SESSIONAL MEETING DISCUSSION



Capital backed funding arrangements

[Institute and Faculty of Actuaries, Sessional Webinar, Thursday 14 September 2023].

Mr C. T. H. Er, F.I.A. (opening the discussion): Welcome to you all for today's session on the developments in the alternative risk transfer market paper by the Capital Backed Funding Arrangements (CBFAs) Working Party. My name is Clarence Er, and I am pleased to chair this session today. For those of you who do not know me, I am currently chair of the Finance and Investment Research Sub-Committee and also deputy chair of the Life Board of the IFoA.

I now introduce the topic today – developments in the alternative risk transfer market for defined benefits pension schemes. We have seen a rise in interest rates over recent years, and this has resulted in improved funding levels for many schemes. However, many find that they are still not in a position to implement a pension buy-out, and these schemes may face a difficult decision as they approach their endgame: they could either de-risk to glide towards a low-dependency position or seek to finish the journey more quickly, thus risking under-performance that might take the scheme further away from its goals. Various providers have seen a role for external capital in helping the scheme to finish its journey, potentially resolving this tension, and therefore a range of CBFAs have been developed in response. Given this development, the CBFAs Working Party was formed at the end of last year with the objective of looking at various arrangements available for schemes and highlighting issues that schemes will need to consider when assessing the appropriateness of these arrangements.

With that, I would like to introduce our speakers for today. We have David Barnett, who is a partner and senior consultant at Barnett Waddingham. David specialises in endgame options and solutions and is part of Barnett Waddingham's alternative risk transfer group. We also have Claire van Rees who is a partner at Sackers, a law firm for the pensions and retirement savings industry. She has 19 years' experience advising pension schemes and is a member of the firm's risk transfer team. Last but not least, we have Iain Pearce, who is a partner at Hymans Robertson and head of alternative risk transfer. He advises trustees and sponsors on a full range of endgame options. I will now hand over to the speakers.

Mr I. C. Pearce, F.I.A.: Thanks, Clarence (Er). It is great to be here on behalf of the working party to present our paper. We will provide some of the key points of our work, explaining the main principles of what a CBFA is, how we define it, its benefits and uses, and explore through a trustee lens and a sponsor lens how that may play out.

First, I will touch on why the working party was formed, which was to recognise that this industry and the de-risking market have been through a large degree of innovation. A lot of providers have put a lot of thought into developing solutions and finding new ways of deploying third-party capital to de-risk. A lot of pension schemes, trustees, and sponsors have considered their endgame, and a large proportion of those have decided to target insurance. They recognise that doing so involves using third-party capital to underwrite risk for a defined financial outcome, and that is what we are talking about today, but in a different context.

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The challenge is that this is a new area and is relatively complicated. It has perhaps not helped that different advisors talk about it in different ways. We might use different language to describe the same thing. It does not help that the industry does not have a collective way of discussing it to build that baseline knowledge, which we do see, for instance, in the buy-in market. We hope that the output of the working party is helpful in building that baseline level of understanding and to help explore and explain what the solutions are in this space, and in doing so help people consider what might be the most appropriate solutions for them. To be clear, as a working party, our focus is on education. We are not advocating for or against these solutions.

Why are we here?

Capital Backed Funding Arrangements (CBFAs) are agreements which commit to a particular

- ... investment return or financial outcome
- ... for a defined period.
- ... backed by capital which underwrites this commitment
- Third party capital to support de-risking is well established within buy-in market. CBFAs are not buy-ins.
- Trustees/sponsors keen to understand full range of options, BUT
- · High barriers to understand CBFA market (time and cost)
- · Working Party convened to address this need

Figure 1. Defining CBFAs.

So, what is a CBFA?

You can see in Figure 1 that we have defined a CBFA fairly loosely, and that reflects the range of solutions that exist. They seek to deliver a defined outcome for pension schemes, usually over a defined period. They are backed by capital to underwrite the associated risks. We will consider the details and types of solutions later.

Overview of CBFA assessment Underwritten outcome / investment top-up What you receive *Premise underwritten by supporting capital Need to weigh up pros and cons of CBFA solution

Figure 2. CBFA assessment.

There are some common themes. In Figure 2, you can see a scale, and on the left the benefits that comprise the promised outcome. It could be a guaranteed return or a defined funding level. For example, the funding level at which a scheme is able to fully cover benefits, which is backed by capital put at risk by a provider with the aim of ensuring that a defined outcome is achieved.

The right-hand side shows what you give up. The provider is putting their own capital at risk and will have their own set of investment beliefs and investment strategy, which they are typically looking to work with the scheme to implement. The provider is looking to generate a return on the capital provided, and it is therefore likely that the assets are being invested to target a higher return than is being guaranteed through the promise supported by the capital. In most cases, that may be a change in the underlying investment risk and perhaps an increase in risk – this is dependent on each pension scheme's circumstances.

These core functions have many similarities to the principles of buying insurance. I am not saying that a CBFA is equivalent to a buy-in, but insurers put capital at risk to deliver the defined benefits they have committed to. They invest in a way which is targeting a return that is higher than that implied by the price of that buy-in premium. I think that analogy is helpful when thinking about where CBFAs might fit on the spectrum of outcomes.

Trustees and sponsors need to recognise these high-level principles, and that there are pros and cons to each. It is important to understand how they apply to each pension scheme and how they fit in with the beliefs of the stakeholders involved, whether that be the trustee or the sponsor.

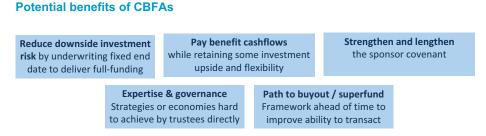


Figure 3. Potential benefits of CBFAs.

We talked about the core characteristics of these arrangements, and in Figure 3 we are considering potential benefits. I will not talk through each of these, but will cover a few, and I treat "reduce downside investment" first. The objective is to provide a guarantee of financial outcomes so that pension schemes expect to have more certainty over the future outcome. Typically, a capital-backed journey plan materially changes the risk exposure, providing more certainty on a whole range of outcomes. We will come to downside risk shortly.

The "strengthen and lengthen" sponsor covenant is interesting because many pension schemes today are well-funded. Some schemes receive contributions from the sponsors. For those schemes that no longer require contributions, it does not mean that benefits are guaranteed. They have probably concluded that the existing assets are sufficient to achieve their target endgame. However, they are exposed to the material risk of a sponsor insolvency event, in which case, if they cannot afford to insure beforehand, the benefits will be reduced. To strengthen or lengthen the sponsor covenant will reduce the chance of an insolvency event and build more confidence that the scheme will have time to reach its target endgame.

It is worth spending some time considering the uses of CBFAs and the problem they are trying to solve. Typically, they have been developed with the aim of insurance settlement as a likely destination for pension schemes, but there are a whole range of circumstances and strategies, which include potentially exploring run-on strategies.

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CBFAs supporting run-on strategies



Figure 4. Run-on strategies supported by CBFAs.

In Figure 4, the first consideration is the value of running on as opposed to insurance. Those schemes that choose not to fully insure must believe it is beneficial, in terms of the value that may arise. This gives rise to the questions of how much value, who does the value belong to, and where does the value go. There is also a regret risk if the scheme is able to fully insure, chooses not to, and then experiences a deterioration in its funding level, which is an uncomfortable position for trustees to be in.

So how can trustees mitigate or manage the downside risk? This might involve a buffer. If they are considering how to use an emerging surplus, for example, to fund defined contribution (DC) contributions or for augmentations, at what point might it be reasonable to do so?

To the right, there is a DIY approach to manage the run-off. Like the CBFA route, this might also involve changing the risk profile and/or the value that the scheme can generate. I now pass to David (Barnett) who is going to consider further the future endgame.

Mr D. J. Barnett, F.I.A.: Thanks, Iain (Pearce).

CBFA use cases for insurance endgames



Figure 5. Use cases for CBFAs.

In Figure 5, we show three use cases for these types of solutions. Schemes will vary, so these scenarios will not be appropriate to all but provide some flavour of how you can segment according to different schemes' circumstances.

Case 1 – in the first scenario, the scheme is fully funded on technical provisions. They are out of the growth phase, so they no longer need the same investment returns they had been targeting. Contributions are ceasing, and they are asking, "What do we do with the investment risk going forward?" They do not necessarily want to and/or cannot justify taking chances with investment risk, so they consider how they can consolidate their strong position in moving to an endgame solution. This is a particular group for which some of the CBFA solutions can be used.

The key is risk asymmetry – taking more risk in order to move to an objective of buy-out, versus compromising what's already there. Another challenge in that scenario is pension schemes edging their way towards an insurance deal, but they may or may not hit that moving target. Having something that provides greater certainty of the outcome can help them plan better for that ultimate position.

Case 2 – in this case, the pension scheme is at the point of being buy-out-funded but, for whatever reason, is not transaction-ready. It could be to do with data, benefits issues that need to be resolved, their desire to pay some discretionary increases, or capacity constraints in the market for a scheme of their particular size or flavour. So, the buy-out option is not necessarily viable, but they want to maintain their risk management and ensure that the pensions get paid in full. It can be a cash flow solution that helps to meet the benefit payments and maintain security against the buy-out risk, while they get themselves transaction-ready.

Case 3 – the final example is the more distressed case. The scheme is far from being fully funded. There might be doubt about the future or strength of the covenant for the trajectory from the scheme's current position to a point of full insurance. Supplementing the covenant and/or the ability of the covenant to tolerate the risk within the portfolio through these types of solutions may help to deliver on that goal. In other words, managing risk from the corporate perspective through the use of external capital.

What are the key features of these solutions? First, CBFA providers will normally take on at least some of the assets of the scheme, and all of the assets in most cases. Second, the assets will be reinvested to reflect the provider's re-risking objectives. The provider will put up capital to act as a buffer to reflect the additional risk taken on.

Third, the time horizon ranges from about 5 up to about 20 years, which has a big impact on the types of schemes that might use these solutions.

Fourth, there is an enormous range of options and varieties as to the kinds of guarantee being provided, from being able to ensure the pension scheme survives through to the end game to just a specified return on a portion of assets in the portfolio.

Thinking about the capital trying to achieve its objective over that journey, what might throw it off course and why might we want to know? Why might we deviate if the assets do not perform? What if the buffer is burnt through? Are there mechanisms for topping up the capital? How might capital be released if they find themselves in a better-than-expected position? The other flavour we see is the ability for the scheme to share in the upside. And what if the solution does not reach the end of its term? What if the provider or sponsor goes bust, or there is an exit desired in order to do a transaction with a buy-out because the scheme finds itself in a different position? The exit terms of these solutions vary significantly.

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Portfolio risk vs capital buffer - stress testing

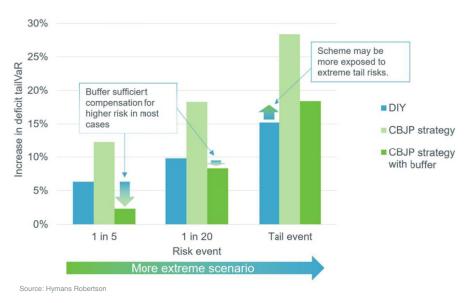


Figure 6. Risk versus capital buffer.

Figure 6 illustrates that one of the biggest considerations is the financial risk in the portfolio – how that changes over time and interacts with the risk buffer that is put in place. We have shown three scenarios; the 1-in-5 event, the 1-in-20 event, and a much more extreme tail-risk event. These solutions are narrowing down the middle range of outcomes and are also adding to the tails. The blue bar (do-it-yourself, DIY) is the starting point, while the light green bar (Capital Backed Journey Plan, CBJP strategy) shows that, if we were to re-risk the portfolio ourselves, the overall risk would rise significantly. However, the dark green bar (CBJP strategy with buffer) shows that the capital supplied reduces the risk back down to a lower level than it was previously in a 1-in-5 or 1-in-20-year event. That is narrowing the range of options under typical circumstances.

I talked about the three cases earlier. Here we are going to talk about the different flavours and types of solutions within the range of CBFAs. The first is a return-focussed solution.



Figure 7. Return focussed arrangements.

In Figure 7, say, the funding level still needed to rise by 10% to enable an insurance transaction. In this scenario, with the providers we have seen that fall into this category, we will look to increase the return on the assets that you place with them. They might look to achieve a (Gilts + 3%) or (Gilts + 4%) return, using high-quality credit or leveraging the credit in the portfolio, potentially using illiquid assets. Alongside that, they will provide a capital buffer in the 5% to 10% region, which will be much more focussed on capital to offset against asset-based risk. Typical timeframes of these return-focussed solutions are around 7 years (could be 5–10 years), that is, giving them enough time to generate returns, in order to achieve the objective and extract extra profit from the capital invested. And, generally speaking, the focus, in terms of the guarantee that is being provided, is a guaranteed return outcome. So, it may be a (Gilts + 1%) to (Gilts + 2%) return over that 7-year period. So, the provider is taking some profit off the top in a position where it can provide a better return outcome than may have been possible in the first place. Some of the solutions in this area will look to provide a buy-out or buy-out proxy level of outcome at the end of the solution.

If the initial capital has burnt through, some of the solutions will top it up and ensure that some of that risk is covered. Generally speaking, the surplus goes to the provider at the end of the term. It varies by provider as to whether or not there is an early termination of these solutions.

The second solution is more for a scheme that is already fully funded on buy-out but cannot transact in the near term.

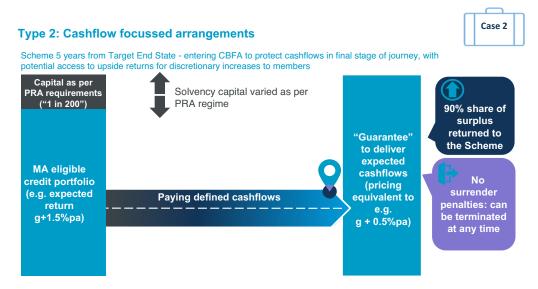


Figure 8. Cashflow focussed arrangements.

In the scenario shown in Figure 8, the cashflow focussed solutions have more relevance. They seek to invest in a more matching adjustment eligible portfolio, more akin to the insurance-type model.

They provide a much larger capital buffer against the portfolio. The focus here, because they are fully funded, is more on time and operations and getting them to a point of insurance. The timeframe focuses on paying the actual cash flows and finally on delivering the expected cash flow position.

The capital will be maintained at the solvency capital level, while at the end of it, the scheme takes away most of that position. As this is more of a cash flow play, it is not so much about the surrender penalties but rather an ongoing commitment.

The final type is the covenant-focussed solutions (See Figure 9).

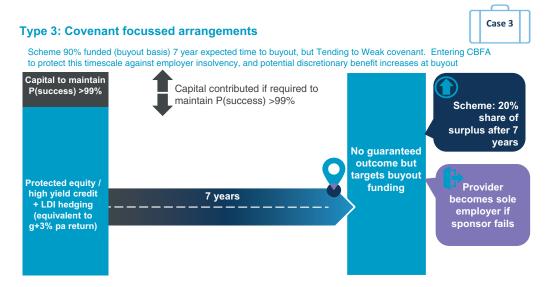


Figure 9. Covenant focussed arrangements.

The third scenario that I talked about was pension schemes in a more distressed position. Here, the provider will be taking on the assets and re-risking them and, as with the second scenario, providing capital to a level such that they can cover a 1-in-100 distressed event.

We are seeing a variety of time horizons offered by the different solutions, and the aim is targeting a buy-out-related outcome. So, this is providing something close to a second covenant for the scheme, which makes these solutions work well for the distressed market. The capital contribution is about maintaining that level of certainty within the portfolio. Because the buyer outcome is being achieved, there is potential for sharing any surplus that may come through (see Figure 10).

What should trustees (and their advisors) consider?

Early termination Legal and Capital and provision regulatory covenant support What do you get Governance and Investment and what do you control strategy and risk give up? Surplus extraction Target outcome or Term and other costs guarantee

Figure 10. Trustee and advisor considerations.

What should trustees and advisors consider? The key point is that there is a lot of variety in the types of solutions available, and there is also flexibility within the providers themselves. Many of

them are still looking to prove that the concept they offer works, so there is variability in what they are willing to offer to different schemes. But they all tend to fit into those three different structures.

The key is how to assess the various factors in terms of what you get and what you're going to give up. What is the level of capital that will be made available, how reliable will it be and what level of covenant support will it provide? Do you have a direct line of sight to it, and is some of it contingent on certain events happening? If it is contingent, what are the implications in terms of the level of security provided?

There are also limits on the capital buffer. If you buy an insurance contract, it is a largely all-risk policy. A number of these solutions have specific carve-out clauses, or triggers, terms or bounds, within which they will operate the capital. Comparing that capital is therefore important in terms of the investment strategy and risk that is being run. So, what are the assets that they are going to use to re-risk the scheme? How do those assets model in an environment of distress? What are the day-to-day risks and volatility of those assets? How will those assets perform in the event of an extreme risk event? We want the capital provided to be consistent with the asset risk that is being run.

Most of them want at least a 5-year period. The compounding of them being able to get their returns out of the product relies on being able to invest over a minimum term. The solutions available have a wide variety of terms. For some, 5 years is sufficient. For others, you are tying up capital for 20 years, because they are putting much more into illiquid assets.

What is being provided in terms of an outcome? Is it a return? Is it a buy-out or a funding-level position, and what are the bounds on that? Is it a proxy, or an explicit guarantee of some form of outcome? An important consideration is how will the provider extract surplus. Will that be at the end of the product or part-way through? Are there mechanisms where they can take out some of the capital and is some of it shared with the scheme? What else is it covering? There are costs associated with the underlying investments and scheme expenses – to what extent are these covered?

Finally, is early termination possible? If you are in a scheme for 3 years and your circumstances change, or the sponsor changes, or you find the funding position is different from what you were expecting, you may be in a position to move to a different type of risk transfer, such as buy-ins or buy-outs. Can you get out, and, assuming you can get out, what would you get from the solution? Are there penalties involved? I will now hand over to Claire (van Rees) to talk about legal and regulatory matters.

Ms C. van Rees: Thanks, David (Barnett). I will say a few words from a lawyer's perspective about the issues that trustees ought to be thinking about when they approach these structures. They are going to be using their powers and discretions under the scheme rules to enter into them. It is useful to remind ourselves about how they approach that question, from a legal perspective, to make sure that they are meeting their duties and doing what they are supposed to. Exercising powers and discretions means that you have to make sure, as a trustee, that you are following a proper process in doing so. As a lawyer, I tend to frame that in terms of two questions. The first one is, "Do I have power to do what I want to do?", meaning "Is there power under the rules and the legislation? Can I do it?" The second question is, "If I do have power, should I do it?" The "can-you" question is often more straightforward and factual. With some of these structures, where they are more like an investment product, it might be quite straightforward. If it is an investment through an insurance policy, you might be using your standard investment powers. The more complicated ones, or the ones that involve bringing in the provider as an extra employer, are going to use other powers and it is going to be more complicated to work through that, but that is usually the more straightforward aspect.

The "should-you" question is typically the more difficult one, and in terms of assessing that, trustees need to, from a legal perspective, balance the relevant factors, ignore the irrelevant ones, and reach a decision that is reasonable. They should use their powers for the proper purpose, and that involves taking into account the interests of members. That process is going to involve drawing in all of the factors that David (Barnett) just discussed in terms of the detailed analysis from all the advisors and making sure that you have got the right advice from the right advisors, at the right level. The amount of work involved in that is going to vary considerably between the

different structures. Some of them are going to be a lot more work-intensive than others, depending on how complex they are.

I think, particularly while this market is developing, there is that aspect that, until advisors become very familiar with the structures, it takes a while to get to grips with how they work. From a lawyer's perspective, when you look at the legal documentation surrounding them, do they actually do what they have been sold to do, and is there anything that might be a sting in the tail? It also entails looking at exit provisions and so on, and making sure that it works in the way that you are expecting and need it to, particularly if things go wrong, or if your employer goes insolvent.

So, when the trustees are assessing and balancing everything, ultimately they are going to need a clear idea of, if they decide to proceed, which factors are the ones driving them forward, plus the things that they are giving up. What are the things that make them think this is in the best interests of members? Again, from a legal perspective, we like to make sure that the lawyers help them document that and write it down. That way, trustees can make sure, firstly on the governance side, that they have followed a proper process in considering the interests of members. But also, from a self-interest perspective, if things do not work out as intended, that trustees have protected themselves from criticism and challenge because they can show that they did think about it properly.

Just to say a few words on the regulatory side, one aspect trustees will need to be aware of is that the regulatory environment is in a period of flux. We are expecting The Pensions Regulator (TPR) guidance on these new models in late 2023. We have also had the Department of Work and Pensions July 2023 response to the consultation on defined benefits pension schemes, which acknowledges that a lot of that consultation is about pension super funds, which is not what we are discussing here.

However, it does acknowledge that, when they are looking to move forward with regulating super funds in a more formal way, through primary legislation, they seem to be taking the view that they want the definition of super fund to start quite wide. They also want it to be able to accommodate the developments in this wider market, with the potential to then narrow it down in secondary legislation, to cut out the elements that they think are not really going to benefit from the same level of regulation as super funds. Trustees and indeed all of us need to be aware of that, but issues may develop and regulators' views will, presumably, evolve if there are any aspects of these structures that they feel less comfortable about than others (see Figure 11).

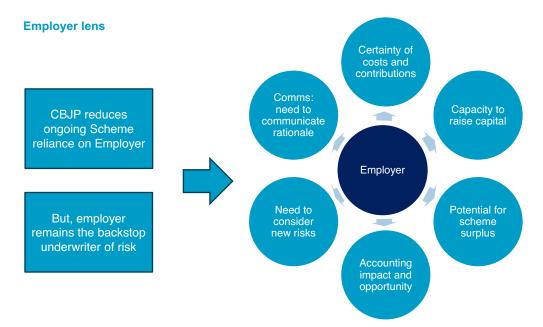


Figure 11. Employer considerations.

Mr Pearce: Having touched on trustee considerations and decision-making, when looking at this market, we thought it was also worth touching on the employer lens as well. As Claire (van Rees) mentioned, usually these kinds of products can be entered into via a trustee investment power. And typically, that is done so unilaterally, without requiring the sponsor's support or agreement. However, it recognises that the residual risk exposure with any de-risking solution, whether it is a super fund, a buy-in, or in particular for wind-up, is that the sponsor continues to have that exposure and fundamentally underwrites the remaining risk of that product. In particular, at this stage of development of the market, it would be quite unusual for a trustee to go into some of these solutions without the support of a sponsor. We would expect collaborative processes primarily to lead the way in this space. I am not going to cover all the points on the slide; my paper provides further details. I focus on a couple. First, the sponsor will understandably like paying as little as possible in the pension scheme, all else being equal. But what they really value is clarity and certainty as to what their obligations are - knowing what they have to pay and having confidence that if they pay it, that is all they have to pay. If a sponsor stops paying money into the pension scheme, they get used to that quickly. The thought of going back to re-establish those contributions may not always be a very welcome development for a sponsor of a pension scheme.

We talked before about how these arrangements can fundamentally change the distribution of outcomes for pension schemes. Providing what is promised across many outcomes, but recognising there are some risks that trustees and sponsors should focus on, can provide more certainty and stability of outcomes for a sponsor, and can be attractive for those reasons. We talked about what happens with early termination and how we think about these risks. What are those residual risks? Because the sponsor is acting as a backstop, there are particular features that are most relevant for the sponsor, and in which we would expect them to be most interested, in addition to being confident that trustees are following a due process in reviewing these solutions.

In conclusion, we have highlighted today, and in our paper more widely, what these kinds of CBFAs are. And why they can have characteristics that could be attractive to pension schemes as part of their de-risking journey. That includes thinking about downside protection, investment performance, strategic governance, and the impact on covenant arrangements. We have touched on how they could be applicable for a range of scenarios. But it does fundamentally change the relationship in a funding model for a pension scheme, and there are particular risks, which we have drawn out, which are likely to have been of particular focus. We hope that by sharing this with our colleagues and peers in the industry, it will help to increase the baseline understanding and enhance how people engage in those key criteria sooner in the process, hopefully for the benefit of all involved. We are going to pause there and move on to the question-and-answer session.

Mr J. C. Spain: My name is Jon Spain. I used to be a defined benefits pensions actuary. First, thank you to the working party for an interesting paper and presentation, especially the legal piece. I feel that we may be looking at this the wrong way round. About 40 years ago, Alan Fishman was an expert witness in the Imperial case. One of the pieces of evidence that he gave, which the judge accepted at the time, was that you can only define a surplus or a deficit when you finally discontinue the scheme. That is the only time you know what the true position is. Everything else is a guess, maybe a well-informed guess, but that is all it is.

I cavil at the use of capital values in defining the assessment of funding because capital values are scalars; you have got one on the left (assets) and one on the right (liabilities). You look at these two scalars and say, "We've got a surplus of £10 million, so we will be okay". If we change the liability basis to buy-out, "we have a deficit of £8 million, a difference of £18 million". These scalars have no predictive value and indicate nothing about the considerable risks and rewards in the future.

We should really be looking at cash flows, not discounted into capital numbers, but discounted as vectors using robustly designed stochastic processes. I was delighted to see that the working

party mentioned these as a valuable tool on page 8 of the paper. Such information is far more useful to everybody because you can give the trustees, employer, and members some indication of the possibility, probability, downright certainty, that there is going to be a big crush. A real problem with using capital values is there is no indication of future illiquidity, whether it is next year, 3 years' time, or 15 years down the line. Stochastic cash flows can provide that information. Somebody in this room or on Zoom is going to say, "This guy is ignorant, we are not allowed to do that. The law says we have to have capital values" citing the Pensions Act or saying we have done it for years. Maybe now is the time for pension actuaries to be released from this onerous yoke, and that is what it is, because other areas of actuarial life do not use capital values in the way that we do in the pensions field. This has been suggested a number of times. So far TPR has said, "Don't be silly, we don't want to know". The government has not wanted to know, but I suspect that Mansion House is going to change that considerably.

Discounting is simplistic and should be eliminated. Actuaries have been doing it for so long that we have lost sight of the fact that we could do something different. I have written more about this on discrate.com, about which I would be very happy to chat with anybody. Thank you again, for at least trying to do something to help the employers and trustees out there, but to be honest, I think there is too much reliance upon capital values, which are not trustworthy.

Moderator: Thank you for those interesting thoughts. Does the panel have anything to add at this stage?

Mr Pearce: Yes, thank you for the comments. I think the challenge trustees have is not necessarily, "Do they understand the risk distribution?", but how do they think about that residual risk and what are the tools and modelling to support it? Conceptually, someone says, "Pension scheme – have this capital". That is clearly a step change, and a positive development in terms of the likelihood that the scheme can pay benefits in full. The challenge is what comes with it. What are the changes to investment risk and how does that compare to capital? We provided that single stylised chart – there must be a point at which, maybe, capital is not enough. What is the risk of getting to that point? I am not going to touch on the wider regulatory environment and funding principles and legislation, but I think the challenge at that point is you are looking at quite a small range of outcomes and going pretty deep into the tail. You can apply stochastic techniques to that, but clearly, the further into the tail you go, the more and more those assumptions or reliances become stronger and involved and emboldened by the various advisors. I think that is a particular challenge right now in this market.

Mr Barnett: I think irrespective of the regime in which we are putting a capital value on those liabilities, how we go about investing to achieve better outcomes for those members and how you crystallise the gains is still going to be a function of the risk we are taking in the capital assets we are running. Can the CBFA provide a different risk outcome? It relies on stress testing the stochastic analysis, and looking at what could happen in those extreme events, some of which are hard to model financially. We need to consider what constitutes an extreme event, how it manifests, and what that means for our ability to meet cash flows. If we have a more stable asset base our ability to meet cash flows is generally improved, because we do not have the path dependency of crystallising losses on a portfolio, because we are having to meet cash flow payments on an annual or monthly basis.

Mr A. Beecraft: I am Alex Beecraft, from Aon. The positioning here is very much as a bridging solution to an insurance endgame, whereas it seems to me that a combination of this and the strong investment grade equivalent sponsor, based on the approximate numbers you have presented, is no less secure than the insurance regime. Therefore, I was curious as to why we have constrained it here as a pathway to the buy-out rather than as a longer-term solution to allow better value extraction by sponsors and members, rather than to insurers.

Mr Pearce: Great, thanks for the comment. We tried to cover that in one of the slides, but fully take the point that there is a debate going on within the industry. Today we have focussed on educating the market but that slide noted there are many applications for these solutions. That includes thinking about the strength of conviction that insurance is the right destination. To the extent you have that view, you can think about whether these types of solutions play a part in supporting those alternatives. For instance, by addressing downside risks to an extreme limit. I think it is a very fair comment, which I suspect we will be thinking about collectively for some time.

Mr J. S. Melcer, F.I.A.: Good evening. I am Jerome Melcer at PwC. I commend the working group for the excellent report. There is a nice point raised early on, which is from a trustee perspective, looking at CBFAs - what are they getting and what are they giving up? On the "What are they giving up?" side, that is a question that has come up repeatedly in discussions I have had with the market. From a trustee perspective, are they giving up optionality and putting a commitment in the hands of the CBFA provider? These are funds that lock in for a fixed period of time and, bar a serious event or pulling the ripcord on a surrender, the trustees are committing to leave it with you for that period. That loss of optionality is an interesting trade, because we believe that it means the CBFA may not be as valuable as one might think. If you consider events over the last year, for example, the scenario that would play out time and time again in discussion would be "If we give you this money to put in a lock-box with all the legal guarantees and security around it, what happens if the buyer market comes towards us and we cannot rush to secure a buy-out? We have lost an opportunity". Obviously, many schemes have seen that opportunity come towards them over the last year, following the Gilts liability-driven investment crisis. Some have managed to transact, but many are struggling in a highly congested market to crystallise the value of having retained that optionality. We did a transaction 3 years ago, which was 10%-15%, maybe more, away from buy-out, and could potentially have been fully buy-out funded now. I suspect we would not have been able to crystallise that, but instead found ourselves having the first call on a box, which contains assets significantly above the cost of a buy-out. They are very well capitalised. So, by giving up their optionality, they have put themselves in a very secure position, and the counterfactual is that optionality may not have given them very much. There is an asset the trustees hold. They can monetise in a way by giving it to a third-party provider. I think that aspect of optionality is an interesting way to look at it from a trustee perspective.

One final question, for Claire (van Rees), on the legal side. This point, which has come up already from the other question, is about the value of third-party capital in the context of run-on. This is something that has been a recurring discussion we have had with the market. We have been looking at cases with pricing that fit in the category. In the view of a lawyer, does that provision of external capital, in a scenario where a scheme is already fully funded against buy-out, help unpick the following knotty issue: is it right, legally, for the trustees to not seize the buy-out opportunity, but instead run-on, given that there are downside risks that could lurk in the future? We contend that putting third-party capital into the mix makes it easier to decide to run on, rather than struggle with that legal conundrum.

Ms van Rees: It is not something that I have particularly thought about before, but I think that is probably right, in the sense of it being akin to the conundrum that sometimes faces trustees who want to buy out but have a really strong employer, who might theoretically be even better than the insurance company. I think everybody is very much in the mindset of, "Buy-out is the goal, buy-out is the dream. Let's just get rid of our pension liabilities into the insurance market". But that is not a slam-dunk, and when you do it, there are nuances around the deal – are you actually securing everything with the insurance company? There is a lot of development in the residual risks area, and have you got the benefits right? And so on. I am not convinced that assuming buy-

out is the right solution or goal for everybody is quite as straightforward anyway. It seems to me that challenging it and having that capital aspect can help unlock the debate.

Mr Barnett: The other interesting thing, related to your point around optionality, is where pension schemes have done a partial buy-in, which they have been doing consistently for years now. It is the willingness to tie up a portion of their assets indefinitely, in that scenario, rather than for a fixed period, with a third party that is putting in capital. Because it is a well-trodden path, people feel comfortable with it. There is a regulatory regime that wraps around that as well. But in principle, when we are looking at partial buy-ins versus these sorts of solutions, that optionality piece should be framed in the context of peoples' willingness to invest in buy-ins, or invest in private markets more generally, for instance, in a way that ties up assets. I accept that I am looking at that through an investment lens, which is my day job, but ultimately it is a well-trodden path, just not in this space yet.

Mr Er (closing the discussion): Hopefully, this session has provided you with some interesting takeaways. This does sound like an area that has had a lot of traction recently, so no doubt we will see more activities in this space. It remains for me to express my own thanks, and I am sure the thanks of all of us, to Iain, David, and Clare, and all the other members of the working party who have worked on this, as well as those who have participated in the discussion today.