



Yale SCHOOL OF MANAGEMENT

Accounting Research Workshop Presents

Yuri Biondi

French National Center for Scientific Research (CNRS)

Accounting and the Formation of Share Market Prices Over Time: A Mathematical Institutional Economic Analysis Through Simulation and Experiment

This paper develops an agent-based model to examine the emergent dynamic properties of share market price formation over time, with a view on financial market stability under alternative accounting regimes. In the model, individual heterogeneous investors interact with each other and with institutional devices which are an accounting system (related to the business firm) and a price system (related to the Share Exchange). These interactions provide mechanisms for transmission through which firm-specific (accounting signal) and market-driven (aggregate price) drivers can act. A baseline simulation analysis assesses the financial market stability under three alternative accounting designs, namely two kinds of historical cost accounting regime and one kind of fair value (mark-to-market) accounting regime. The former prove to better stabilize the financial system for market volatility and exuberance in perfectly balanced conditions between speculative and fundamentalist beliefs and intentions. An evolutionary analysis is then developed by varying the relative degree of speculative attitudes. Historical cost accounting regimes further prove to make the financial system more resilient to speculative waves occurring at inter-individual level. Baseline findings are further corroborated through experimental analysis in ten artificial financial systems. This mathematical institutional economic analysis has general implications for both designing accounting systems aimed at enhancing financial market stability and preventing procyclicality, and the study of accounting information process in the formation of share market prices over time.

Thursday, November 5, 2015

11:30 am - 12:50 pm

165 Whitney Avenue

Gould Classroom, Room 4220

Lunch will be provided

Full paper attached

Elizabeth Viloudaki/ Administrative Assistant/Yale School of Management
P.O. Box 208200 165 Whitney Ave. New Haven, CT 06520-8200 Phone: (203) 436-5798
elizabeth.viloudaki@yale.edu / <http://www.mba.yale.edu/>

*[Yale Accounting Research Workshop] Yuri Biondi, French National Center for Scientific Research (CNRS).
November 1. <click to add to your calendar>*

In this week's Yale Accounting Research Workshop, Yuri Biondi of the French National Center for Scientific Research, will lecture on "Accounting and the Formation of Share Market Prices Over Time: A Mathematical Institutional Economic Analysis Through Simulation and Experiment". Please join us on Thursday, November 5 from 11:30 am -12:50 pm in Classroom #4220, Evans Hall. An email notice with abstract and paper will be sent in advance of the talk. Lunch will be provided.