

From Symposium to Field

Twenty-One Years of Longevity Risk Research

Professor Richard MacMinn

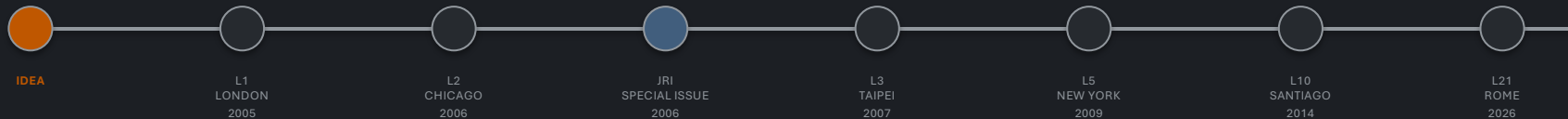
The University of Texas
and National Chengchi University

Professor David Blake

Pensions Institute
City St George's, University of London

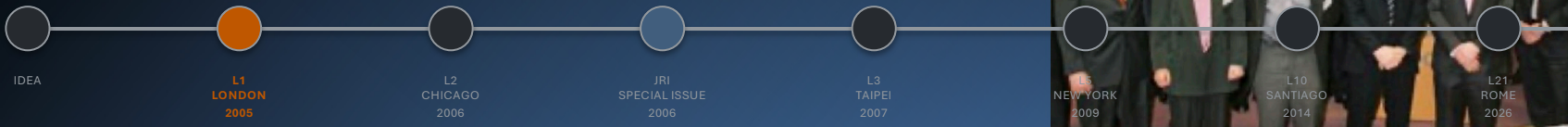
Professor Jennifer Wang

National Chengchi University



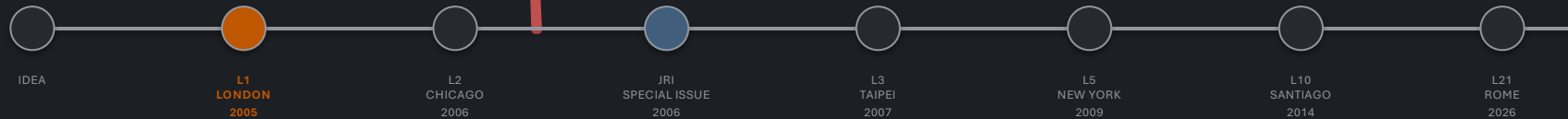


L1 — London 2005



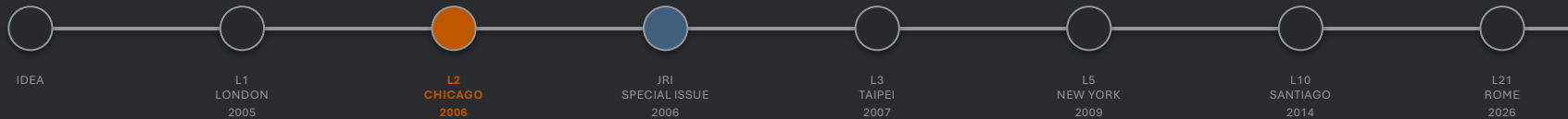


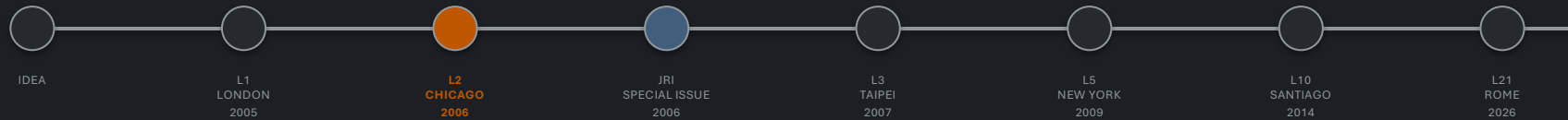
What We Learned Early





L2 — Chicago 2006





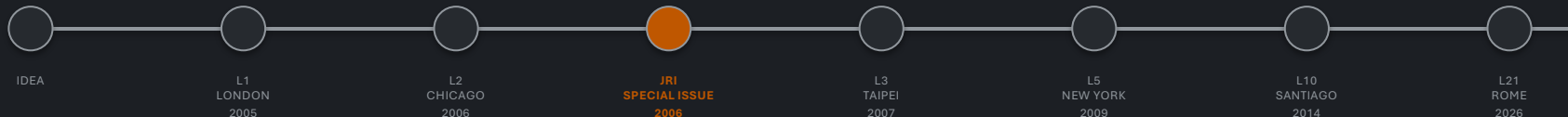
The 2006 JRI Special Issue

A milestone in the development of longevity risk research



- Most cited issue in JRI history (1933–present)
- Established the intellectual infrastructure for longevity risk
- Brought together pricing, pensions, demography, and capital markets
- Continues to shape both research and practice

*“The symposium became a research community—
and the research community helped build a field.”*



L3 – Taipei 2007 Market Emerges

- Swaps, indices
- Life Market concept
- Real transactions appear

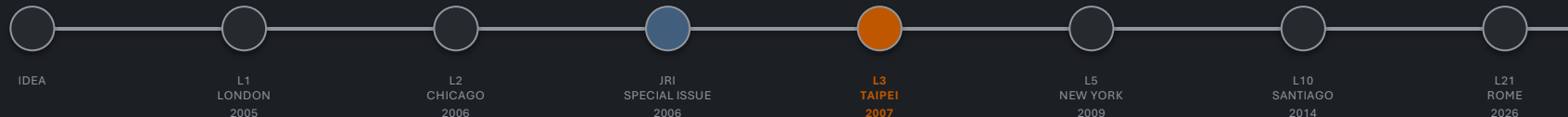


L3 Global Markets?



L3 — Taipei 2007: Why It Matterred

- 1 First longevity-risk conference in Asia** — Extended the international dialogue to Asia and highlighted the growing importance of population ageing in Asian economies.
- 2 Bridging global longevity innovation to Asian public policy:** The opening remarks were delivered by Henry Ho, the Finance Minister of Taiwan. L3 provided an important platform for exploring how global innovations could be adapted to Asia countries.
- 3 Generating Asian academic impact:** Brought young researchers and new research topics from Asia. It transformed the conference from a one time international event into a platform that generated lasting academic outputs to the development of longevity-risk solutions in Asia.



L3 — From Ideas to Market Solutions

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Exploring more capital-market solutions for longevity risk:

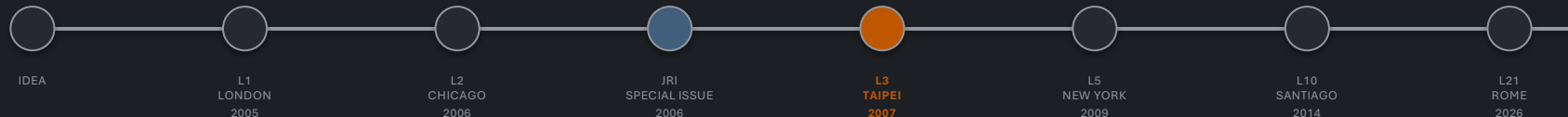
Discussions covered more innovative solutions such as longevity bonds, mortality-linked securities, longevity swaps, reverse mortgages, and retirement-income products, helping advance the emerging field of longevity finance.

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Enhancing academic contribution: L3 papers emphasized that robust pricing and hedging of longevity-linked securities requires models that capture cohort effects and parameter risk, and that better models can reduce mispricing and basis risk.

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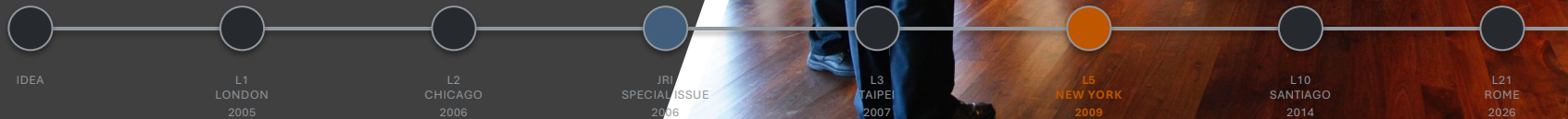
Longevity risk with capital-market solutions are feasible: Comparisons of reforms and initiatives across countries showed longevity risk solutions (such as corporate buy-outs, capital-market instruments) are feasible. The new market developments included: the first release of the LifeMetrics Indices and the world's first publicly announced Longevity swap.





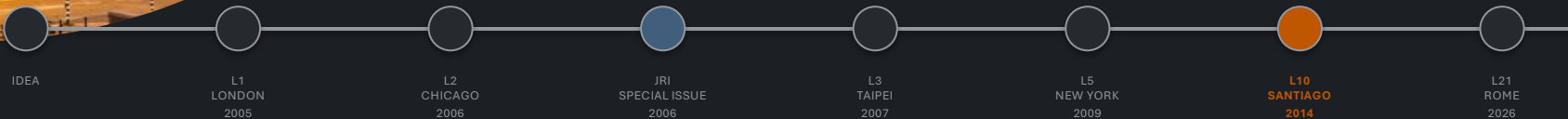
The Puzzle

- Risk is systematic
- Hedging exists
- Market is thin





A Complete Market... With Incomplete Participation



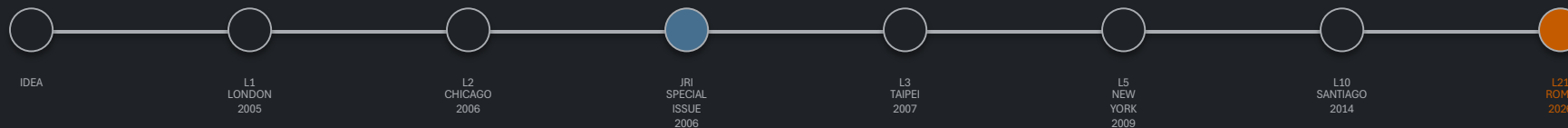
Where do we go from here?

Who is the most efficient bearer of longevity risk?

Under what conditions does systematic longevity risk become systemic?

Can markets allocate it efficiently?

What is the economic cost of inaction?



Forward

