Possible implications of Brexit and funding scenarios

Introduction

This paper has been prepared to consider the potential impact of alternative Brexit outcomes. It builds upon the scenarios we considered last year, reflecting how the position and potential outcomes have evolved since then. This note, which complies with Technical Actuarial Standard 100, covers the following:

- Commentary on potential market implications of a no deal;
- Potential impact of three Brexit scenarios (soft, no deal and a new 'ongoing uncertainty' scenario) on the funding position;
- Some implementation and operational aspects to consider and raise with managers and the custodian.

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Executive summary

In this paper we consider the impact of potential Brexit outcomes on the Fund's funding position, having regard to the impact on assets and liabilities. We have updated our central assumptions for economic indicators, and the range of scenarios modelled reflecting developments since the analysis carried out last year. In particular, we have modelled Soft Brexit, No-deal, and Ongoing uncertainty scenarios.

For the purpose of our analysis, we have made assumptions around the economic impact of the above scenarios, and assumed these materialise as one-off shocks. In practice, the effects may be experienced over a period of time.

For noting

Our analysis indicates that the funding position remains exposed to the potential impact of a no-deal scenario. This is primarily due to the impact of a fall in real gilt yields, and anticipated change in the value of unhedged liabilities which would lead to a fall in the funding level (all other things being equal). Conversely, the Fund is expected to benefit modestly from a Soft Brexit outcome.

Our analysis indicates that the Fund should be relatively well insulated against ongoing uncertainty. This is largely due to the diversified nature of the Fund investment strategy, with several factors acting for or against the Fund. In practice, we expect a period of ongoing uncertainty will fuel greater volatility in the funding level.

For agreement

We recommend the Fund contacts their investment managers and custodian to check that they do not anticipate any impact on their ability to trade once full details of the precise Brexit outcome are known.

Background and possible outcomes

When the UK invoked Article 50 of the Treaty of Lisbon on 29 March 2017, a two-year time period was set to negotiate the form of the UK's departure from the European Union. The UK was set to leave the EU on 29 March 2019, with a transition period scheduled to take place over the next 21 months to December 2020. Earlier this year, the EU agreed to an extension to the Brexit deadline, which is now set for 31 October 2019.

At the time of our initial analysis, the type of Brexit that will be faced by the British people was broadly categorised into three main categories: 'soft', 'hard', and 'no deal' Brexit. A soft Brexit scenario is generally deemed to be the most 'business-friendly', as this scenario is likely to reflect a continuation of the existing agreements with the EU. A no-deal Brexit is still seen as the most extreme case. Given the repeated rejection of the negotiated deal, the passing of the initial Brexit deadline, Theresa May's resignation and the appointment of Boris Johnson, the uncertainty around the UK's exit from the EU has increased.

Central GDP forecasts have come down since our previous analysis given the global slowdown in trade and manufacturing since 2018. Reflecting this, the latest Consensus Forecast for UK GDP growth in 2019 is 1.3% (i.e. 0.2% lower than last year) and UK CPI inflation is expected to be a little below 2%. Most forecasters' central GDP assumptions are still the same as the rates they forecast assuming a UK-EU Compromise Agreement. However, there is less consensus on the likely outcome between no deal, no Brexit and a compromise agreement. Moreover, we note there will be a range of views around what a Compromise Agreement might look like.

A no-deal outcome is generally taken to mean that UK will initially trade under World Trade Organisation ("WTO") arrangements. The possibility of anything more extreme is ruled out as vanishingly small. A no-deal is viewed as disruptive: UK growth forecasts for 2019 would be expected to be cut below 1% and some envisage a recession or near-recessionary environment. The impact on forecasts for Europe would be much more modest. A spike in UK inflation would be expected, driven by currency weakness. The view that a no-deal Brexit will cause short-term economic disruption is relatively uncontroversial. It is also the consensus view that a no-deal Brexit will be bad for UK growth over the long term, but we note that views on this are far from uniform. One other plausible Brexit-related event that may arise is the end of the current government and its replacement by Labour; generally viewed as likely to result in economic forecasts being revised downwards.

The behaviour of markets after the EU referendum in June 2016 is perhaps still the best guide to what might happen in the short term if the UK crashes out of the EU with no-deal. There is one important caveat: the referendum result was a surprise and markets had to adjust quickly. This time, markets have time to adjust ahead of 31 October 2019. This means that the impact of the ultimate Brexit outcome is likely to be experienced over time, as markets adjust to new information and as the date of the UK's exit from the EU draws closer.

Implications of a 'no-deal'

The ongoing uncertainty around Brexit is likely to cause volatility in markets in the short term, particularly in the UK, with a no-deal outcome likely to cause the greatest market adjustments. However, the longer-term impact on markets is less certain.

Gilts

The short-term call is less obvious here than elsewhere. Ongoing domestic demand and discretionary foreign demand (which may take a different view on the credit quality of post-Brexit UK Government bonds) may pull in different directions. Yields did fall relative to other developed government bond markets in the wake of the referendum – by c.0.5% at the worst. Arguably, the cut in rates was as important as the immediate shock of the result.

A flight to safety in the short term and subdued growth prospects in the longer term could argue for lower real yields. That said, it is the stability of real yields that has perhaps been most noteworthy in the last couple of years and it seems likely that hedging demand, largely from closed private sector pension schemes, will continue to dominate any impact from domestic economic fluctuations or global valuation comparisons.

As suggested earlier, there is little change in consensus for long-term inflation. However, this may simply reflect the difficulty in predicting the likely direction of inflation as there are potentially conflicting tensions. In the event of a no deal a weaker pound will increase import prices, leading to higher inflation, as will any wage pressure linked to low levels of unemployment. Conversely, a general slowdown in growth or recession will limit the extent of any rise in inflation. However, one predictable outcome of a no deal is that markets are likely to require a higher inflation risk premium for a while, thus pushing real yields even more negative than current levels.

Sterling credit spreads

While it might be expected that investment-grade credit spreads would rise in the short term, the expected impact is generally small. A distinction is drawn between domestic borrowers (where risk premiums may rise) and internationally focused borrowers (generally large, often foreign and assumed to be relatively unaffected). Although the former would include RBS and Lloyds, the investment-grade market is dominated by the latter; in any case, the banks are generally seen as better prepared to weather tougher economic conditions than they were. The sterling high-yield market might suffer more.

Equities

Here, too, the domestic/international split is seen as key. The post-referendum experience of FTSE100 outperforming FTSE250 and UK equities underperforming global averages in terms of a common currency is the template. The global repercussions of a no deal might undermine sentiment for equities in general, although the effect on forecasts of global growth is likely to be very limited.

Unhedged currency exposure

A further short-term fall in sterling is widely expected, which would result in a gain for unhedged overseas assets, but it is less clear that it will be fuelled by monetary easing as it was after the Referendum. There is certainly a view that the BoE will take a dovish stance, but they are thought to consider a hard Brexit as representing a supply shock that would require tighter monetary policy over time on the view that immediate stimulus to a disrupted economy might just feed through to inflation. Therefore, the Bank of England might not cut rates as quickly as they did last time. Nor does sterling look as expensive on longer-term measures now as it did in the middle of 2016.

Brexit scenario analysis

We have considered the impact on the short term funding position of three potential Brexit outcome scenarios. Our focus is on the relative impact rather than the absolute projection of funding levels.

In practice, we cannot predict which of these outcomes is the more likely (although as noted, at present the market appears to be placing more emphasis on a “soft Brexit” outcome), nor what will actually happen to capital markets should one of these outcomes occur. However, the analysis hopefully provides a useful flavour of the range of outcomes that may arise, and the implications for funding.

In selecting the scenarios we have not attempted to introduce a view on the underlying details of any deal, but worked with the following framework:

- a “**soft Brexit**” is one that markets generally support, and that is considered broadly supportive of the UK’s current competitive position. The scenario outcome is one with an uplift to UK GDP growth, modest strengthening of sterling and the expectation of modestly faster future rate rises;
- the “**no-deal**” assumes immediate disruptive elements to trade and ongoing uncertainty over the UK’s competitive position. We anticipate a much bigger adjustment to sterling and prolonged lower interest rates

associated with more marked slowdown in growth. A combination of higher expected inflation and higher inflation risk premium push real yields materially lower. The adjustment to UK property is more severe, but UK equities are kept in positive territory due to the high level of overseas earnings.

- the new “**ongoing uncertainty**” assumes the current impasse in parliament over the acceptance of the negotiated deal continues and the UK agrees repeated extensions to the Brexit deadline. The ongoing uncertainty is likely to lead to an ongoing deferral of investment which will lead to a contraction in UK GDP growth and a gradual further weakening of sterling. Falling demand-side inflationary pressures more than offset the inflationary impact of a weaker sterling. Cash rates and real and nominal yields will likely move lower as growth slows, with real yields moving in lock-step with nominal yields as Sterling induced inflation would be more than offset by the general slowdown in this scenario. A deferral of investment and shunning of UK assets would lead to falling UK equity and property markets and credit spreads would widen.

Some adjustments will evolve after the immediate impact, say over the first two or three years. We have tried to factor these into our assumptions. Long-term outcomes are much more uncertain, and we make no attempt here to suggest which outcome will be better or worse for the UK economy in the long term. Longer-term outcomes will also depend upon many other factors, and as such we do not consider there is material benefit in looking at longer-term time horizons as part of this analysis.

We have not explicitly included a hard Brexit outcome, assuming that this will sit between soft Brexit and no deal outcomes. Moreover, we have not modelled an outcome whereby the UK does not leave the European Union. Although this is a possibility, and on the face of it, the outcome would be seen as more positive for UK growth in the short-term, the potential for associated political upheaval (with unknown outcome or consequences) may be a bigger influence on outcome.

Updated analysis of potential Brexit outcomes

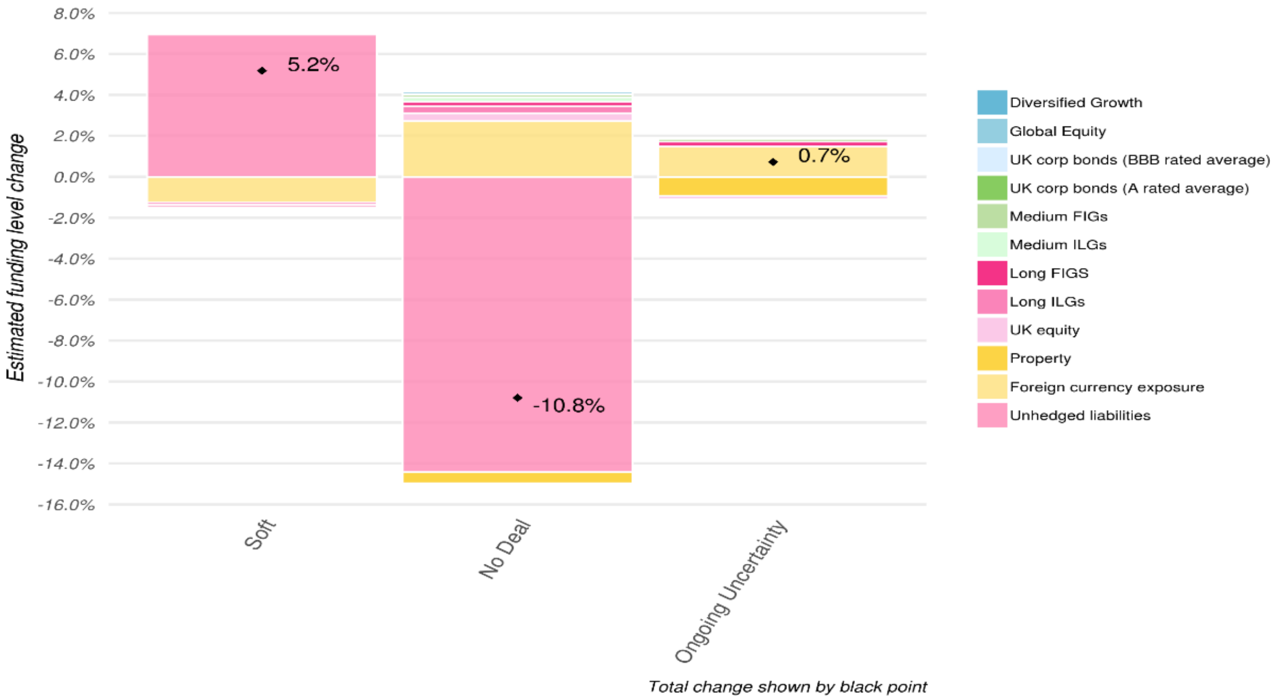
We have considered the relative change in the funding level due to a potential Brexit outcomes. We have updated our assumptions for core economic indicators in the table below to reflect up to date market conditions and our views as at 30 June 2019.

A summary of the assumed economic indicators and returns is set out below.

	Current Consensus	Soft Brexit		No Deal		Ongoing Uncertainty	
	3 years (p.a.)	Immediate	3 years (p.a.)	Immediate	3 years (p.a.)	Immediate	3 years (p.a.)
3 year UK GDP	1.3%		1.6%		0.0%		-0.2%
3 year RPI inflation	3.0%		3.0%		3.5%		2.5%
		Change relative to current consensus					
£ to global basket		+5%		-11%		-2% p.a.	
UK equity		0%		+5%		-2% over three years	
Unhedged Global equity		-4.5%		+10%		+5.5% over three years	
Base rates		-		-0.5%		-0.25%	
Gilt yields		+0.25%		-0.5%		-0.5% over three years	
ILG yields		+0.35%		-0.9%		-	
UK IG corporate yld spreads		-		+0.5%		+0.5% over three years	
UK property		-		-7%		-12% over three years	

An overview of the outcomes modelled is included in the table below

Chart 1 – Potential impact of Brexit on Scheme's funding level for current strategy



The results show that:

- The magnitude of the potential impact of a no-deal Brexit scenario is now lower than we illustrated in 2018. In addition, the potential improvement in funding position in a Soft Brexit scenario is more substantial than we illustrated last year. This in part reflects that markets have priced in a greater likelihood of a no-deal outcome, for example, as demonstrated by the Sterling weakness experienced over the last year;
- Unhedged liabilities (i.e. the extent to which the Fund's assets are not expected to offset a change in the value of the liabilities) represents the largest single risk and driver of outcomes in the more extreme scenarios;
- Unhedged currency exposure is expected to provide some protection in the event of a no-deal outcome or ongoing uncertainty as the sterling would expect to weaken in these scenarios.
- The overall impact of our new 'ongoing uncertainty' scenario is expected to be relatively muted. This is due to various positive and negative factors largely cancelling out. In practice, we can expect ongoing uncertainty to feed into an increase in funding level volatility until the terms of the UK's withdrawal from the EU are known in more detail.

From an investment strategy perspective, the key risks to the Fund's funding position are from:

- a fall in nominal gilt yields impacting short term funding levels and long-term returns;
- rise in inflation expectations; and
- a fall in property values and potential fall in liquidity.

If the outcome is a Soft Brexit then we might expect an improvement in the funding level (of around 5%) due to a rise in nominal gilt yields. However, in the event of a No-Deal outcome then the funding level is likely to suffer due to an expected fall in nominal gilt yields and rise in inflation expectations. Whilst currency represents a significant source of uncertainty regarding potential Brexit outcomes, the impact of a No-deal Brexit on overseas investments is expected to be favourable, given the Fund's overseas exposure is partly unhedged.

We note that the expected impact on the Fund is that the overall funding deficit is expected to increase significantly under a No-Deal outcome while the impact on the funding level is a fall of around 11%.

Implementation and operational considerations

As communicated in our November 2018 paper, Brexit poses potential business-related risks to the Fund's managers and custodians, both in terms of the service they provide to UK clients and the service they provide to EU clients. It is important that the Committee takes steps, as necessary, to ensure the smooth operation of the Fund regardless of the nature of the UK's withdrawal from the European Union.

We recommend that the Fund contacts all of the investment managers and the custodian, to ensure that they do not anticipate any impact on trading or other operational aspects as a result of Brexit.

We recommend continuing to monitor the position and once the precise details of the UK's withdrawal are known (e.g. no-deal, or other form of Brexit), contact each of the Fund's investment managers and custodian again to confirm.

Conclusions

Overall, the Fund remains exposed to the potential (downside) impact of a no-deal Brexit outcome. In particular, the key risks to the funding level are from a fall in gilt yields, rise in inflation and fall in property prices.

Although markets could fluctuate significantly, most LGPS funds and employers are able to take a longer term approach to funding. There are ways in which the Fund could protect funding against the potential downside scenarios we have associated with a No Deal Brexit including where there is greater sensitivity to short term volatility (although these would worsen the position in the event of a Soft Brexit):

- Consider the level of interest rate and inflation hedging from the Fund's protection assets and assess if any changes could be made to manage shorter term funding risks where relevant;
- Reduce or remove currency hedging where it is in place; or
- Look to introduce different investment strategies for long term (contribution rate focussed) and short term (balance sheet focussed) employers.

We note that we have not mentioned property here despite the potential for property markets to suffer in the wake of a No Deal or ongoing uncertainty outcome (and limited upside potential in the event of a Soft Brexit). Property is expensive to trade and therefore we do not recommend any tactical changes are made to the Fund's property allocation.

Interest Rate and Inflation Hedging

Interest rate and inflation risk could have the largest short-term impact on the funding level. Given the long term nature of the Fund, that contribution rates are more important than the funding balance sheet and the fact the LGPS remains open to future accrual, we do not propose any changes to the current interest rate and inflation hedging.

Unhedged Equities

The Fund currently hedges c50% of overseas equity exposure. We would caution against attempting to time currency markets recognising this can be difficult. Our preference is for the Fund to continue to have a long term overseas strategic target currency hedge ratio of at least 50% and do not propose any changes. We also note that in the event of a Soft Brexit, it is likely that Sterling will appreciate and the currency hedged share class will therefore be expected to outperform the unhedged share class.

Risk warnings

Please note the value of investments, and income from them, may fall as well as rise. This includes but is not limited equities, government or corporate bonds, derivatives and property, whether held directly or in a pooled or collective investment vehicle. Further, investments in developing or emerging markets may be more volatile and less marketable than in mature markets. Exchange rates may also affect the value of investments. As a result, an investor may not get back the full amount of the original investment. Past performance is not necessarily a guide to future performance.

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We look forward to discussing this paper with you at the Committee meeting.

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September 2019

For and on behalf of Hymans Robertson LLP

Appendix - Brexit scenarios

We have considered the impact on funding of three potential Brexit outcome scenarios. As before, our focus is on the relative impact rather than the absolute projection of funding levels.

In practice, we cannot predict which of these outcomes is more likely (although since the nomination of Boris Johnson and the appointment of his pro-Brexit cabinet, markets appear to be placing more emphasis on a "no-deal" outcome), nor what will actually happen to capital markets should one of these outcomes occur. However, the analysis hopefully provides a useful flavour of the range of outcomes that may arise, and the implications for funding.

In selecting the scenarios we have not attempted to introduce a view on the underlying details of any deal, but worked with the following framework:

- a "**soft Brexit**" is one that markets generally support, and that is considered broadly supportive of the UK's current competitive position. The scenario outcome is one with an uplift to UK GDP growth, modest strengthening of sterling and the expectation of modestly faster future rate rises;
- the "**no-deal**" assumes immediate disruptive elements to trade and ongoing uncertainty over the UK's competitive position. We anticipate downwards pressure on sterling and prolonged lower interest rates associated with more marked slowdown in growth. A combination of higher expected inflation and a higher inflation risk premium pushes real yields materially lower. The adjustment to UK property is more severe, but UK equities are kept in positive territory due to the high level of overseas earnings, and;
- the new "**ongoing uncertainty**" assumes the current impasse in parliament over the acceptance of the negotiated deal continues and the UK agrees repeated extensions to the Brexit deadline. The ongoing uncertainty is likely to lead to an ongoing deferral of investment which will lead to a contraction in UK GDP growth and a gradual further weakening of sterling. Falling demand-side inflationary pressures more than offset the inflationary impact of a weaker sterling. Cash rates and real and nominal yields will likely move lower as growth slows, with real yields moving in lock-step with nominal yields as Sterling induced inflation would be more than offset by the general slowdown in this scenario. A deferral of investment and shunning of UK assets would lead to falling UK equity and property markets and credit spreads would widen.

Some adjustments will evolve after the immediate impact, say over the first two or three years. We have tried to factor these into our assumptions. Long-term outcomes are much more uncertain, and we make no attempt here to suggest which outcome will be better or worse for the UK economy in the long term. Longer-term outcomes will also depend upon many other factors, and as such we do not consider there is material benefit in looking at longer-term time horizons as part of this analysis.

We have not explicitly included a hard Brexit outcome, assuming that this will sit between soft Brexit and no deal outcomes. Moreover, we have not modelled an outcome whereby the UK does not leave the European Union. Although this is a possibility, and on the face of it, the outcome would be seen as more positive for UK growth in the short-term, the potential for associated political upheaval (with unknown outcome or consequences) may be a bigger influence on outcome.

Appendix – Assumptions

A summary of the assumed economic indicators and returns as at 30 September 2018 used for the purpose of our previous analysis are shown below:

	Current Consensus	Soft Brexit		Hard Brexit		No deal	
	3 years (p.a.)	Immediate	3 years (p.a.)	Immediate	3 years (p.a.)	Immediate	3 years (p.a.)
3 year UK GDP	1.5%		2.0%		1.0%		0.0%
3 year RPI inflation	3.2%		3.0%		3.2%		3.7%
		Change relative to current consensus					
£ to global basket		+5%		-7.5%		-15%	
UK equity		0%		0%		+5%	
Unhedged Global equity		-4.5%		+7%		+14%	
Base rates		-		-0.5%		-0.5%	
Gilt yields		+0.25%		-0.25%		-0.5%	
ILG yields		+0.25%		-0.5%		-1.0%	
UK IG corporate yld spreads		-		+0.25%		+0.5%	
UK property		-		-10%		-15%	

Since 2018 a slowdown in trade and manufacturing has seen global growth and inflation forecasts, including in the UK, drift lower. This will not have an effect on potential impacts from UK-specific risks but has been incorporated in to our base case assumptions below. Repeated rejections in parliament of the negotiated Brexit deal, Theresa May's resignation, and the election of Boris Johnson, an advocate of a leaving without a deal, has seen the likelihood of a no-deal Brexit being reflected to some extent in the level of both Sterling, real yields and the commercial property markets. These developments have been incorporated in to the impacts assumed in the scenarios below as at 30 June 2019.

	Current Consensus	Soft Brexit		No Deal		Ongoing Uncertainty	
	3 years (p.a.)	Immediate	3 years (p.a.)	Immediate	3 years (p.a.)	Immediate	3 years (p.a.)
3 year UK GDP	1.3%		1.6%		0.0%		-0.2%
3 year RPI inflation	3.0%		3.0%		3.5%		2.5%
		Change relative to current consensus					
£ to global basket		+5%		-11%		-2% p.a.	
UK equity		0%		+5%		-2% over three years	
Unhedged Global equity		-4.5%		+10%		+5.5% over three years	
Base rates		-		-0.5%		-0.25%	
Gilt yields		+0.25%		-0.5%		-0.5% over three years	
ILG yields		+0.35%		-0.9%		-	
UK IG corporate yld spreads		-		+0.5%		+0.5% over three years	
UK property		-		-7%		-12% over three years	

Appendix – Modelling methodology

The model takes a simplified approach to modelling a scheme's liabilities; we assume that the liability dynamics can be proxied by a suitably weighted portfolio of long and medium dated index-linked and fixed-interest gilts.

Making this simplifying assumption for the scheme's liabilities we then estimate the scheme's adjusted assets and liabilities for each scenario using the assumed returns as set out above. From this we can calculate the estimated funding level change.

This estimated funding level change is then attributed to the individual assets based on the allocations, adjusted by the funding level, multiplied by each asset's estimated return. The residual is then allocated to unhedged liabilities.

The analysis shown is referred to as a "scenario test" analysis and it examines the impact of 3 possible scenarios on the Scheme's financial position. As with any scenario analysis, the scenarios tested are not exhaustive in terms of the possible (actual) outcomes that may occur in future and over the specified time period. Changing the time period considered or the variables that are flexed in the scenario analysis could produce materially different results. The purpose of the analysis is therefore to inform a discussion about possible outcomes (not certain outcomes nor the likelihood of these possible outcomes or the time frame over which they may occur).