Approved by the Regents
May 19, 2022

PROMOTION RECOMMENDATION
The University of Michigan
Stephen M. Ross School of Business

Joline Ann Uichanco, assistant professor of business, Stephen M. Ross School of Business, is recommended for promotion to associate professor of business, with tenure, Stephen M. Ross School of Business.

Academic Degrees

Ph.D.	2013	Massachusetts Institute of Technology, Sloan School of Management Operations Research, Cambridge, MA
M.S.	2007	Massachusetts Institute of Technology, School of Engineering Computation for Design Optimization, Cambridge, MA
M.S	2007	National University of Singapore, Computational Engineering, Singapore, China
B.Sc.	2006	National University of Singapore, Computational Finance, Singapore, China

Professional Record:

2014 – Present	Assistant Professor of Technology and Operations, University of Michigan, Stephen M. Ross School of Business, Ann Arbor, MI
2013 – 2014	Post-doctoral Research Fellow, IBM T.J. Watson Research Center Yorktown Heights, NY
2010	Summer Intern, IBM Zurich Research Lab, Ruschlikon, Switzerland

Summary of Evaluation:

Teaching: Professor Uichanco has taught the BBA operations core for many years, and has demonstrated that, although her performance is somewhat uneven over the years, she is capable of outstanding evaluations and her scores have trended higher recently: for example, her Fall 2021 scores (Q10 % agree+) across three sections of the BBA operations core were outstanding, 100%, 96%, and 95%. She has served as the course coordinator for the BBA core operations course since 2017, and has successfully mentored numerous PhD students as they taught for the first time, which we consider to be an important contribution to teaching, although not the typical kind we directly measure. Given the increasing importance of the BBA program within the school's portfolio, the technology and operations (TO) area does not perceive this as a major concern. Professor Uichanco has plans to teach an MBA elective on Revenue Management; given her research in the area.

Research: Professor Uichanco is distinctive in the various approaches she combines in her research. Historically, most mathematical optimization models assumed that basic model parameters are known, whereas in practice these are always being estimated with incomplete data dynamically over time, and therefore subject to sampling error. She is an expert in the area of robust optimization, which refers to methods that take explicit account of that potential sampling error in the solutions. Further, she uses estimation methods dynamically so they are useful in real-world systems where information (such as sales data, or a typhoon's trajectory) evolve over time, making today's decisions complex when the decision maker knows that

additional information won't be available until the future. In a world of increased accessibility to high volumes of detailed data and computing power we can consider models with greater realistic complexity, although the solution approach is then more algorithmic than analytical.

Professor Uichanco combines these approaches – robust optimization, simultaneous estimation and control, and more realistically complex problems addressed by algorithms – to address managerial challenges in applied industrial and public service contexts. The fruitfulness of her approach is evidenced by a strong publication record in top journals, recognition by the Academy for practical impact, and commercial software that utilizes some of her work.

Recent and Significant Publications:

M. Zhang, H.-S. Ahn, J. Uichanco, "Data-driven pricing for newproducts," Forthcoming in *Operations Research*

Y. Lei, S. Jasin, J. Uichanco, A. Vakhutinski, "Joint product framing (display, ranking, pricing) and order fulfillment under the MNL model for e-commerce retailers," Forthcoming in *Manufacturing & Service Operations Management*

J. Uichanco, "A model for pre-positioning emergency relief items before a typhoon with uncertain trajectory," Forthcoming in *Manufacturing & Service Operations Management*

2021. A. Govindarajan, A. Sinha, J. Uichanco, "Distribution-free inventory risk pooling in a multilocation newsvendor", *Management Science, Volume: 67, Issue: 4, Pages 2272-2291*

2019. P. Harsha, S. Subramanian, J. Uichanco, "Dynamic pricing of omnichannel inventories," *Manufacturing & Service Operations Management (Special Section: First M&SOM Practice-Based Research Competition), Volume: 21, Issue: 1, Pages: 47–65*

Service: Professor Uichanco has been the TO area's PhD coordinator since 2018. She has been superb in this role. She is thoughtful, organized, works intensively with the area's PhD students to monitor and support their progress, and has engaged in important work like DEI initiatives. At the field level, Professor Uichanco has served as a judge for prestigious paper competitions such as MSOM Best Student Paper Competition, INFORMS Public Sector Operations Research Best Paper Award, INFORMS Revenue Management and Pricing (RMP) Section Student Paper Prize, POM College of Supply Chain Management Best Student Paper Award, and The Decision Sciences Institute (DSI) Elwood S. Buffa Doctoral Dissertation Award. This evidences Professor Uichanco's reputation in the field, and we expect it will not be long before she is invited for increasingly high visibility roles

External Reviewers:

Reviewer A: "Dr. Uichanco's output is at the high-end of what one would expect from a productive operations management scholar at this stage of her career. ... Dr. Uichanco's focus has established her as an independent scholar with a clear identity, and the novelty and quality of her papers have already made an impact on the field.

Reviewer B: "The visibility and reputation of our field would be enhanced if others followed Joline's example and chose to do the hard work needed to collect, combine and analyze the data for important problems like this."

Reviewer C: "Joline's research is both broad and deep...I also find her papers to be technically and elegantly developed, which is a fact that also adds to the importance and impact of her work."

Reviewer D: "Joline has engaged in practice-driven work with remarkable success for a junior scholar."

Reviewer E: "Joline's scholarship, in terms of quality, independence, and practical impact, is in the top tier among her cohort."

Reviewer F: "...she is definitely creating a body of work that will make her recognized expert in this area."

Reviewer G: "'The Data-Driven Newsvendor Problem: New Bounds and Insights' is a brilliant combination of practical guidance for data-driven inventory management and qualitatively insightful theory."

Summary of Recommendation: The fruitfulness of Professor Uichanco's research approach is evidenced by a strong publication record in top journals, recognition by the academy for practical impact, and commercial software that utilizes some of her work. Professor Uichanco has proven an ability to teach well and is a major contributor to the TO area through her outstanding work coordinating the area's PhD Program. With the support of the Executive Committee, I am pleased to recommend the promotion of Joline Ann Uichanco to associate professor of business, with tenure, Stephen M. Ross School of Business.

Francine Lafontaine
Interim Dean of Business
Stephen M. Ross School of Business

May 2022