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

Damian R. Beil, assistant professor of business, Stephen M. Ross School of Business, is recommended for promotion to associate professor of operations and management science, with tenure, Stephen M. Ross School of Business.

## Academic Degrees

PhD 2003 Operations Research, Massachusetts Institute of Technology BA 1999 Mathematics, New College

# Professional Record:

2003-Present University of Michigan, Stephen M. Ross School of Business

Assistant Professor of Business

## Summary of Evaluation:

Teaching: Professor Beil is an excellent teacher across the BBA, MBA and PhD programs. At the BBA level, Professor Beil taught the core BBA operations management class from 2004 until 2007, serving as the core course coordinator from 2005-2007. He substantially overhauled the class, adding new case studies and modules based on his research on procurement, as well as plant visits and a module to allow students to be able to rapidly assess operations at a plant during a visit. He was very successful in teaching this class, receiving in 2006-2007 average teaching evaluations of 4.85 on a 5 point scale. He was also awarded the prestigious 2007 BBA Teaching Excellence Award. Professor Beil has been teaching the core MBA operations management class since 2008, once again to great success. His 2008-2009 evaluations for the core MBA operations management class averaged 4.93/5. He also has significantly contributed to the development of a new course on Strategic Sourcing, a required class for the new Master's of Supply Chain Management program. Finally, he has also taught a PhD course in his research area on procurement and sourcing which was also very well received by the students. Professor Beil has also done an excellent job advising MBA and Masters of Engineering students in Tauber Institute for Global Operations Student Projects every year since 2004.

Research: Professor Beil has established himself as one of the leading researchers of his cohort in the areas of sourcing and procurement and publishes his research in the field's top journals. distinguishes his work is that he asks questions that actual companies face, builds models to analyze these questions, and uses sophisticated operations research machinery to obtain significant insights into how companies should address issues in procurement. For example, in a recent paper accepted in Operations Research, he addresses the issue of how much effort companies should spend qualifying suppliers for an auction given that any given supplier may lose the auction. On one hand, postponing the qualification until after the auction saves money; on the other hand, a realization by other suppliers that their competitors may not be qualified may lead them strategically to inflate their bids. Professor Beil's paper models these tradeoffs and determines the optimal auction and supplier qualification screening schedule. In this and his other papers, Professor Beil addresses issues that procurement professionals face on a regular basis and provides interesting, original and implementable insights. His research has been published in the most prestigious journals of the field such as Operations Research, Management Science and M&SOM and Professor Beil's research has also been awarded with two National Science Foundation grants. In addition, in 2009 the Ross School awarded Professor Beil the Arnold and Linda Jacob Faculty Development Award for research excellence.

## Recent and Significant Publications:

- Kostamis, D., Beil, D.R., and Duenyas, I., "Total-Cost Procurement Auctions: Impact of Suppliers' Cost Adjustments on Auction Format Choice," forthcoming in *Management Science*.
- Beil, D.R, and. Wein, L.M, "A Pooling Analysis of Two Simultaneous Online Auctions," *Manufacturing and Service Operations Management*, Vol. 11, 2009, pp.33-51.
- Yang, Z.B., Aydin, G., Babich, V. and Beil, D.R., "Supply Disruptions, Asymmetric Information and a Backup Production Option," *Management Science*, Vol. 55, 2009, pp. 192-209.
- Wan, Z., and Beil, D.R., "RFQ Auctions with Supplier Qualification Screening," *Operations Research*, Vol 57, 2009, pp. 934-949.
- Beil, D.R., and Wein, L.M., "An Inverse Optimization-Based Mechanism to Support Multi-Attribute RFQ Processes," *Management Science*, Vol. 49, 2003, pp. 1529-1545.

Service: Professor Beil has been an active member of the operations and management science area and has added to the intellectual life of the area and the school. For example, he has served on the OMS group's doctoral committee, helping select and recruit doctoral students and has also organized the OMS seminar series. He has contributed to the school by serving on the BBA curriculum redesign task-force. He has also provided excellent service to the profession. He served as co-chair of the M&SOM Society's annual Student Paper Competition in 2009 and for several years as a panelist for the same competition. He also has organized sessions for many professional conferences. He has also served as a referee (and is admired for his work as a referee by outside reviewers) by all top journals in the operations and management science field such as Management Science, Operations Research, M&SOM, POMS, and IIE Transactions.

## External Reviewers:

Reviewer A: "Professor Beil has considered issues of fundamental interest in operations management. Professor Beil has addressed interesting issues in the bidding area, has made several valuable contributions, and demonstrates a command of the field as well as analytical abilities that will enable him to continue to make contributions in the future...I cannot think of anyone in his cohort whose work has been as fundamental as Professor Beil's in terms of creating novel descriptions of complex purchase situations and extracting optimal designs...I would support promotion if Professor Beil were at my institution. I also notice that his teaching is clearly outstanding. All together, these factors would make a strong case for promotion."

Reviewer B: "...I am pleased to support this promotion. Damian is a serious scholar, addressing vitally important questions in operations management with a number of high-quality research contributions. He has excellent modeling and technical skills, has developed a distinctive research agenda on which he is now executing, and is widely recognized as being an exceptional citizen for his OM professional community...Damian has established himself as a leader in the OM research community with his procurement work. He has set an ambitious agenda to develop a theory of procurement and is well on his way to meeting it."

Reviewer C: "I believe that Damian is a first-rate researcher in Operations Management who has done work that is interesting, innovative and challenging. Let me illustrate this by discussing a paper that I like, which was not included in his packet. This is the paper titled 'A Pooling Analysis of Two Simultaneous Online Auctions.' First, the paper asks an interesting question: when would a stream of bidders that simultaneously participate in two auctions make both auctioneers better off?...I view this paper as a good example of OM adapting economics for asking questions that OM researchers care about. Second, some of the conclusions in this paper are novel and thought provoking...Third, this analysis is

non-trivial and innovative; order-statistics are not easy to work with and the paper deals with them with a judicious mixture of explicit computation and clever bounding."

Reviewer D: "...Beil is a competent researcher who has published several articles in top operations management journals. He has mastered the tools of mechanism design and has worked on some nice applications of these techniques. I used this paper ['Supply Disruptions, Asymmetric Information, and a backup production Option'] in my PhD class last spring. It is competently executed and clearly written."

Reviewer E: "Professor Beil's teaching record appears to be outstanding; clearly meeting any hurdle you might have...it also appears that his research has hit its stride...The papers present simplified models of a supply chain, but they are sufficiently complex as to capture the salient features of the phenomenon being modeled. For example, 'Bargaining power and supply base diversification'...fits neatly into a very active area of OM research and advances understanding of the issues at play...I would view the fact that he has received two NSF grants very positively in this regard; the competition for those grants is considerable."

Reviewer F: "Damian Beil is recognized as the leading researcher within his cohort group in Operations Management working on market mechanisms. His work has influenced my writing. The common features of his work are that they are innovative, carefully thought out, written in clear and simple terms and well executed. Certainly, as a single body of work, they stand out for their quality and comprehensive treatment of the subject....He impressed me with his clarity of thinking, his energy and enthusiasm for academics-both teaching and research...These qualities along with his published work and the promise in the working papers put him well beyond the requirements for tenure at any top school."

Reviewer G: "With the recognition of procurement's strategic role, both academics and industry alike started to pay more attention to it. Professor Beil is among the pioneers of this emerging research area. As such, I commend his effort and achievement so far... In sum, Professor Beil has made many important and pioneering research contributions to supply chain procurement management and has demonstrated strong modeling and technical ability as well as broad interest. He has also made valuable teaching and service contributions to both the Ross School and the profession in general. I thus fully support his promotion to tenured associate professor."

Reviewer H: "Partial pooling in auctions is where a subset of the bidders participates simultaneously in more than one Internet auction. This is an important, but understudied topic. It is important because in the business-to-consumer sector, partial pooling is very common. It is understudied only because it is a difficult topic. What Professor Beil's paper achieves is to explain the impact of partial pooling in the auctioneers' expected revenues...I feel that this is one of the most original papers that has been published by M&SOM and I can report that I have read every article on auctions that has appeared in the journal since its inception...In conclusion, it is my considered opinion that Professor Damian Beil is strongly deserving of being promoted to Associate Professor with Tenure."

Summary of Recommendation: The outside reviewers' comments and the placement of his work in the top journals in the field attest to the fact that Professor Beil is a leader in his field. His research and teaching are of excellent quality. Professor Beil is able to exploit the strength of his work in order to maximize its impact both to the field of operations management research but also to the field of practice. He adds considerable value to the operations and management science area's research portfolio and also to the reputation and excellence of the Ross School of Business and the University of Michigan. His case for promotion is really made by the quality of his research contributions, his extraordinary teaching, and his service to the Ross Community and the field of operations and management science education.

With this in mind, the Executive Committee and I strongly recommend Professor Beil's promotion to associate professor of operations and management science, with tenure, Stephen M. Ross School of Business.

Robert J. Dolan

Edward J. Frey Dean of Business Stephen M. Ross Professor of Business Stephen M. Ross School of Business

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