Xu Wei 徐炜

Nationality: China

Affiliation: University of Limerick

Permanent Address: Rongwan Yuenning Garden, Lane 77, Yuecheng Road, Baoshan District, Shanghai, China.

Temporary Address: Faculty Office, Kemmy Business School, University of Limerick, Plassey Ave, Limerick, Ireland.

Email: Wei.Xu@ul.ie

Birthdate: 1st December, 1994

Electronic Bio: http://weixuul.github.io

Education Background

2019 ~ Fall 2023 (expected): Kemmy Business School, University of Limerick, Ph.D. Candidate in Finance (jointly supervised by Fudan University)

Thesis Title: "*Microeconomic Impacts of Digital Distribution on Insurance Market: Performance and Information Asymmetry*"

2017 ~ 2019: Fudan University, Master in Insurance

2013 ~ 2017: Ocean University of China, Bachelor in Finance

Work and Teaching Experience

Spring, 2023: TA of module *Fintech, Innovation and Risk Transfer* (M.A. course) for Dr. John Garvey (Department Head), University of Limerick

Spring, 2021: TA of modules *Insurtech and Financial Analysis of Insurance* (B.A. course) for Prof. Dr. Xian Xu, Fudan University

2020 ~ 2021: RA of China Insurance and Social Security Research Center, Fudan University

2019 ~ 2020: RA of Science Foundation Ireland Research Centre (LERO), University of Limerick

Research Interests

Fintech & Insurtech, Insurance Economics, Risk Management, Risk Decision Theory, Uncertainty Economics, Data Science in Finance Research, Cyber Security Risk and Governance, etc.

Academic Achievements

Papers Under Review

How does the insurer's mobile application sales strategy perform? (with Finbarr M., Xian X., An C., Yusha C.), *Journal of Risk and Insurance* (field top of insurance), **Conditionally Accepted**.

> *Abstract*: Mobile insurance is gaining increasing popularity in the global insurance industry. Using a unique data of a best-selling mobile cancer insurance product from a Chinese life insurer, this paper studies the relationship between mobile technology and insurance inclusion. We find that the introduction of the mobile application channel generates higher growth for low-insured-amount policies which are closely associated with low-income population. However, this inclusion of mobile insurance is unequal – it is stronger in high-income areas than in low-income areas. Examining mechanisms, we show that reduced transaction costs help explain the inclusion of mobile insurance, while regional digital divide leads to inclusion inequality. We also provide evidence on the inclusive impacts of mobile insurance on claim compensation and insurance consumer welfare.

Risk screening in digital insurance distribution: Evidence and explanations (with Finbarr M., Xian X.), **Job Market Paper**, *Journal of Risk and Insurance*, **Revise & Resubmit**.

> *Abstract*: The embedding of digital technologies in the global economy has attracted increasing attention from economists. With a large and detailed dataset, this study examines the specific case where consumers have a choice between offline and digital channels in the context of insurance purchases. We find that digital channels screen in consumers with lower unobserved risk. For the term life, endowment, and disease insurance products, the average risk of the policies purchased through digital channels was 75%, 21%, and 31%, respectively, lower than those purchased offline. Consequently, the lower unobserved risk leads to weaker information asymmetry and higher profitability of digital channels. We also find that the risk screening effect mainly comes from extensive margin, i.e., new consumers. Three mechanisms are highlighted as explanations: heterogeneous marginal influence of channel features on insurance demand, the channel features directly related to risk control and the link between digital divide and risk.

Papers in Progress

Ambiguity preferences and insurance-precaution relation (with Xian X.)

> *Abstract*: Snow (2011) was the first to separatively demonstrate the positive impacts of ambiguity aversion on self-insurance and self-protection at the optimal level. This paper extends to analyze how ambiguity preferences affect

the insurance-precaution relation when jointly determined. We find that the effect of ambiguity aversion on the insurance-precaution relation depends on the efficiency of precaution efforts. At the optimal level, when the efficiency of precaution efforts is high, ambiguity aversion makes insurance and precaution substitute; while when the efficiency of prevention efforts is low, ambiguity aversion makes insurance and precaution complementary. In this case, ambiguity aversion doesn't necessarily increase both insurance demand and precaution efforts. This finding has significant implications for using sophisticated techniques such as machine learning to achieve accurate risk assessment to assist insurance marketing.

Does the mobile application sales channel strengthen insurance inclusivity? (with Finbarr M., Xian X.)

Abstract: Mobile insurance is gaining increasing popularity in the global insurance industry. Using a unique data of a best-selling mobile cancer insurance product from a Chinese life insurer, this paper studies the relationship between mobile technology and insurance inclusion. We find that the introduction of the mobile application channel generates higher growth for low-insured-amount policies which are closely associated with low-income population. However, this inclusion of mobile insurance is unequal – it is stronger in high-income areas than in low-income areas. Examining mechanisms, we show that reduced transaction costs help explain the inclusion of mobile insurance, while regional digital divide leads to inclusion inequality. We also provide evidence on the inclusive impacts of mobile insurance on claim compensation and insurance consumer welfare.

Discriminatory machine learning and risk selection: Evidence from insurance claim prediction (with Changrui Z., Xian X.)

Published Papers (in English)

Dynamic communication and perception of cyber risk: Evidence from big data in media (with Finbarr M., Xian X., Wenpeng X.), *Computers in Human Behavior* (field top of cyber-human interaction, IF 8.96), Vol(122), 2021. https://doi.org/10.1016/j.chb.2021.106851

Envisioning a credit society: Social credit systems and the institutionalization of moral standards (with Jing W., Hongmei L., Wayne X.), *Media, Culture and Society* (IF 3.25), forthcoming issue, 2022. https://doi.org/10.1177/01634437221127364

Published Papers (in Chinese)

Connotation and development of cyber security insurance, *Shanghai Insurance*, Vol(1):23-25, 2022.

Newspaper Articles (in Chinese)

The impact and restructuring of artificial intelligence in the insurance industry,

Financial Times (China), 2018-05-30.

The difference in insurance industrial layout between Alibaba and Tencent Groups, *China Insurance*, 2018-01-09.

Cyber security insurance: The next blue sea of Insurtech, *China Insurance*, 2017-11-14.

How does Insurtech play an important role into the cost control of social insurance?, *China Insurance*, 2017-09-26.

Seminar and Conference Presentations

Screening in digital insurance distribution: Evidence and explanations, Annual Conference of Irish Academy of Finance, Dublin, May, 2023.

Does the mobile application sales channel strengthen insurance inclusivity? 2023 Spring Seminar Series, Limerick, March, 2023.

Is cyber risk perceived as dangerous? Evidence from Chinese media, CONVENTION A 2022, hosted by European Actuarial Academy, Shanghai, September, 2022.

Screening in digital insurance distribution: Theory and evidence, 2022 Spring Seminar Series, Limerick, April, 2022.

Dynamic communication and perceptions of cyber security risks: Evidence from big data in media, Conference on Endogenous Security Development in Cyberspace, sponsored by Zi Jinshan Laboratory, Nanjing, April, 2022.

Mobile Internet, search cost and sales performance, Emerging Risk Seminar, hosted by Irish Academy of Finance, Dublin, June, 2021.

References

Finbarr Murphy (supervisor)
Professor of Finance and Emerging Risk
Dean of Kemmy Business School
University of Limerick
Finbarr.Murphy@ul.ie
https://www.ul.ie/research/prof-finbarr-murphy

Xian Xu (supervisor)
Professor of Insurance
Head of Department of Risk Management and Insurance, Fudan University
xianxu@fudan.edu.cn
https://econ.fudan.edu.cn/info/1028/14221.htm

An Chen
Professor of Insurance
Head of Institute of Insurance Science
University of Ulm
an.chen@uni-ulm.de
https://www.uni-ulm.de/mawi/ivw/institut/team/achen/

Martin Mullins (examiner)
Professor of Risk and Insurance
Co-Leader of the Emerging Risk Group
University of Limerick
Martin.Mullins@ul.ie
https://www.ul.ie/research/prof-martin-mullins