

Inter-generational cross-subsidies in UK collective defined contribution funds

John Armstrong

King's College London
Strand, London
United Kingdom

Joint work with: J Dalby, C Donnelly

We will evaluate the performance of single-employer and multi-employer collective defined contribution (CDC) schemes which have been designed to be compatible with UK legislation. The single-employer scheme captures the essential features of the Royal Mail CDC scheme, which is currently the only UK CDC scheme. We find that the schemes are successful in smoothing pension outcomes while outperforming annuities, but also find that there are significant inter-generational cross-subsidies.

The cross-subsidies in the single-employer scheme are, for the most part, there by design and mirror the cross-subsidies seen in existing defined benefit schemes. The cross-subsidies in the multi-employer scheme, by contrast, arise from a discrepancy between the approximate pricing methodology implicit in the scheme design and the rigorous pricing methodology required to accurately price what is a complex derivatives contract. While these cross-subsidies tend to cancel out over time, but in any given year they can be surprisingly large, implying that it is important to use a rigorous pricing methodology when valuing collective pension investments.