

# THE LATEST RESEARCH TRANSFORMING THE ASSET MANAGEMENT INDUSTRY

EURONEXT, 39 RUE CAMBON, 75001 PARIS

### HEDGE FUND PERFORMANCE ARE PERFORMANCE MEASURES GAMED BY HEDGE FUND MANAGERS?

Do marital events impact hedge fund performance? Is the hedge fund equity trading skill explained by luck? Do uncertainty about expected stock returns explain hedge fund performance?

### INFORMATION AND ASSET PRICES DO HEDGE FUNDS HAVE AN ADVANTAGE IN A COSTLY INFORMATION MARKET?

What is the contribution of hedge funds to price efficiency? Does local ownership mitigate the effect of systemic shocks? What are the effects of regulation constraints on fund performance?

### HEDGE FUND FLOWS AND LIQUIDITY HOW TO PREDICT LIQUIDITY RISK IN FUND OF HEDGE FUND RETURNS?

Is surviving fund behavior consistent with a Darwinian assumption? Do stocks exposed to funding liquidity risk exhibit higher returns?

## HIGH-FREQUENCY TRADERS COMPETITION IN SPEED VERSUS COMPETITION IN PRICES

Does competition among HFTs reduce arbitrage? When does a millisecond data point matters?



The Latest Research Transforming the Asset Management Industry



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This conference received the financial support of the «Financial Econometric» Thematic Semester granted by the LABEX Louis Bachelier



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Welcome to the 7th Annual Hedge Fund Research Conference, which presents the latest research papers shaping the future of the asset management industry, from the most renowned academics.

With close to a hundred submissions from 50 universities in 17 countries, the 16 unpublished papers, which will be presented during the conference, were selected following a thorough screening process by a scientific committee of internationally respected academic professors.

Since its inception, this event has become a reference in the field of risk management and alternative investments research, now attracting the most reputable academics working on cutting-hedge topics. Over the last 6 years, the "Annual Hedge Fund Research Conference" has thus been a platform for international visibility. Indeed, out of a total of 91 research papers presented across the last 6 events, 43 of them have already been published in the most renowned academic publications.



### **Organizing Committee**

#### SERGE DAROLLES, UNIVERSITÉ PARIS-DAUPHINE & CREST

Serge Darolles is Professor of Finance at Université Paris-Dauphine where he teaches Financial Econometrics since 2012. Prior to joining Dauphine, he worked for Lyxor between 2000 and 2012, where he developed mathematical models for various investment strategies. He also held consultant roles at Caisse des Dépôts & Consignations, Banque Paribas and the French Atomic Energy Agency.

Mr. Darolles specializes in financial econometrics and has written numerous articles which have been published in academic journals. He holds a Ph.D. in Applied Mathematics from the University of Toulouse and a postgraduate degree from ENSAE, Paris.



Philippe has worked since 2005 for SG's renowned Cross-Asset Research as a multi-asset strategist and previously as an economist on emerging markets and the eurozone. He has also worked for five years as an economist for the OECD and the United Nations.

Philippe holds a Master in International Economics and Econometrics from the University of

Philippe Ferreira is Head of Hedge Fund Research at Lyxor. Prior to joining Lyxor in 2013,

Paris La Sorbonne. He is also a regular lecturer in universities and business schools.

#### RENÉ GARCIA, EDHEC BUSINESS SCHOOL

After his Ph.D. in Economics from Princeton University in 1992, René Garcia joined the Université de Montréal, where he held the Hydro-Québec Chair in Risk Management. He was also the scientific director of the Centre for Interuniversity Research and Analysis on Organizations (CIRANO). He joined EDHEC Business School in Nice (France) in 2007 where he is today Chair Professor of Finance. His most recent research focuses on the evaluation of asset pricing models accounting for higher moments, long-run asset pricing models, the use of cross-sectional variance of equity returns to measure idiosyncratic volatility, the analysis of hedge fund returns.

#### CHRISTIAN GOURIÉROUX, UNIVERSITY OF TORONTO & CREST

Christian Gouriéroux is professor of Economics at the University of Toronto and director of the Finance-Insurance laboratory at CREST (Center for Research in Economics and Statistics in Paris). His current research interests are in Financial Econometrics, especially in credit risk, term structure of interest rates, longevity, hedge funds and regulation. Christian has been a scientific adviser for credit scoring at BnpParibas during 20 years, and consultant for Basel II at DEXIA and CIBC (Canada). He has published widely, about 200 articles, in Economics, Econometrics and Finance academic journals.

#### Scientific Committee

#### Vikas Agarwal,

Georgia State University

#### Charles Cao,

Pennsylvania State University

#### Serge Darolles,

Université Paris-Dauphine & CREST

#### Laurent Fournier,

**Euronext** 

#### René Garcia,

EDHEC Business School

#### Christian Gouriéroux,

University of Toronto & CREST

#### **Andrew Patton,**

Duke University

#### Thierry Roncalli,

Lyxor Asset Management

#### Ronnie Sadka,

Boston College







# **DAY ONE**HEDGE FUND PERFORMANCE, LIQUIDITY, ASSET PRICES & HIGH-FREQUENCY TRADERS

The first session sheds light on the impact of Hedge Funds on asset prices. Lubomir Petrasek examines the relation between changes in hedge fund stock holdings and measures of informational efficiency of equity prices. He shows that the contribution of hedge funds to price efficiency is greater than the contributions of other types of institutional investors. Augustin Landier builds on the intuition that most known anomalies are much stronger among mid-caps than among large stocks. He finds closed-form formulas relating decay of Sharpe ratios with the size of portfolios, illiquidity and signal persistence. He shows that well-know trading strategies are characterized by different trading capacities, from few millions to a billion dollar.

The second session starts with the Zhen Shi's research about liquidity spillovers in Hedge Funds. She examines whether funds of hedge funds engage in costly fire sales of their hedge fund investments during the 2004–2011 period. She finds that funds of hedge funds experiencing large outflows tend to liquidate holdings in funds with relatively few redemption restrictions, even when these funds perform well. Sevinc Cukurova provides evidence that hedge funds that suffer a very large negative return and survive exhibit outstanding future performance with abnormal returns as high as 9.6% annually. This is consistent with a Darwinian hypothesis: During periods of turmoil, fund managers are more willing to disclose information about their investment philosophy to avoid fund outflows and liquidation of the fund.

The third session deals with Hedge Fund performance. Melvyn Teo finds that marital events negatively impact hedge fund performance. Fund manager marriages and divorces significantly lower investment performance, both during the six-month period surrounding the event and for up to two years after the event. Russell Jame examine whether hedge funds profit from liquidity provision. He finds hedge funds' equity-trading skill is largest in their contrarian trades over a one-month holding period. His results suggest that contrarian hedge funds create short-term value through liquidity provision.

Finally, for the NYSE session, high frequency trading will be the 'sujet du jour'. Two papers are presented in this session. In the first paper, Shunquan Zhan finds HFT competition comes at a cost of more frequent, small-sized and prolonged price discrepancies between futures and ETFs. HFT firms compete away significant discrepancies, leaving unprofitable small-sized arbitrage opportunities in the market. In his keynote speech, lan Domowitz addresses a single question: is consideration of trading strategy an essential component in assessing venue performance? The answer to the question is, yes. This conclusion is reached through comparisons of strategy use across venues and performance metrics, by venue, venue type, and strategy.

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# DAY TWO HEDGE FUNDS FLOWS AND LIQUIDITY, IMPACT OF REGULATION, NETWORKS & PERFORMANCE

The second day will start with a session on Networks. Christian Brownlees introduces a lasso based regularization procedure for large dimensional realized covariance estimators of log-prices. He names it the regularized estimator realized network, since estimating a sparse inverse covariance matrix is equivalent to detecting the partial correlation network structure of the log-prices. Alberto Plazzi constructs a network of fund managers based on past employment at the same firm at the same time, mutual former employers, and mutual former industries. He finds that common industry background has a significant impact on the funds' similarities in risk factors.

Mariassunta Giannetti exploits the domestic portfolios of U.S. mutual funds to provide microeconomic evidence that investors are more likely to liquidate geographically remote investments at times of heightened stock market uncertainty. This has important implications for asset prices. The returns of stocks with geographically distant owners are more exposed to changes in market volatility. Biliana Guner explores the dynamic management of leverage by long/short equity hedge funds. She investigates hedge fund timing ability from the perspective of adjustment of leverage ratios by skilled fund managers.

The third session deals with the impact of regulation. Robert Kosowski demonstrates that hedge funds have more suspicious patterns in their reported returns than Absolute Return UCITS, which have stricter reporting rules. Alberto Rossi documents one approach that is commonly used by some institutional portfolio managers: exploiting the Freedom of Information Act, a law that allows for the full or partial disclosure of previously unreleased information and documents in the domain of agencies of the Executive Branch of the United States government. His results indicate that these requests are an important conduit through which institutional investors gather information to generate abnormal portfolio returns.

Finally, in the last session of the day, Monica Billio introduces a new flexible Generalized Utility-based N-moment measure of performance, relying on a characterization of the whole return distribution, and which is hardly gamable. This new performance measure is well adapted for analyzing performance of hedge funds and could serve as the basis of the detection of fraudulent funds as illustrated with the case of the Madoff's fund. Eser Arisoy investigates empirically whether uncertainty about expected stock returns can explain the performance of hedge funds both in the cross-section and over time. He finds that volatility of aggregate volatility exposure is a significant determinant of hedge fund returns at the overall index level, at different strategy levels, and at individual fund level.

#### 7TH ANNUAL HEDGE FUND RESEARCH CONFERENCE - JAN 2015

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#### **DAY ONE**

# HEDGE FUND PERFORMANCE, LIQUIDITY, ASSET PRICES & HIGH-FREQUENCY TRADERS

8.30 – 9.15 **REGISTRATION** 

9.15 – 10.45

**ASSET PRICES** 

S. Darolles

(Université Paris-Dauphine

#### **Authors**

C. Cao

(Penn State University)

B. Liang

(University of Massachusetts)

A. Lo

(MIT Sloan School of Management)

L. Petrasek

(Board of Governors of the Federal Reserve System)

#### Hedge Fund Holding and Stock Market Efficiency

**Speaker:** L. Petrasek (Board of Governors of the Federal Reserve System) **Discussant:** M. Rockinger (HEC Lausanne)

We examine the relation between changes in hedge fund stock holdings and measures of informational efficiency of equity prices derived from transactions data, and find that, on average, increased hedge fund ownership leads to significant improvements in the informational efficiency of equity prices. The contribution of hedge funds to price efficiency is greater than the contributions of other types of institutional investors, such as mutual funds or banks. However, stocks held by hedge funds experienced extreme declines in price efficiency during liquidity crises, most notably in the last quarter of 2008, and the declines were most severe in stocks held by hedge funds connected to Lehman Brothers and hedge funds using leverage.

#### **Authors**

B. Durin (CFM)

A. Landier

(Toulouse School of Economics)

G. Simon (CFM)

D. Thesmar (HEC Paris)

#### Trading Mid-Caps Signal Persistence and Investment Capacity

**Speaker:** A. Landier (Toulouse School of Economics) **Discussant:** G. Mero (University of Cergy-Pontoise)

On paper, most known anomalies are much stronger among mid-caps than among large stocks. The standard interpretation is that anomalies "survive" in the mid-cap range because such stocks are less liquid: High price impact prevents investors from achieving the necessary scale to make arbitrage profitable. This intuition is true when trading signals move fast, but when signals are persistent enough, the decay of Sharpe ratios with the size of portfolios invested is slow. Building on a dynamic optimization result from Garleanu & Pedersen (2012), we find closed-form formulas relating Sharpe decay, illiquidity, signal persistence and portfolio size. Looking at mid-caps, we show that some well-known signals provide trading capacity in the billion dollar range while others are not scalable above a few million dollars.

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10.45 – 11.15 **MORNING BREAK** 

11.15 - 12.45

#### **FUNDING LIQUIDITY AND FLOWS**

Chair: C. Gourieroux

(University of Toronto and CREST

#### **Authors**

V. Agarwal (Georgia State University)

G. Aragon

(Arizona State University)

Z. Shi

(Georgia State University)

#### Authors

S. Cukurova (Aalto University)

J. Marin

(Carlos III University of Madrid)

# Liquidity Spillovers in Hedge Funds: Evidence from the Holdings of Funds of Hedge Funds

Speaker: Z. Shi (Georgia State University)

Discussant: O. Kolokolova (Manchester Business School)

We examine whether funds of hedge funds (FoFs) engage in costly fire sales of their hedge fund investments during the 2004–2011 period. We find that FoFs experiencing large outflows tend to liquidate holdings in funds with relatively few redemption restrictions ("liquid funds"), even when these funds perform well. A tracking portfolio that buys liquid funds involved in fire sales over the prior four quarters earns quarterly abnormal returns of -1.5%. We find no similar effects among illiquid funds, suggesting that trading costs from unanticipated redemptions explain the performance effects. We also show that liquidity mismatches between a FoF's holdings and its investors helps predict liquidity risk in FoF returns, that is, FoFs with "excessive" exposure to illiquid funds outperform during normal periods but underperform during market crises. We find evidence that best performing hedge funds are unlikely to accept investments from FoFs that are subject to greater liquidity mismatches as hedge funds are likely to face significant liquidity spillover risks in case of large outflows from FoFs.

#### Darwinian Selection in the Hedge Fund Industry

Speaker: S. Cukurova (Aalto University)

Discussant: H. Pirotte (Université Libre de Bruxelles)

This paper provides evidence that hedge funds that suffer a very large negative return and survive exhibit outstanding future performance with abnormal returns as high as 9.6% annually. The outperformance is more pronounced for hedge funds that: 1) provide higher discretion to their investors, reflected as shorter withdrawal periods, 2) suffer more severe negative returns, and 3) experience lower fund outflows. Surviving funds also exhibit lower fund outflows during crisis periods than dying funds. All this evidence is consistent with a Darwinian hypothesis: During periods of turmoil, fund managers are more willing to disclose information about their investment philosophy to avoid fund outflows and liquidation of the fund. The process results in the survival of funds managed by truly talented managers. The evidence is not consistent with competing hypotheses such as illiquidity of hedge fund holdings, rebalancing, or managerial self-confidence.



#### **DAY ONE**

# HEDGE FUND PERFORMANCE, LIQUIDITY, ASSET PRICES & HIGH-FREQUENCY TRADERS

12.45 – 14.15 **LUNCH BREAK** 

14.15 - 15.45

#### **HEDGE FUND PERFORMANCE I**

Chair: M. Brière

(AMUNDI, Université Paris-Dauphine, Université Libre de Bruxelles)

#### **Authors**

Y. Lu

(University of Florida)

S. Ray

(University of Florida)

M. Teo

(Singapore Management University)

#### Limited Attention, Marital Events and Hedge Funds

Speaker: M. Teo (Singapore Management University)

Discussant: D. Schmidt (HEC Paris)

We find that marital events negatively impact hedge fund performance. Fund manager marriages and divorces significantly lower investment performance, both during the six-month period surrounding the event and for up to two years after the event. Relative to the period before the event, fund alpha falls by an annualized 8.50 percent during a marriage and 7.39 percent during a divorce. Older managers who run liquid, high-tempo investment strategies are more negatively impacted by marriage. Younger managers who engage in illiquid investment strategies with a longer investment horizon are more susceptible to the deleterious effects of divorce. We show that behavioral biases may partially explain the performance deterioration. The difference between the proportion of gains realized and the proportion of losses realized widens both during a marriage and during a divorce, indicating that hedge fund managers are more prone to the disposition effect around marital events. Taken together, our findings suggest that the limited attention as a result of marital events can hurt the investment performance of professional money managers.

#### **Authors**

R. Jame (University of Kentucky)

#### Do Hedge Funds Create Value from Liquidity Provision?

**Speaker:** R. Jame (University of Kentucky) **Discussant:** B. Guner (Ozyegin University)

Using transaction data, I examine whether hedge funds profit from liquidity provision. I find hedge funds' equity- trading skill (ETS) is largest in their contrarian trades over a one-month holding period. This effect is strongest for funds with greater share restrictions and when funding liquidity is low. Further, funds that engage in greater contrarian trading have persistently higher ETS over one-month holdings periods. The results suggest that contrarian hedge funds create short-term value through liquidity provision. However, contrarian hedge funds have holding periods of roughly one year, which reduces the impact of liquidity provision profits on the performance of their holdings.

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15.45 – 16.15 **AFTERNOON BREAK** 

16.15 - 17.45

HIGH-FREQUENCY SPECIAL SESSION

Chair: G. Le Fol

(Université Paris-Dauphine

#### **Authors**

A. Frino

(Macquarie University Graduate School of Management)

V. Mollico

(Macquarie University Graduate School of Management)

R. Webb

(University of Virginia)

S. Zhang

(Macquarie University Graduate School of Management)

# Does Competition Among High Frequency Traders Reduce Potential Arbitrage Profit Opportunities?

Speaker: S. Zhang (Macquarie University Graduate School of Management)

Discussant: C.-A. Lehalle (CFM)

This study examines the duration, frequency and profitability of uncaptured arbitrage opportunities between the Australian Securities Exchange (ASX) Share Price Index futures contract and its exchange-traded fund (ETF) counterpart written on the S&P/ASX200 constituent securities. We find the frequency and profitability of potential arbitrage opportunities are greater during volatile and high turnover periods - other things equal. To determine whether competition among high frequency traders (HFTs) reduces potential arbitrage profit opportunities or simply encourages socially wasteful investments in being faster, we measure the increased competition in high frequency trading by identifying the number of 'cabinets' utilized in the Australian Securities Exchange's (ASX) colocation facility. We find HFT competition comes at a cost of more frequent, small-sized and prolonged price discrepancies between futures and ETFs. HFT firms compete away significant discrepancies, leaving unprofitable small-sized arbitrage opportunities in the market.

#### **KEYNOTE SPEECH**

#### **Authors**

I. Domowitz

(ITG)

K. Reitnauer

(ITG)

C. Ruane

(ITG)

# Garbage In, Garbage Out: An Optical Tour of the Role of Strategy in Venue Analysis

Speaker: I. Domowitz (ITG)

A single question is addressed: is consideration of trading strategy an essential component in assessing venue performance? Before this issue is settled empirically, it is impossible to construct comparisons of individual venues, or even contrast dark versus lit markets in the aggregate. The answer to the question is, yes. This conclusion is reached through comparisons of strategy use across venues and performance metrics, by venue, venue type, and strategy. Even a simple examination of the distribution of trading strategies across venue types suggests that different venues are used to implement disparate strategy choices.

18.00 – 19.00 **PANEL SESSION**  Financial Market Liquidity and Long Term Investors: Which measures? Which behavior?

Moderator: A. Attia (Euronext)

Panelists: I. Domowitz (ITG), C.-A. Lehalle (CFM), H. Rotivel (BNP Paribas)



#### **DAY TWO**

# HEDGE FUNDS FLOWS AND LIQUIDITY, IMPACT OF REGULATION, NETWORKS & PERFORMANCE

9.00 - 10.30 NETWORKS

Chair: J.-M. Zakoian (CREST-INSEE)

#### **Authors**

C. Brownlees (Universitat Pompeu Fabra)

E. Nualart (Universitat Pompeu Fabra)

Y. Sun

(Universitat Pompeu Fabra)

#### **Realized Networks**

**Speaker:** C. Brownlees (Universitat Pompeu Fabra) **Discussant:** J.D. Fermanian (CREST-ENSAE)

In this work we introduce a lasso based regularization procedure for large dimensional realized covariance estimators of log-prices. The procedure consists of shrinking the off diagonal entries of the inverse realized covariance matrix towards zero. This technique produces covariance estimators that are positive definite and with a sparse inverse. We name the regularized estimator realized network, since estimating a sparse inverse covariance matrix is equivalent to detecting the partial correlation network structure of the log-prices. We focus in particular on applying this technique to the Multivariate Realized Kernel and the Two-Scales Realized Co-variance estimators based on refresh time sampling. These are consistent covariance estimators that allow for market microstructure effects and asynchronous trading. The paper studies the large sample properties of the regularized estimators and establishes conditions for consistent estimation of the integrated covariance and for consistent selection of the partial correlation network. As a by-product of the theory, we also establish novel concentration inequalities for the Multivariate Realized Kernel estimator. The methodology is illustrated with an application to a panel of US bluechips throughout 2009. Results show that the realized network estimator outperforms its unregularized counterpart in an out-of-sample global minimum variance portfolio prediction exercise.

#### **Authors**

M. Gerritzen(University of Konstanz)

J. Jackwerth (University of Konstanz)

A. Plazzi (University of Lugano)

#### Birds of a Feather - Do Hedge Fund Managers Flock Together?

Speaker: A. Plazzi (University of Lugano)

Discussant: G. Monarcha (Orleans University and Orion Partners)

Typical hedge fund factor models ignore the possibility that connected managers might also invest in a similar fashion. Using a novel data set, we construct a network of fund managers based on past employment at the same firm at the same time, mutual former employers, and mutual former industries. We find that common industry background has an significant impact on the funds' similarities in risk factors (beta). In turn, sharing a former employer is the major determinant of the similarities in hedge funds abnormal performance (alpha). Managers who overlap in their past work experience share more similar residuals (idiosyncratic components).

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10.30 – 11.00 **MORNING BREAK** 

11.00 - 12.30

#### **GEOGRAPHY AND LEVERAGE**

Chair: C. Gresse

(Université Paris-Dauphine

#### **Authors**

M. Giannetti (Stockholm School of Economics)

L. Laeven (International Monetary Fund)

#### Authors

D. Edelman (UBS)

B. Güner

(Ozyegin University)

# Local Ownership, Crises, and Asset Prices: Evidence from U.S. Mutual Funds

**Speaker:** M. Giannetti (Stockholm School of Economics) **Discussant:** T. Nefedova (Université Paris-Dauphine)

During periods of heightened market uncertainty, financial integration drops. This may reflect an increase in international barriers, wealth effects, or rather an increase in the preference for geographically close investments. Since such preference for local stocks also applies to portfolios of domestic stocks, we exploit the domestic portfolios of U.S. mutual funds to provide microeconomic evidence that investors are more likely to liquidate geographically remote investments at times of heightened stock market uncertainty. This has important implications for asset prices. The valuations of stocks with ex ante less local ownership decline more when market uncertainty is high. Furthermore, the returns of stocks with geographically distant owners are more exposed to changes in market volatility. As a consequence, it appears that local ownership can mitigate the effects of systemic shocks.

#### Dynamic Management of Hedge Fund Leverage

Speaker: B. Güner (Ozyegin University)

Discussant: A. Calamia (SKEMA Business School)

We explore the dynamic management of leverage by long/short equity hedge funds and investigate hedge fund timing ability from the perspective of adjustment of leverage ratios by skilled fund managers. Using observed monthly leverage data, we find evidence of leverage timing. A sizable proportion of fund managers pro-actively adjust leverage in correct anticipation of changes in market liquidity, funding liquidity, and market volatility. Leverage timing skill is a source of economically- and statistically-significant risk-adjusted return for the top timing funds. This out-performance is especially notable in periods characterized by high volatility and tight funding conditions. We also find that while momentum followers tend to manage their leverage pro-cyclically, reversal-strategy funds tend to have counter- cyclical leverage dynamics, act as liquidity providers in anxious market environments, and collect a liquidity rent as a result.



#### **DAY TWO**

# HEDGE FUNDS FLOWS AND LIQUIDITY, IMPACT OF REGULATION, NETWORKS & PERFORMANCE

12.30 – 14.00 LUNCH BREAK

14:00 - 15:30

**IMPACT OF REGULATION** 

**A. Monfort** (CREST-ENSAE

#### **Authors**

J. Joenväärä (University of Oulu)

R. Kosowski (Imperial College Business School)

#### Authors

A. Gargano (University of Melbourne)

A. Rossi

(University of Maryland)

R. Wermers

(University of Maryland)

#### The Effect of Regulatory Constraints on Fund Performance: New Evidence from UCITS Hedge Funds

**Speaker:** R. Kosowski (Imperial College Business School) **Discussant:** C. Gouriéroux (University of Toronto and CREST)

Based on geographically disparate regulatory constraints, such as share restrictions and risk/leverage limits, we economically motivate and test a range of hypotheses regarding differences in performance and risk between UCITS-compliant (Absolute Return UCITS (ARUs)) and other hedge funds. We demonstrate that hedge funds have more suspicious patterns in their reported returns than ARUs, which have stricter reporting rules. Inconsistent with the notion that UCITS rules reduce operational risk we find that ARUs are more exposed to operational risk measures and exhibit more external conflicts of interest than hedge funds. Although ARUs deliver lower risk-adjusted returns than other hedge funds on average, this difference disappears when we compare subsets of the two groups of domicile matched funds that have the same liquidity or share restrictions. Leverage and margin constraints are less binding for funds that impose tight share restrictions, and thereby, these funds tend to have more exposure to betting-against-beta factor. Finally, we find that there are limits to the ability of investors to exploit the superior liquidity of ARUs through portfolio rebalancing since they exhibit lower performance persistence.

# The Freedom of Information Act and the Race Towards Information Acquisition

Speaker: A. Rossi (University of Maryland)

Discussant: F. Riva (IAE Lille)

Early access to information is a cornerstone for achieving superior investment returns. This paper documents one approach that is commonly used by some institutional portfolio managers: exploiting the Freedom of Information Act (FOIA), a law that allows for the full or partial disclosure of previously unreleased information and documents in the domain of agencies of the Executive Branch of the United States government. Through our own FOIA requests to one of these agencies – the Food and Drug Administration – we uncover the identities of several large institutional investors that routinely request value-relevant FDA information (e.g., on the outcome of drug trials). By linking these data with 13f institutional holdings, we document that FOIA-requesting institutions often trade in the same direction as news from the released filing—positive outcomes result in the purchase of a corporations stock, while negative outcomes result in either a stock sale or no trade.

#### The Latest Research Transforming the Asset Management Industry

15.30 – 16.00 **AFTERNOON BREAK** 

16.00 - 17.30

#### **HEDGE FUND PERFORMANCE II**

**Chair: L. Clerc** (Banque de France)

#### **Authors**

M. Billio

(University of Venice)

G. Jannin

(Variances)

B. Maillet

(AAAdvisors)

L. Pelizzon

(University of Venice)

#### **Authors**

V. Agarwal (Georgia State University)

E. Arisoy

(Université Paris-Dauphine)

N. Naik

(London Business School)

# A Generalized Utility-based N-moments Measure for building a Fraudulent Behavior Index

**Speaker:** M. Billio (University of Venice) **Discussant:** S. Vrontos (University of Essex)

Most of the performance measures proposed in the financial and academic literature are subject to be gamed in an active management framework (Goetzmann et al., 2007). One of the main reasons of this drawback is due to an incomplete characterization by these measures of studied return distributions. We introduce a new flexible Generalized Utility-based N-moment measure of performance (GUN, in short), relying on a characterization of the whole return distribution, which is hardly gamable. More precisely, it takes into account the first four moments of the return distribution and the associated sensitivities of a representative investor, reflecting his preferences and risk profile. The new performance measure is also well adapted for analyzing performance of hedge funds. It could also serve as the basis of the detection of fraudulent funds as illustrated with the case of the Madoff's fund.

#### Volatility of Aggregate Volatility and Hedge Fund Returns

**Speaker:** E. Arisoy (Université Paris-Dauphine) **Discussant:** C. Spaenjers (HEC Paris)

This paper investigates empirically whether uncertainty about expected stock returns can explain the performance of hedge funds both in the cross-section and over time. We measure uncertainty via volatility of aggregate volatility (VOV) and construct an investable version of this measure by computing monthly returns on lookback straddles written on the VIX index. We find that VOV exposure is a significant determinant of hedge fund returns at the overall index level, at different strategy levels, and at individual fund level. We find that funds with low (more negative) VOV betas outperform funds with high VOV betas by 1.61% per month. After controlling for a large set of fund characteristics, we document a robust and significant negative risk premium for VOV exposure in the cross-section of hedge fund returns. We further show that funds with low VOV betas outperform their counterparts during the financial crisis period when uncertainty about expected returns was at its highest. On the contrary, funds with high VOV betas generate superior returns when uncertainty in the market is less.



#### **SPEAKERS**



**Lubomir Petrasek,** Economist, Board of Governors of the Federal Reserve System

Dr. Lubomir Petrasek specializes in institutional investors, alternative investments, fixed income securities, and financial market regulation. His current research focuses on hedge funds and their impact on the liquidity and functioning of financial markets. His papers have been published in the Journal of Financial and Quantitative Analysis, Journal of Financial Markets, Journal of Banking and Finance, and Financial Management. Lubomir received his PhD in finance from Smeal College of Business at Penn State University in 2011. He is currently working as a financial economist at the Board of Governors of the Federal Reserve System in Washington, D.C., where he performs tasks related to prime brokers, monetary policy, and regulatory policy.



A. Landier,
Professor of Finance,
Toulouse School of Economics

Augustin Landier is a Professor of finance at the Toulouse School of Economics. He was previously an Assistant Professor at New York University (2004-2009), the University of Chicago (2002-2004), and was a Resident Scholar at the International Monetary Fund (2009). Augustin completed his PhD in Economics at the Massachusetts Institute of Technology in 2002, and graduated from Ecole Normale Superieure in Paris in 1998. His research is largely focused on finance, banking and behavioral economics and has been published in lead scientific Journals, such as the Quarterly Journal of Economics, the Review of Economic Studies, the Journal of Finance. He is also active in the public policy debate and was a member of the French Council of Economic Analysis (2010-2012).



Zhen Shi, Assistant Professor of Finance, Georgia State University

Zhen Shi is an Assistant Professor of Finance at J. Mack Robinson College of Business, Georgia State University. She received a Ph.D. in Finance from W.P. Carey School of Business at Arizona State University in 2011. Her primary research interests include investments, hedge funds and mutual funds, and behavioral finance. She has published in the Journal of Financial and Quantitative Analysis and has presented her work at several major conferences such as the Western Finance Association, the American Finance Association, the European Finance Association, and the Financial Management Association Annual Meetings.



**Sevinc Cukurova,**Assistant Professor of Finance,
Aalto University

Sevinc Cukurova is an Assistant Professor of Finance at Aalto University. Her research focuses on information transmission in financial markets, and portfolio implications derived from this analysis. She works in many areas including Hedge Funds, Mergers and Acquisitions, Insider Trading, and Corporate Governance. She has worked in various consulting projects in Spain and in Finland, using her expertise in risk management and valuation. She received her Ph.D. in Economics from Carlos III University in Madrid and M.Sc. in Economics from Pompeu Fabra University. She has regularly been a Visiting Scholar at Wharton School of University of Pennsylvania.



#### **SPEAKERS**



Melvyn Teo,
Professor of Finance,
Singapore Management University



Russell Jame, Assistant Professor of Finance, University of Kentucky



Shunquan Zhang,
PhD Candidate,
Macquarie Graduate School of Management

Melvyn Teo is Professor of Finance and Associate Dean of Research at the Lee Kong Chian School of Business, Singapore Management University. Melvyn's academic research on hedge funds has been published in top academic journals such as the Journal of Financial Economics and the Review of Financial Studies, and has garnered awards from the European Finance Association, Inquire UK, AIMA, and INSEAD. At SMU, where he teaches finance and hedge funds in the undergraduate, MBA, and Ph.D. programs, he was conferred the Lee Foundation Fellowship and the Lee Kuan Yew Fellowship for Research Excellence. Outside of SMU, Melvyn consults for Alphadyne Asset Management, an investment firm that focuses on directional and relative value strategies in the global interest rate, foreign exchange, and volatility markets. Melvyn holds a B.A. in Economics and Mathematics from Cornell University and a Ph.D. in Economics from Harvard University.

Russell Jame is an Assistant Professor of finance at the University of Kentucky. He received his Ph.D. in finance from Emory University in 2010 and taught at the University of New South Wales in Sydney, Australia from 2010-2013. Russell's research interests include hedge funds, sell-side analysts, and behavioral finance. His most recent work offers a unique look at understanding the sources of hedge fund skill by examining a novel dataset of hedge funds' equity transactions. His findings suggests that hedge funds create significant short-term value through their liquidity-providing trades. However, the impact of liquidity provision of fund performance is attenuated due to the hedge funds' relatively long holding periods.

Shunquan Zhang is a PHD candidate at Macquarie Graduate School of Management, Australia, sponsored by Capital Markets CRC Limited and Financial Market Research Centre. He received his B.Com. – ACST (1st Class Hons) from Macquarie University. His working thesis focuses on High Frequency Trading in the Australian market. By utilising low latency trading message data, he has been examining how tick size impacts High Frequency Trader's activities, their behavioural biases and arbitrage efficiencies. Other than research, he has also taught a number of subjects in statistics, finance and actuarial studies, at Faculty of Business And Economics, Macquarie University.



lan Domowitz, CEO, ITG Solutions Network, and Managing Director, ITG



Christian Brownlees, Assistant Professor, Universitat Pompeu Fabra



Alberto Plazzi, Assistant Professor, University of Lugano

lan Domowitz is the CEO of ITG Solutions Network, Inc. and a Managing Director at ITG, Inc. Prior to joining the company in 2001, he served as the Mary Jean and Frank P. Smeal Professor of Finance at Pennsylvania State University and previously was the Household International Research Professor of Economics at Northwestern University. A former member of the NASD's Bond Market Transparency Committee, he also served as chair of the Economic Advisory Board of the NASD. Mr. Domowitz has held positions with Northwestern's Kellogg Graduate School of Management, Columbia University, the Commodity Futures Trading Commission, the International Monetary Fund and the World Bank. He is currently a Fellow of the Program in the Law and Economics of Capital Markets at Columbia University.

Christian Brownlees is Assistant Professor at Universitat Pompeu Fabra and Barcelona GSE Affiliated Professor. He received his undergraduate degree in Economics and Quantitative Methods and PhD in Statistics from Università di Firenze. He was a Post-Doc Research Fellow at NYU Stern until 2011. Professor Brownlees has been working extensively in the field of systemic risk and econometric network analysis.

Alberto Plazzi graduated in 2010 from the UCLA Anderson School of Management, with a PhD in Finance. His PhD dissertation, chaired by Professor W. Torous, is entitled "Essays on Real Estate and International Asset Pricing". In September 2010 he was appointed Assistant Professor with tenure track at the Università della Svizzera Italiana (USI, Lugano). His research interests include Empirical Asset Pricing, Real Estate, Asset Allocation, and Financial Econometrics. His research has been published in leading academic journals, including the Review of Financial Studies. At USI, he teaches Risk Management, Empirical Asset Pricing, and Quantitative Methods for Finance.



#### **SPEAKERS**



Mariassunta Giannetti,
Professor of Finance,
Stockholm School of Economic



Biliana Güner, Assistant Professor, Ozyegin University

Mariassunta Giannetti is a professor of Finance at the Stockholm School of Economics, a CEPR research fellow in the financial economics program, and a research associate of the ECGI. She holds a Ph.D. in Economics from the University of California, Los Angeles and completed her B.A. and M.Sc. at Bocconi University (Italy). Professor Giannetti studies how formal institutions (such as investor protection) and informal institutions (such as culture and social norms) affect corporate finance, investor behavior, firm valuations, and economic and financial integration. All her contributions are driven by big economic questions, rather than specific institutional contexts or methodologies. She strives to identify the most appropriate economic applications, data and empirical and theoretical models to address these questions. She often relies on natural experiments to assess causality. Her publications have appeared in leading journals in Finance (including Journal of Finance, Journal of Financial Economics, Review of Financial Studies, and Journal of Financial and Quantitative Analysis), in Economics (including American Economic Review, Journal of International Economics, and Economic Journal), and in Management (including Management Science and Journal of Economics and Management Strategy).

Biliana Güner completed her B.Sc. in Economics (1999) at Sofia University, Bulgaria, and her M.Sc. in Economics and Finance (2000) at Warwick Business School, U.K. She received her Ph.D. in Statistics with Emphasis in Empirical Finance (2007) from the University of California, Santa Barbara. She was a recipient of an OSI/FCO/Chevening scholarship and a Fulbright fellowship. After completing her Ph.D., Biliana worked with a U.S. start-up hedge fund on algorithmic trading strategies. She has been with Ozyegin University, Turkey, since 2011. Biliana's research areas include market risk management, investment management, heavy-tailed financial modeling, econometrics, and Bayesian methods in finance. She has co-authored a book on Bayesian methods in finance and her work has appeared in handbooks published by Spinger, Risk Books, and Wiley.



Robert Kosowski, Associate Professor of Finance, Imperial College Business School

Robert Kosowski is Associate Professor in the Finance Group of Imperial College Business School, Imperial College London, and Director of the Risk Management Lab and Centre for Hedge Fund Research. Robert is an associate member of the Oxford-Man Institute of Quantitative Finance at Oxford University and a member of AIMA's research committees. Robert Kosowski's research interests include asset pricing and financial econometrics with a focus on hedge funds, mutual funds, performance measurement, business cycles and derivative trading strategies. Robert's research has been featured in The Financial Times and The Wall Street Journal and was awarded the European Finance Association 2007 Best Paper Award, an INQUIRE UK 2008 best paper award, an INQUIRE Europe 2009 best paper award and the British Academy's mid-career fellowship (2011-2012). Robert's research has been accepted for publication in top peer-reviewed finance journals such as The Journal of Finance, The Journal of Financial Economics and the Journal of Financial and Quantitative Analysis.



Alberto Rossi, Assistant Professor of Finance, University of Maryland

Alberto Rossi is an Assistant Professor of Finance at the Smith School of Business, University of Maryland at College Park. His research interests include theoretical and empirical asset pricing, portfolio choice and financial econometrics. His recent work concentrates on optimal investment strategies in the presence of information costs, model combination approaches for portfolio choice, and the risk-return trade-off in financial markets. He also studies institutional investors' performance and stock return predictability. Professor Rossi's work has been published in leading academic journals such as the Journal of Finance. His teaching interests include econometrics, investments and asset pricing. Before joining the Smith School, he worked as an economist at the Board of Governors of the Federal Reserve System in Washington DC. He received his PhD in Economics from the University of California, San Diego.



#### **SPEAKERS**



**Monica Billio,**Professor,
University of Venice



Eser Arisoy, Associate Professor, Université Paris-Dauphine

Monica Billio is Full Professor of Econometrics at the University Ca' Foscari of Venice. She graduated in Economics from the University Ca' Foscari of Venice and holds a PhD in Applied Mathematics at the University Paris Dauphine. Her main research interests include financial econometrics, with applications to risk measurement and management, volatility modelling, hedge funds, financial crisis and systemic risk; business cycle analysis; dynamic latent factor models; simulation based inference techniques. She is participating to many research projects financed by the European Commission, Eurostat and the Italian Ministry of Research (MIUR). The results of these and other research projects have appeared in peer-refereed journals including Journal of Econometrics, Journal of Financial Economics, Computation Statistics and Data Analysis, Journal of Empirical Finance, Journal of Financial Econometrics and European Journal of Operational Research. Moreover, she has been head of the School of Economics, Languages and Entrepreneurship (Treviso branch of the University Ca' Foscari of Venice), President of the Teaching Committee of the Master Degree in Economics and Finance and she is now Head of the Department of Economics.

Y. Eser Arisoy is associate professor at Université Paris-Dauphine since 2012. Before joining Dauphine, he held positions at Lancaster University and IESEG School of Management. His research focuses on empirical asset pricing. More particularly, he researches into determinants of asset prices in the presence of volatility, jumps, uncertainty, and other market frictions such as short-sale constraints. His work appeared in journals such as Journal of Futures Markets, Journal of Banking and Finance, and Finance Research Letters.



#### PAST CONFERENCES RESEARCH PAPERS

#### 2014 CONFERENCE RESEARCH PAPERS

From	Title
Federal Reserve Board	Do Hedge Funds Exploit Rare Disaster Concerns?
University of Sankt Gallen	Tail Risk in Hedge Funds: Evidence from Portfolio Holdings
Boston College	Fund Governance and Corporate Governance
Manchester Business School	Recovering Managerial Risk Taking from Daily Hedge Fund Returns: Incentives at Work?
University of Exeter	Commercial Banks and Hedge Funds
York University	Hedge Funds in M&A Deals: Is there Exploitation of Private Information?
VU University Amsterdam	Need for Speed? Exchange Latency and Adverse Selection
University of Illinois, Urbana-Champaign	Tick Size Constraints, Market Structure and Liquidity
Oxford University	The Impact of Hedge Funds on Asset Markets
Stockholm School of Economics	Who Trades Against Mispricing?
Imperial College Business School	The Effect of Investment Constraints on Hedge Fund Investor Returns
University of Michigan	Fund Flows in Rational Markets
University of Lugano	Do Hedge Funds Provide Liquidity? Evidence From Their Trades
University of Cambridge	Deleveraging Risk
ACPR	Funding Liquidity Risk from a Regulatory Perspective
	Federal Reserve Board University of Sankt Gallen Boston College Manchester Business School University of Exeter York University VU University VU University Amsterdam University of Illinois, Urbana-Champaign Oxford University Stockholm School of Economics Imperial College Business School University of Michigan University of Lugano University of Cambridge

#### 2013 CONFERENCE RESEARCH PAPERS

Paper Presented by	From	Title
M. Teo	Singapore Management University	Growing the Asset Management Franchise: Evidence from Hedge Fund Firms
C. Cao	Pennsylvania State University	Liquidity Costs, Return Smoothing, and Investor Flows: Evidence from a Separate Account Platform
D. Hsieh	Duke University	Exploring Uncharted Territories of the Hedge Fund Industry: Empirical Characteristics of Mega Hedge Fund Firms
S. Ray	University of Florida	Institutional Investment and Intermediation in the Hedge Fund Industry
C. Jotikasthira	UNC Chapel Hill	Hedge Fund Activists: Do They Take Cue from Institutional Exit?
Y. Chen	Texas A&M University	The Role of Hedge Funds in the Security Price Formation Process
T. Foucault	HEC Paris	News Trading and Speed
T. Hendershott	University of California at Berkeley	High Frequency Trading and Price Discovery
R. Kosowski	Imperial College London	The Economic Value and Statistical Properties of Manipulation-proof Performance Measures
F. Trojani	University of Lugano	Robust Hedge Fund Exposures and Alphas
G. Chemla	Imperial College London & CNRS-DRM	Familiarity Breeds Alternative Investment: Evidence from Corporate Defined Benefit Pensions Plans
R. Sadka	Boston College	Horizon Pricing
A. Bernales	Banque de France	Algorithmic and High Frequency Trading in Dynamic Limit Order Markets
S. Wahal	Arizona State University	High Frequency Quotation, Trading, and the Efficiency of Prices

#### 2012 CONFERENCE RESEARCH PAPERS

Paper Presented by	From	Title
R. Sadka	Boston College	Skin in the Game versus Skimming the Games: Governance, Share Restrictions and Insider Flow
G. Aragon	Arizona State University	Strategic Delays and Clustering in Hedge Fund Reported Returns
G. Girardi	Suffolk University	Systemic Risk Measurement: Multivariate GARCH Estimation of CoVaR
C. Brownlees	Universitat Pompeu Fabra	Volatility, Correlation and Tails for Systemic Risk Management
C. Gouriéroux	University of Toronto	Allocating Systematic and Unsystematic Risks in a Regular Perspective
M. Lambert	Maastricht University	Higher-moment Risk Exposures in Hedge Funds
M. Cliff	Analysis Group	Hedge Funds, The Good, the (Not-so) Bad, and the Ugly
J. Jurek	Princeton University	The Cost of Capital for Alternative Investments
E. Pagnotta	New York University	Competing on Speed
D. Rosenthal	University of Illinois at Chicago	Performance Metrics for Algorithmic Traders
L. Wagalath	Paris 6 University	Running for the Exit: Distressed Selling and Endogenous Correlation in Financial Markets
G. Le Fol	Paris-Dauphine University	Liquidity Contagion: a Look at emerging Markets
F. Franzoni	University of Lugano	ETFs, Arbitrage and Shock Propagation
Z. Shi	Georgia State University	The Impact of Portfolio Disclosure on Hedge Fund Performance, Fees, and Flows
T. Ramadorai	University of Oxford	Change you can Believe In? Hedge Fund Data Revisions
G. Simon	Capital Fund Management	Does Lockup Increase Hedge Funds Lifetimes?
E. Kastl	Cass Business School	How Does Family Membership Influence Hedge Fund Survival?
J. Joenvaara	University of Oulu	New "Stylized Facts" about Hedge Funds and Database Selection Bias
I. Guidotti	University of Neufchatel	Rational Behavior of Hedge Fund Managers and Investors



#### PAST CONFERENCES RESEARCH PAPERS

#### **2011 CONFERENCE RESEARCH PAPERS**

Paper Presented by	From	Title
T. Adrian	Federal Reserve Bank of New York	Financial Intermediaries and the Cross-Section of Stock Returns
A. Ang	Columbia University	Hedge Fund Leverage
A. Landier	Toulouse School of Economics	Do Hedge Funds Manipulate Stock Prices?
T. Ramadorai	University of Oxford	Capacity Constraints, Investor Information, and Hedge Fund Returns
A. Menkveld	VU University	Middlemen in Limit-Order Markets
R. Sadka	Boston College	Do Hedge Funs Reduce Idiosyncratic Risk?
G. Ozik	Edhec Business School	Media Coverage and Hedge-Fund Returns
M. Teo	Singapore Management University	Hedge Funds and Analyst Conflicts of Interests
N. Bollen	Vanderbilt University	Zero-R2 Hedge Funds and Market Neutrality
V. Nanda	Georgia Tech University	Tournament Behavior in Hedge Funds: High-water Marks, Fund Liquidation, and Managerial Stake
C. Gouriéroux	University of Toronto	Survival of Hedge Funds: Frailty vs Contagion
M. Billio	University of Venice	Crises and Fund of Hedge Funds Tail Risk
G. Criton	Lombard Odier	Unsupervised Risk Factor Clustering: a Construction Framework for Funds of Hedge Funds
C. Cao	Penn State University	Can Hedge Funds Time Market Liquidity?
H. Hau	University of Geneva	Role of Equity Funds in the Financial Crisis
M. Gianetti	Stockholm School of Economics	Investors' Horizons and the Amplification of Market Shocks
M. Gianetti	Stockholm School of Economics	Investors' Horizons and the Amplification of Market Shocks

#### 2010 CONFERENCE RESEARCH PAPERS

Paper Presented by	From	Title
G. Plantin	Toulouse School of Economics	Rewarding Trading Skills without Inducing Gambling?
C. Gouriéroux	University of Toronto	The Effects of Management and Provision Accounts on Hedge Funds Returns
V. Fos	Columbia University	Inferring Reporting-related Biases in Hedge Fund Databases from Hedge Fund Equity Holdings
M. Billio	University of Venice	Econometric Measures of Connectedness and Systemic Risk in the Finance and Insurance Sectors
B. Buyuksahin	International Energy Agency	Speculators, Commodities and Cross Market Linkages
C. Polk	London School of Economics	Connected Stocks
M. Teo	Singapore Management University	The Liquidity Risk of Liquid Hedge Funds
R. Sadka	Boston College	Liquidity Risk and the Cross-Section of Hedge-Fund returns
N. Papageorgiou	HEC Montreal	Performance Analysis of a Collateralized Fund Obligation (CFO) Equity Tranche
R. Garcia	Edhec Business School	The Option CAPM and The Performance of Hedge Funds
H. Hau	University of Genova	The Exchange Rate Effect of Multi-Currency Risk Arbitrage
T. Ramadorai	University of Oxford	Asset Fire Sales and Purchases and the International Transmission of Funding Shocks
F. Franzoni	University of Lugano	Hedge Fund Stock Trading in the Financial Crisis of 2007-2009
R. Kosowski	Imperial College London	Hedge Fund Predictability Under the Magnifying Glass: Forecasting Individual Fund Returns Using Multiple Predictors
A. Patton	Duke University	On the High Frequency Dynamics of Hedge Fund Risk Exposures

#### 2009 CONFERENCE RESEARCH PAPERS

Paper Presented by	From	Title
D. Madan	University of Maryland	Hedge Fund Performance: Source and Measures
C. Gouriéroux	University of Toronto	L-Performance with an Application to Hedge Funds
R. Garcia	EDHEC Business School	Assessing Misspecified Asset Pricing Models with Empirical Likelihood Estimators
J. Teiletche	Lombard Odier	The Dynamics of Hedge Funds Performances
J.P. Florens	Toulouse School of Economics	Hedge Funds Durations: Endogeneity of Performance and AUM
M. Billio	University of Venice	Dynamic Risk Exposure in Hedge Funds
V. Agarwal	Georgia State University	Do Higher-Moment Equity Risks Explain Hedge Fund Returns?
R. Kosowski	Imperial College London	Where There is nothing to Hide: Correlation Risk and the Cross-Section of Hedge Fund Returns
R. Cont	Columbia University	When Diversification Increases Risks: Feedback Effects and Endogenous Correlation in Fund Returns
A. Patton	Duke University	Time-Varying Liquidity in Hedge Funds Returns
N. Bollen	Vanderbilt University	Locked up by a Lockup: Valuing Liquidity as a Real Option
D. Thesmar	HEC Paris	Overcoming Limits of Arbitrage: Theory and Evidence



# FORMER CONFERENCE PAPERS PUBLISHED IN ACADEMIC JOURNALS

Authors	Title	Published in
Aboul-Enein, S., Dionne, G., and N. Papageorgiou	Performance Analysis of a Collateralized Fund Obligation (CFO) Equity Tranche	The European Journal of Finance, 2013
Adrian, T., Etula, E., and T. Muir	Financial Intermediaries and the Cross-Section of Asset Returns	Journal of Finance, 2014
Agarwal, V., Fos, V., and W. Jiang	Inferring Reporting-related Biases in Hedge Fund Databases from Hedge Fund Equity Holdings	Management Science, 2013
Almedia, C., and R. Garcia	Assessing Misspecified Asset Pricing Models with Empirical Likelihood Estimators	Journal of Econometrics, 2012
Ang, A., and N. Bollen	Locked up by a Lockup: Valuing Liquidity as a Real Option	Financial Management, 2010
Ang, A., Gorovyy, S., and G. van Inwegen	Hedge Fund Leverage	Journal of Financial Economics, 2011
Anton, M., and C. Polk	Connected Stocks	Journal of Finance, 2014
Aragon, G., and V. Nanda	Tournament Behavior in Hedge Funds: High-water Marks, Fund Liquidation, and Managerial Stake	Review of Financial Studies, 2012
Avramov, D., Barras, L., and R. Kosowski	Hedge Fund Predictability Under the Magnifying Glass: Forecasting Individual Fund Returns Using Multiple Predictors	Journal of Financial and Quantitative Analysis, 2013
Ben-David I., Franzoni F., and R. Moussawi	Hedge Fund Stock Trading in the Financial Crisis of 2007-2009	The Review of Financial Studies, 2012
Ben-David I., Franzoni F., Landier A., and R. Moussawi	Do Hedge Funds Manipulate Stock Prices?	Journal of Finance, 2013
Billio, M., Getmansky, M., Lo, A., and L. Pelizzon	Econometric Measures of Connectedness and Systemic Risk in the Finance and Insurance Sectors	Journal of Financial Economics, 2011
Billio, M., Getmanski, M., and L. Pelizzon	Dynamic Risk Exposure in Hedge Funds	Computational Statistics and Data Analysis, 2012
Billio, M., Mamo, K., and L. Pelizzon	Crises and Fund of Hedge Funds Tail Risk	Funds of Hedge Funds: Managing in Turbulent Times (ed. G. Gregoriou), 2013
Bollen, N.	Zero-R2 Hedge Funds and Market Neutrality	Journal of Financial and Quantitative Analysis, 2013
Brogaard ,J., Hendershott, T., and R. Riordan	High Frequency Trading and Price Discovery	Review of Financial Studies, 2014
Buraschi, A., Kosowski, R., and F. Trojani	When There is No Place to Hide - Correlation Risk and the Cross-Section of Hedge Fund Returns	Review of Financial Studies, 2014
Buyuksahin, B., and M. Robbe	Speculators, Commodities and Cross Market Linkages	Journal of International Money and Finance, 2013
Cao, C., Chen, Y., Liang, B., and A. Lo	Can Hedge Funds Time Market Liquidity?	Journal of Financial Economics, 2013
Cella, C., Ellul, A., and M. Gianetti	Investors' Horizons and the Amplification of Market Shocks	Review of Financial Studies, 2013
Cont, R., and L. Wagalath	Running for the Exit: Distressed Selling and Endogenous Correlation in Financial Markets	Mathematical Finance, 2012
Darolles, S., Jasiak, J., and C. Gourieroux	L-Performance with an Application to Hedge Funds	Journal of Empirical Finance, 2009
Darolles, S., and C., Gourieroux	The Effects of Management and Provision Accounts on Hedge Funds Returns	Modeling Dependence in Econometrics, 2014
Darolles, S., Gourieroux, C., and J. Teiletche	The Dynamics of Hedge Funds Performance	Econometric of Risk, 2015
Diez de los Rios, A., and R. Garcia	The Option CAPM and The Performance of Hedge Funds	Review of Derivatives Research, 2011
Eberlein, E., and D. Madan	Hedge Fund Performance: Source and Measures	International Journal of Theoretical and Applied Finance, 2009
Edelman D., Hsieh, D., and B. Fung	Exploring Uncharted Territories of the Hedge Fund Industry: Empirical Characteristics of Mega Hedge Fund Firms	Journal of Financial Economics, 2013
Girardi, G., and T. Ergun	Systemic Risk Measurement: Multivariate GARCH Estimation of CoVaR	Journal of Banking and Finance, 2013
Gourieroux, C., and A. Monfort	Allocating Systemic Risk in a Regulatory Perspective	International Journal of Theoretical and Applied Finance, 2013
Hau, H.	The Exchange Rate Effect of Multi-Currency Risk Arbitrage	Journal of International Money and Finance, 2014
Hombert, J., Foucault, T., and I. Rosu	News Trading and Speed	Journal of Finance, forthcoming



# SELECTED PUBLISHED PAPERS FORTHCOMING PUBLICATIONS

Authors	Title	Published in
Hombert, J., and D. Thesmar	Overcoming Limits of Arbitrage: Theory and Evidence	Journal of Financial Economics, 2014
Jotikasthira, C., Lundblad, C., and T. Ramadorai	Asset Fire Sales and Purchases and the International Transmission of Funding Shocks	Journal of Finance, 2012
Kang, N., Kondor, P., and R. Sadka	Do Hedge Funds Reduce Idiosyncratic Risk?	Journal of Financial and Quantitative Analysis, 2015
Lambert, M., Hubner, G., and N. Papageorgiou	Higher-moment Risk Exposures in Hedge Funds	European Financial Management, 2014
Makarov, I., and G. Plantin	Rewarding Trading Skills Without Inducing Gambling	Journal of Finance, 2014
Ozik, G., and R. Sadka	Media Coverage and Hedge-Fund Returns	Financial Analysts Journal, 2013
Ozik, G., and R. Sadka	Skin in the Game versus Skimming the Games: Governance, Share Restrictions and Insider Flow	Journal of Financial and Quantitative Analysis, forthcoming
Patton, A., and T. Ramadorai	On the High-Frequency Dynamics of Hedge Fund Risk Exposures	Journal of Finance, 2013
Patton, A., Ramadorai, T., and M. Streatfield	Change you can Believe In? Hedge Fund Data Revisions	Journal of Finance, forthcoming
Sadka, R.	Liquidity Risk and the Cross-Section of Hedge-Fund returns	Journal of Financial Economics, 2010
Ramadorai, T.	Capacity Constraints, Investor Information, and Hedge Fund Returns	Journal of Financial Economics, 2013
Teo, M.	The Liquidity Risk of Liquid Hedge Funds	Journal of Financial Economics, 2011



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#### LYXOR RESEARCH

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Recognized in the industry and among academics alike for its research in macroeconomics, quantitative and alternative investments, Lyxor is also known for the publication of proprietary portfolio management models and white papers, which have been widely referenced in the most important financial research publications. The close synergies established between portfolio managers and Lyxor's independent research department allow for the development of reliable and innovative investment solutions in each of Lyxor's areas of expertise.

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#### Further Information

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#### **ABOUT LYXOR ASSET MANAGEMENT**

#### Lyxor Asset Management

Lyxor Asset Management, the fully-owned Asset Manager of Societe Generale Group, was founded in 1998 and counts 600 professionals worldwide managing and advising EUR 96bn\* of assets. Lyxor offers customized investment management services in ETFs & Indexing, Alternatives & Multi-Management, and Absolute Return & Solutions. Driven by acknowledged research, advanced risk-management and a passion for client satisfaction, Lyxor's investment specialists strive to deliver sustainable performance across all asset classes.

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