

# WORKSHOP IN FINANCIAL ECONOMICS

Hosted by the International College of Economics and Finance (ICEF) International Laboratory of Financial Economics (LFE)

**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 riskfree 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 infinitehorizon 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: Terrence 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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### Pablo Beker

University of Warwick

Pablo Beker is an Associate Professor of Economics at the University of Warwick. He holds a Ph.D. in Economics from Cornell University. His research interests are Economic Theory, Asset Pricing and Industry Dynamics. He has published a number of articles in the Journal of Economic Theory.



### Marie-Ann Betschinger

ICEF and Faculty of Management, Higher School of Economics

Marie-Ann Betschinger is an Assistant Professor at the International College of Economics and Finance and the Faculty of Management of the Higher School of Economics and senior research fellow at the International Laboratory in Financial Economics and the Centre for Advanced Studies. She holds a PhD in Economics from the Münster School of Business and Economics. Main research interests of Marie-Ann Betschinger are New Institutional Economics, Foreign Direct Investment, Multinational Enterprise, Cross-border M&A. Marie-Ann Betschinger has published in the Journal of Comparative Economics, the Strategic Management Journal.



### **Alexey Boulatov**

Higher School of Economics

Alexey Boulatov is a Full Professor at the International College of Economics and Finance, Centre for Advanced Studies and Department of Economics at the Higher School of Economics. He holds a PhD in Physics from City College in New York and a PhD in Finance from the University of California, Berkeley. His main areas of interest are Micro-based analysis in Asset Pricing, Market Microstructure, Computational Finance, and Informational Economics. Alexey Boulatov has published in the Journal of Banking and Finance, Review of Economic Studies, Review of Financial Studies, Economic Theory, and Journal of Risk and Insurance.



### Emiliano Catonini

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Emiliano Catonini is an Assistant Professor at the International College of Economics and Finance of the Higher School of Economics. He holds a PhD from Bocconi University. Emiliano Catonini's current research focuses on Economic Theory, Game Theory and Applied Microeconomic Theory.



### Valery Charnavoki

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Valery Charnavoki is an Assistant Professor at the New Economic School. He received a PhD in Economics from the Carlos III University of Madrid. Valery Charnavoki's current research focuses on Macroeconomics, International Macroeconomics, Monetary economics and Macroeconometrics. He has published in the American Economic Journal: Macroeconomics.



### Sergey Gelman

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Sergey Gelman is an Assistant Professor at the International College of Economics and Finance of the Higher School of Economics and senior research fellow at the International Laboratory in Financial Economics. He holds a PhD in Economics from the University of Münster. His main research interests are stock price dynamics around takeovers, identification of structural breaks and regime switching in financial time series, pricing of derivatives in forefront of anticipated significant events, asset pricing and consumption preferences. Sergey has published in the Journal of Empirical Finance and the European Review of Economic History.



### Terrence Hendershott

Haas School of Business, University of California, Berkeley

Terrence Hendershott is a Professor at the Haas School of Business of University of California in Berkeley. He holds a PhD from the Graduate School of Business, Stanford University. His research interests include management of information systems, role of information technology in financial markets, electronic communications networks (ECNs) and stock market design, regulation of financial markets and how electronic markets compete with traditional businesses. Terrence Hendershott has published in the Journal of Finance, Financial Review, Journal of Investment Management, Journal of Financial Markets, Journal of Financial and Quantitative Analysis, Review of Economic Studies, Journal of Empirical Finance, Review of Financial Studies, Real Estate Finance, among others.



### Kyeong Hun Lee

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Kyeong Hun Lee is an Assistant Professor at the International College of Economics and Finance and the Faculty of Economics of the Higher School of Economics. He was awarded a PhD in Finance by the University of Iowa. His current research interests span Corporate Finance and International Finance.



### **Christian Julliard**

London School of Economics

Christian Julliard is an Associate Professor of Finance and a senior research associate of the Financial Market Group (FMG) at the London School of Economics. He is also a research affiliate of the International Macroeconomics and Financial Economics programmes of the Centre for Economic Policy Research (CEPR). He was awarded a PhD by the Department of Economics at Princeton University. His research interests span Macroeconomics, Finance, and the frontier of Applied Econometrics. His research has been published in the Journal of Political Economy and the Review of Financial Studies.



### Patrick Kelly

New Economic School

Patrick Kelly is an Associate Professor of Finance and Chair of the Finance Department at the New Economic School and an associated research fellow at the International Laboratory of Financial Economics. He has a PhD in Finance from the W. P. Carey School of Business, Arizona State University. His research interests span Market Efficiency, Investments, International Investments and Empirical Asset Pricing. Patrick has published in the Review of Financial Studies, Journal of Banking and Finance and Quarterly Journal of Finance.



### lgor Kheifets

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Igor Kheifets is an Assistant Professor at the New Economic School. He obtained a PhD in Economics from the Carlos III University of Madrid. His major research interests are Econometrics and Empirical Finance. His latest article was accepted to The Econometrics Journal.



#### **Dmitry Makarov**

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Dmitry Makarov is an Associate Professor of Finance at the New Economic School and an associated research fellow at the International Laboratory of Financial Economics. He holds a PhD in Finance from the London Business School. His research interests include Asset Pricing, Portfolio Choice, and Money Management. Dmitry has published in the Journal of Finance, Journal of Financial Economics, and Finance Research Letters.



### Anna Obizhaeva

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Anna Obizhaeva is an Assistant Professor at the New Economic School. She received her PhD in Finance at the Massachusetts Institute of Technology. Anna Obizhaeva's research focuses on market microstructure, including topics such as market liquidity, transaction costs, information dissemination, price volatility, price manipulation, and optimal execution strategies. Anna has published in the Journal of Financial Markets and Computational Mathematics and Modeling. She has also won the prestigious Roger F. Murray Q-Group Prize (first place) for her work on market microstructure invariance.



### **Oleg Shibanov**

New Economic School

Oleg Shibanov is an Assistant Professor at the New Economic School. He obtained his Ph.D. in Mathematics (Statistics) from the Moscow State University and PhD in Finance from London Business School. His research interests span Asset Pricing, in particular Mutual Funds, Information Asymmetry, Business Cycle, International Finance, Macroeconomics, Production Economies, and Numerical Methods.



### Vladimir Sokolov

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Vladimir Sokolov is an Assistant Professor at the International College of Economics and Finance of the Higher School of Economics and senior research fellow at the International Laboratory in Financial Economics. He holds a PhD in Economics from the University of Notre Dame. The main research interests of Vladimir are Banking, Financial Intermediation and International Finance. His research has been published in the Journal of Empirical Finance, Review of International Economics, Pacific Economic Review, Economic Policy, and the Journal of the New Economic Association.



#### Bart Taub

Adam Smith Business School, University of Glasgow

Bart Taub is a Professor in Finance (Economics) at the Adam Smith Business School of the University of Glasgow. He holds a PhD from the University of Chicago. Bart Taub studies dynamic models in which information and commitment play a role. He currently is applying these ideas to models of stock markets, international lending and corporate mergers. Main research interests of Bart Taub are Dynamic Models of Market Microstructure, Industrial Organization, Monetary Theory, Economic Development, Contract Theory. Bart Taub has published in the Journal of Economic Theory, the Journal of Financial Markets, Economic Theory, Economic Inquiry, the Journal of Finance, the Journal of Macroeconomics, the Review of Economic Design, Finance and Stochastics, and the Annals of Finance.



### Carsten Sprenger

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Carsten Sprenger is an Assistant Professor at the International College of Economics and Finance of the Higher School of Economics and head of the International Laboratory in Financial Economics. He holds a PhD in Economics from the Universitat Pompeu Fabra. His research interests span the areas of Corporate Finance, Corporate Governance, Credit Risk, and Real Estate Markets. Carsten has published in the Journal of Comparative Economics, Economic Annals and the Journal of the New Economic Association.



#### **Dimitrios Tsomocos**

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Dimitrios Tsomocos is a Reader in Finance at the Saïd Business School and fellow in Management at St. Edmund Hall at the Oxford University. He is also a senior research associate at the Financial Markets Group at the London School of Economics. He holds a Ph.D. from Yale University. Dimitrios Tsomocos' current research focuses on banking and regulation, incomplete asset markets, systemic risk, financial instability and issues of new financial architecture. Dimitrios Tsomocos has published among others in the Journal of Financial Stability, Economic Theory, International Game Theory Review, Journal of Mathematical Economics, Journal of World Economics Review, Greek Economic Review, Journal of Economic, International Journal of Central Banking, Annals of Finance.



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