12
PPF risk developments

This chapter looks at the risks facing the PPF and our ability to deliver on our mission. These include risks to our own funding position and the risk of future claims.

Summary

- This chapter contains information on how the PPF manages its risks and on how the risks to which we are exposed, outlined in the previous chapters, might impact our future funding levels.
- We operate a comprehensive enterprise risk management framework which enables us to understand and measure the potential impact of risks on the PPF.
- We operate a stochastic model which enables us to assess the likelihood of us meeting our funding objectives, and which also enables us to consider the impact of possible future stresses and scenarios on those plans.
- There has been a general improvement to scheme funding levels. This and government support over the pandemic has resulted in fewer claims than expected. However, there remains uncertainty about what happens next, notably about the state of the economy and how it is affected by the progress of the COVID-19 pandemic. Known factors which are likely to increase claims include the gradual withdrawal of government economic support, and goods and labour market shortages in some sectors. In some areas we have more certainty such as that provided by the Court of Appeal ruling on the *Hughes* case.

The table below highlights some of the key findings from this section:

Key metric	Result
PoS	95 per cent, up from 83 per cent last year as the funding levels of the PPF and the schemes we protect have improved significantly since March 2020.
Funding horizon and target funding margin	2030 and 10 per cent, unchanged since last year
Key stress	Extreme claims over immediate short term (£12bn deficit): PoS -42pp

Our approach to risk management

Like other financial institutions, we assess our risks using a comprehensive enterprise risk management framework so we can ensure our focus is on the most important risks to our balance sheet. We seek to understand our financial risks using modelling, including sensitivity testing, to help us understand the potential impact of those risks for the future.

In making decisions about our risk management processes the aim is to be proportionate. This means that we always consider the cost of any risk management activities being undertaken and the benefit it will provide to members and levy payers.

We consider our risk under three broad headings – External Environment, Strategic and Funding, and Operational. In *The Purple Book* we focus our attention on the components of those risk types with material financial implications for us, and so do not cover Operational Risk or the many non-financial external environment risks to which we are exposed.

External Environment: risk from the universe

This is the risk that we exist to protect – it is the credit risk that a scheme sponsor fails, possibly resulting in a claim. We are unable to manage the risks in the scheme universe, but must accept them. Therefore, we monitor these risks to understand any implications this may have for us both financially and operationally.

We are protected by TPR, which monitors and sets guidance for DB pension schemes to ensure strong funding levels. This aims to reduce the size of any claim we receive. We liaise with TPR regularly to gain a shared understanding of developments that may change the risk of claims on the PPF, which enables us to understand the possible implications of these expected claims. When monitoring claims, consideration is given both to the potential size of a claim and the likelihood of it occurring. An allowance for these risks is also included within our financial modelling as detailed in the summary of modelling section below. The data in Chapter 4 shows how the size of the aggregate deficit of schemes in deficit (the theoretical maximum risk that we are exposed to) has reduced over the past year. The main contributor to this reduction was market movements in the form of large increases in gilt yields and equity values.

To assess the frequency of claims we monitor key information about employers who sponsor the schemes in the universe. This includes any public credit ratings. Chapter 6 provides information about the historical levels of insolvencies that we have seen.

Economic impacts in the wake of the COVID-19 pandemic and Brexit remain uncertain. The UK Government's COVID-19 support measures are due to be withdrawn and we expect an increase in insolvencies to result. Labour market tightening in some sectors could have knock-on impacts on others. There are also schemes whose deficits are large enough to wipe out our reserves if they claimed, which has always been a key risk for us. We monitor the position of the relevant schemes and their sponsors particularly closely.

Strategic and Funding: risk from our existing assets and liabilities

These risks are similar to those that all financial institutions face, including pension funds and insurance companies. They include the risks of managing our own investment portfolio and the demographic risks we face.

We will accept risk where it adds value to do so or where the costs of hedging are disproportionate. We manage our investment risk by hedging our liabilities closely and by using a bespoke investment strategy which seeks to avoid concentration in the UK economy to which are we exposed via universe risk. This strategy takes a conservative level of investment risk to target a return that exceeds the growth of liabilities over the long term. We accept short-term volatility of our funding level and will ensure that our response is consistent with our long-term funding strategy.

We are willing to accept longevity and other demographic risks; however, we are prepared to transfer this risk to a third party if the risk is significant and hedging costs are reasonable. We use granular estimates of longevity based on socio-economic and geographical factors to ensure that our liability hedging strategy is effectively implemented.

Both investment and demographic risks are potentially impacted in the long term by climate change. We have a comprehensive Responsible Investment strategy which helps mitigate this risk, and are developing approaches to understand the potential impact of climate change on our demographic risk exposure.

Summary of modelling

Members of DB pension schemes rely on the continued financial resilience of the PPF to provide them with a safety net if the sponsors of their schemes become insolvent. The data in *The Purple Book* demonstrates that there is still significant risk in the universe of schemes that we protect.

We use the Long Term Risk Model (LTRM), a Monte Carlo simulation model, to inform our understanding of the funding risks we face, which in turn helps us to manage and protect our finances.

Like any complex modelling exercise, the projections are subject to significant uncertainty and our success ultimately depends on some factors outside of our control. In particular, the model run for the base case makes the simplifying assumption that our investment strategy and broad approach to levy will not change before the funding horizon. Schemes are assumed to transition gradually to a low-risk investment strategy, and to keep paying DRCs to remove underfunding.

During 2020/21 we enhanced the model to provide improved and additional functionality. This will allow us to carry out more comprehensive analysis as part of our review of our funding strategy, being undertaken over 2021/22.

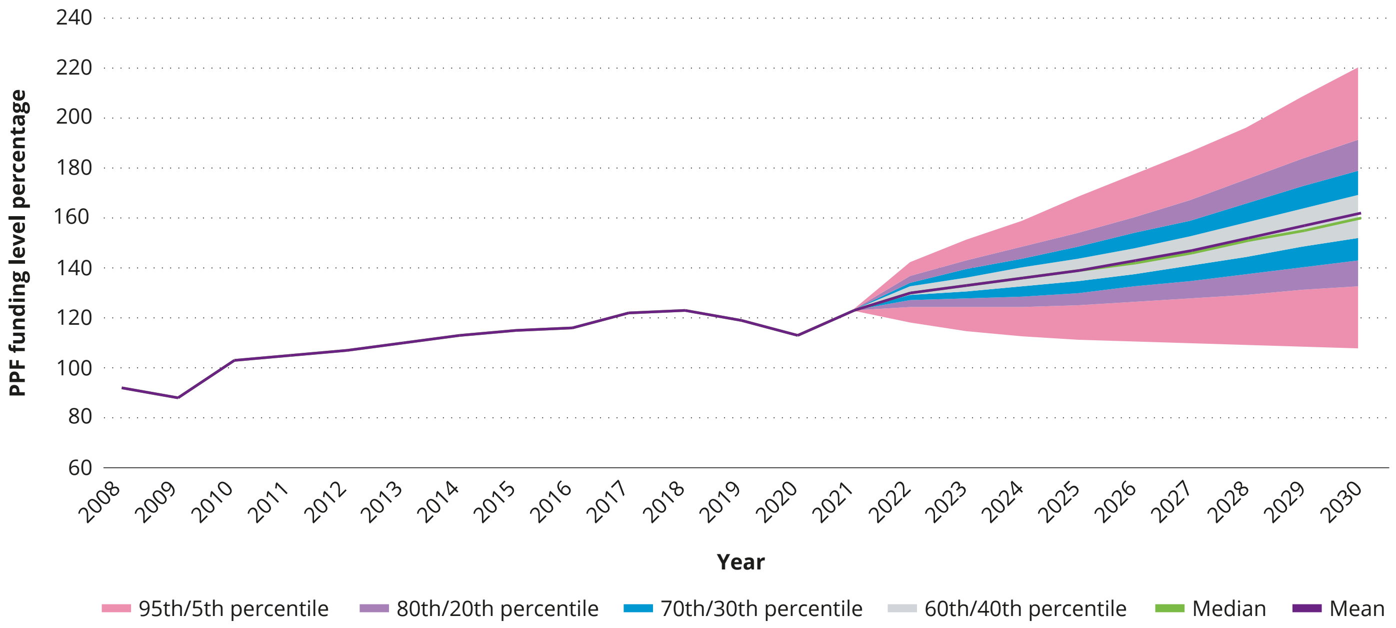
Monitoring our funding objective

Our current long-term funding objective is to be financially self-sufficient by the target funding horizon. The funding horizon is set as the point at which we expect claims to be low relative to the size of the PPF, currently estimated to be year 2030. Self-sufficiency means that we will have accumulated sufficient reserves by the funding horizon to protect against reasonably adverse experience, and we will have little reliance on levy or return-seeking assets. We currently estimate that we need to be 110 per cent funded to ensure self-sufficiency.

The two key metrics that we use to monitor progress against our funding objective are the PoS and downside risk. The PoS is the proportion of scenarios in which we are projected to meet our funding objective, i.e. to have a funding level of 110 per cent or more at 2030. The downside risk is the lowest PPF reserve projected at any time point within the period to the funding horizon measured at the 90th percentile across scenarios.

As at 31 March 2021, the PoS was 95 per cent, and the downside risk was a reserve of £4 billion.

Figure 12.1 | Projections of PPF funding level

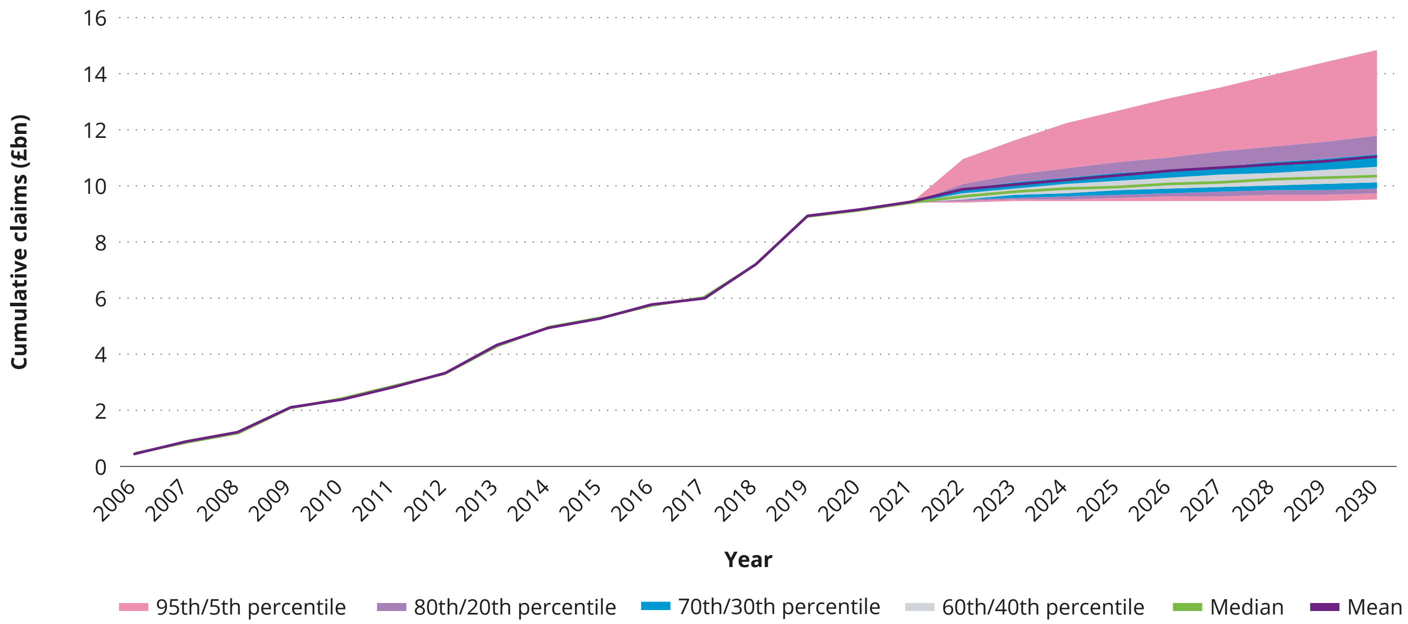


Source: PPF

The fan chart in figure 12.1 shows the history of the PPF funding level as well as the base case projection beyond 2021. It shows that our central projection is for the PPF funding level to rise as investment returns and income from levy exceed claims. As mentioned above, these projections are based on assumptions that our investment strategy and broad approach to levy do not change.

During 2021/22 we will be reviewing our funding strategy and this is likely to result in different central paths for our projections.

Figure 12.2 | Projections of cumulative claims on the PPF



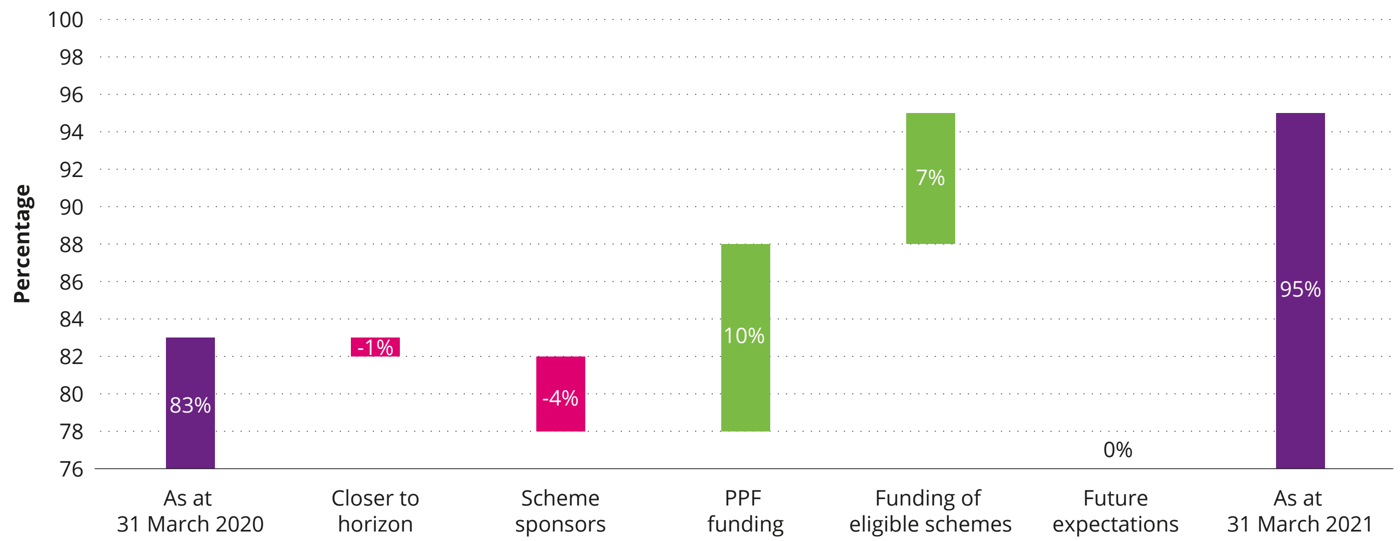
Source: PPF

The fan chart in figure 12.2 shows the history of claims on the PPF as well as modelled future claim levels. As discussed in the section above on the risk management approach at the PPF, the level of claims being made on the PPF in future years is the biggest funding risk we face and is one we cannot control. It is also one of the areas of greatest uncertainty. The most uncertainty is around exactly which schemes might claim, and when those claims might occur. There are favourable scenarios in which we receive fairly small claim volumes, but there is a substantial risk that we could face some very large claims.

Changes over the year

The chart below shows the main changes in the PoS over the year to 31 March 2021.

Figure 12.3 | PoS attribution over the year to 31 March 2021



Note: all figures have been rounded to the nearest whole number.
Source: PPF

The PoS started the year at 83 per cent. This reflected depressed markets at the bottom of the COVID-19-driven market fall, impacting both our own funding and the funding position of the schemes we protect. It also reflected our view that the COVID-19 pandemic would be likely to increase the levels of claims on the PPF due to the worsening position of scheme sponsors.

Over the year, our own funding position and the funding of the schemes we protect have improved significantly. These have been the main drivers for the improvement in the PoS. However, with more detailed information now available about the impact of the COVID-19 pandemic on the economic health of sponsors and their ability to inject money into schemes, we have downgraded our assumptions for sponsors' creditworthiness, which has had a negative impact on the PoS.

Overall, the PoS has improved over the year, up to 95 per cent as at 31 March 2021.

Possible future changes

Like all financial services institutions, including the schemes we protect, the PPF is exposed to other possible circumstances over which we have no or limited influence. The following is a list of some of the most material which we are monitoring at the moment.

COVID-19 pandemic: Although we have not yet experienced an increase in claims attributable to COVID-19, due to government support for businesses, our central assumption is still for an elevated level of claims.

Structural changes to the economy: The COVID-19 pandemic and the effects of Brexit are likely to result in structural changes in the economy, partially cushioned by government policy. Lockdowns and changes to working preferences may affect the demand for certain types of goods and services. Supply is also affected, particularly the availability of component parts and labour in certain sectors. The Bank of England (BoE) has also forecast a rise in CPI inflation, in the short term driven mostly by higher energy prices, and the medium-term outlook for inflation is still uncertain. These issues may adversely impact the viability of sponsoring employers, which affects our biggest risk. The value of our financial asset values may be affected too. We monitor these risks closely.

Commercial consolidators: Interest in consolidator vehicles continues to advance. However, the shape and size of the market are relatively unclear so at this stage we have made no specific adjustments in our financial modelling. TPR has set out guidance for consolidators which indicates that the risk these new models pose to our ability to meet our funding objectives will be limited. At the time of writing no consolidators have been approved by TPR.

TPR's consultation on a new DB funding framework: The second consultation on the drafting of the new code of practice is due to take place in the second half of 2021 at the time of writing. The aim of the new framework is to increase the security of the benefits that have been promised to members of DB schemes, which also has the impact of reducing the likelihood and scale of claims on the PPF.

Climate change: Climate change could, over the medium to long term, have a significant impact on the level of claims we receive. This is due to both impacts on the value of scheme asset portfolios and on sponsoring employer business models. Increased requirements on pension schemes for disclosure are likely to drive changes in approach to investment. Considering the impacts of climate change on our investments is one of our three key priorities within our Responsible Investment strategy. We finalised a climate change policy and strategy in 2019, and have been active in assessing and managing climate-related risks and opportunities across our investment portfolio. We follow the guidance of the Task Force on Climate-related Financial Disclosures (TCFD) in assessing and managing investment decisions around climate-related risks and opportunities. We have engaged with the Paris Aligned Investment Initiative (PAII) and other initiatives to improve our management of these risks. Further information can be found in our Climate Change and Responsible Investment reports[22].

Sensitivities

The LTRM output has been tested for sensitivity to a range of modelling assumptions. A selection of the more significant sensitivity tests is shown in figure 12.4. The sensitivity tests aim to provide an insight into how the PoS might be affected if future experience is not as expected relative to the base case, best-estimate assumptions.

As the PoS has increased between 31 March 2020 and 31 March 2021, the PoS result has become less sensitive to the assumptions used. So the sensitivities presented in figure 12.4 are smaller than the comparable sensitivities from previous years.

Figure 12.4 | Sensitivities

Base case at March 2021	PoS; 83%
Assumption	Change in PoS
Sustained higher nominal yields *Nominal gilt yields at time zero are shifted upward by about 2pp, to 2.85% at the 10-year duration and to 2% at the one-year duration. Yields remain at these levels for the full projection period*	+3pp
Lower life expectancy *Modelled mortality is adjusted so that a male aged 63 lives on average one year less*	-3pp
Lower life expectancy *Modelled mortality is adjusted so that there is no allowance for improvements in mortality rates for the next five years*	+1pp
Fall in value of PPF assets *The value of return-seeking assets as at the valuation date (excluding those which are used to value hedge liabilities) is assumed to decrease by 10%*	-3pp
Lower returns on growth assets *Growth asset returns are one percentage point p.a. lower*	-3pp
Extreme claims on the PPF over the immediate short term *Simulated immediate claims totalling £12bn, where PPF starting assets increased by £20bn and PPF starting liabilities increased by £32bn*	-42pp
Higher PPF expenses *Non-investment expenses are assumed to be 10% higher than assumed in the main valuation. (No change to investment nor wind-up expenses.)*	-0pp
Lower PPF levies *The PPF levy collected is lower by 10%*	-0pp

Note: all figures have been rounded to the nearest whole number.

Source: PPF

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https://www.ppf.co.uk/sites/default/files/file-2020-08/PPF_32198_RI_Report_2019-20.pdf