



Nanyang Technological University

## **DIVISION OF ECONOMICS**

Seminar Series

The Division of Economics invites you to a seminar by Professor Larry Selden.

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- Speaker** : **Professor Larry Selden**  
*Columbia Graduate Business School  
Columbia University*
- Topic** : **"Risk Neutrality Regions"**
- Chairperson** : **Assistant Professor Kang Minwook**  
*Division of Economics  
School of Humanities & Social Sciences*
- Date** : **Wednesday, 28 January 2015**
- Time** : **02:30 pm to 04:00 pm**
- Venue** : **HSS Seminar Room 3 (HSS-B1-10)**  
*Nanyang Technological University  
School of Humanities and Social Sciences  
14, Nanyang Drive  
Singapore 637332*

### **About the Speaker:**

Larry Selden is Emeritus Professor at the Columbia Graduate Business School and Visiting Distinguished Research Scholar at the University of Pennsylvania. He has published articles in *Econometrica*, *American Economic Review*, *Review of Economic Studies*, *Journal of Economic Theory*, *Economic Theory*, *American Economic Journal: Microeconomics* and a number of other journals. His academic research has covered preference theory, demand theory, asset demand and asset prices. He has also published widely in popular management publications such as the *Harvard Business Review* and *Fortune Magazine*. He co-authored a bestselling book *Angel Customers and Demon Customers* with Geoffrey Colvin, former editor of *Fortune Magazine*. Professor Selden has been advisor to the senior leadership of more than 50 of the largest companies in the world in the areas of finance, marketing and strategy and has been listed as a top corporate advisor by *Business Week* and *Business 2.0*.

### **Abstract:**

The notion of risk neutrality is a basic element in standard textbook treatments of the economics of risk. In the single variable case, it is well known that an Expected Utility maximizer will be risk neutral toward all distributions if and only if her NM (von Neumann Morgenstern) index is linear. In the multivariate case, an individual can be risk neutral over a set of non-degenerate distributions even if her NM index is not linear. We provide necessary and sufficient conditions for when an individual with a nonlinear NM index is risk neutral and characterize the regions of the choice space over which risk neutrality is exhibited. The least concave decomposition of the NM index introduced by Debreu (1976) plays an important role in our analysis as do the notions of minimum concavity points and minimum concavity directions. For the special case where one choice variable is certain, the analysis of risk neutrality requires modification of the Debreu decomposition. The existence of risk neutrality regions are shown to have potentially important implications for classic consumption-savings, consumption-leisure and representative agent equilibrium asset pricing models.

### **Reservation:**

Admission is free. Please reply to [d-egc@ntu.edu.sg](mailto:d-egc@ntu.edu.sg) to confirm your attendance.