

Impact case study (REF3b)

Institution: The University of Warwick
Unit of Assessment: Warwick Business School
Title of case study: Influencing Occupational Pensions Policy - The Pension Protection Fund
<p>1. Summary of the impact (indicative maximum 100 words)</p> <p>Neuberger, together with David McCarthy (Imperial), who, in their earlier work, had raised concerns about the sustainability of the Pensions Protection Fund (PPF), were commissioned by the Fund to conduct research on alternative levy structures. This led to the development of a new risk-based levy structure, which was implemented over the years 2012-2013. This research and its resulting impact have not only shaped how the PPF operates in ensuring the levy's burden is fairly shared, but has also benefited all UK holders of occupation based pensions and the taxpayer at large.</p>
<p>2. Underpinning research (indicative maximum 500 words)</p> <p>The original Pensions Protection Fund adopted a new levy framework in 2011, implemented from 2012 onwards, benchmarked against Neuberger and McCarthy's model of a theoretically fair levy, taking on board earlier criticisms of the original plan by Neuberger.</p> <p>The PPF was designed to secure occupational pensions in the event that a sponsor company becomes insolvent and the pension scheme is underfunded and unable to meet its accrued obligations. However, this raised the question as to whether the PPF was itself sustainable. Pension insolvency and underfunding are very volatile. For example, aggregate pension scheme funding (as estimated by the PPF 7800 index) fluctuated by over £240 billion between 2009 and 2010 (PPF 2010 Combined Annex). Hence, the demands on the scheme, and the ultimate burden on taxpayers could, in the event of unexpected crises, be very large. Neuberger and McCarthy argued that at the time the original legislation was promulgated (Hansard 9 September 2004; http://hansard.millbanksystems.com/grand_committee_report/2004/sep/09/official-report-of-the-grand-committee), demands on the PPF were likely to be uneven, with intense demands at particular points in time; in a worst-case scenario claims on the PPF would rise to 30 times the average, necessitating some 24 years reserves of annual PPF contributions if a substantial taxpayer bailout was to be avoided (Financial Times 16 May 2005).</p> <p>Initial research co-led by Neuberger and McCarthy, both Principal Investigators, aimed to establish the sustainability of the PPF and its premium levy structure. Neuberger and McCarthy developed two economic models which identified and quantified some of the main policy issues involved in the PPF. Initial analysis was based on a simple economic model of a generic pension guarantee fund. The research model was extended with the development of a second, more sophisticated economic model. This employed a sophisticated structural model of the firm in order to model stochastic (random unpredictable) default rates. Based on the rationale that a downturn in equity markets would increase pension fund deficits and firm insolvencies, the stochastic model showed greater volatility in the claims on the PPF. Neuberger and McCarthy's model showed that risk-based premiums would have limited impact on moral hazard (i.e., being more willing to take a risk because the costs of doing so will be borne by others) for occupational pension schemes most at risk of defaulting. The study served as a critique of the PPF initial system of levies, contending that it would not work without an implicit government guarantee and adequate funding of pension schemes covered by the insurance scheme. This research led to public debate and was soon proved prescient when, in 2008, the PPF was exposed to the consequences of the financial crisis, prompting calls by a range of organisations for the government to act as a guarantor. Instead, mechanisms were put in place for the fund to cope better with adverse circumstances: Neuberger and McCarthy were commissioned by the PPF Committee to examine how the concept of fairness could be modelled theoretically to support them in the development of a fairer risk-based levy (RBL). Based on their findings, the PPF moved to adopt a new levy framework to cope better with unforeseen economic shocks. The new levy framework was rolled out in 2012-2013.</p>
<p>3. References to the research (indicative maximum of six references)</p> <p>1. McCarthy, D. and Neuberger, A. (2005), The Pension Protection Fund,, <i>Fiscal Studies</i>, Vol 26,</p>

No. 2, pp. 139-167 [ABS grade 2]. Peer reviewed journal article DOI: 10.1111/j.1475-5890.2005.00008.x

2. McCarthy, D. and Neuberger, A. (2005), Pricing Pension Insurance: The Proposed Levy Structure for the Pension Protection Fund', *Fiscal Studies* 26, No. 4; pp. 471-489. [ABS grade 2]. Peer reviewed journal article. DOI: 10.1111/j.1475-5890.2005.00020.x
3. Neuberger, A. (2006) Chapter 7: 'The UK Approach to Insuring Defined Benefit Pension Plans' in *Restructuring Retirement Risks*. Blitzstein, D., Mitchell, O.S. and Utkus, S.P. (eds.). Oxford University Press: Oxford. Chapter contribution to edited volume DOI: 10.1093/0199204659.003.0007
4. McCarthy, D. and Neuberger, A. (2008) Chapter 10: 'Pricing Defined Benefit Pension Insurance', in *Pension Fund Governance: A Global Perspective on Financial Regulation*, Evans, J., Orszag, M. and Piggott, J (eds). Chapter contribution to edited volume DOI: 10.4337/9781781007662.00021
5. McCarthy, D. and Neuberger, A. (2010). Evaluating the Fairness of the Risk-Based Levy. London: PPF. Report prepared for the Payment Protection Fund (PPF). http://www.pensionprotectionfund.org.uk/levy/Documents/McCarthy_neuberger_fairness.pdf
6. McCarthy, D. and Neuberger, A. (2006), 'The Pension Protection Fund' in *Retirement Provision in Scary Markets*, Bateman. H. (ed). Edward Elgar. Chapter contribution to edited volume

4. Details of the impact (indicative maximum 750 words)

Neuberger and McCarthy's research has been recognised as being of practical and political importance to the UK pension policy context and has directly informed reforms to the way in which the PPF is managed. Its primary impact has been to provide the basis for an adjusted pension levies structure, which was implemented over the period 2012-2013, and which has placed the PPF on a more sustainable footing. The research has also improved practitioner and pension decision makers' understanding of critical pension issues, regulations and their potential implications.

The research has engaged with by a range of key stakeholders. There were seven principal beneficiaries of the research:

1. The Pension Protection Fund
2. The Department of Work and Pensions
3. Parliamentarians in the UK House of Commons
4. Pension fund consultants and trustee boards advising on strategic asset allocation decisions.
5. Firms contributing to the Fund.
6. Those dependent on pensions from schemes covered by the PPF.
7. UK taxpayers.

Based on their initial research on the PPF, Neuberger and McCarthy argued that the scheme might require a future government bailout, unless its levy structure was re-visited. With the 2008 economic downturn and subsequent concerted financial shocks, the PPF was exposed to a number of the issues predicted in Neuberger and McCarthy's earlier research, with a range of organisations calling for the state to guarantee the Fund, again as predicted by their work.

As acknowledged experts (inter alia, Specialist Advisors to the Parliamentary Select Committee on Work and Pensions, 2007), in 2008 Neuberger and McCarthy were commissioned by the PPF to examine how the concept of fairness could be modelled theoretically to support them in the development of a fairer risk based levy (RBL) more closely aligned with market rates and preceding PPF experiences. The emphasis on fairness was of particular importance, given that if levies were seen as unscientific or unfair, this might drive many employers to close their schemes, leaving a disproportionate amount of weak schemes implicitly relying on PPF bailouts. More specifically, the PPF's Steering Group agreed on the principle that a fair levy was one where contributions were commensurate to the risks an individual scheme posed to the PPF. The PPF's 'Evaluating the Fairness of the Risk-based Levy (including Combined Annex)' policy document was published in conjunction with the 2010 Pension Protection Levy consultation document, and

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formed the basis of the subsequent changes to the levy system, implemented during the period 2012-2013, benchmarked against Neuberger and McCarthy's model of a theoretically fair levy. The Annex Document to the PPF's New Framework Document outlines the changed framework, and explicitly acknowledges the debt the changes owe to Neuberger and McCarthy, noting that their research constructed a theoretical measure to assess the cost of future pension scheme claims. In turn, this served as a basis for measuring fairness of alternative levy designs, including the one ultimately adopted.

The research has had a further impact on policy through improving the base of parliamentary understanding and knowledge of the PPF and its consequences. In July 2012 the House of Commons published a document for Members of Parliament on the PPF (Thurley 2012), drawing on Neuberger and McCarthy's original (2005) research. It highlighted the broader range of risks posed by the PPF to the public purse, imparting the reforms with a measure of urgency.

5. Sources to corroborate the impact (indicative maximum of 10 references)

1. **Thurley, D. (2012) House of Commons Library: Pension Protection Fund Report (July):** The report highlights the risks posed to the public purse by the PPI, informed by, and making direct reference to the work of Neuberger and McCarthy (report, p. 32). Online, available from: <http://www.parliament.uk/briefing-papers/SN03917.pdf>
2. **Consultation Document: The Pension Protection Levy: A New Framework Including the Combined Annex (October 2010) (Report).** This corroborates research impact on the decision making process and the subsequent proposals of the PPF Committee in formulating and assessing fair and alternative levy designs which in turn, were adopted in the new levy system phased in from 2012-2013. ***The Pension Protection Levy: A New Framework Consultation*** document online, available from: http://www.pensionprotectionfund.org.uk/DocumentLibrary/Documents/levy_consultation_oct10.pdf ***Combined Annex*** online, available from: http://www.pensionprotectionfund.org.uk/DocumentLibrary/Documents/levy_consultation_anne_x_oct10.pdf