Workshop in Financial Economics

hosted by the International College of Economics and Finance (ICEF)
and the International Laboratory of Financial Economics (LFE)
of the Higher School of Economics
Moscow, Shabolovka st. 26, building 3, room 3211

November 7-8, 2014

Program

Friday, November 7

10.30 Session 1 "Asset Pricing and General Equilibrium"

- *Short-Term Momentum and Long-Term Reversal in General Equilibrium*
  Presenter: Pablo Beker, University of Warwick (co-author: Emilio Espino)
  Discussant: Dmitry Makarov, New Economic School, Moscow

We evaluate the ability of the Lucas tree and the Alvarez-Jermann models, both with homogeneous as well as heterogeneous beliefs, to generate a time series of excess returns that displays both short-term momentum and long-term reversal, i.e., positive autocorrelation in the short-run and negative autocorrelation in the long-run. Our analysis is based on a methodological contribution that consists in (i) a recursive characterisation of the set of constrained Pareto optimal allocations in economies with limited enforceability and belief heterogeneity and (ii) an alternative decentralisation of these allocations as competitive equilibria with endogenous borrowing constraints. We calibrate the model to U.S. data as in Alvarez and Jermann. The sign of the autocorrelations predicted by the Lucas tree model or the Alvarez-Jermann model with correct beliefs coincide with the data for some preferences parameters. However, we find that only the Alvarez-Jermann model with heterogeneous beliefs delivers autocorrelations that not only have the correct sign but are also of magnitude similar to the US data when the preferences parameters are disciplined to match both the average annual risk-free rate and equity premium.

- *A One Factor Benchmark Model for Asset Pricing*
  Presenter: Christian Julliard, London School of Economics (co-authors: Anisha Gosh and Alex P. Taylor)
  Discussant: Patrick Kelly, New Economic School, Moscow

Given a set of test assets, a relative entropy minimization approach can be used to estimate *the most likely* pricing kernel to price the given cross-section *out-of-sample*. Compared to leading empirical asset pricing models, such as the Fama-French 3-factor and Carhart models, our out-of-sample pricing kernel delivers smaller pricing errors and better cross-sectional fit. Moreover, a tradable "information portfolio" that mimics this kernel: a) has a high Shape ratio that consistently outperforms the *1/N* benchmark out-of-sample; b) extracts pricing information not captured by the Fama-French and momentum factors –it leads to an "information anomaly", generating high alphas of 3.5%-22.0% per annum. These results hold for a

wide cross section of assets consisting of size, book-to-market-equity, momentum, industry, and long term reversal sorted portfolios.

12.00 Coffee break

12.30

- *Monetary Uncertainty and Default*
  Presenter: Dimitrios P. Tsomocos, Saïd Business School and St. Edmund Hall, University of Oxford (co-authors: Kwangwon Ahn, Chansoo Kim and Luxi Wang)
  Discussant: Valery Charnavoki, New Economic School, Moscow

We investigate the effects of monetary uncertainty on the aggregate economy, especially default. First, we estimate monetary policy for the U.S. that allows for time-varying volatility to bring in monetary uncertainty. Then, we assign productivity, money policy and monetary uncertainty shock to a dynamic general equilibrium model with default that is calibrated with the U.S. economy. It reveals that monetary uncertainty has a negative effect on the economic activity and results in default issue. An increase of risk aversion among agents is the primary cause of investment delays and dries up liquidity temporarily while a decrease in the output serves as an intermediate step in the transmission mechanism of monetary uncertainty.

13.15 Lunch break

14.30 Session 2 “Stock Markets, mutual funds and M&A”

- *Stock liquidity in forefront of anticipated announcements*
  Presenter: Sergey Gelman, ICEF, Higher School of Economics (co-author: Roman Lushchikov)
  Discussant: Igor Kheifets, New Economic School, Moscow

Earnings announcements present an exceptionally attractive opportunity to study the effect of information asymmetry on liquidity for two reasons: their timing is usually known beforehand, and they contain market-moving information. We examine changes in liquidity in the forefront of such announcements and link them to the degree of uncertainty related to the announcement. We find that liquidity surges stronger for stocks with less certain announcement outcomes.

- *ETF expansion and alpha discovery in the mutual fund industry*
  Presenter: Oleg Shibanov, New Economic School, Moscow
  Discussant: Carsten Sprenger, ICEF, Higher School of Economics

I study the impact of an increase in the exchange-traded funds' (ETF) assets under management and its impact on the mutual funds in the US wealth management industry. I show that on average, there is no significant change in alphas for the mutual funds. However, smaller funds do show significant increase in alphas and the impact is economically large: for $100bln increase in the size of ETFs, there is approximately

6bp annual increase in alpha. Similarly, volatilities of the fund returns also increase with the size of ETFs. The results are robust to the model based on the most correlated ETF inflows rather than the average ETF inflows.

16.00 Coffee break

16.30

- *Repetitive Cross-border Mergers and Acquisitions*
  Presenter: Kyeong Hun Lee, ICEF, Higher School of Economics (co-authors: Amrita Nain and Qianying (Emma) Xu)
  Discussant: Marie-Ann Betschinger, ICEF and Faculty of Management, Higher School of Economics, Moscow

This paper examines repetitive deals in the same target country. We find that as acquirers repeat cross-border deals in the same country, (i) the time between successive deals declines, (ii) the percentage of ownership stake acquired increases, and (iii) the percentage of consideration paid in cash increases. To further distinguish whether such patterns are consistent with learning or hubris, we examine repetitive cross-border deals at two different stages of learning: experience-building versus memory-loss periods (as in Hayward (2002)). We find that as the acquirer makes more deals in the country, the time between deals decreases and the abnormal announcement return increases in experience-building periods, whereas such patterns do not exist or are reversed in memory-loss periods. Our results suggest that firms gain by learning as they repeat acquisitions in the same country.

17.30 Reception

Saturday, November 8

10.30 Session 3 “Market Microstructure”

- *Market Microstructure Invariance as an Implication of a Structural Model*
  Presenter: Anna Obizhaeva, New Economic School, Moscow (co-author: Albert S. Kyle)
  Discussant: Emiliano Catonini, ICEF, Higher School of Economics

We develop a structural model showing that microstructure invariance hypotheses are consistent with a dynamic infinite-horizon model of market microstructure with informed trading, noise trading, market making, and endogenous production of information. The invariance relationships are derived under the assumption that the effort required to generate one discrete bet does not vary across stocks and time. Since bets are based on the arrival of discrete chunks of information, the structural model describes how the invariance relationships reflect differences in the granularity of information flows across markets. The invariance of pricing accuracy and market resiliency requires an additional assumption that private information has the same signal-to-noise ratio across markets.

- *High Frequency Trading and the 2008 Short Sale Ban*
  Presenter: Terence Hendershott, Haas School of Business, University of California Berkeley (co-authors: Jonathan Brogaard and Ryan Riordan)
  Discussant: Vladimir Sokolov, ICEF, Higher School of Economics

We examine the effects of high frequency traders (HFTs) on liquidity and price efficiency using the September 2008 short sale ban. To disentangle the separate impacts of short selling by HFTs and non-HFTs (nHFTs) we use an instrumental variables approach exploiting differences in the ban's cross-sectional impact on HFTs and nHFTs. nHFTs' short selling improves liquidity and price efficiency, as measured by bid-ask spreads and pricing errors. HFTs' short selling has the opposite effect by decreasing liquidity and price efficiency. HFTs' negative impact is driven by liquidity demanding trades. HFTs' liquidity supply improves liquidity and price efficiency, but not enough to outweigh the negative HFT liquidity demand effect.

12.00 Coffee break

12.30

- *Inconspicuousness and Obfuscation: How Large Shareholders Dynamically Manipulate Output and Information for Trading Purposes*
  Presenter: Bart Taub, Adam Smith Business School, University of Glasgow
  Discussant: Alex Boulatov, Higher School of Economics

I relate the theory of large shareholders in corporate governance to market microstructure theory. The large shareholder literature examines how a large shareholder trades off the advantage of being able to influence the decisions of the firm, while small shareholders free ride on the outcomes, against the extra risk entailed in large shareholdings.

The market microstructure literature is concerned with the use of private information in pricing stocks. The large shareholder can affect the underlying value of the firm not only in the conventional sense; he can also profit because this improves his ability to hide his private information from other informed traders and from market makers. In a static version of the model, the large shareholder increases the volatility of firm fundamentals, but by adjusting his trading strategy this increase is of the component of his private information that is unforecastable by the market maker: he obfuscates.

I then use Fourier transform methods to construct a continuous time dynamic version of the large shareholder model. In the dynamic model, the large shareholder does not just simply amplify the fundamental as in the static model: in addition, he alters the fundamental autoregressive structure of the fundamental value of the firm because this improves his ability to hide his private information from other informed traders and from market makers, that is, to obfuscate. This has implications for the allocation of real resources in the firm.

13.30 Lunch

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<u>Format of presentations</u>

30 min presentation, 10 min discussant, 5 min floor. TOTAL 45 minutes per paper.