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Modelling the case for a new public Superfund as a consolidation vehicle to address legacy defined benefit scheme risks

This Paper was commissioned by the PLSA from Simon Willes, Chairman, Gazelle Corporate Finance Limited, for the DB Task Force Final Report. It follows on from Gazelle's October 2016 Study for the PLSA: "Estimation of the longer-term loss of benefits for UK defined benefit scheme members", which was referred to in the DB Task Force's Interim Report, and a further paper submitted to the PLSA in January 2017 "Avoiding the economic damage arising from benefit insecurity for UK defined benefit scheme members".

The purpose of this paper is to explore whether the Superfund "concept" can be expected to deliver greater benefit security for DB members.

Summary & conclusions

This report provides illustrative modelling of a new Superfund for consolidating closed defined benefit schemes.

- **A Superfund which offered a gilt flat based "exit premium" for scheme sponsors should considerably enhance benefit security for members of schemes especially those supported by weaker sponsors. It also offers a much more economical price for sponsors to exit legacy defined benefit pension schemes that buy-out at gilts - 0.6%.**

- **The initial modelling suggests that only a limited "buffer" (either a capital buffer or equivalent benefit flexibility) would be required to support the Superfund and deliver significantly better security for members than would be experienced in unconsolidated CG3 and CG4 Covenant Groups.**

- **Funding progress by the Superfund is such that the probability of reaching solvency within 10 years is high resolving legacy defined benefit issues relatively quickly and harmlessly for the economy and taxpayer.**

- **Where it is not feasible for sponsors to pay the full exit premium upfront to the Superfund, part of the premium could become a debt from a sponsor to the Superfund, then the payment risk assumed by the Superfund will need to be offset by an additional "buffer" of perhaps 10% of gilts flat liabilities"**

- **We would suggest that a new Superfund is therefore designed with two or more sections reflecting the different risk and financial support profiles of Section A with assured initial funding of gilts flat, and Section B with initial funding below gilts flat reflecting provisioning on the Superfund's portfolio of debts owed by sponsors.**

- **A private Superfund with access to capital could use a capital "buffer" or a combination of capital buffer and some benefit flexibility to increase the financial strength rating of a Superfund and assure a more secure outcome for members, particularly in Superfund Section B.**

- **Only scheme consolidation by way of a Superfund offers members a significant uplift in benefit security.**

Modelling cases

This report is directed at evaluating the impact on benefit security of the PLSA's consolidation Model 4 – the Superfund. The impact of the other consolidation methods- Models 1, 2 and 3- is briefly compared in the final section of this report.

The approach taken is to use Gazelle's Mousetrap model to compare integrated risk analytics for the Superfund experience compared to the unconsolidated experience for CG1-4 as set out in the PLSA Interim Report and Gazelle's supporting study: Estimation of the longer-term loss of benefits for UK defined benefit scheme members.

Payment risk on Superfund entry premiums

We deal firstly with a Superfund in which the sponsors of entering schemes pay an upfront premium which takes the initial level of Superfund funding to gilts flat. The payment of an upfront premium does not expose the Superfund to any payment risk and the Superfund is assured an initial funding level of Gilts flat. We refer to this as **Superfund Section A** and entrants would likely form a separate segregated section within the Superfund.

We then consider the more complicated case where the Superfund is exposed to payment risk. Here it is assumed that sponsors pay (or otherwise secure) their existing outstanding deficit repair plans but that the additional premium which would be required to take the initial level of Superfund funding to gilts flat becomes a debt owed to the Superfund by the sponsors of schemes entering the Superfund. We assume that a 10 year fixed term payment plan would be established to repay this debt. We then use a prudent estimate of the expected 10 year default experience of the relevant Covenant Group sponsors to make a provision against payment risk exposure from the portfolio of Superfund debts. We further assume that the portfolio of debts is sold on to a financial intermediary (such as a debt hedge fund) on day one returning a single discounted premium to the Superfund. We acknowledge that it may prove possible to considerably improve on the pricing of this debt which will also reflect any detailed debt terms and financial covenants imposed. We refer to this as **Superfund Section B** and these schemes would likely form a second separate less-well funded section within the Superfund which will have an initial funding level lower than gilts flat.

We have not at present built a detailed Superfund Section B model in which the Superfund retains and manages its debt portfolio "generating" uncertain payments into the Superfund.

The terms of the debt will also define the Superfund's risk exposure and ability to sell debts on. Two important considerations are likely to be a negative pledge and assumption of joint and several liability by any UK parent of the sponsor, and possibly also any overseas parent of the sponsor, as part of the eligibility criteria for entering the Superfund. Both would serve to protect and enhance the "credit" attaching to debts thereby reducing the level of discount to gilts flat initial funding caused by provisioning.

Modelling assumptions

The assumptions which specifically change for a Superfund compared to the Covenant Group average scheme profile cases are as follows:

1. **Returns/costs**: It is assumed that the mean outperformance rate on risk bearing assets and outperformance on matching assets would be +0.25% higher for the Superfund reflecting lower costs.
2. **Initial funding level**: It is assumed that the initial funding level is gilts flat in the Superfund and that premiums are paid and added to Superfund assets to achieve this. As indicated above this will not be achieved where the Superfund accepts payment risk on entry premiums.
3. **Superfund investment policy**: The Superfund will commence with an initial asset allocation which approximates the PPF's strategic asset allocation: 60% cash and bonds, 20% alternatives, 10% equities, and 10% hybrid assets. Estimated returns, volatilities and correlations are assumed for these broad asset groups. We have not modelled in dynamic de-risking at this stage preferring to keep things simple.
4. **Superfund "wind-up" provisions and "buffer" levels**: It is assumed that the Superfund would "wind-up" crystallising a Section 75 debt. We examine 3 sub-cases with different "wind-up" provisions if Superfund assets fall below 80%, 90% or 95% of Superfund liabilities valued on a gilts flat basis. The rationale for this reflects the potential for a "buffer" (either capital or benefit flexibility, or both) to "absorb" up to 20% of Superfund losses but also a desire to limit the "buffer" if it is not necessarily needed to reduce the probability of Superfund failure. A "wind-up" provision set at 80% or more should also importantly ensure that member losses are never more than average PPF funding levels.

Public and private Superfunds

A public run Superfund, not unlike the PPF in terms of asset and liability management, would not have access to capital or levies and would therefore need to rely on benefit flexibility alone. Asset and liability development is therefore "self-contained" once entry conditions are met and premiums paid and/or debts established.

A private Superfund with access to capital could use a capital buffer to increase the financial strength rating of a Superfund. In such instance the capital buffer could be substituted for benefit flexibility and/or used to assure a more secure outcome for the Superfund Section B which would start from an initial funding level below gilts flat.

Superfund Section A – member exposure to benefit losses compared

For Superfund Section A single upfront premiums are received from sponsors of schemes entering the Superfund ensuring the Superfund starts with initial funding of gilts flat. From this level of funding, and with an investment policy broadly replicating the PPF's strategic asset allocation, simulated funding progress is relatively fast compared to the unconsolidated cases.

Superfund financial strength and failure rate is supported by a "buffer" (either capital or benefit flexibility). By setting the Superfund "wind-up" provision equivalent to a given levels of capital buffer or benefit flexibility of 20%, 10% and 5% (of gilts flat liabilities), an approximate illustration of the relationship between the "buffer" and failure rate of the Superfund is gained.

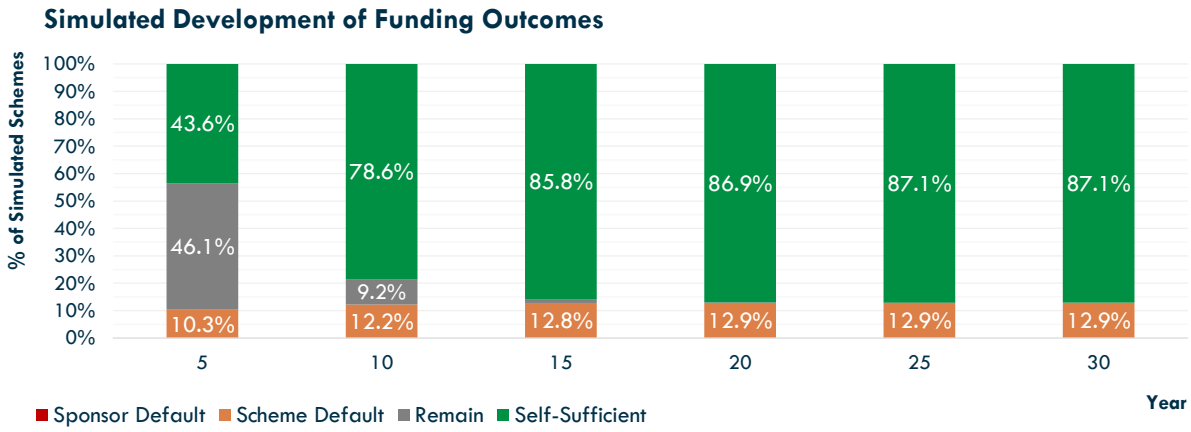
Simulated funding development of the Superfund Section A

In Superfund Section A all members share the same funding development because going forward members of all entering schemes, whether from CG1, CG2, CG3 or CG4, have initial funding of gilts flat and the same investment policy.

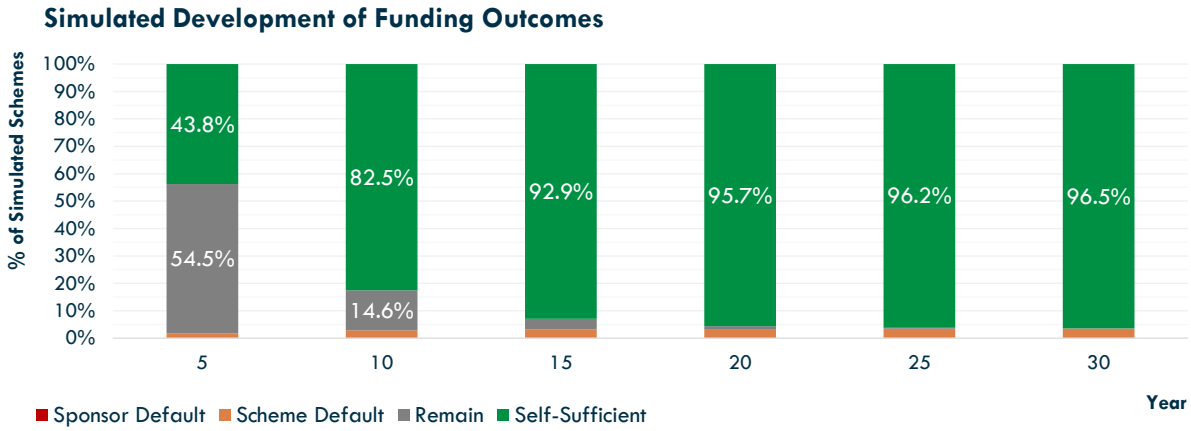
However the level of "buffer" chosen to support the Superfund will influence the relative attractions of entering the Superfund for schemes in different Covenant Groups. For example a 5% "buffer" (either capital or benefit flexibility) offers a much improved experience for CG3 and CG4 schemes but not necessarily CG1 and CG2 schemes.

If the Superfund is designed to provide a relatively secure outcome for members with perhaps less than a 1 in 20 chance of failure, then a 10% "buffer" provides the more appropriate support for the Superfund. Higher levels of "buffer" appear unnecessary for Superfund Section A.

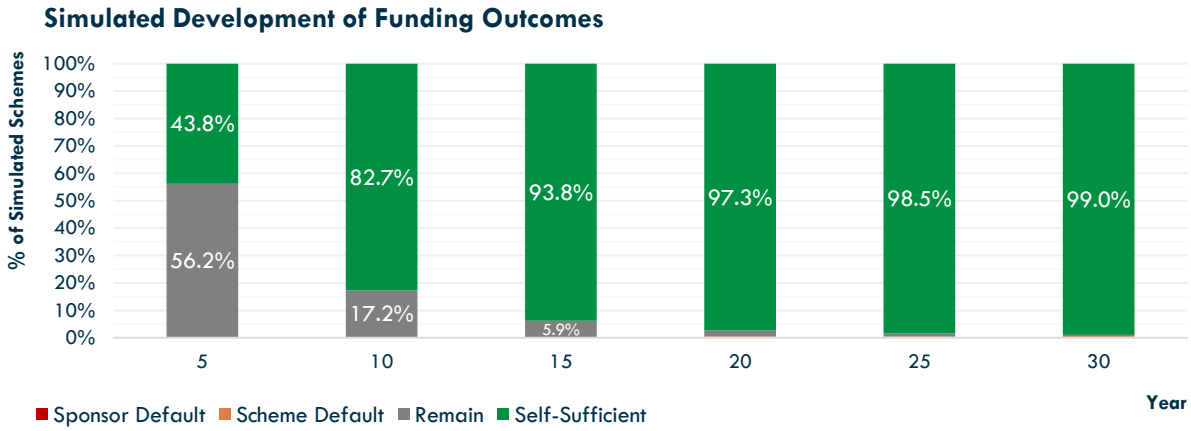
5% buffer supporting Superfund



10% buffer supporting Superfund



20% buffer supporting Superfund



Probability of Superfund reaching solvency funding

We are now in a position to compare the probability of the Superfund achieving solvency funding and paying all members benefits in full with the probabilities which members can expect in CG1, CG2, CG3 and CG4 contexts (as previously illustrated in the PLSA Interim Report).

The Superfund Section A delivers members a probabilistic experience comparable to that of the CG1 strong categorisation in the 5% "buffer" case. The probabilistic experience is better for higher levels of "buffer". The Superfund also delivers significantly faster funding progress securing benefits much faster than for unconsolidated schemes – members don't now have to wait 20-30 years to know their benefits are secure.

	% of simulations reaching solvency funding		
	After 10 years	After 20 years	After 30 years
Superfund section A			
5% buffer level	**79 %**	**87 %**	**87 %**
10% buffer level	**83 %**	**96 %**	**97 %**
20% buffer level	**83 %**	**97 %**	**99 %**
CG1 Strong	51 %	84 %	90 %
CG2 Tending to strong	31 %	57 %	67 %
CG3 Tending to weak	24 %	45 %	52 %
CG4 Weak	16 %	29 %	32 %

The resulting estimated loss of benefits for scheme members

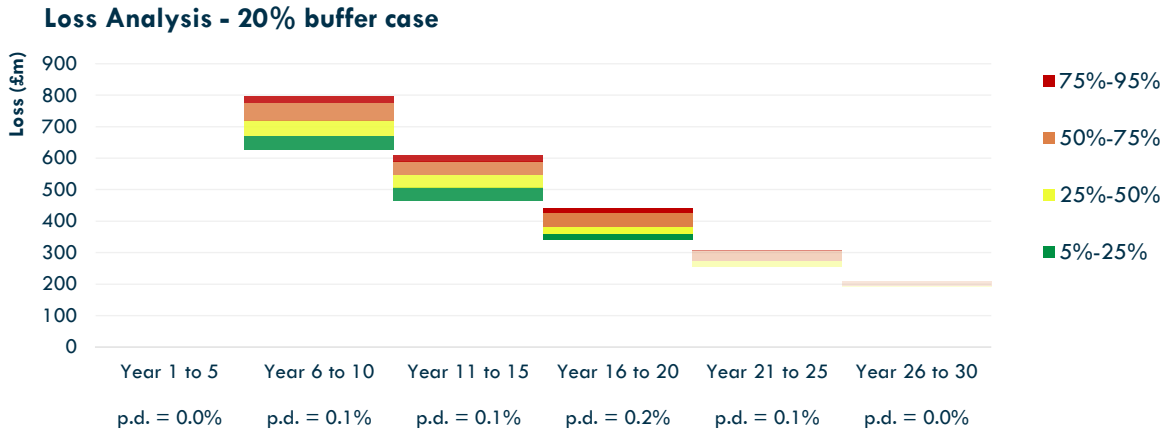
The table below compares modelling outputs for the 3 versions of Superfund Section A against the PLSA Interim Report outputs for average schemes in each Covenant Group. In summary the Superfund provides greater benefit security with the exception of CG1 Strong versus Superfund Section A with only 5% "buffer". For CG3 and particularly CG4 there is a very substantial uplift in benefit security for members.

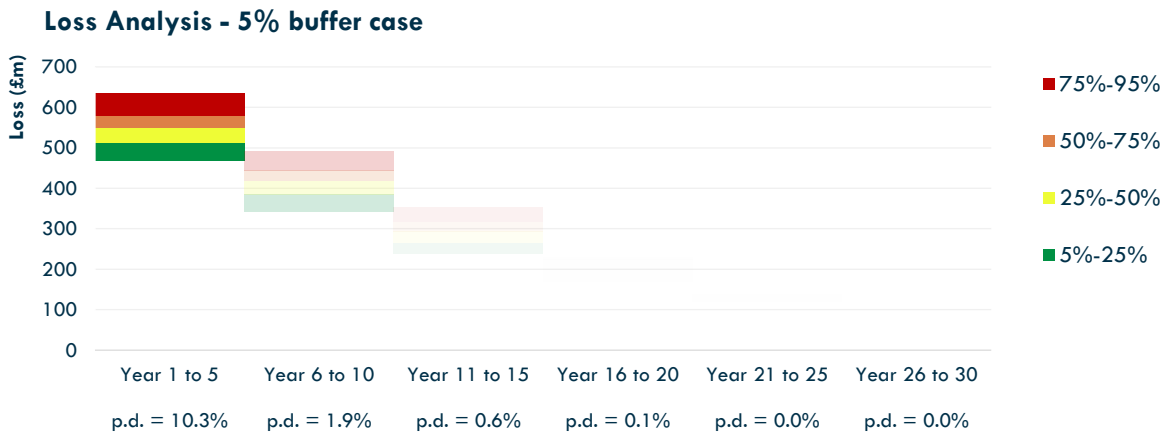
Within 30 years	Estimated benefit losses on default	Probability of default/failure	Probability weighted benefit losses
Superfund section A			
5% buffer level	**15 %**	**12.9 %**	**2.0 %**
10% buffer level	**16 %**	**3.5 %**	**0.6 %**
20% buffer level	**15 %**	**0.6 %**	**0.1 %**
CG1 Strong	11%	**6 %**	1 %
CG2 Tending to strong	14 %	**20 %**	3 %
CG3 Tending to weak	16 %	**40 %**	7 %
CG4 Weak	19 %	**65 %**	12 %

Superfund failure probabilities can be calibrated by the % of "buffer" allowed. Superfund "wind-up" provisions have been modelled in to reflect this such that the 5% "buffer" case engenders wind-up when Superfund assets are less than 95% of outstanding liabilities on a gilts flat basis. So if it is desirable that the Superfund has less than say a 1 in 20 chance of failing then the "buffer" needs to be around 10% of gilts flat liabilities to give less than a 5% chance of failure. The actual numbers provided here are very much illustrative but illustrative of the principles governing levels of benefit security offered by a Superfund.

Estimated benefit losses on default are the average estimated loss given default or failure as a % of initial solvency liabilities. Interestingly average losses experienced on default are

broadly the same across each of the 3 "buffer" levels whereas one might intuitively expect a reduced buffer level to contain loss of benefits given the tighter "wind-up" provision. The counter-intuitive explanation is evident from comparing the Superfund's loss experience over time for the 20% and 5% "buffer" levels. Setting scheme "wind-up" when Superfund assets fall below 95% of Superfund liabilities on a gilts flat basis (reflecting support from only a 5% "buffer") generates a high proportion of Superfund failures in years 1-5 when solvency liabilities are highest and before the Superfund's PPF style investment strategy has had a chance to build returns. The much greater "buffer" provided by for example 20% benefit flexibility generates a much lower failure rate spread over years 6-20: initial losses are higher but over time losses reduce generating an average loss similar to the 5% "buffer".





Using this modelling framework suggests that allowing for greater benefit flexibility in a public Superfund actually improve benefit security for members. The counter-intuitive aspect of asking members to give up the right to fixed benefits in order to improve benefit security however poses some issues for persuading members that this is indeed the case- but mathematically the modelling demonstrates that it is.

Summary of results

It can be observed from these results that the Superfund Section A would provide a very efficient and effective "run-off" vehicle for Defined Benefit liabilities presenting much improved outcomes and benefit security for schemes attached to the CG3 and CG4 weaker Covenant Groups. Further these results indicate how expensive the current insured buy-out or buy-in exit for defined benefit schemes is. The rationale for exploring less expensive options for "breaking" the dependency of schemes on weaker sponsors appears overwhelming.

From the trustee and member standpoint, there is potential for considerable uplift in benefit security from enhanced funding and investment policy, lower costs and considerably lower default risk. From the sponsor standpoint the Superfund Section A provides an opportunity to extract the sponsor from legacy liabilities at considerably less cost than buy-out. Exit pricing at gilts flat is considerably more achievable and attractive than exiting at gilts -0.6 or -0.7. That does not however mean that sponsors will necessarily be able to afford the required premium or willing to pay it upfront which leads on to consideration of Superfund Section B. Also some sponsors may take the view that forward curves will change in their favour over time reducing premiums further. Some encouragement or inducement may therefore be required to ensure sponsors are less able to "sit on their hands" and this may equally also apply to some scheme trustee boards.

Superfund Section A should therefore presents a considerably reduced cost to the economy in terms of burden on the corporate sector, reliance on the PPF and taxpayers, and loss of pensioner wealth.

Superfund Section B - member exposure to benefit losses compared

For Superfund Section B the outstanding contribution schedule of the current Technical Provisions deficit repair plan is assumed to be paid upfront as a single premium, or alternatively security provided against payment of it. The residual premium which would enable the scheme to enter the Superfund at a gilts flat funding level is established as a debt from the sponsor to the Superfund with a 10 year term. The Superfund is assumed to quickly build a debt portfolio resulting from scheme entry which it is able to sell on to a financial intermediary or hedge fund at a discount to face value reflecting a prudent provision for loan risk exposure. The level of provision would theoretically reflect the 10 year expected default rate of the sponsors with debts outstanding. Whilst there should be considerable scope for clever financial engineering to achieve the most efficient pricing of this debt, for the purposes of modelling in this report the Superfund is assumed to receive a single additional upfront premium reflecting the discounted value of its debt portfolio. The Superfund Section B will therefore start with an initial funding level below gilts flat and the initial funding level will in turn reflect the riskiness of the sponsors of schemes entering Section B. For example provisioning of CG4 sponsor debt will need to be in excess of 2 x the provisioning on CG3 debts. This suggests that schemes entering Superfund Section B would initially need to be segregated into "risk buckets" depending on sponsor credit risk.

Superfund Section A		
Initial assets A	Glits flat TPs 0% B	Premium B-A=C

Superfund Section B				
TP deficit D	Net premium C-D=E	Default factor (10 yr) F	Less debtprovision E* (1-F)=G	Initial assets A+D+G=H

This is reflected in the modelling by adjusting the initial assets for each Superfund Section B sub-section using 10 year Default factors of 2% for CG1, 5% for CG2, 20% for CG4 and 45% for CG4.

Simulated funding development of the Superfund Section B

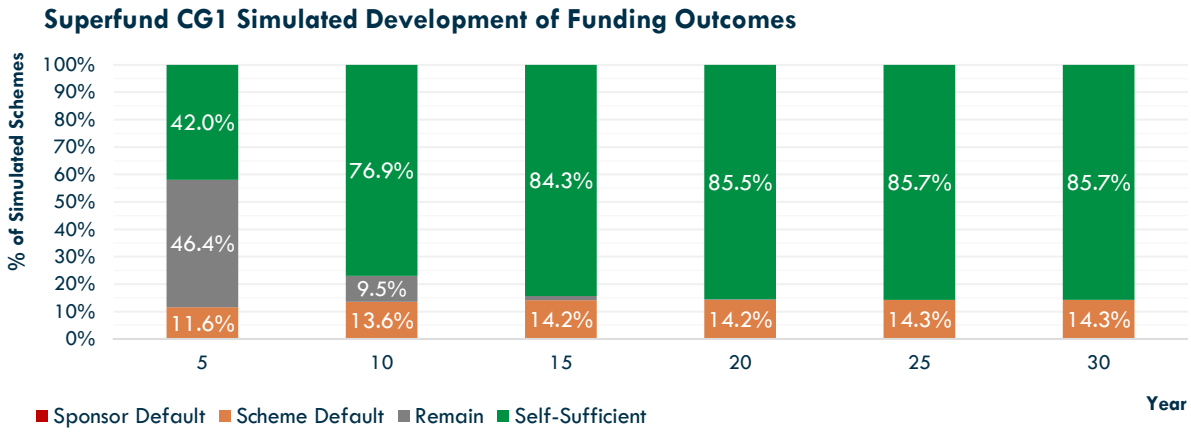
In Superfund Section B members will experience different funding development depending on whether debts created to the Superfund are owed from CG1, CG2, CG3 or CG4 sponsors. This is because the discount on the debt will reflect credit strength of the sponsor and in turn determine the extent to which Superfund Section B initial funding is below gilts flat. We therefore look at the experience of members entering Superfund Section B as if they in turn entered separate sub-sections of Section B reflecting whether they had CG1, CG2, CG3 or CG4 sponsors. In may prove possible to merge these sub-sections either initially or in due course but further detailed work would be required to explore the practicalities and implications of doing so.

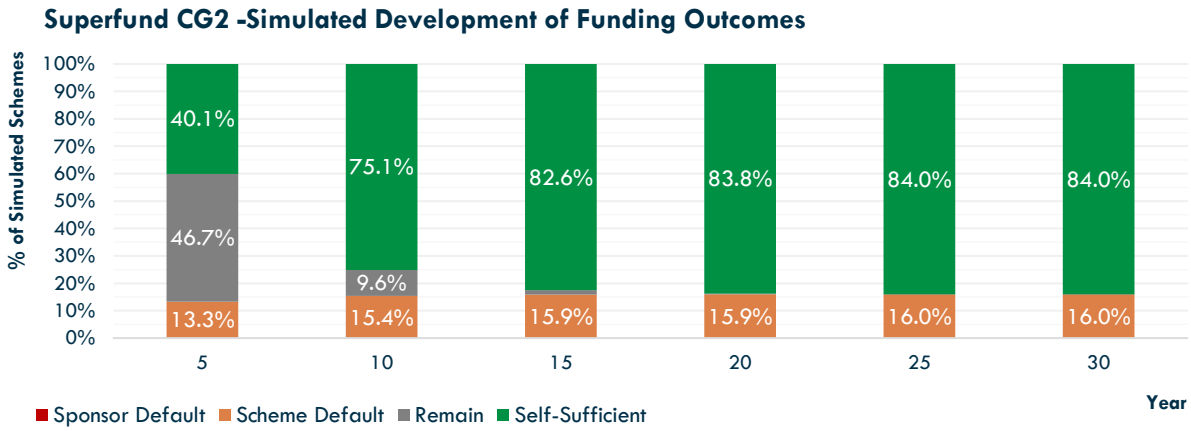
Again the level of "buffer" level chosen to support the Superfund will influence the relative attractions of entering the Superfund for schemes in different Covenant Groups.

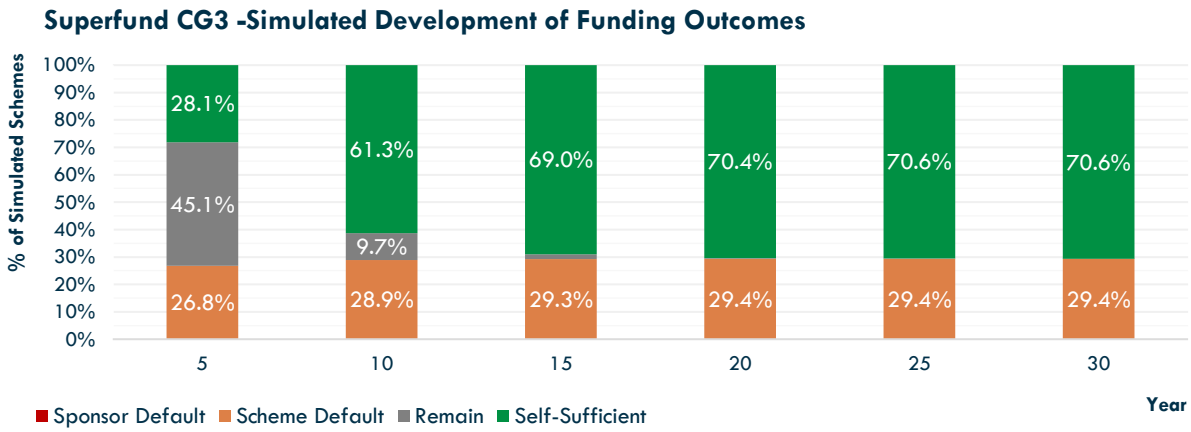
Because Superfund Section B initial funding levels are below gilts flat progress towards solvency funding will be slower compared to Superfund Section A and reflect the Covenant Group "risk bucket".

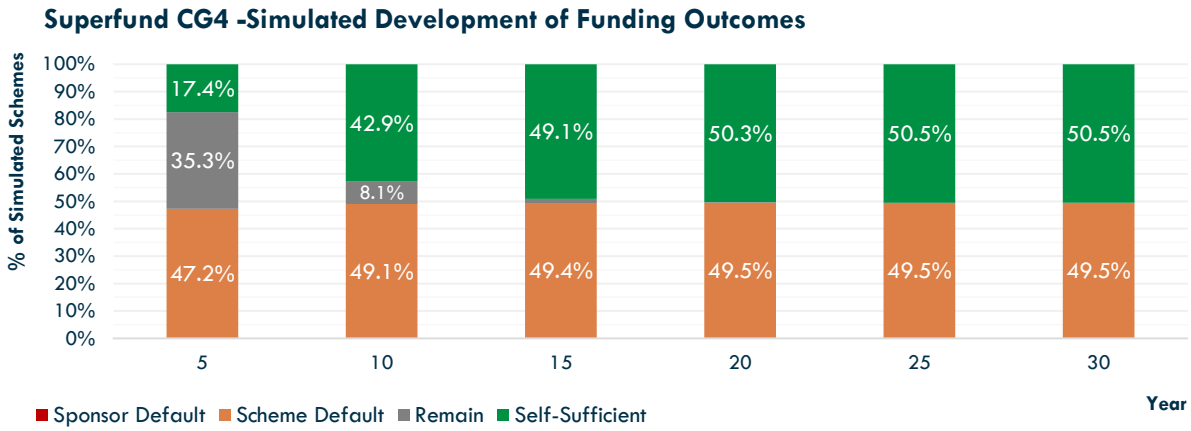
5% buffer supporting Superfund

The 5% buffer level is no longer that safe especially for members of CG3 and CG4 supported schemes.



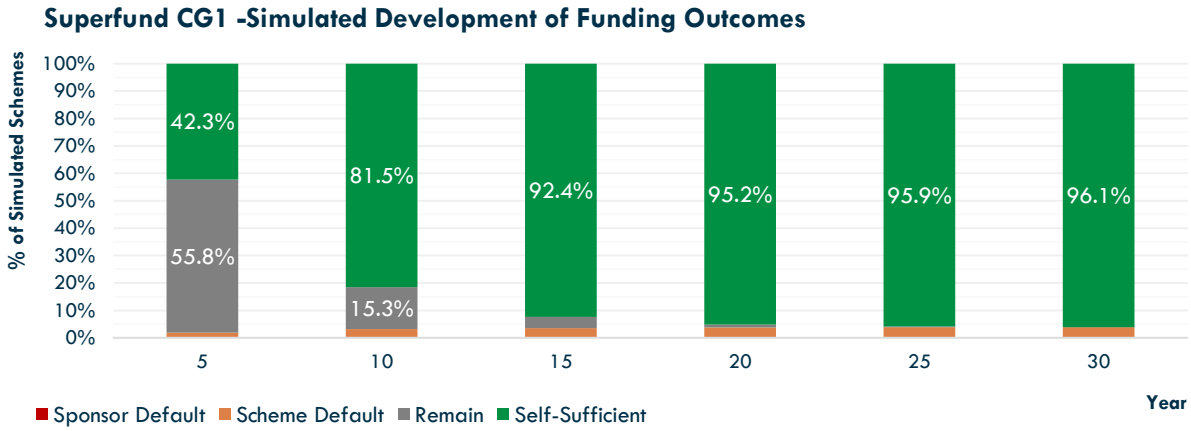


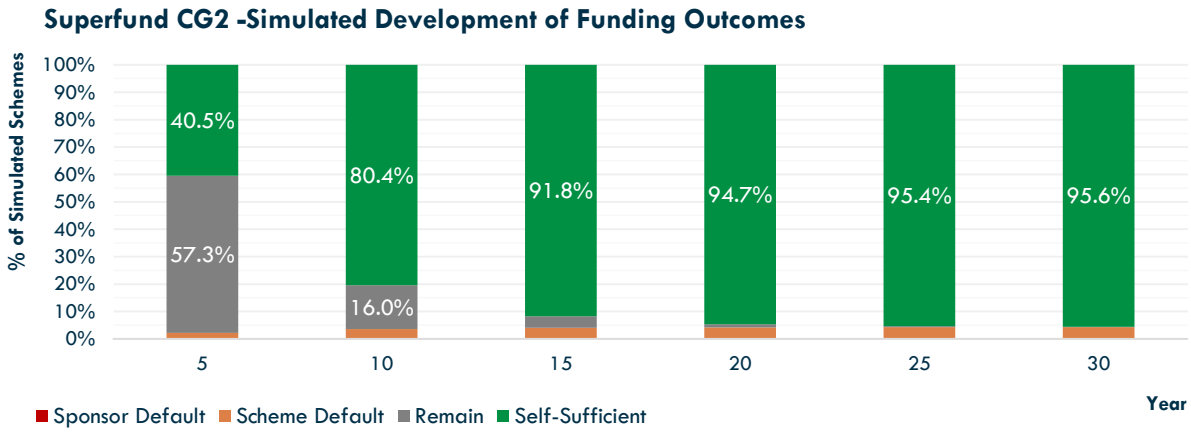


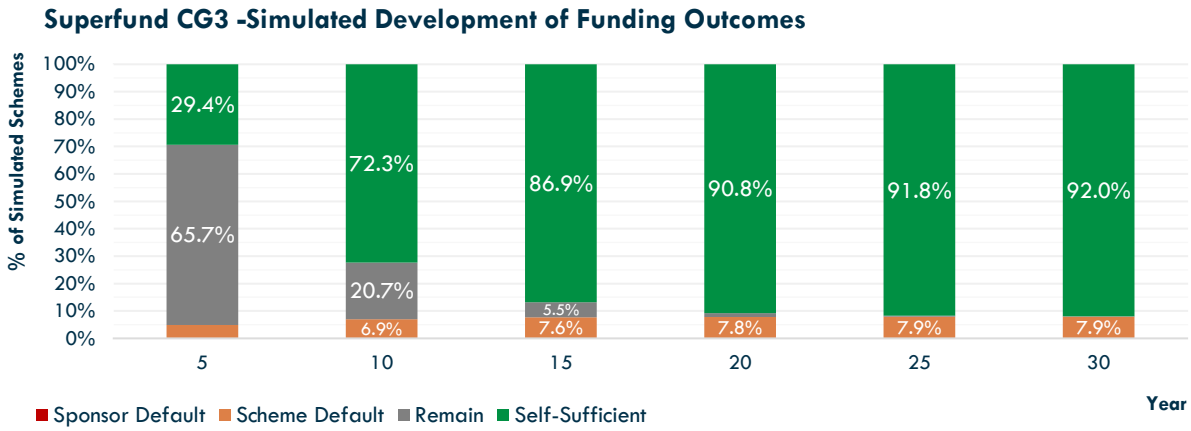


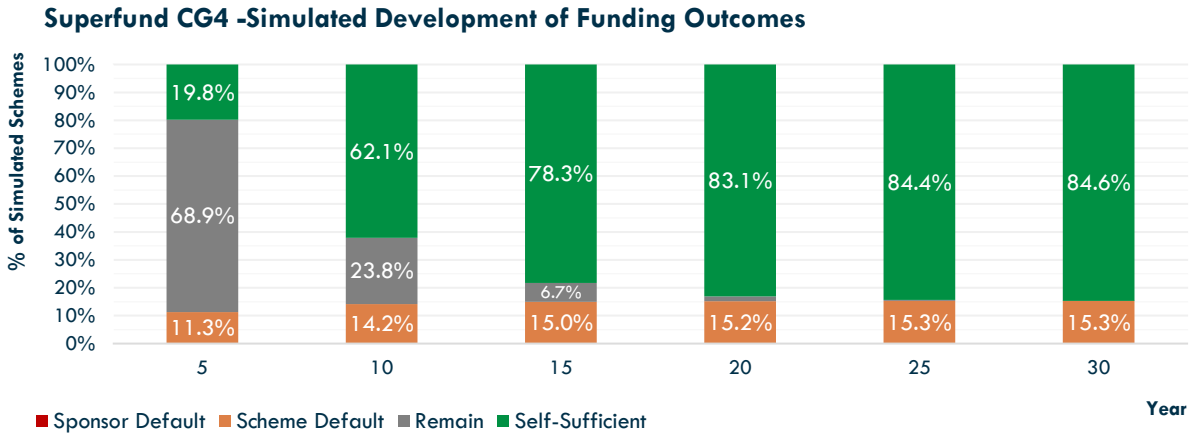
10% buffer supporting Superfund

The 10% buffer level provides relatively secure benefits across all Covenant groups.



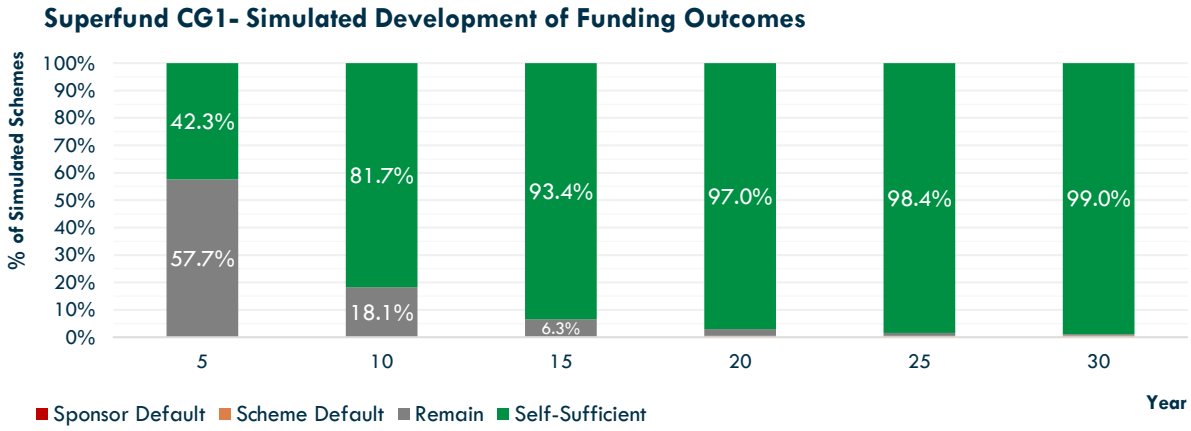


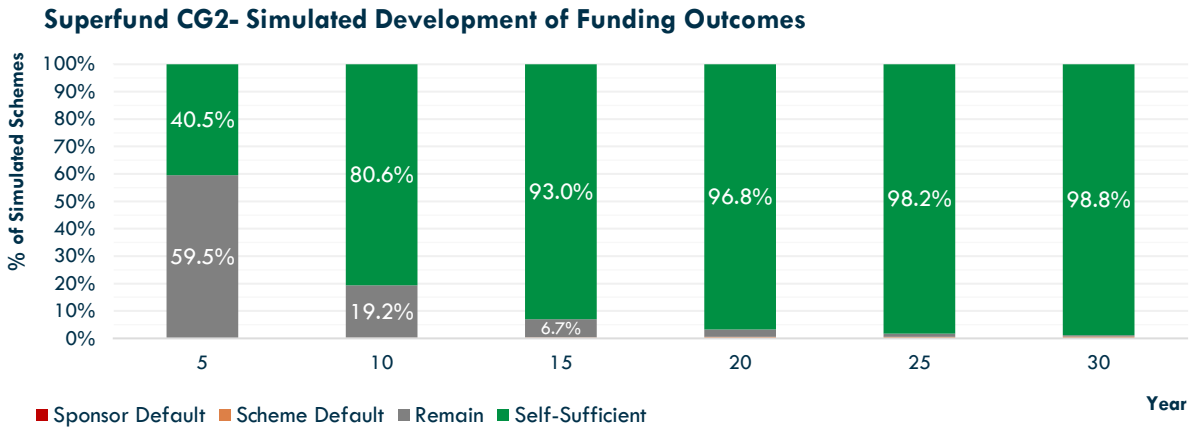


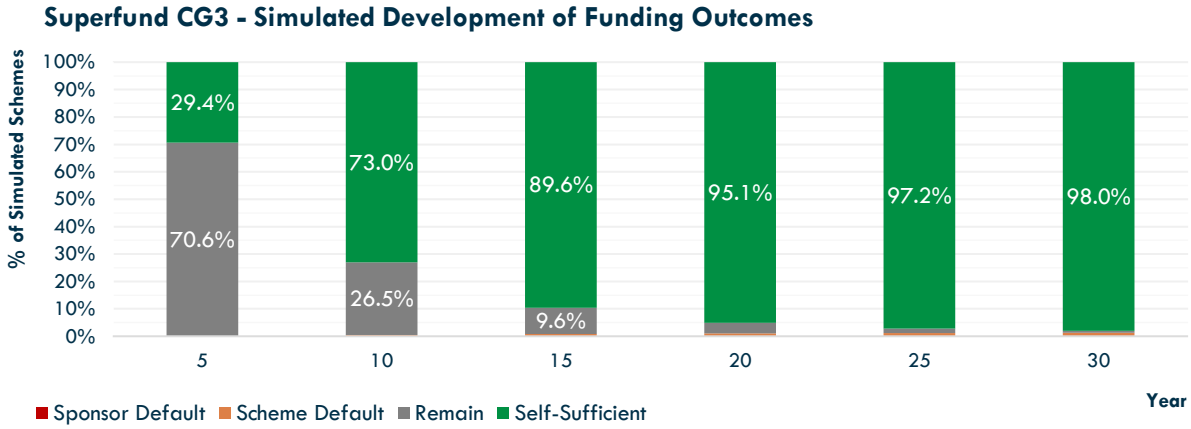


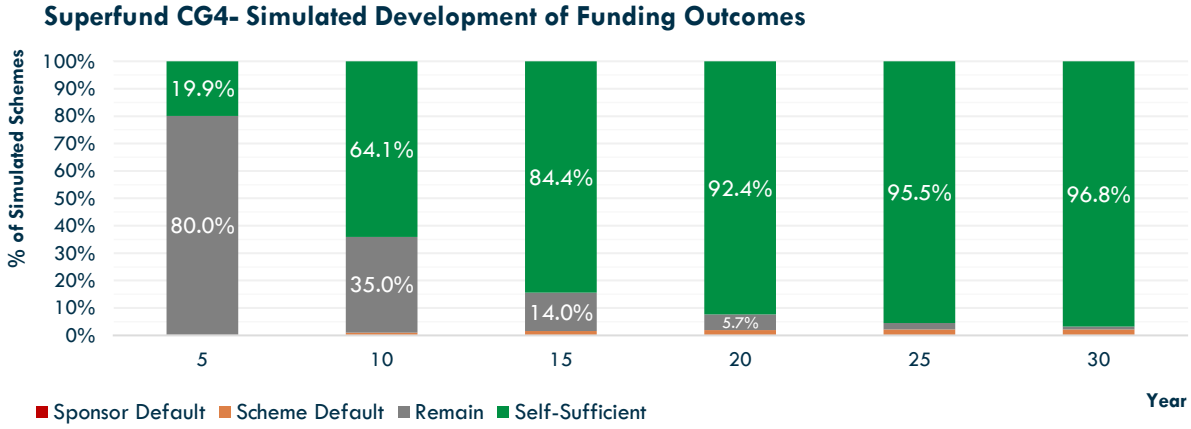
20% buffer supporting Superfund

The 20% buffer level provides a high level of secure outcomes for all Covenant Groups.









Probability of Superfund reaching solvency funding

We are now in a position to compare the probability of the Superfund B achieving solvency funding and paying all members benefits in full with the probabilities which members can expect in CG1, CG2, CG3 and CG4 contexts (as previously illustrated in the PLSA Interim Report).

Based on this modelling Superfund Section B still looks capable of delivering members a probabilistic experience comparable to that of the CG1 strong categorisation in all but the 5% level. The probabilistic experience is again better for higher levels of benefit flexibility. The Superfund Section B still delivers significantly faster funding progress towards securing benefits than for unconsolidated schemes.

	% of simulations reaching solvency funding		
	After 10 years	After 20 years	After 30 years
Superfund Section B			
5% buffer level			
CG1	**77 %**	**85 %**	**86 %**
CG2	**75 %**	**84 %**	**84 %**
CG3	**61 %**	**70 %**	**71 %**
CG4	**43 %**	**50 %**	**51 %**
10% buffer level			
CG1	**82 %**	**95 %**	**96 %**
CG2	**80 %**	**95 %**	**96%**
CG3	**72 %**	**91 %**	**92 %**
CG4	**62 %**	**83 %**	**85 %**
20% buffer level			
CG1	**82 %**	**97 %**	**99 %**
CG2	**81 %**	**97 %**	**99 %**
CG3	**73 %**	**95 %**	**98 %**
CG4	**64 %**	**92 %**	**97 %**
CG1 Strong	51 %	84 %	90 %
CG2 Tending to strong	31 %	57 %	67 %
CG3 Tending to weak	24 %	45 %	52 %
CG4 Weak	16 %	29 %	32 %

Superfund Section B should therefore present a considerably reduced cost to the economy in terms of burden on the corporate sector, reliance on the PPF and taxpayers, and loss of pensioner wealth.

It can be observed from these results that the Superfund Section B would need access to greater benefit flexibility than Section A in order to provide an efficient and effective "run-off" vehicle for Defined Benefit liabilities presenting much improved outcomes and benefit security particularly for schemes attached to the CG3 and CG4 weaker Covenant Groups. Further these results indicate that cases where the upfront payment of premiums is not feasible can potentially be catered for through a Superfund Section B type mechanism.

From the trustee and member standpoint, there is potential for considerable uplift in benefit security from enhanced funding and investment policy, lower costs and considerably lower default risk. The trustee-side decision is made only a little more difficult because of the potential need for greater levels of benefit flexibility in Section B. From the sponsor standpoint the Superfund Section B again provides an opportunity to extract the sponsor from legacy

liabilities at considerably less cost than buy-out. Exit pricing at gilts flat is considerably more achievable and attractive than exiting at gilts -0.6 or -0.7. That does not however mean that sponsors will necessarily be able to afford or otherwise secure the existing deficit repair plan or willing or able to establish a repayable debt on appropriate terms to the Superfund. In particular the position of other creditors to the sponsor may be disadvantaged through premium payments and establishing a debt to the Superfund.

Some encouragement or inducement may therefore be required to ensure sponsors have incentive not to "sit on their hands" and this may equally also apply to some scheme trustee boards.

The resulting estimated loss of benefits for scheme members

The table below compares risk analytics for the 3 "buffer" levels x 4 Covenant Group versions of Superfund Section B against the PLSA Interim Report outputs for average schemes in each Covenant Group. In summary the Superfund Section B still provides greater benefit security with the exception of CG1 and only 5% "buffer" level.

Within 30 years	Estimated benefit losses on default	Probability of default/failure	Probability weighted benefit losses
Superfund section A			
5% buffer level			
CG1	**15.3 %**	**14.3 %**	**2.2 %**
CG2	**15.5%**	**16.0 %**	**2.5 %**
CG3	**16.5%**	**29.4 %**	**4.8 %**
CG4	**17.4%**	**49.5 %**	**8.6 %**
10% buffer level			
CG1	**16.2 %**	**3.9 %**	**0.6 %**
CG2	**16.5 %**	**4.3 %**	**0.7 %**
CG3	**17.5 %**	**7.9 %**	**1.4 %**
CG4	**18.6 %**	**15.3 %**	**2.8 %**
20% buffer level			
CG1	**14.8 %**	**0.6 %**	**0.1 %**
CG2	**14.6 %**	**0.7 %**	**0.1 %**
CG3	**15.7 %**	**1.3 %**	**0.2 %**
CG4	**17.0 %**	**2.2 %**	**0.4 %**
CG1 Strong	11%	**6 %**	1 %
CG2 Tending to strong	14 %	**20 %**	3 %
CG3 Tending to weak	16 %	**40 %**	7 %
CG4 Weak	19 %	**65 %**	12 %

However the probability of Superfund Section B failure is only contained within a 1 in 20 probability by a higher "buffer" level of benefit flexibility of more than 10% and probably 15-20%. Therefore if Superfund Section B needs to present a high level of future benefit security, like Superfund Section A does above, then higher levels of "buffer" are likely to be a prerequisite for achieving this.

Cost to sponsors of Superfund exit route

From the sponsor standpoint the Superfund Section A provides an opportunity to extract the sponsor from legacy liabilities at considerably less cost than buy-out. Exit pricing at gilts flat is considerably more achievable and attractive than exiting at gilts -0.6 or -0.7. This is essentially because the buy-out market is based on an insurance model whereas the Superfund operates outside of an insurance based capital requirement and provisioning. For schemes with Technical Provisions valued at gilts +0.6%, gilts flat represents the mid-point to buy-out funding.

The Superfund concept is not intended to deal with the worst cases at the bottom end of CG4 with sponsors already presenting considerable payment risk on current contribution schedules. It is not a "magic wand" to make the existing case load of difficult cases disappear but is intended to "sweep up" a worthwhile proportion of CG3 and CG4 schemes which may, if not addressed, result in tomorrow's schemes on "watch" and knocking at the PPF's door.

The Covenant Group average scheme profiles indicate funding levels in the range 70-74 % of gilts flat liabilities, and the modelling in this Report indicates that the Superfund Section A premium might represent an uplift in unconsolidated scheme assets of 35-42%. In terms of £ numbers for average profile schemes in deficit this might represent the following:

Initial scheme assets	Indicative premium requirement for Section A
£100m	£35m-£42m
£50m	£17m-£21m
£25m	£9m-£11m
£10m	£3.5m-£4.2m

For Section B the proportion of the overall sponsor financial requirement represented by securing payment of the current recovery plan to the full "premium" including debt owed to the Superfund would range from 37% for CG1s to 61% for CG4's again based on the scheme profiles derived from tPR's Funding Statistics Tranche 9 (schemes in deficit).

Comparison with other consolidation models

The PLSA's DB Task Force has considered three alternative consolidation models to the Model 4 Superfund. We have considered the benefits set out below for the 4 Covenant Group cases originally reported on in the PLSA Interim Report.

Model 1: Shared services

Many schemes share one set of administrative functions – achieving cost savings through economies of scale. We have assumed that shared services offers a benefit of ***5 basis points*** in terms of return enhancement.

Model 2: Asset pooling

The assets of distinct pension schemes are consolidated into centrally managed asset pools to be managed centrally on behalf of the different schemes. Schemes retain their governance,

administration and back office functions and most of their advisers. We have assumed that asset pooling offers a benefit of ***20 basis points*** in terms of return enhancement.

Model 3: Single governance

The assets of distinct different pension schemes are consolidated into a single asset pool and governance, administration and back office functions are merged. We have assumed that single governance offers a benefit of ***25 basis points*** in terms of return enhancement.

Set out below are comparative results for Model 3: Single governance which potentially offers the greatest enhancement.

Probability of reaching solvency funding within 30 years

The table below illustrates a useful but relatively small improvement in the probability of Single Governance schemes reaching solvency funding.

Within 30 years	% of simulations reaching solvency funding
Single Governance	
CG1 Strong	**92 %**
CG2 Tending to strong	**71 %**
CG3 Tending to weak	**56 %**
CG4 Weak	**35 %**
CG1 Strong	90 %
CG2 Tending to strong	67 %
CG3 Tending to weak	52 %
CG4 Weak	32 %

The resulting estimated loss of member benefits

The table below again illustrates a relatively modest increase in benefit security.

Within 30 years	Estimated benefit losses on default	Probability of default/failure	Probability weighted benefit losses
Single Governance			
CG1	**11 %**	**5.6%**	**0.6%**
CG2	**13 %**	**19 %**	**2.5 %**
CG3	**16 %**	**38 %**	**6 %**
CG4	**18 %**	**63 %**	**11.5 %**
CG1 Strong	11%	**6 %**	1 %
CG2 Tending to strong	14 %	**20 %**	3 %
CG3 Tending to weak	16 %	**40 %**	7 %
CG4 Weak	19 %	**65 %**	12 %

In conclusion the modelling results indicate that, whilst helpful, none of these alternative consolidation models "move the dial" in terms of significantly improved benefit security. In comparison with the potential improvement in benefit security offered by the Superfund, these are relatively small gains.