JING AI

Department of Finance Shidler College of Business The University of Hawaii at Manoa 2404 Maile Way, Honolulu, HI 96822 Phone: (808) 956-9519 Fax: (808) 956-9887 Email: jing.ai@hawaii.edu

EDUCATION

Ph.D. in Risk Management, 2008

McCombs School of Business, University of Texas at Austin

M.S. in Information, Risk, and Operations Management, 2006

McCombs School of Business, University of Texas at Austin

B.S. in Economics, 2003

School of Economics and Management, Tsinghua University, Beijing, China Concentration: Finance and Insurance

AREAS OF EXPERTISE

Insurance markets and operations, Insurance regulation and public policy making, Behavioral insurance, Enterprise/Corporate risk management, Business analytical modelling, Healthcare financial management, Household finance

ACADEMIC EXPERIENCE

Finance Department, Shidler College of Business, University of Hawaii at Manoa

Professor of Finance, Risk Management, and Insurance	Aug. 2018-present
First Insurance Company of Hawaii Distinguished Professorship	Aug. 2014-present
Associate Professor of Finance, Risk Management, and Insurance	Aug. 2013-present
Assistant Professor of Finance, Risk Management, and Insurance	Aug. 2008-July 2013

Tsinghua University, Beijing, China Spring-Summer 2022

Visiting Professor, School of Economics and Management

Cornell University, Ithaca, New York March-April 2015

Visiting scholar, Samuel Curtis Johnson Graduate School of Management

Tsinghua University, Beijing, China Spring-Summer 2015 Visiting Associate Professor, School of Economics and Management

Editorial Board

Associate Editor, North American Actuarial Journal	2015-present
Associate Editor, International Journal of Financial Consumers	2015-present

HONORS AND AWARDS

2016	Most Outstanding Journal Article of 2016 by the Society of Actuaries, "Empirical Evidence on the Use of Credit Scoring for Predicting Insurance Losses with Psycho-Social and Biochemical Explanations," with L.L. Golden,
2015	P.L. Brockett and B. Kellison, North American Actuarial Journal, 20, 233-251 2015 Spencer L. Kimball Award Writing Award of the National Association of
	Insurance Commissioners, "How to Set Rates If You Must: An Efficiency-
	Based Methodology for Setting Promulgated Insurance Rates with an Application to Title Insurance," with P.L. Brockett. L.L. Golden, and U.
	Pitaktong, Journal of Insurance Regulation, 34, 167-205.
2014-	First Insurance Company Distinguished Professor, Shidler College of Business
2012-14	Shidler Faculty Fellowship, Shidler College of Business
2011	Shirley M. Lee Research Award, Shidler College of Business
2011	Interdisciplinary Research Award, Center for International Business Education
	and Research (CIBER), the University of Hawaii at Manoa
2010	Research Relations Fund, the University of Hawaii at Manoa
	University-wide competition
2009	Hagen Family Foundation Award, American Risk and Insurance Association
	One recipient per year
2006	Funded Conference Participant in Integrated Risk Management in Operations
	and Global Supply Chain Management Workshop and Conference
2006	Gus S. Wortham Chair Scholarship
2005	Houston Marine Insurance Seminars Inc. Scholarship
2004-05	Risk Management Scholarship from Central Texas Chapter of the CPCU
2003-08	Dean's Fellowship, McCombs School of Business, University of Texas Austin
2003-04	University Preemptive Fellowship, the University of Texas at Austin

REFEREED PUBLICATIONS

Ai, Jing, Jennifer Russomanno, Skyla Guigou, and Rachel Allan (2022) "A Systematic Review and Qualitative Assessment of Fraud Detection Methodologies in Health Care," *North American Actuarial Journal (Flagship Journal of the Society of Actuaries)*, 26, 1-26

Ai, Jing and Tianyang Wang (2020), "Exploring Cyber Risk Contagion – A Boundless Threat," *Variance (Flagship Journal of the Casualty Actuarial Society)*, forthcoming

Ai, Jing, Lin Zhao, and Wei Zhu (2020), "Precautionary Effort, Self-Control and Competitive Equilibrium in Insurance Markets," *Journal of Risk and Insurance*, 87, 751-782

- Ai, Jing, Vickie Bajtelsmit, and Tianyang Wang (2018), "The Combined Effect of ERM and Diversification on Property and Casualty Insurer Performance," *Journal of Risk and Insurance*, 85, 513-543
- Ai, Jing, Lin Zhao, and Wei Zhu (2018), "Portfolio Choice in Personal Equilibrium," *Economic Letters*, 170, 163-167
- Ai, Jing, Patrick L. Brockett, and Tianyang Wang (2017), "Optimal Enterprise Risk Management and Decision Making under Shared and Dependent Risks," *Journal of Risk and Insurance*, 84, 1127-1169
- Ai, Jing, Patrick L. Brockett, Linda L. Golden, and Wei Zhu (2017), "Health State Transitions and Longevity Effects on Retirees' Optimal Annuitization," *Journal of Risk and Insurance*, 84, 319-343
- Ito, Haruyoshi, Jing Ai, and Akihiko Ozawa (2016), "Managing Weather Risks for J. League Soccer Teams in Japan," *Journal of Risk and Insurance*, 83, 877-912
- Ai, Jing, Lin Zhao, and Wei Zhu (2016), "Contracting with Present-Biased Consumers in Insurance Markets," *Geneva Risk and Insurance Review*, 41, 107-148
- Golden, Linda L., Patrick L. Brockett, Jing Ai, and Bruce Kellison (2016), "Empirical Evidence on the Use of Credit Scoring for Predicting Insurance Losses with Psycho-Social and Biochemical Explanations," *North American Actuarial Journal*, 20, 233-251 (Winner of the Most Outstanding Journal Article of 2016 by the Society of Actuaries)
- Ai, Jing, Patrick L. Brockett, Linda L. Golden, and Utai Pitaktong (2015), "How to Set Rates If You Must: An Efficiency-Based Methodology for Setting Promulgated Insurance Rates with an Application to Title Insurance," *Journal of Insurance Regulation*, 34, 167-205. (Winner of the 2015 Spencer L. Kimball Award Writing Award of the National Association of Insurance Commissioners)
- Ai, Jing, Patrick L. Brockett, and Allen Jacobson (2015), "A New Defined Benefit Pension Risk Measurement Approach," *Insurance: Mathematics and Economics*, 63, 40-51
- Ai, Jing, Patrick L. Brockett, Linda L. Golden, and Montserrat Guillen (2013), "A Robust Unsupervised Method for Fraud Rate Estimation," *Journal of Risk and Insurance*, 80, 121-143.
- Ai, Jing, Patrick L. Brockett, William W. Cooper, and Linda L. Golden (2012), "Enterprise Risk Management through Strategic Allocation of Capital," *Journal of Risk and Insurance*, 79, 29-55.
- Ai, Jing, Patrick L. Brockett, and Linda L. Golden (2009), "Assessing Consumer Fraud Risk in Insurance Claims with Discrete and Continuous Data," *North American Actuarial Journal (Flagship Journal of the Society of Actuaries)*, 13, 438-458.

Jing Ai 3/10 2022

EXTERNAL GRANTS

2017-20 "Exploring Cyber Risk Contagion - A Boundless Threat," Casualty Society of Actuaries (*Individual Grant Competition Awardee*), Co-Principal Investigator
 2016-17 "Examining Predictive Modeling Based Approaches to Characterizing Healthcare Fraud," Society of Actuaries, Co-Principal Investigator
 2012-14 "Healthcare Fraud Estimate Study," AARP Public Policy Institute, Co-Principal Investigator

INVITED TALKS

"Consumer Passiveness and Retail Financial Advice," with Wei Zhu

- School of Economics and Management, Tsinghua University, June 2022
- International Academy of Finance Consumers, May 2021 (Virtual Research Seminar)
- College of Business, Illinois State University, March 2021 (Virtual Research Seminar)

"Corporate Defaults with Chinese Characteristics," with W. Bailey, H. Gao, X. Yang, and L. Zhao

- 2015 Global Financial Consumer Forum, Jeju, South Korea, October 2015
- Fourth Symposium on Emerging Financial Markets: China and Beyond, New York, New York, May 2015
- College of Business, Colorado State University, Fort Collins, Colorado, March 2015
- Nanyang Business School, Nanyang Technological University, Singapore, March 2015
- Bank for International Settlement, Hong Kong, SAR, China, March 2015
- Panelist, Moody's-SAIF Credit Research Conference, Beijing, China, May 2014

"ERM and Diversification Effect for Property and Casualty Insurance Companies," with V. Bajtelsmit and T. Wang

- School of Economics and Management, Tsinghua University, Beijing, China, March 2015
- Fox School of Business, Temple University, Philadelphia, Pennsylvania, October 2014
- Terry College of Business, University of Georgia, Athens, Georgia, February 2014
- ERM Symposium, Society of Actuaries, Chicago, Illinois, October 2014

"Equilibrium and Welfare in Insurance Markets with Time-Inconsistent Consumers," with Lin Zhao and Wei Zhu

 Fox School of Business, Temple University, Philadelphia, Pennsylvania, November 2012

"Enterprise Risk Management and Capital Budgeting: an Integrated Framework," with T. Wang (previous title "Integrated Capital Budgeting Framework under Dependent Risks")

- School of Insurance, University of International Business and Economics, Beijing, China, December 2012
- ERM Symposium, Society of Actuaries, Washington, D.C., October 2014

Jing Ai 4/10 2022

- Academy of Mathematics and Systems Science, Chinese Academy of Sciences, Beijing, China, July 2012
- Department of Statistics and Actuarial Science, University of Waterloo, Waterloo, Canada, May 2012
- Department of Finance, School of Economics and Management, Tsinghua University, Beijing, China, December 2011

"The How, Why, and When of PRIDIT: Examples from Hospital Quality and Fraud Detection,"

• Ratemaking and Predictive Modeling Seminar, Casualty Actuarial Society (CAS), Philadelphia, Pennsylvania, March 2012

"The PRIDIT Technique and its Application to Fraud Management,"

• School of Business, Beihang University, Beijing, China, December 2011

"Three Recent Applications of the Unsupervised PRIDIT Predictive Modeling Technique: Fraud, Medical Care Quality, and Risk Management,"

 Ratemaking and Predictive Modeling Seminar, Casualty Actuarial Society (CAS), New Orleans, LA, March 2011

"On the Development of a Set of New Methods for Active Fraud Detection,"

- China Center for Insurance and Risk Management, Tsinghua University, Beijing, China, April 2011
- School of Economics, Peking University and China Center for Insurance and Social Security Research, Beijing, China, December 2010
- School of Economics, Fudan University, Shanghai, China, December 2010

"An Optimization Approach to Enterprise Risk Management," with Patrick L. Brockett, William W. Cooper, and Linda L. Golden

• School of Business, SungKyunKwan University, Seoul, Korea, June 2009

CONFERENCE PRESENTATIONS

"Consumer Passiveness and Retail Financial Advice," with Wei Zhu

• World Risk and Insurance Congress, August 2020 (Online)

"Exploring Cyber Risk Contagion – A Boundless Threat," with Tianyang Wang

• American Risk and Insurance Association, San Francisco, CA, August 2019

"What Are Agents For? Consumer Reference Manipulation in Life Insurance Markets," with Wei Zhu

- Western Risk and Insurance Association (WRIA) Annual Meeting, Santa Barbara, CA, January 2017
- CEAR/MRIC Behavior Insurance Workshop, Munich, Germany, December 2016

"The Impact of Financial Literacy on Long-term Care Insurance and Annuity Decision-making: Product Innovation Implications," with Patrick L. Brockett, Linda L. Golden, and Wei Zhu

• Twelfth International Longevity Risk and Capital Markets Solutions Conference, Chicago, IL, September 2016

"Economic and Non-Economic Losses Fraud Severity Estimation of Auto Bodily Injury: Evidence from China," with Jiantao Zhou and Tianyang Wang

- American Risk and Insurance Association annual meeting, Boston, MA, August 2016 "Understanding and Estimating Fraudulent Activities in Healthcare," with Robert D. Lieberthal and Patrick L. Brockett
 - Biennial Conference of the American Society of Health Economists, Philadelphia, PA, June 2016 (co-author present)

"Why Use Agents? Consumer Reference Manipulation in Life Insurance Markets," with Sharon Tennyson and Wei Zhu

- American Risk and Insurance Association annual meeting, Boston, MA, August 2016
- Asia Pacific Risk and Insurance Association annual meeting, Chengdu, China, July 2016
- World Risk and Insurance Economics Congress (Third Meeting), Munich, Germany, August 2015

"Healthcare Expenditure Shocks and Longevity Risk Effects on Optimal Annuitization," with Patrick L. Brockett, Linda L. Golden, and Wei Zhu

- World Risk and Insurance Economics Congress (Third Meeting), Munich, Germany, August 2015
- Tenth International Longevity Risk and Capital Markets Solutions Conference, Santiago, Chile, September 2014

"Understanding Longevity Risk Annuitization Decision-making: An Interdisciplinary Investigation of Financial and Nonfinancial Triggers of Annuity Demand," with Patrick L. Brockett, Linda L. Golden, and Wei Zhu

• Eleventh International Longevity Risk and Capital Markets Solutions Conference, Lyon, France, September 2015 (co-author presented)

"Does ERM Improve Firm Value: Evidence from Listed Chinese Nonfinancial SOEs," with Hua Chen and Yang Zhao

- Western Risk and Insurance Association annual meeting, Scottsdale, Arizona, January 2015
- American Risk and Insurance Association annual meeting, Seattle, Washington, August 2014 (co-author presented)
- Asia Pacific Risk and Insurance Association annual meeting, New York, New York, July 2013

"Corporate Default with Chinese Characteristics," with with W. Bailey, H. Gao, X. Yang, and L. Zhao

• China International Conference in Finance, Chengdu, China, July 2014

"Optimal Enterprise Risk Management and Decision Making under Shared and Dependent Risks," with Tianyang Wang

(previous title "Enterprise Risk Management and Capital Budgeting: an Integrated Framework")

- American Risk and Insurance Association annual meeting, Seattle, Washington, August 2014
- Asia Pacific Risk and Insurance Association annual meeting, Moscow, Russia, July 2014
- Asian Finance Association International Conference, Taipei, Taiwan, July 2012 (accepted)
- Financial Management Association (FMA) annual meeting, Denver, Colorado, October 2011
- Asia-Pacific Risk and Insurance Association (APRIA) annual meeting, Tokyo, Japan, July 2011

"A New Defined Benefit Pension Risk Measurement Approach," with Patrick L. Brockett, and Allen Jacobson

• Ninth International Longevity Risk and Capital Markets Solutions Conference, Beijing, China, September 2013

"Equilibrium and Welfare in Insurance Markets with Time-Inconsistent Consumers," with Lin Zhao and Wei Zhu

- American Risk and Insurance Association annual meeting, Washington, D.C., August 2013
- CEAR/MRIC Behavior Insurance Workshop, Munich, Germany, December 2012
- China International Conference in Finance, Chongqing, China, July 2012

"ERM and Diversification Effect for Property and Casualty Insurance Companies," with Vickie Bajtelsmit and Tianyang Wang

• American Risk and Insurance Association annual meeting, Washington, D.C., August 2013

"Managing Weather Risks for J. League Soccer Teams in Japan," with Haruyoshi Ito and Akihiko Ozawa

 Asia Pacific Risk and Insurance Association annual meeting, New York, New York, July 2013

"Enterprise Risk Management and Diversification Effect," with Vickie Bajtelsmit and Tianyang Wang

 American Risk and Insurance Association annual meeting, Minneapolis, Minnesota, August 2012

"Predicting Individuals' Insured Losses: Psychology, Responsibility, and Quantitative Correlates, with Patrick L. Brockett, Linda L. Golden, and Bruce Kellison

• Asia Pacific Risk and Insurance Association annual meeting, Seoul, Korea, July 2012

"Use of Credit Scores in Insurance Classification and Pricing," with Patrick L. Brockett, Linda L. Golden, and Bruce Kellison

- Western Risk and Insurance Association (WRIA) annual meeting, Kona, Hawaii, January 2012
- INFORMS (The Institute for Operations Research and the Management Sciences) annual meeting, Charlotte, NC, November 2011
- American Risk and Insurance Association (ARIA) annual meeting, San Diego, California, August 2011

"Efficient Use of Weather Derivatives for J. League Soccer Teams in Japan," with Haruyoshi Ito and Akihiko Ozawa

• Asia-Pacific Risk and Insurance Association (APRIA) annual meeting, Tokyo, Japan, July 2011

"A Decision Analysis Approach to Enterprise Risk Management," with Tianyang Wang

• INFORMS (The Institute for Operations Research and the Management Sciences) annual meeting, Austin, Texas, November 2010

"An Efficiency-based Methodology for Setting Promulgated Insurance Rates," with Patrick Brockett, William W. Cooper, Linda Golden, Utai Pitaktong, and Charles Yang

- INFORMS (The Institute for Operations Research and the Management Sciences) annual meeting, Austin, TX, November 2010, *Invited for Special Session*
- World Risk and Insurance Economics Congress (WRIEC), Singapore, July 2010

"An Optimization Approach to Enterprise Risk Management," with Patrick L. Brockett, William W. Cooper, and Linda L. Golden

- World Risk and Insurance Economics Congress (WRIEC), Singapore, July 2010
- Financial Management Association (FMA) annual meeting, Reno, Nevada, October 2009
- Asia-Pacific Risk and Insurance Association (APRIA) annual meeting, Beijing, China, July 2009

"An Informative Initial Sample Approach to Active Fraud Detection," with Maytal Saar-Tsechansky

• INFORMS (The Institute for Operations Research and the Management Sciences) annual meeting, San Diego, CA, October 2009

"On the Development of a Fraud Rate Estimation Method," with Patrick L. Brockett, Linda L. Golden, and Montserrat Guillen

- American Risk and Insurance Association (ARIA) annual meeting, Providence, Rhode Island, August 2009
- Asia-Pacific Risk and Insurance Association (APRIA) annual meeting, Beijing, China, July 2009
- INFORMS (The Institute for Operations Research and the Management Sciences) annual meeting, Washington D. C., October 2008

"Active Fraud Detection," with Patrick L. Brockett and Linda L. Golden

• INFORMS (The Institute for Operations Research and the Management Sciences) annual meeting, Seattle, Washington, November 2007

OTHER REFEREED PUBLICATIONS

"Enterprise Risk Management and Diversification Effects for Property and Casualty Insurance Companies," with Vickie Bajtelsmit and Tianyang Wang, Executive Summary in *ERM Monograph*, Society of Actuaries, 2014

"Enterprise Risk Management and Capital Budgeting under Dependent Risks: An Integrated Framework," with Tianyang Wang, Executive Summary in *ERM Monograph*, Society of Actuaries, 2012

"Enterprise Risk Management," with Patrick L. Brockett, in *Encyclopedia of Quantitative Risk Analysis and Assessment*, E. Melnick and B. Everitt (Eds.), 2008, John Wiley & Sons Ltd, Volume 2

"Insurance Pricing/Nonlife," with Patrick L. Brockett, in *Encyclopedia of Quantitative Risk Analysis and Assessment*, E. Melnick and B. Everitt (Eds.), 2008, John Wiley & Sons Ltd, Volume 2

"Free Riding," with Patrick L. Brockett, in *Encyclopedia of Actuarial Science*, J. Teugels and B. Sundt (Eds.), 2004, Wiley publishers, Volume 2, pp. 739-742

TEACHING EXPERIENCE

Shidler College of Business, the University of Hawaii at Manoa Jan. 2009-present Principles of Insurance: undergraduate level Enterprise Risk Management: undergraduate/graduate level, Executive MBA level

Micro- and Macro-economic Foundations for Managers: core MBA class Business, Government, and the External Environment: core MBA class

Insurance and Risk Management: graduate (Master's level)

Corporate Financial Management: case studies class, undergraduate level

McCombs School of Business, the University of Texas at Austin

Aug. 2003-July 2008

Introduction to Risk Management (undergraduate level)

Teaching Assistant for

Managing International Risk, Corporate Risk Management: MBA level

Managing Employee Risks and Benefits, Property-Liability Risk Management and

Planning, Elementary Business Statistics: undergraduate level

ACADEMIC SERVICES AND MEMBERSHIP

Service for the University of Hawaii at Manoa

Ph.D. Advisor, Department of Finance, Since 2017 Faculty coordinator, University of Hawaii insurance industry internship programs University of Hawaii at Manoa Tenure and Promotion Review Committee, 2019
Faculty Advisor, Financial Management Association (FMA) Student Chapter, 2013-2017
Faculty Executive Senate, Shidler College of Business, 2015-2017
Assurance of Learning Committee, Shidler College of Business, 2015-2017
TIM School Faculty Personnel Committee, 2015-2016
Ph.D. Dissertation Committee: Supasith Chonglerttham, Juan Qin, Yiwei Zhao

Academic Services and Others

Tsinghua University (Beijing, China) Ph.D. Dissertation Defense External Member: Tianyu Yang, Peiyun Deng, Yang Dong, Peixin Liu, 2022

Program Committee, American Risk and Insurance Association (ARIA), 2010, 2013, 2014, 2018, 2021, 2022

Excellence in Teaching Award Committee, American Risk and Insurance Association (ARIA), 2020, 2021

RMIR Award for Best Feature Article Committee, American Risk and Insurance Association, 2013, 2014, 2021, 2022

Chair, Teaching Resources Committee, American Risk and Insurance Association (ARIA), 2016, 2017, 2018

External Expert Reviewer, Natural Sciences and Engineering Research Council of Canada, 2017

Executive Office Review Committee, American Risk and Insurance Association (ARIA), 2015

Chair, Excellence in Teaching Award Committee, American Risk and Insurance Association (ARIA), 2011

Board of Governors, Asia-Pacific Risk and Insurance Association (APRIA), 2010-2013 Program Committee, China International Conference on Insurance and Risk Management, since 2011

Reviewer

Journal of Risk and Insurance, Insurance: Mathematics and Economics, North American Actuarial Journal, Risk Management and Insurance Review, Journal of Insurance Issues, Journal of Financial Services Research, Pacific Basin Finance Journal, MIS Quarterly

Academic Membership

American Risk and Insurance Association, Asia-Pacific Risk and Insurance Association, Casualty Actuarial Society (Academic Correspondent), American Finance Association