Sustainable funding in volatile times

Our mission is to pay all of our current and future members for the rest of their lives. In order to do this, we charge a levy on eligible pension schemes and seek to generate returns on the assets we hold.

To help keep the costs to levy payers stable, we model our funding over the long term towards an assumed point which we call our funding horizon – currently 2030.

As the funding horizon draws closer, our approach will need to shift to ensure we have neither too much nor too little in reserve.

Funding position

Our funding ratio (see definition on page 180) as at 31 March 2020 stood at 113.4 per cent. This is a 5.2 percentage point decrease year-on-year, which is a result of market turmoil in the last few weeks of the year.

We have £36.1 billion in invested assets, an increase of £4.1 billion year-on-year, and total consolidated reserves of £5.1 billion – a decrease of £1.0 billion from last year.

At the end of the third quarter our assets, reserves and funding ratio were significantly higher than at 31 March 2019, only declining as the coronavirus pandemic affected global markets.

However, thanks to our hedging strategy, the Fund was well protected – to a far greater degree than many of our peers. Our liability-driven investment (LDI) strategy protects the Fund from changes in inflation and interest rates. It is for this reason that we have been able to maintain a positive funding level.

Our reserves mean that we have £5.1 billion over and above what we estimate is needed to pay every current member and their dependants their full PPF benefits for life. The reserves exist to protect us against the risks we will face in the future.

The decrease in our reserves reflects the impact of markets' reaction to the pandemic on our return-seeking assets.

There were 36 new claims in 2019/20, up from 23 the previous year, but the value of these claims was lower – £0.3 billion compared to £1.7 billion in 2018/19, which included a single claim of £1.5 billion.

The reduction in our reserves this year is a reminder that we cannot be complacent. Many of the schemes we protect are underfunded, and it is likely that many schemes' funding positions will have worsened as a result of market volatility – particularly those with relatively high-risk investment strategies. We are also prepared to face an increased level of claims due to higher insolvency rates.

This is the risk the PPF was created to accept. Our funding strategy aims to manage the impact of this risk and to bring us to a position of self-sufficiency after our funding horizon, even if the trajectory is unsteady along the way.

Our low-risk, long-term funding strategy is designed to withstand uncertainty: despite the recent market instability, we are well-equipped to weather the storm and achieve our funding objective.

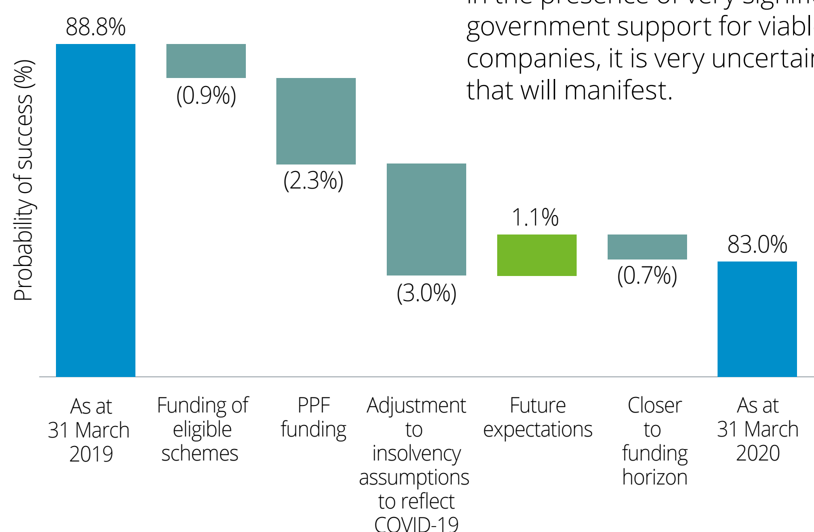
Understanding our biggest risk
See pages 30-31

Probability of success

KPI 3

The measure we use to monitor progress towards our funding target is our PoS, which we estimate quarterly using the LTRM.

Probability of success



The PoS started the year at 89 per cent before rising above 90 per cent for most of the year. At 31 March 2020 the PoS was 83 per cent, which at this stage of our development still indicates a good level of confidence that we remain on track to meet our funding target.

In 83 per cent of the scenarios modelled we have a margin of at least 10 per cent at the funding horizon. Like any complex modelling exercise, our projections make significant simplifying assumptions, in particular that we make no significant changes to funding strategy before the horizon, and they are subject to significant uncertainty. Our focus as a business is to prudently and actively manage all of the factors within our control and so in the event of a further material decline in PoS we would look to manage those factors to mitigate the risk of underfunding at the horizon.

At this year end, the uncertainty in our projections is more than usually high, as a result of the coronavirus crisis. There is more uncertainty than normal in our estimates of the current financial strength of the pension schemes we protect, as we need to make some high-level assumptions about the impact of the significant recent market volatility on their asset values. We are also facing a more uncertain claims environment than usual. It is clear that insolvency risk has increased, but at this early stage in the development of the expected worldwide recession, and in the presence of very significant government support for viable companies, it is very uncertain how that will manifest.

5.2%

2019/20 investment return

The chart shows the main drivers of the change in PoS from last year end to this. The main driver of the change is the environment caused by the pandemic, reflected in the funding levels of schemes we protect, PPF funding and the changes to our insolvency assumptions. This has been somewhat offset by the standard assumptions in the model about the future, which work out as a small increase in observed PoS.

Finally, it can be seen that since we are one year closer to our expected funding horizon, there is less time to recover from any possible adverse development.

Investment performance

KPI 18

In the last quarter of 2019/20 the COVID-19 pandemic caused market moves of an unprecedented speed, and a depth which had not been seen since 2008.

Thanks to our robust investment framework, while there was a negative impact on the portfolio of risk assets, our LDI strategy performed extremely well and our Strategic Asset Allocation performed in line with our expectations, given the economic backdrop.

Our investment strategy is built to withstand market shocks from time to time. Additionally, the portfolio was below our strategic risk target as we entered the final quarter of the year as we had earlier taken the decision to reduce risk when assets began to look overvalued.

Overall our investments returned 5.2 per cent – the same as in 2018/19 – which was very positive given the market situation. On a one, three and five-year basis our investment portfolio continued to outperform the associated asset class benchmarks.

Refreshing our Long Term Risk Model

KPI 1

Our LTRM informs our understanding of the funding risks we face and helps us explore our financial position as we consider how a range of possible versions of the future might unfold. It takes into account existing assets and liabilities and how they might develop over time, possible claims on the PPF from eligible pension schemes and the assets and liabilities claims might bring, and possible levy income. The LTRM produces the PoS – the principal measure of our progress towards achieving our funding objective.

Our existing LTRM has served us well, but as we move closer to our funding horizon we need a tool that is more flexible and adaptable and one that allows us to be increasingly responsive to the needs of the organisation. We need to make informed decisions at an ever-increasing pace. We are developing a new model which will allow us easier access to information about how the organisation could evolve in the future. An improved level of information and insight will allow us to shape and evolve our strategies and activities so we can assess our confidence that we remain on track to achieve our objectives.

After a comprehensive review of the tools and systems available to us we awarded a contract to a supplier to provide us with modelling software and help us redevelop the LTRM.

The first stage of redevelopment, which we implemented in August 2020, was a milestone in increased productivity and capability to undertake a wider range of risk analysis with better operational control. The next stage will see a major project to develop the model throughout 2020/21, introducing increased functionality to meet the modelling requirements of key stakeholders.

Our long-term sustainability, governed by our funding strategy, is fundamentally important to our success in providing a secure future for our members. The new model will provide the right platform and tools for us to a make a step-change in how we manage and approach our balance sheet risk in the future, building the right foundations for a full review of our funding strategy throughout 2021/22.

Our levy methodology

KPI 1

In December 2019 we published our first consultation with Dun & Bradstreet (D&B) to seek stakeholders' views on our proposed approach to the measurement of insolvency risk for the 2021/22 levy year.

The existing insolvency risk methodology has been shown to be working well and only limited changes were proposed, largely in response to stakeholder feedback.

The first levy invoices to be calculated with D&B are expected to be issued in autumn 2021, based on monthly scores from April 2020 to March 2021.

Transparent and stakeholder-friendly levy invoicing
See page 46

> Our proposals for the measurement of insolvency risk build on the strengths of our existing model. The new services we are introducing – particularly the new portal – are important developments, making it quicker and easier to understand and engage with insolvency risk scores.

David Taylor
Executive Director and General Counsel

Working with troubled schemes

Contingency planning
Experience has shown us that a significant portion of the schemes which enter PPF assessment following an insolvency event should have been better prepared for an effective entry into the PPF, at what is an uncertain time for members. This poses risks to scheme members and the PPF.

From the cases we have seen to date, many of the issues faced could have been avoided or largely mitigated had trustees received better support and guidance on these risks and suitable contingency plans been put in place before insolvency.

Through extensive engagement with industry professionals and The Pensions Regulator (TPR) we have produced guidance and offered support for trustees on appropriate contingency planning steps that could be taken. The guidance aims to encourage trustees to understand the risks to their schemes of not preparing for potential employer insolvency, and to take steps to put effective contingency planning in place. We published this guidance in April 2019 and launched it with a series of events and communications, which have continued throughout the year. Since publication, the guidance has been downloaded more than 900 times and was shortlisted for 'Best Risk Management Exercise' in the 2020 Pensions Age Awards.

New panel of firms to provide PPF assessment services
In February we announced the appointment of nine specialist firms to a new panel which will provide the administration, actuarial, support and consultancy services we need to take schemes through PPF assessment.

We will continue to switch between our in-house and outsourced models of handling schemes in assessment (SIA) to help manage the peaks and troughs of claims experience.

Restructuring and insolvency
When a sponsoring employer suffers an insolvency event we adopt the creditor rights of the scheme trustees and seek to recover as much as possible towards the cost of members' pensions. Sometimes we engage in restructuring proposals for sponsoring employers facing insolvency.

Our Restructuring and Insolvency team remains actively engaged with our partners and stakeholders to identify cases which may make a claim on the PPF. We aim to engage early with the employers and trustees to discourage pension dumping and maximise returns in the event of insolvency. This approach helps to limit the impact on our levy payers. Our team works closely with TPR and, if there are concerns, TPR assesses whether to use its powers.

We only take part in a restructuring or rescue if the proposal meets specific criteria. These strict principles are designed to make sure the pension scheme is in a much better financial position than if we had done nothing. We will take part in restructuring if it means the return from the employer will be better than if the business had been simply left to fail. It usually involves removing the pension debt from the company, allowing it to continue to trade with a positive cash flow and potentially make a profit.

We believe a planned entry into PPF assessment allows for the best member experience. To that end, with the support of TPR, we also encourage the appointment of our recommended experts – such as those on our trustee and pensions administration panels – to complex or high-profile cases before insolvency.

Case study

A flexible approach to restructuring

Following the administration of John Sutcliffe & Son (Holdings) Limited in February 2016, the company's pension scheme entered PPF assessment while the administrators sold its assets. One of the assets was its subsidiary company, John Sutcliffe & Son (Grimsby) Limited, which was also a scheme employer and faced insolvency due to the size of its pension liabilities.

The company was otherwise profitable and cash generative but value would be lost for all stakeholders if it had entered administration or liquidation. The majority of the economic value on insolvency would pass to the scheme and we recognised that the best way to maximise the return for the PPF was to avoid a destructive insolvency process and take any future upside. This was achieved with the support of TPR through a Company Voluntary Arrangement, completed in April 2019, whereby a better immediate cash return was generated and we took a 90 per cent controlling equity interest. Other creditors, which were small in value, were unaffected, and business and jobs were preserved in the hope of additional greater returns for the PPF in future.

This approach was not without risks, but taking a more flexible approach when confronted by the different circumstances of individual schemes is the right thing to do. We closely monitor the performance of the company due to the risks with this approach. Such flexibility, through engagement before an insolvency event, also allows more value preserving options to be considered and allows us to put in place plans to ensure that schemes move smoothly into and through PPF assessment.

Although this scheme does not represent a large claim on the PPF, it is a good example of how taking a flexible approach can produce better results, and acts as a potential model for future situations. In taking this approach, our aims have been to provide reassurance, confidence and clarity to the stakeholders, trustees and scheme members.

1,000th Scheme

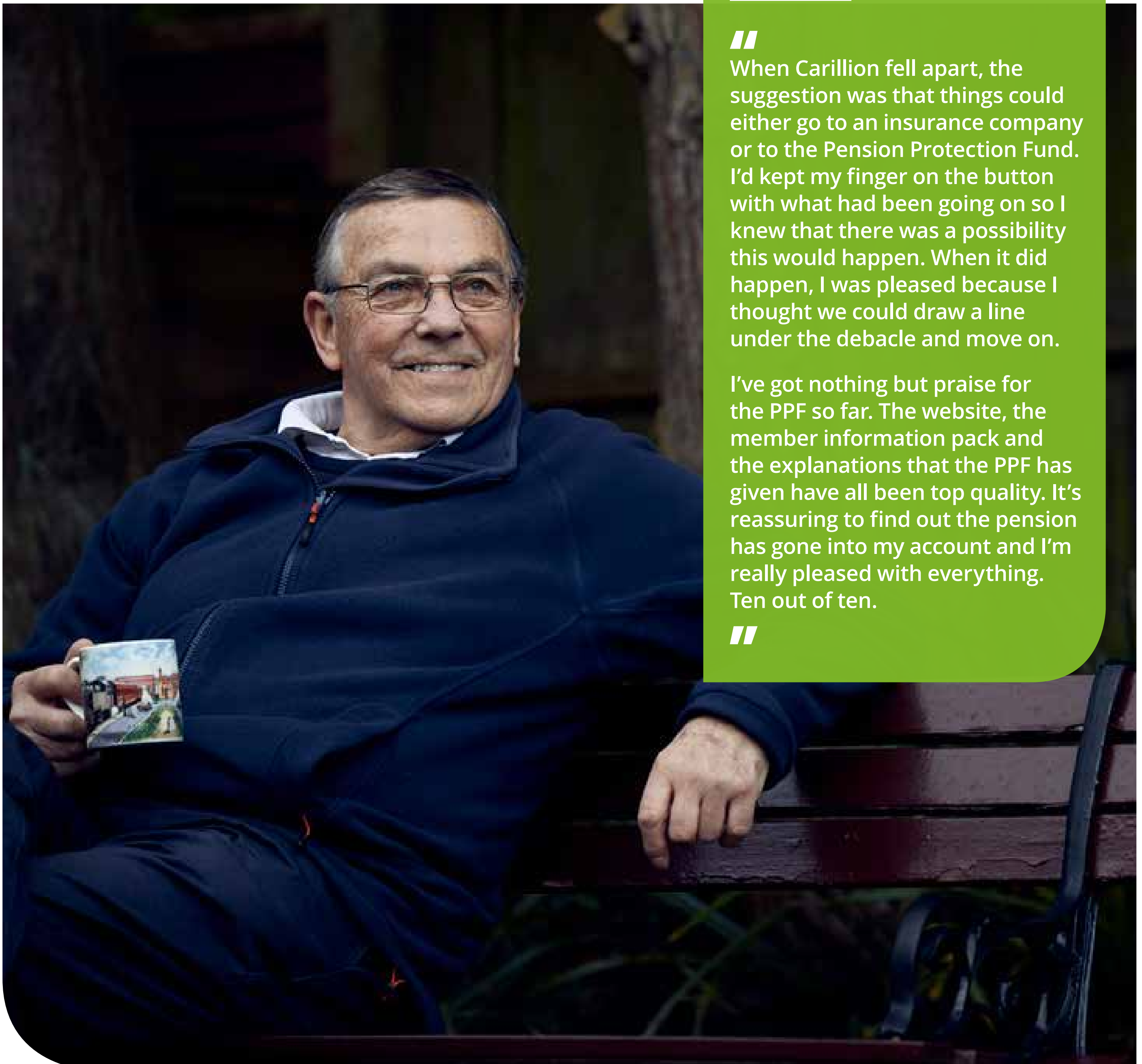
On 9 January 2020 the Carillion Rail (GTRM) Pension Scheme transferred to the PPF, securing the retirement benefits of almost 4,000 members. The scheme became the 1,000th to transfer to the PPF since we opened our doors in 2005. The scheme was severely underfunded, so without the PPF members would have received substantially less than their promised benefits.

Case study

John Brown, Lancashire
PPF Member

"When Carillion fell apart, the suggestion was that things could either go to an insurance company or to the Pension Protection Fund. I'd kept my finger on the button with what had been going on so I knew that there was a possibility this would happen. When it did happen, I was pleased because I thought we could draw a line under the debacle and move on.

I've got nothing but praise for the PPF so far. The website, the member information pack and the explanations that the PPF has given have all been top quality. It's reassuring to find out the pension has gone into my account and I'm really pleased with everything. Ten out of ten."



Our approach to understanding and managing the risks we face

KPI 14

The management and taking of risk is critical to our ability to achieve our strategy and objectives. Over the Strategic Plan period we will continue to build on our risk expertise, ensuring that we have a framework and tools for understanding and managing all the risks we face. We have made great progress in the first year of the Plan.

Risk management framework
In 2018/19 we refreshed our RMF design: a single, comprehensive framework that covers all sources of risk and that is appropriate for our future plans and strategy. During 2019/20 we have delivered a number of the components of this RMF including the risk strategy, risk appetite statements and risk universe.

Risk strategy
We developed a risk strategy which sets out our intentions for the management of risk to ensure that risk-taking enables the achievement of business objectives and protects the interests of our stakeholders.

Risk appetite
We updated our risk appetite statements and published them on our website. These enable us to approach risks consistently and help us to prioritise the most significant risk exposures. They balance opportunity and threat and provide clear direction for executive decision-making.

Risk universe
We reviewed and refined our risk universe, which outlines the risk types to which we are exposed. As a tool, it facilitates risk identification, risk ownership and risk classification and supports consistent aggregated risk reporting.

Risk types are grouped into broad categories as follows:

- external environment (e.g. climate change; likelihood of future claims);
- strategic and funding (e.g. liabilities; assets); and
- operational (e.g. legal/regulatory; conduct).

The improved risk universe articulates the risk types that we may face in achieving our business objectives. One of the key objectives of the RMF is to ensure that we have parity of risk assessment across the PPF. This requires us to compare potential risk exposures across the PPF universe of risk, so that we have a meaningful and consistent view of importance. To this end we have extended our risk classifications to give a more nuanced view, using consistent language around impact and likelihood. We have embedded the new approach within operational risk and are now rolling it out to strategic and funding risk.

Did you know...

- If a risk affects our funding level in the short term we will make sure our response is consistent with our long-term funding strategy.
- We make sure that we can always meet foreseeable requirements for cash, both in normal and stressed market conditions.

Understanding our biggest risk

The funding of the schemes we protect and the strength of their sponsors combine to make up the biggest risk we face. While the risk is not within our control, by seeking a detailed understanding of it we can plan and prepare.

Each year we compile and analyse data on the schemes we protect, and publish this data in 'The Purple Book'. This is an important part of our RMF. The data gives us an in-depth understanding of how the universe of schemes we protect is changing.

Understanding these trends helps us paint a realistic picture of how this landscape might look in the future. This helps us to model the level of claims the PPF may need to absorb in years to come, which, when combined with information relating to our membership, helps inform decisions on future levy and investment strategy.

It tells us about the demographic, funding and investment characteristics of these schemes, as well as steps being taken by trustees to reduce future funding risk and hence the risk of claims on the PPF.

It also provides some comparable information on the demographics of our membership along with information on historic claims on the PPF and the levies we have received.

This information all comes together to give an insight into the claims we expect in the future and how our funding might evolve.

Recent trends

Data for the most recent 'Purple Book' was taken at 31 March 2019. It showed a continuation of the trends we have seen over the last few years. Schemes are continuing to take de-risking measures, such as moving from investing in equities towards bonds. There are fewer schemes allowing new accrual of benefits. The universe is continuing to shrink as schemes wind up or transfer to the PPF, albeit at a slow rate.

Our risk exposure

Despite all this, even before the most recent market turmoil caused by the coronavirus pandemic, there were still a significant number of schemes that remained underfunded. At the time the data was taken, the proportion of schemes in deficit was 57 per cent, with an aggregate deficit in those schemes of £160 billion.

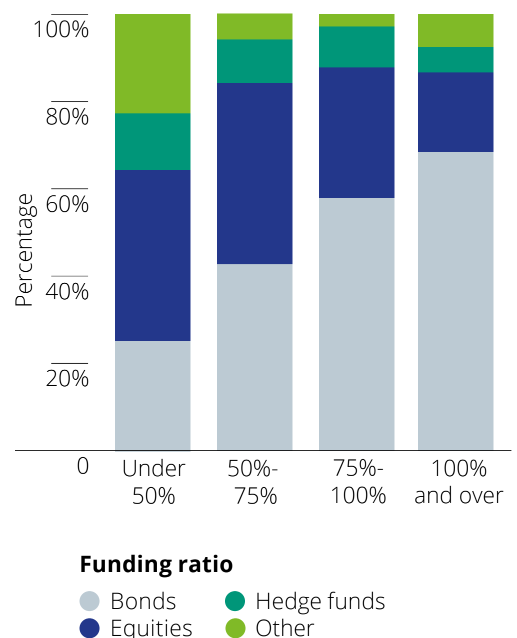
This number is significant as it represents the size of potential claims on the PPF. It is a volatile number, driven by market changes in asset values and yields. Our reserves of £5.1 billion are a fraction of this amount. While we do not expect all these potential claims to crystallise, our aim is to understand this risk as best we can so that we are as well placed as possible for those claims we do incur.

Correlation between scheme underfunding and risk

Funding ratios have been much more stable over the years for overfunded schemes compared to underfunded ones. This reflects the different funding strategies adopted by schemes. Well-funded schemes tend to hold far fewer risky assets, instead choosing to invest in assets that much more closely match their liabilities. We see this strategy reflected in our own funding position, which is generally stable thanks to our defensive investment strategy.

The difference in investment strategy between schemes with different funding levels is very pronounced. Overfunded schemes have on average 70 per cent of their assets in bonds – whose value responds in similar ways to their liabilities – compared with just 25 per cent for those with a funding level below 50 per cent.

Weighted average asset allocation by s179 funding ratio



What this means for the PPF
Our modelling shows there is an 83 per cent probability that we will be at least 110 per cent funded by 2030 if we continue with our current approach to the levy and investment.

In practice we will not simply let the current approach roll forward unchanged – our focus is to manage funding prudently and to manage our balance sheet effectively. Over the last 15 years we have improved our ability to do so and our understanding of our risks.

To this end, we are currently rebuilding the LTRM, which underpins our analysis (see page 24), and we are preparing for a complete review of our funding strategy in 2021/22.

The PPF 7800 Index showed that the total deficit of the schemes in deficit at the end of March 2020 was £254.1 billion (2019: £159.8 billion). This figure has been significantly impacted by the disruption to global investment markets caused by the coronavirus pandemic.

We are using this up-to-date information to inform our best estimates of what claims might affect us in the future. We do this by combining the estimates of scheme funding that underlie the PPF 7800 Index with estimates of sponsor strength to assess possible claim levels.

In doing this we take into account both the different impacts that the pandemic might have on different sectors and sponsors and the support available to those sponsors from the various government intervention schemes.

Our current estimate is that allowing for expected claims over the next year or so our funding level is likely to remain comfortably above 100 per cent – although the risk level remains high as we are exposed to individual large claims or to an aggregation of smaller claims.

In the unlikely event that we look like we would not meet our funding objective, there are levers at our disposal, such as changing our investment strategy (e.g. to take more risk) or increasing the levy. Only in extreme circumstances would we reduce the compensation we provide.

Overall, we remain on a strong footing to continue protecting the UK DB pensions universe.

See page 68

Did you know...

- This year we asked people who downloaded 'The Purple Book' about how they use it, which sections they find most useful and what else they would like to see in future editions. Feedback was very positive, with 100 per cent of respondents saying they find the publication useful. We will use the feedback to make improvements to future editions.
- **Stakeholder comments:**

  "It is an indispensable source of information on private sector DB, and is greatly appreciated."

  "A unique and incredibly valuable publication."

  "A terrific document in which its authors should take pride!"

Responsible investment

KPI 2

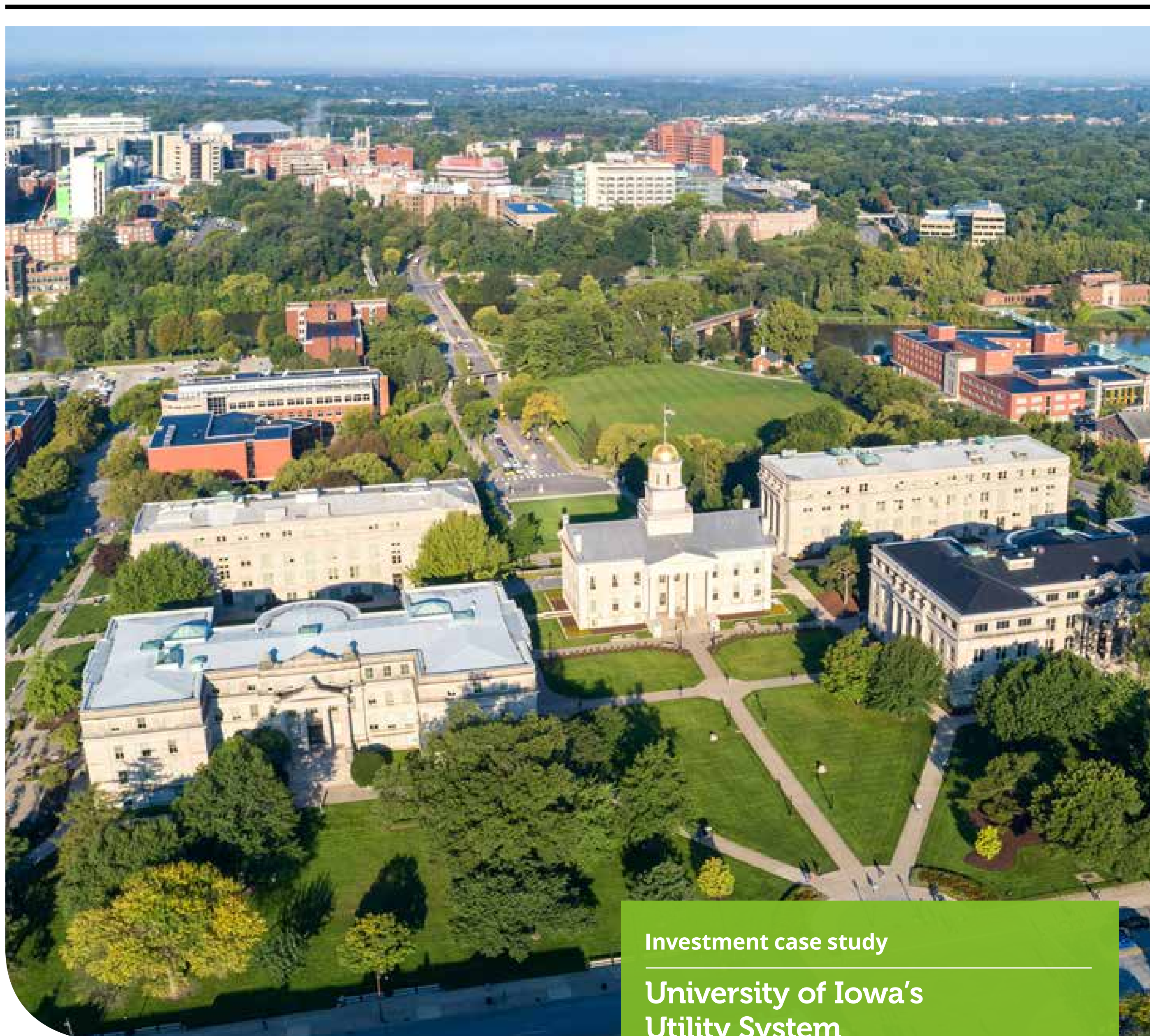
We are committed to RI. Our RI strategy integrates material ESG issues into our core investment process, better informing decisions and enhancing the value of our assets.

While we take account of all relevant ESG factors, we give particular consideration to climate change, as we perceive it to be a systemic issue that presents considerable risks – as well as opportunities. We believe that climate change could present financial risk to assets, with the potential to affect their value across the short, medium and long term.

Another focus is integrating D&I into our manager selection process and also within voting and engagement. For our listed equities, company performance on board composition and broader D&I within the workforce is reviewed, which informs engagement objectives and our decisions on how to vote at company AGMs. More recently, we integrated questions about diversity policies and initiatives into the selection and due diligence process of our external managers.

More generally, we actively engage with our managers on their ESG processes, outcomes and stewardship activities. We expect regular dialogue and reporting from them, and are keen to see continued progress as best practice evolves. We continue to collaborate with the Institutional Investors Group on Climate Change (IIGCC) and the Climate Action 100+ initiative to enhance our stewardship of climate-related issues across specific high-risk companies and at a broader policy level.

As a signatory to the PRI and supporter of the Financial Stability Board's Task Force on Climate-Related Financial Disclosures (TCFD), we have pledged to be transparent, and this year we are publishing our inaugural RI report to outline our progress on our ESG priorities in further detail.



Investment case study

University of Iowa's Utility System

We recently committed to a co investment in the University of Iowa's Utility System, a 50 year regulated concession within the core infrastructure sector in the US. The asset is expected to generate a strong return with low volatility while fully exploring the development of renewable projects to transition away from a fossil fuel system, minimise energy costs and improve sustainability on campus.

Photo – Image courtesy of University of Iowa

Task force on climate-related financial disclosures (TCFD)

In 2018, we formally expressed our support for the TCFD and this is our first disclosure in line with the framework. As an asset owner, the TCFD's recommendations guide us to identify, assess and manage climate-related risks within our investments, including our external managers' application of the recommendations. Using the four core elements – governance, strategy, risk management, and metrics and targets – we report on how we are considering the risks and opportunities, and our strategies for mitigating and realising them.

Our climate-related governance structure

PPF Board	Highest governing body with oversight of climate related issues.
Investment Committee (IC)	Responsibility for developing and maintaining the Fund's RI principles and policies, including climate-related, is delegated to the IC.
Investment Team	Led by the Chief Investment Officer (CIO). Responsibility for ensuring adherence to the RI framework and associated policies, and integration of climate change policy across all asset classes, both internally and externally managed.
ESG Team	The ESG team, as part of the Investment team, provides support and expertise, oversees appropriate implementation of the RI framework, engages with portfolio managers and monitors investments for climate related risks and opportunities. The ESG team provides the Board and IC with quarterly reporting on the progress of climate related risk management within the Fund.

Progress in 2019/20

Our climate change policy was reconfirmed by the IC and the Board in 2019/20 and will continue to be reviewed annually.

We also implemented the RI framework and management of climate-related issues by the Investment team in accordance with our Statement of Investment Principles (SIP).

Strategy

We are committed to understanding how our investments might contribute to and be exposed to material climate-related risks and opportunities, which can emerge in the short, medium and long term. Our climate change policy directs our considerations as our understanding of the risks and opportunities evolve. We are invested across a range of liquid and illiquid assets so these issues impact our overall investment strategy. This is a key strategic priority for the organisation, with specific milestones in our three-year Strategic Plan and 12-month Business Plans linked explicitly to our ESG and climate-related risk management. Progress against these milestones is reported to the Executive Committee (ExCo) on a quarterly basis.

Climate and ESG considerations are embedded throughout our entire investment value chain, from manager selection to monitoring portfolios and stewardship activities. As a proportion of our assets are externally managed, we expect our managers to meet or exceed our ESG standards and to continue evolving in line with best practice. Formal commitment to ESG and climate-related risk management and reporting is included in binding legal documentation such as management agreements and side letters.

Progress in 2019/20

In 2019/20, we started to identify which climate-related factors could impact our investments, and recognise that certain risks have different likelihoods or magnitude of impact on specific asset classes.

Examples of potential risks and opportunities identified

- Transition risks in the shorter term that may impact earnings (such as carbon pricing or taxes)
- Technology risks that may affect market positioning as companies develop superior technology to build industry-based solutions
- Physical risks in the medium to long term that may impact infrastructure and property in certain locations; and
- Climate-related opportunities within some asset classes, such as sustainable forestry assets, offer a viable nature-based solution to carbon mitigation.

We also seek to assess the resilience and alignment of our investment strategy, taking different scenarios into consideration. Over the last year we have been building an implementation plan for the assessment and management of material climate-related risks, starting with our Public Equity and listed Corporate Fixed Income portfolios. To help us, we have reviewed a few scenarios as illustrated by the IIGCC, and largely based on the International Energy Agency scenarios. Initial assessments include estimating the impact on the portfolio of increasing carbon legislation, exposure to low-carbon technologies, and alignment with the Paris Agreement commitments under different temperature outcomes.

We have recently started assessing acute and chronic physical risks, covering a range of hazard types, including coastal flooding, extreme heat/cold, and precipitation, focusing on the most exposed regions, sectors and issuers to inform allocation decisions and future strategy.

Risk management

We use a variety of sources of robust data (both open-source and paid research) to assess our exposure from a top-down and bottom-up perspective. This is being integrated into our Portfolio and Risk Management system, to allow us to track our exposure across fund, asset class/strategy, manager, sector, region and issuer, on an ongoing basis. This includes quantifying carbon exposure, stranded assets screening, forward-looking scenario analysis, and identifying green revenue-associated economic activity.

Progress in 2019/20

The findings from the portfolio and risk monitoring provide a useful steer towards potential ways to try to reduce exposure to climate-related risks. We are currently exploring an option to reduce our exposure to emissions-intensive companies and fossil fuel-based revenues within our equity allocation through a climate-aware index. For our actively managed assets, the insights direct discussions with our managers, including challenging them where relevant – for example, whether they have factored the risk in to their valuation of the investment.

We view active stewardship as a key component for the management of climate risks and are supportive of the newly published UK Stewardship Code. We are a strong advocate for an engagement approach, as a critical risk management tool. We closely monitor engagement and voting practices for the most exposed holdings, in active and passive funds and beyond just our public equity holdings, expecting our external managers to deliver tangible engagement results.

We also work directly with our engagement provider to execute specific engagement and voting activities on our segregated accounts. We will consider supporting shareholder resolutions that encourage appropriate improvements in company management and disclosure of material climate-related financial risks, and are supporters of investor initiatives such as Climate Action 100+ and the Transition Pathway Initiative (TPI), which inform our data-driven engagement monitoring. We also participate in the IIGCC's collaborations, and support its engagement with policymakers and governments. Where we invest in sovereign debt, we engage with governments either through our own engagement (with the UK's Debt Management Office) or via our managers.

Metrics and targets

We expect our managers and underlying issuers to adopt the TCFD guidelines on disclosure and reporting publicly or to CDP (formerly the Carbon Disclosure Project), as well as commit to a strategy of decarbonisation. There are a variety of metrics and indicators that investors can use to assess climate-related risks and opportunities, which can then be tracked on an ongoing basis to measure progress in the management of these risks.

Progress in 2019/20

We have started by calculating carbon footprint metrics of our liquid portfolios, as an initial proxy for the carbon exposure of our liquid investments.

Metrics
Carbon footprint metrics include:

- Weighted average carbon intensity of the portfolio (tonnes CO_2e/USDm)
- Total carbon emissions (tonnes CO_2e)
- Portfolio carbon intensity of companies per unit revenue generated (tonnes CO_2e/USDm)
- Exposure to carbon-related assets as a share of assets under management in the portfolio; and
- The Scope 1 + Scope 2 carbon footprints of our public equity and listed corporate fixed income portfolios (as at December 2019) as follows:
  - Equity portfolio: 290 tCO_2e/USDm revenue; over 30% lower than the respective Equity benchmark
  - Corporate Fixed Income Investment Grade portfolio: 250 tCO_2e/USDm revenue; over 20% lower than the respective Global Credit benchmark

Source: MSCI as at 31/12/2019. We have used the Weighted Average Carbon Intensity of Scope 1 + Scope 2 tonnes of CO_2 equivalent per million USD of revenue metric, as recommended by the TCFD.

Focus areas in 2020/21 and beyond

- We will expand our footprint assessment into other asset classes, such as some of our alternative assets, and more broadly for physical risks.
- We acknowledge the need to contribute to economy-wide reductions in global carbon emissions and pursuing a pathway towards net-zero emissions, as stated in the Paris Agreement. We actively support the various investor initiatives such as TPI and IIGCC in their goal for broad decarbonisation of investment portfolios and alignment with the Paris Agreement. We do not currently apply any binding climate targets to our investments, however we are monitoring these initiatives and methods for setting portfolio targets as they evolve.

Investment case study

London Gateway

Together with Legal and General Investment Management, we worked to refinance the construction of the London Gateway port in 2016. London Gateway is a semi automated deep sea container port with a fully integrated logistics facility, located on the bank of the River Thames in Thurrock, Essex, and is focused on practising sustainability through its global programme, 'Our World, Our Future'.

The port was the first in the world to be certified by The Planet Mark, an internationally recognised sustainability certification programme that is awarded to projects committed to reducing their carbon emissions year on year. In October 2019, London Gateway won awards in Supply Chain Engagement and Carbon Reduction from The Planet Mark, which found that the port reduced its carbon emissions by 24.9 per cent per TEU (twenty foot equivalent unit container) from 2017 to 2018.

Supporting the refinancing of projects like London Gateway is a vital component to facilitating the building of essential infrastructure within the UK.