Department of Banking and Financial Management
University of Piraeus

Research Seminar Series

Thursday, September 25 2007
Time: 16:00 – 18:00, Room 013

<u>Seminar Title</u>

“Pricing Two Trees when Trees and Investors are Heterogeneous”

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<u>Summary</u>

We consider an exchange economy with two heterogeneous stocks and two groups of investors. Dividends follow diffusion processes, with a constant expected growth rate for one stock and a stochastic drift for the other. 'Rational investors' can either observe this stochastic drift without error or are at least able to use a noisy signal about it, while 'irrational investors' base their inference only on dividend observations. In an economy with homogeneous investors, uncertainty about the drift increases the volatilities of both stocks and the expected return of the smaller stock. Differences between the two types of stocks are mainly caused by learning, which increases both the volatility and the expected return of the stock with the stochastic drift. When both groups of investor are present, differences in portfolio holdings and thus trading mainly depend on differences in beliefs. In the long run, the irrational investors will be driven out of the market, and for realistic parameter scenarios, they can loose on average half of their wealth within twenty years.

Nicole Branger holds a PhD from the Department of Economics and Business Engineering, University of Karlsruhe, Germany in September 2001 and a post-doc from the Goethe-University Frankfurt, Germany. After spending three years as an Associate Professor at the Department of Business and Economics, University of Southern Denmark (Odense) she joined Westfälische Wilhelms-Universität Münster (Germany) in July 2008 . Her main research interests are Hedging and Pricing of Contingent Claims, Model Risk, Learning, Asset Allocation and Asset Pricing.