NYU Stern School of Business
Department of Information, Operations & Management Sciences
OPERATIONS MANAGEMENT RESEARCH SEMINAR

TOPIC: **Loss Distribution Approach for Operational Risk Capital Modelling: challenges and pitfalls**
SPEAKER: **Pavel Shevchenko (CSIRO)**
DATE: **Monday, March 24, 2014**
TIME: **12:30 PM-1:30PM**
PLACE: **KMC 8-170**

ABSTRACT

The management of operational risk in the banking industry has undergone explosive changes over the last decade due to substantial changes in the operational environment. Globalization, deregulation, the use of complex financial products and changes in information technology have resulted in exposure to new risks very different from market and credit risks. In response, Basel Committee for Banking Supervision has developed a regulatory Basel II framework that introduced operational risk category and corresponding capital requirements. Over the past five years, many major banks have received accreditation under the Basel II Advanced Measurement Approach by adopting the Loss Distribution Approach (LDA) despite there being a number of unresolved methodological challenges in its implementation. Different approaches and methods are still under hot debate. This talk is devoted to quantitative issues in operational risk LDA such as modelling large losses, methods to combine different data sources (internal data, external data and scenario analysis) and modelling dependence which are still unresolved issues in operational risk capital modelling. Presented results are based on our work with the banking industry, discussions with regulators and academic research.

BIO

Prof Pavel Shevchenko is a Senior Principal Research Scientist in the Division of Computational Informatics of CSIRO (The Commonwealth Scientific and Industrial Research Organisation of Australia). Prof Shevchenko joined CSIRO in 1999 to work in the area of financial risk. He leads research and commercial projects on modelling of operational and credit risks; option pricing; insurance; modelling commodities and foreign exchange; and the development of relevant numerical methods and software. He received a MSc from Moscow Institute of Physics and Technology and Kapitza Institute for Physical Problems in 1994; a PhD from The University of New South Wales in 1999 in theoretical physics. He is currently an adjunct Professor at School of Mathematics and Statistics University of NSW, adjunct Professor at School of Mathematical Sciences University of Technology Sydney, Honorary Senior Research Associate in University

College London, and associate editor of the Journal of Operational Risk. Prof Shevchenko has published extensively in academic journals, consults for major financial institutions and is a frequent presenter at industry and academic conferences. His publication records include over 50 journal papers and over 70 technical reports. He is the author of the monograph Modelling Operational Risk Using Bayesian Inference (Springer 2011) and co-author of the forthcoming Handbook of Operational Risk (Wiley 2014).