

INDUSTRIAL & SYSTEMS ENGINEERING SEMINAR

Wednesday, November 28

3:15 PM – Refreshments before the seminar

3:30 PM – Graduate Seminar

Mechanical Engineering Room 4125 A & B



Should Buyers use Procurement Service Providers when Suppliers have Private Information about Supply Disruptions?

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We consider a supply chain with one buyer and multiple suppliers, who are subject to disruptions and whose likelihoods of disruptions are their private information. Research question we investigate is: should the buyer procure directly from the suppliers or engage services of a better-informed procurement service provider (PSP). Conventional wisdom says that hiring a PSP is always the right choice because PSP's knowledge of the supply base improves supplier selection and management, and reduces informational costs of procurement. However, on the other hand, when using a PSP, the buyer adds another layer to its supply chain, potentially introducing double-marginalization costs and relinquishing control over procurement and supply-risk management. In fact, earlier studies prove that using a PSP purely for its superior knowledge about supply costs is always, unequivocally worse for a buyer than contracting with the suppliers directly. We show that the answer to our research question is more nuanced. We identify, quantify, and explain all of the benefits and the costs of using a PSP in our setting and describe conditions under which benefits exceed the costs.

Bio: Volodymyr Babich is an associate professor of Operations and Information Management at the McDonough School of Business, Georgetown University. He earned his Ph.D. in Operations Research from Case Western Reserve University, Weatherhead School of Management, in 2003. He also holds M.S. degrees in Management Science and Mathematics, both from Case Western Reserve University. Prior to joining Georgetown University, he was an assistant professor at the University of Michigan, Ann Arbor, Industrial and Operations Engineering department. His research interests are the interface of operations and finance, supply risk management, supply chain management, stochastic modeling, and risk management. His research has been supported by grants from the National Science Foundation, University of Michigan, and industry. His papers have been published in top-tier Operations Research, Operations Management, and Industrial Engineering journals. Volodymyr Babich is a member of editorial boards for *Management Science* and *Production and Operations Management*. He is an active member of INFORMS and the MSOM society, and the Chair of the MSOM Special Interest Group on the "Interface of Finance, Operations, and Risk Management (iFORM)".

**FOR MORE INFORMATION ON PROFESSOR BABICH'S RESEARCH,
PLEASE VISIT: <http://explore.georgetown.edu/people/vob2/?PageTemplateID=319>**