

Cass Business School and Hymans Robertson win bid for Longevity Basis Risk Quantification research project

Researchers will develop a method of assessing basis risk for longevity transactions

Cass Business School, part of City University London, and Hymans Robertson are delighted to announce their successful bid for a Longevity Basis Risk Quantification research project for the Longevity Basis Risk Working Group (LBRWG).

The project is funded by the Institute and Faculty of Actuaries (IFoA) and the Life and Longevity Markets Association (LLMA) who founded the LBRWG in 2012.

An important problem facing insurance companies and pension schemes is the measurement of the basis risk arising from the use of population-based mortality indices for managing the longevity risk inherent in specific blocks of pension benefits or annuitant liabilities.

Cass and Hymans Robertson will aim to develop a readily-applicable methodology to quantify this basis risk.

The LLMA began publishing indices linked to population mortality statistics in March 2012 with the goal of facilitating the hedging of longevity risk for pension funds and annuity books.

The launch of the LLMA indices was an important milestone towards a longevity market where risk management can be carried out through transactions that are linked to standardised population-level data.

Index-based hedges have considerable potential to provide effective risk and capital management for all holders of longevity risk.

In addition to the mortality indices, the LLMA has also produced a significant body of work around possible derivative transactions that could reference mortality indices and offer [‘standardised’ longevity risk management tools](#).

Sarah Mathieson, Head of Research at the IFoA comments: "In the context of a longevity hedge, longevity basis risk is the potential mismatch between the behaviour of the longevity hedge and the portfolio of pensioners or annuitants being hedged, when the hedge has been based on a generic mortality index rather than the actual pool of lives in the pension scheme or annuity book. This project aims to develop a methodology to quantify the risk, which we believe will benefit a range of parties involved in pensions, from scheme sponsors to scheme members, as well as writers of annuity business."

Dan Ryan spokesperson for the LLMA comments: “With the help of Cass and Hymans Robertson, the Life and Longevity Markets Association believes that this project will go a long way to develop market clarity and support our brief to grow this marketplace. The resulting research will hopefully bring a real and quantifiable solution to the issue of Longevity Risk.”

Lead researcher and Cass Dean Professor Steven Haberman comments: “This project offers us a great opportunity to bring together the School’s strengths – academic excellence and practical industry knowledge. We will be using statistical knowledge and original research to produce a solution to a real industry problem. We look forward to working closely with our partners Hymans Robertson on this project.”

Andrew Gaches, Partner at Hymans Robertson, comments: “Pension schemes are increasingly looking to reduce their exposure to longevity risk and are demanding solutions which complement their existing use of bespoke longevity swaps. Index-based solutions are a promising approach. But to use them, schemes need a way of assessing the ‘basis risk’ – how well mortality-based population indices will match a scheme’s specific portfolio of members.

“We are excited about working with Cass Business School to create a new, practical methodology that will help pension schemes and insurers assess the benefits of index-based longevity solutions, and enable them to make the best decisions for managing longevity risk.”

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Notes to Editors:

Cass Business School, which is part of City University London, delivers innovative, relevant and forward-looking education, consultancy and research.

Cass is located in the heart of one of the world’s leading financial centres. It has strong links to both the City of London and its corporate, financial and professional service firms, as well as to the thriving entrepreneurial hub of Tech City – located close to the School.

Cass’s MBA, specialist Masters and undergraduate degrees have a global reputation for excellence, and the School supports nearly 100 PhD students.

Cass offers one of the widest portfolio of specialist Masters programmes in Europe. It also has the largest faculties of Finance and Actuarial Science and Insurance in the region.

According to recent independent rankings, Cass is ranked third in Europe for its finance research, second in Europe and eleventh in the world for banking research, and first in Europe and second in the world for actuarial science research.

Cass is a place where students, academics, industry experts, business leaders and policy makers can enrich each other’s thinking. [@Cassinthenews](http://www.cass.city.ac.uk)

About the Institute and Faculty of Actuaries:

Actuaries provide commercial, financial and prudential advice on the management of a business’s assets and liabilities, especially where long term management and planning are critical to the success of any business venture. They also advise individuals, and advise on social and public interest issues.

Members of the IFoA have a statutory role in the supervision of pension funds and life insurance companies. They also have a statutory role to provide actuarial opinions for managing agents at Lloyd’s.

Members are governed by the Institute and Faculty of Actuaries. A rigorous examination system is supported by a programme of continuing professional development and a professional code of conduct supports high standards reflecting the significant role of actuaries in society.

The IFoA is available to provide independent expert comment to the media on a range of actuarial-related issues, including enterprise risk management, finance and investment, general insurance, health and care, life assurance, mortality, and pensions.

Hymans Robertson LLP (www.hymans.co.uk)

Established in 1921, today Hymans Robertson is a limited liability partnership and is one of the longest established independent consulting and actuarial firms in the UK. The firm offers a full range of services including the provision of actuarial, investment consultancy, administration and general consultancy services to the trustees and sponsors of defined benefit and defined contribution pension schemes and an Enterprise Risk Management practice advising banks and insurance companies.

Employing 630 staff in London, Glasgow, Edinburgh and Birmingham, the firm has a client base including companies in the FTSE 100, the FTSE 250, the public sector and privately owned firms.

The [Life and Longevity Markets Association](#) ('LLMA') is a non-profit organisation founded and funded by members, these being AVIVA, AXA, Deutsche Bank, J.P. Morgan, Legal & General, Morgan Stanley, Munich Re, Pension Corporation, Prudential PLC, RBS and Swiss Re. It aims to promote the development of a liquid traded market in longevity and mortality-related risk. The association supports the development of consistent standards, methodologies and benchmarks to help build a liquid trading market, of the type that exists for Insurance Linked Securities (ILS), and other large trend risks like interest rate and inflation.