)



The PPF also produces some data that allows us to show the distribution of schemes by the "Levy Rate" used by the PPF in the calculation of the risk-based levy. The Levy Rate is only a broad proxy for the Insolvency Risk faced by schemes with a sponsoring employer in the various Levy Bands. We note that in its own analysis of Insolvency Risk, the PPF uses the Levy Rate as a proxy for the probability of insolvency during the levy year.

The Levy Rate for each Levy Band is revised from time to time. However, the Levy Rates have remained unchanged between 2018/19 and 2020/21.

The following table shows the proportion of schemes covered by the PPF allocated to each Levy Band for the 2018/19 levy year alongside the Levy Rate applied for the 2018/19 levy year, as published by the PPF in the Purple Book 2019.

Levy Band	Proportion of Schemes 2018/19	Levy Rate 2018/19
1	14%	0.28%
2	7%	0.31%
3	11%	0.35%
4	11%	0.40%
5	14%	0.53%
6	15%	0.81%
7	12%	1.26%
8	6%	1.76%
9	6%	2.39%
10	4%	3.83%

The average Levy Rate across the PPF universe in 2018 / 19 weighted by number of schemes was 0.89% per annum.

5.1. The target market

The target market is those schemes segmented by the PPF as "Small" or "Micro" schemes.

The PPF considers the average levy rate for schemes of different sizes weighted by number of members. For "Micro" schemes (those with between 2 and 99 members) the average levy rate was just below 1.2% for 2018/2019. For "Small" Schemes (those with between 100 and 999 members) the average levy rate was just below 0.8% for 2018/2019.

Given the target market of the Stoneport Pension Scheme it might be reasonable to assume the sponsoring employers within the Stoneport Pension Scheme will face an insolvency risk of around 1.0%, assuming the membership is split evenly between "Small" and "Micro" schemes.

However, the entry criteria for sponsoring employers (in the form of the Covenant Test) means that those sponsoring employers that would be categorised as having "weak" employer covenants (using the Pensions Regulator's covenant gradings shown in Appendix C) will be unlikely to be eligible to join the Stoneport Pension Scheme. This means, broadly, that sponsoring employers in Levy Bands 8, 9 and 10 are unlikely to be accepted into the Stoneport Pension Scheme implying an average Levy Rate (weighted by number of schemes) of 0.58% per annum.

Moody's Investor Services calculate various estimates of the probability of a rated issuer defaulting on their debt (in their Annual Default Study: Corporate Default & Recovery Rates, 1920 – 2017 dated 15 February 2018) which is typically the result of an insolvency event (albeit it is possible for a corporate to default on their debt without triggering an insolvency event and the PPF assumes that the probability of a company in default becoming insolvent is 60% in its July 2018 Long Term Funding Strategy Update).

Allowing for the probability of a company in default becoming insolvent we can see from the following table that the application of the Covenant Test results in the Stoneport Pension Scheme universe of prospective sponsoring employers being those companies with a creditworthiness broadly equivalent to a credit rating of Ba or above (noting that the majority of schemes within the target market will not be sponsored by employers who have credit ratings).

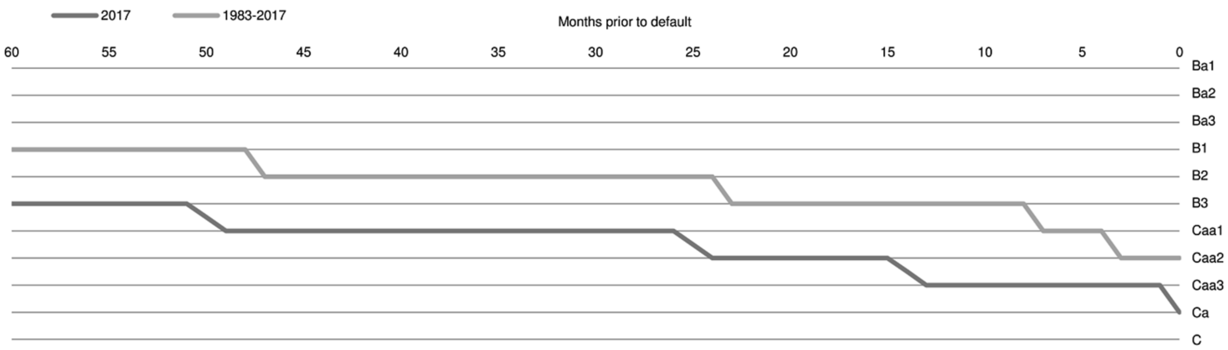
Moody credit rating	Actual over first year	Cumulative over 20 years	Average over 20 years
Aaa	0.0%	1.4%	0.1% p.a.
Aa	0.1%	4.5%	0.2% p.a.
A	0.1%	6.6%	0.3% p.a.
Baa	0.3%	11.3%	0.6% p.a.
Ba	1.2%	27.9%	1.6% p.a.
B	3.4%	44.5%	2.9% p.a.
Caa-C	10.1%	61.7%	4.7% p.a.

We expect those sponsoring employers with a Ba rating to require a higher level of due diligence to enable them to join the Stoneport Pension Scheme. Those companies with a B rating or below are unlikely to be able to enter the Stoneport Pension Scheme even with additional due diligence.

5.2. The short – medium term Insolvency Risk

Moody's Investor Services also produce data on the creditworthiness of rated companies in the period prior to insolvency. The following chart, produced by Moody (in their Annual Default Study: Corporate Default & Recovery Rates, 1920 – 2017 dated 15 February 2018), indicates that the median credit rating prior to default in 2017 was below Ba in the period up to five years prior to default. This demonstrates, as expected, that in the short to medium term covenant visibility provides a good indication of the likely risk of default.

Exhibit 13
Median Ratings Prior to Default, 2017 vs. Long-Term Average



As noted previously, the application of the Covenant Test at entry and at centralisation suggests that sponsoring employers in the target market are likely to have a creditworthiness broadly equivalent to a credit rating of Ba or above. Therefore, due to the high level of covenant visibility in the short – medium term the risk of default (and subsequent insolvency) for any of the sponsoring employers can be expected to be extremely low in the five years immediately following entry and centralisation.

5.3. The longer-term Insolvency Risk

Based on the assumed average Levy Rate (weighted by number of schemes) of 0.58% per annum for the pool of sponsoring employers in the Stoneport Pension Scheme we expect 12.5 insolvency events to occur over the 23 years between centralisation and the Target Date, assuming there are 100 Employers at centralisation.

The majority of the sponsoring employers will therefore be expected to be able to support their notional liabilities throughout the lifetime of the Stoneport Pension Scheme as they will remain solvent throughout this period.

However, we recognise that the incidence of sponsoring employer insolvencies will not be spread evenly over the lifetime of the Stoneport Pension Scheme and that sponsoring employers will be concerned about the more unlikely worse case scenarios. Therefore, we consider a much more pessimistic scenario below.

In the 1 in 200 scenario (i.e. the scenario that has a 0.5% chance of occurring) we might expect approximately 7 insolvencies over the 5 years following centralisation (based simply on the average Insolvency Risk per annum and making no allowance for the high level of covenant visibility in the short term), assuming there are 100 sponsoring employers at centralisation.

If we assume that all sponsoring employers have a contribution period of 5 years at centralisation and that these 7 insolvencies all occur at the end of Year 3, this would result in a reduction in the total cash contributions being paid to the Stoneport Pension Scheme of 3%.

To put this into context, we have set out below the sensitivity of the total liabilities of an example defined benefit scheme with duration of 25 years to a number of key funding assumptions:

	Change in assumption	Impact on liabilities
Discount rate	Decrease by 0.25%	Increase of 6.0%
Rate of inflation (RPI)	Increase by 0.25%	Increase of 6.0%
Assumed future improvements in mortality	Increase in long-term rate by 0.5%	Increase of 2.75%

This demonstrates that even in a very pessimistic scenario, one that has only a 1 in 200 chance of occurring over the lifetime of the Stoneport Pension Scheme, the Additional Affordability Risk within the centralised Stoneport Pension Scheme structure is not significant and is below a number of other keys risks that the sponsoring employers already support.

6. Recoveries from departing sponsoring employers

The existing regulatory regime has evolved to offer protections that did not always exist for other historic centralised arrangements.

In particular, regulatory protections now exist that serve to control Additional Affordability Risk for the sponsoring employers of the Stoneport Pension Scheme under Section 75 of the Pensions Act 1995 (and its subsequent extension in 2003 and 2005) whereby a debt will be triggered on the insolvency of any of the sponsoring employers reflecting the sponsoring employer's notional buy-out deficit.

6.1. Section 75 recoveries on insolvency

Any recoveries made against the Section 75 debt claims falling on insolvent sponsoring employers will serve to reduce any allocation of the insolvent sponsoring employer's obligations to the remaining solvent sponsoring employers. However, these recoveries are unlikely to be significant.

The PPF assumes a recovery rate of 5% on the Section 75 debt falling on insolvent employers in its July 2018 Long Term Funding Strategy Update. This level of recovery on the Section 75 debt, whilst very modest would more than cover the additional contributions required under the very pessimistic scenario considered earlier.

Further, we note that depending on the timing of any insolvency events experienced by the pool of sponsoring employers it may be the case that no additional support in the form of cash contributions are expected to be required from the remaining solvent sponsoring employers to meet the buy-out target. This is likely to be the case if the sponsoring employer insolvency event occurs after the end of the sponsoring employer's contribution period.

Any recoveries on the Section 75 debt from insolvencies occurring after this point in time will be a positive experience item for the Stoneport Pension Scheme, improving the overall funding position above that required under the agreed FIPs.

Simplistically, given that the average sponsoring employer contribution period is expected to be around 5 years post centralisation whilst the time between centralisation and the Target Date is expected to be 23 years, the amount of time that the sponsoring employers are exposed to positive experience arising from sponsoring employer insolvencies (18 years) is significantly greater than the amount of time that the sponsoring employers are exposed to any such negative experience that will require additional cash contributions from the sponsoring employers (5 years).

This should provide significant comfort to sponsoring employers, particularly when combined with the high level of covenant visibility achieved in the early years following centralisation by the application of the Covenant Test and the Combined Covenant Test.

6.2. Voluntary withdrawal

In the normal course of events, voluntary exits from Stoneport Pension Scheme will not be permitted. However, it is recognised that circumstances can change and a back-stop voluntary exit provision is a necessary requirement within the Stoneport Pension Scheme structure.

Provisions in the Trust Deed & Rules for the Stoneport Pension Scheme permit the Trustees to consider a voluntary exit proposal from any sponsoring employer that has a justifiable reason for wishing to cease to participate in and exit the Stoneport Pension Scheme.

The terms of any exit will be a matter for the Trustees to determine. It is expected that a sponsoring employer wishing to exit would likely be required to pay the higher of the following to do so:

- A debt reflecting the funding position of the sponsoring employer's share of the Stoneport Pension Scheme's notional assets and liabilities as assessed in accordance with their agreed FIP assuming an immediate buy-out.

- The statutory minimum debt calculated in accordance with section 75, based on the sponsoring employer's pro-rata share of the buy-out deficit in the Stoneport Pension Scheme as a whole.

As a result, any voluntary withdrawal from the Stoneport Pension Scheme by a sponsoring employer, as agreed with the Trustees, is not expected to create any cash funding strain for the remaining sponsoring employers.

7. Conclusion

Several mechanisms exist within the centralised Stoneport Pension Scheme structure to protect sponsoring employers of the risk arising that the liabilities each sponsoring employer is required to support increase beyond a manageable level due to the insolvencies of the other sponsoring employers.

In particular, the Stoneport Pension Scheme is not an industry-wide arrangement. Therefore, it is not exposed to the same concentration of covenant risks (including Additional Affordability Risk) that has created significant difficulties for other well-known centralised arrangements.

The protections in place within the Stoneport Pension Scheme to mitigate Affordability Risk are:

The Combined Covenant test

- For centralisation to occur the Trustees must be satisfied that the Combined Covenant is met and the Principal Employer must give its agreement, reflecting the outcome of a vote of the sponsoring employers. Therefore, centralisation will only proceed when the Trustees, the Principal Employer and the sponsoring employers are satisfied that the pool of Employers is sufficiently strong and diverse.

The "run-off" strategy

- Under the "run-off" strategy we expect the average contribution period for the sponsoring employers to be around 5 years post centralisation. Beyond this point, Additional Affordability Risk may be considered to be trivial as sponsoring employer insolvency events are not expected to require additional cash funding from any of the remaining solvent sponsoring employers.

The Covenant Test

- Due to the high level of covenant visibility in the short to medium term arising from the application of the Covenant Test and the Combined Covenant Test the risk of insolvency for any of the sponsoring employers can be expected to be extremely low in the five years immediately following centralisation.

- Even in a very pessimistic scenario the Additional Affordability Risk within the centralised Stoneport Pension Scheme structure is not significant and is expected to be below a number of other keys risks that the sponsoring employers already support.

Section 75 recoveries

- Any recoveries made against the Section 75 debt claims falling on insolvent sponsoring employers will serve to reduce any allocation of the insolvent sponsoring employer's obligations to the remaining solvent sponsoring employers. Whilst these recoveries are unlikely to be significant they will be a positive experience item in respect of insolvencies occurring after the contribution period for each sponsoring employer has ended.

These mechanisms, and in particular the Combined Covenant Test and the Covenant Test, provide a very high degree of protection for the sponsoring employers. We are confident that the protections in place will prevent the liabilities each sponsoring employer is required to support from increasing beyond a manageable level.

Appendix A: The Covenant Tests

The Stoneport Pension Scheme has strict entry criteria in the form of the Covenant Test. The Covenant Test has been designed to facilitate the creation of a sufficiently strong and diverse pool of sponsoring employers to allow covenant risks to be pooled effectively whilst protecting the interests of all sponsoring employers and ensuring fairness between those who join.

The Covenant Test will be performed as a condition of entry and again for each sponsoring employer when the Stoneport Pension Scheme becomes a centralised scheme. Any sponsoring employer failing the Covenant Test at the time of centralisation will be excluded from centralisation, remaining in their own fully segregated section.

For centralisation to occur the Trustees and the sponsoring employers must agree that the Combined Covenant Test is satisfied. Sponsoring employers are required to vote on centralisation and may veto it if they consider that the covenant pool is not sufficiently strong and diverse.

The Covenant Test is defined as follows in the Stoneport Pension Scheme's Rules:

"Covenant Test" means an assessment as to whether the Employer is of sufficient size and financial strength such that an immediate increase of 50% in the assets and the liabilities (as measured on a range of underlying assumptions which the Trustees deem appropriate):

(a) in its Section (or Sections, if more than one) where the Covenant Test is applied pursuant to Rule 11.2; or

(b) that are intended to be transferred to the Scheme at the Participation Date where the Covenant Test is applied 28pursuant to Rule 21(a)

would not result in a short term risk of the Employer being unable to support such increased liabilities and manage the risks relating to those liabilities, taking into account such factors as the Trustees shall decide, including the Employer's proposed Investment Allocation through time up to the Target Date and the extent of any potential recovery of the Section 75 Debt in the event of the immediate insolvency of the Employer.

The Covenant Test has been designed to ensure that each sponsoring employer is of sufficient strength that it is well placed to support its own liabilities as well as cope with any adverse deviation that could be expected to arise under the centralised Stoneport Pension Scheme structure, addressing both Insolvency Risk and Affordability Risk, including Additional Affordability Risk post centralisation.

The Combined Covenant Test is defined as follows in the Stoneport Pension Scheme's Rules:

“Combined Covenant Test” means an assessment as to whether the aggregate Employer Covenant of the Employers which meet the Covenant Test under Rule 11.2 is sufficiently strong and diversified to mitigate, to a manageable extent, the impact on the Main Section and on the other Employers, of the risk of Employer Insolvency Events, taking account of any Covenant Insurance which will be in place on such date.

The Combined Covenant Test has been designed to ensure that centralisation only goes ahead when the pool of sponsoring employers is sufficiently strong and diverse such that the Insolvency Risk of the sponsoring employers and the impact that this would have on the remaining, solvent sponsoring employers is manageable, as agreed by both the Trustees and the Principal Employer.

Appendix B: Other existing centralised schemes

Several industry-wide arrangements have developed significant problems that have made them unstable. Some, but not all of these were established as centralised schemes.

The Stoneport Pension Scheme has been designed to avoid the problems that have befallen such industry-wide schemes in the past, with a focus on those established as a centralised scheme.

In this section we comment on the lessons learnt from the experiences of these industry-wide schemes and how this has helped in the design of the Stoneport Pension Scheme structure.

Merchant Navy schemes

The Merchant Navy Officers Pension Fund ("MNOPF") and the Merchant Navy Ratings Pension Fund ("MNRPF") are centralised schemes that were established in 1938 to provide pensions for employees across the British Merchant Navy.

The MNOPF and the MNRPF (together, the "MN Schemes") have been in the High Court regularly since the early 2000s, seeking to address some of the problems that occurred.

The assets and liabilities of the MN Schemes grew significantly over the years. Meanwhile, a large number of the participating employers were allowed to exit those arrangements under the pre-2005 statutory debt regime(s). That meant that insufficient funds were collected from exiting employers to cover the risk that the MN schemes might need additional funding in the future.

The result of this was that the MN Schemes were both left with weak employer covenant support relative to the size of their obligations.

Fortunately for the MN Schemes, the trustees secured a ruling from the High Court that the exit procedures of the Trust had not been applied correctly in respect of historic exits. This meant that employers that believed they had exited under the pre-2005 statutory debt regime were in fact still participating employers of the MN Schemes.

These rulings were transformational for the covenant provided to the MN Schemes, substantially increasing the number of employers who could be asked to contribute towards any current deficit in the MN Scheme.

The key reason that the MN Schemes encountered problems was because pre-2005, the statutory debt regime allowed employers to exit without having to pay a premium to ensure the obligations they were leaving behind would be adequately supported, leaving the remaining employers to address any shortfalls arising in the future in respect of those liabilities.

Under the Stoneport Pension Scheme, voluntary exits will not be encouraged but any exiting sponsoring employers will be required to pay a Section 75 debt on exit which reduces the risk of the obligations of the Stoneport Pension Scheme becoming too large for the remaining employers to support. Furthermore, the advisors to the Stoneport Pension Scheme will be responsible for managing risk and where necessary, taking steps to ensure that the overall level of risk is appropriate given the overall employer covenant afforded to the Stoneport Pension Scheme.

Milk Pension Fund

The UK dairy industry was privatised in 1994, with the former Milk Marketing Board ("MMB") being split into a variety of smaller businesses that were sold off and privatised, including Dairy Crest. As part of the privatisation the Milk Pension Fund ("MPF") was created as a centralised scheme for the dozen or so privatised entities in the milk industry. Some functions of the MMB were retained in a successor body, Milk Marque, but this was later broken up into three private companies in 2000.

Significant difficulties arose with the MPF because there were too few employers in the MPF and because they all operated in the same industry and hence were all exposed to the same key risk factor, namely a fall in milk prices. We understand that when employers became insolvent, very limited recoveries were made against the Section 75 debts.

The Stoneport Pension Scheme will only become a centralised scheme once it reaches sufficient scale to avoid the problem of there being too few employers. Furthermore, the Combined Covenant Test will ensure that the pool of sponsoring employers will be sufficiently strong and diverse for centralisation to be effective. The covenant will not be concentrated in one industry.

Plumbing and Mechanical Services Pension Scheme

The Plumbing and Mechanical Services (UK) Industry Pension Scheme (the "Plumbing Scheme") was set up in 1975, with the aim of providing pension benefits for all employees of firms engaged in the plumbing industry in the UK. Today, the Plumbing Scheme has more than 35,000 members and has assets of over £2 billion. It also has more than 350 participating employers.

The change in the employer debt regulations for multi-employer schemes, which came into effect in September 2005, created a huge problem for the Plumbing Scheme. The Plumbing Scheme had not been set up in a way that allowed the calculations of debts in the way required by this new legislation.

In addition, we note that many of the participating employers are small family owned businesses and that some do not have limited liability status. This presents a particular challenge for the Plumbing Scheme with significant numbers of participating employers providing only limited support for their obligations.

The application of the Covenant Test and the Combined Covenant Test will ensure that the pool of sponsoring employers within the Stoneport Pension Scheme is sufficiently robust and diverse thereby avoiding any industry concentration and exposure to sponsoring employers only able to provide a limited amount of support for their obligations.

Furthermore, the evolution of the employer debt regulations for multi-employer schemes combined with the voluntary exist provisions within the Stoneport Pension Scheme structure mitigates the risk of the obligations of the Stoneport Pension Scheme becoming unmanageable for the remaining sponsoring employers.

Lessons for the Stoneport Pension Scheme

As can be seen from the review of the past experience of some of the existing centralised schemes, the following issues are vital to manage and are all part of the unique Stoneport Pension Scheme structure:

- Not permitting sponsoring employers to exit without ensuring adequate support remains for their liabilities (prevented by current Section 75 rules);

- Having sufficient numbers of sponsoring employers to gain the covenant diversification benefits;

- Ensuring that sponsoring employers operate in a range of different industries; and

- Ensuring sponsoring employers are of adequate financial strength relative to their liabilities, both at the point of entry and on an ongoing basis.

Appendix C: The Pensions Regulator's Covenant Gradings

The Pensions Regulator categorises the strength of a scheme covenant into one of four different grades (in its Defined benefit funding regulatory and enforcement policy) as set out in the following table alongside the proportion of all defined benefit pension schemes in deficit on a Technical Provisions basis in each covenant category based on the latest data published by the Pension Regulator (Scheme funding analysis 2019):

Covenant Grade ("CG")	Description from the Pensions Regulator	Proportion of Schemes
CG1 Strong	Very strong trading, cash generation and asset position relative to the size of the scheme and the scheme's deficits. The employer has a strong market presence (or is a market leader) with good growth prospects for the employer and the market. The scheme has good access to trading and value if the employer is part of a wider group. Overall low risk of the employer not being able to support the scheme to the extent required in the short/medium term.	11%
CG2 Tending to Strong	Good trading, cash generation and asset position relative to the size of the scheme and deficits. Operates in a market with a reasonably positive outlook and the employer has a stable market share. Outlook is generally positive but medium-term risk of employer not being able to support the scheme and manage its risks.	47%
CG3 Tending to Weak	Concerns over employer strength relative to the size of the scheme and deficits and/or signs of significant decline, weak profitability or balance sheet concerns and/or high vulnerability to the economic cycle. No immediate concerns over insolvency but potential risk of decline.	28%
CG4 Weak	Employer is weak, to the degree that there are concerns over potential insolvency, or where the scheme is so large that, without fundamental change to the strength of the employer, it is unlikely ever to be in a position to adequately support the scheme.	14%