

**TWENTY-FIFTH ANNUAL CONFERENCE  
OF THE MULTINATIONAL FINANCE SOCIETY**  
(As of June 19, 2018)

**June 24-27, 2018**  
**Novotel Budapest City Hotel**  
**Alkotas utca 63-67**  
**1123, Budapest, Hungary**

**SESSION 1**

**Monday 8:30 - 10:15 a.m.**

**Liszt I**

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**ASSET PRICING I**

*Session Chair:* Tai Ma - National Sun Yat Sen University, Taiwan

**"Financial Constraints, Stock Illiquidity, and Stock Returns"**

Xiafei Li - University of Nottingham, UK

Di Luo - University of Southampton, UK

*Discussant:* Yihui Lan - University of Western Australia, Australia

We examine stock illiquidity in explaining the mixed relationship between financial constraints and stock returns. We find that financially constrained firms have higher liquidity risk than unconstrained firms. They outperform unconstrained firms only in illiquid firms. In liquid firms, constrained firms significantly underperform unconstrained firms. Stock illiquidity is a strong pricing factor in the cross section of stock returns for constrained firms, but it is not the pricing factor for unconstrained firms. Financial constraints are only priced in conjunction with stock illiquidity, particular in bad economic times. Our results suggest that the financial constraint puzzle is associated with stock illiquidity.

**"Firm-Specific Information and Stock Returns"**

Sirimon Treepongkaruna - University of Western Australia, Australia

Yihui Lan - University of Western Australia, Australia

Ha Nguyen - University of Western Australia, Australia

*Discussant:* Woraphon Wattanatorn - Mahidol university international college, Thailand

Our paper focuses on the controversial issue on whether information incorporated in stock prices explains cross-sectional returns. We investigate the role of firm-specific information embedded in U.S. stocks from 1925 to 2016 in the asset pricing context. The six firm-specific information proxies we use are stock price synchronicity, idiosyncratic volatility, residual returns, information discreteness, skewness and stock price jumps. Our portfolio-sorting results show that all of the proxies produce significant differences in average returns between high and low quintile portfolios, even after controlling for firm characteristics. The Fama-Macbeth regression results suggest that for the residual return and skewness, each has a significantly positive cross-sectional relationship with the expected return in both univariate and multivariate settings during the whole period as well as sub-sample periods.

**"Can Mutual Fund Managers Time Market Coskewness? Evidence from Emerging Markets"**

Woraphon Wattanatorn - Mahidol university international college, Thailand

Sarayut Nathaphan - Mahidol University International College, Thailand

*Discussant:* Hugues Langlois - HEC Paris, France

We allow fund managers the ability to time market coskewness, which enables us to propose a

perspective on market timing ability that differs from that found in the existing literature. Based on emerging market data, we find strong evidence of coskewness timing ability. We find that good-performing funds with coskewness timing ability can outperform poorly performing funds without coskewness timing ability. This finding highlights the important role of the higher moment risk factor in the investment decision process.

### **"Time-Varying Risk Premia in Large International Equity Markets"**

Ines Chaieb - University of Geneva, Switzerland

Hugues Langlois - HEC Paris, France

Olivier Scaillet - University of Geneva, Switzerland

*Discussant:* Xiafei Li - University of Nottingham, UK

We estimate international factor models with time-varying factor exposures and risk premia at the individual stock level using a large unbalanced panel of 58,674 stocks in 46 countries over the 1985-2017 period. We consider market, size, value, momentum, profitability, and investment factors aggregated at the country, regional, and world level. The country market in excess of the world or regional market is required in addition to world or regional factors to capture the factor structure for both developed and emerging markets. We do not reject mixed CAPM models with regional and excess country market factors for 76% of the countries. We do not reject mixed multi-factor models in 80% to 94% of countries. Value and momentum premia show more variability over time and across countries than profitability and investment premia. The excess country market premium is statistically significant in many developed and emerging markets but economically larger in emerging markets.

## **SESSION 2**

**Monday 8:30 - 10:15 a.m.**

**Liszt II**

### **BEHAVIORAL I**

*Session Chair:* Ron Bird - University of Technology Sydney, Australia

### **"Investors Attention and Precious Commodities Movements"**

David Aharon - Ono Academic College, Israel

Mahmoud Qadan - University of Haifa, Israel

*Discussant:* Cristiana Cerqueira Leal - Universidade do Minho, Portugal

We investigate the interplay between daily Internet search queries for three commodities (gold, oil, and silver) and investors confidence, economic uncertainty, macroeconomic announcements and investor sentiment for 2004-2017. Using market-based and media-based measures for investor sentiment, we establish that they both prompt investors to intensify their quest for information. On the other hand, greater variations in searches predict an increase in the following trading day's volatility. We document that days on which macroeconomic announcements occur tend to be associated with less demand for information. Conversely, shocks in commodities, captured by several volatility estimators, drive attention to these commodities. In addition, we demonstrate that the demand for information varies across weekdays, which corresponds to the arrival of information hypothesis. Finally, our findings support the theoretical contention that risk-averse agents gather information as a hedge against uncertainty, but do not support the avoidance of information theories.

### **"Numeracy, Psychological Traits, Cultural Factors and Financial Socialization: Are they Determinants of Financial Literacy?"**

Izzat Ramadan - Universidade do Minho, Portugal

Manuel Armada - Universidade do Minho, Portugal

Cristiana Cerqueira Leal - Universidade do Minho, Portugal

*Discussant:* Yi-Ling Chen - National University of Kaohsiung, Taiwan

We present a comparative cross-region study that explains individual financial literacy level through demographic, psychological and cultural factors. We introduce cultural and psychological factors for the first time in financial literacy studies to control for omitted variable bias. To the best of our knowledge, we introduce a model that allows identifying the financial literacy level across demographic, psychological and cultural variables, and help in the implementation of new ways to construct financial education programs adjusted to particular needs, and consequently improve financial literacy in an effective manner as a tool to improve financial behavior. The main variables of our study are numeracy, financial socialization by parents, religiosity, family ties, confidence, impatience and country diversities. We produce a comprehensive survey that aggregates all these factors and is applied to 600 individuals across nine countries. The data is analyzed using OLS regression with country fixed effects, IV regression, GMM, PCA and PCR. The regression findings show that financial literacy is positively associated with numeracy, financial socialization, weak family ties, confidence and Germanic countries. In addition to that, financial literacy is negatively associated with strong family ties, religiosity, impatience, age and females. Moreover, we apply Artificial Intelligence using machine learning algorithms which are regression trees, random forest and quantile regression forest. The Artificial Intelligence techniques that are introduced for the first time in financial literacy studies aim at providing a predictive approach to financial literacy determinants. Based on AI techniques, we find that financial literacy is mostly determined by country diversity, numeracy, impatience, confidence, financial socialization by parents, family ties and religiosity. These findings contribute to knowledge by suggesting new implementations of financial education program as an attempt to improve the effect of financial literacy on financial behavior. We suggest that financial education programs should be targeted towards focus groups based on gender, country, age, the level of religiosity and family ties, impatience and confidence.

### **"What Drives the Value Premium? Is Earnings Quality the Missing Link?"**

George Athanassakos - University of Western Ontario, Canada

Vasiliki Athanasakou - London School of Economics, UK

*Discussant:* Gloria Gardenal - Ca Foscari University of Venice, Italy

The purpose of this paper is to examine whether a value premium exists over the 1983-2013 sample period and whether earnings quality contributes to a risk, mispricing or both explanations for the value premium. Our results confirm the existence of a value premium that is driven primarily by firms of poor earnings quality. Furthermore, our study shows that it is mispricing that drives the value premium mainly through the mispricing of growth stocks, thus reconciling the conflicting evidence on the rationale for the value premium. Combining earnings quality measures with the value and growth stocks returns clears the puzzle. Earnings quality underlies a mispricing explanation of the value premium and it is the channel through which mispricing arises.

### **"Why do you Trust me? A Structural Equation Model of Trustworthiness in Financial Advisory"**

Caterina Cruciani - Ca' Foscari University of Venice, Italy

Gloria Gardenal - Ca Foscari University of Venice, Italy

Ugo Rigoni - Ca' Foscari University of Venice, Italy

*Discussant:* Mahmoud Qadan - University of Haifa, Israel

The paper provides a comprehensive model of trust formation in financial advisory using a dataset of 1,184 Italian advisors that differ across some specific characteristics (bank advisors or tied agents, market maturity of the bank/institution they work for, that is new player or incumbent). The goal is twofold: on one side, we aim at demonstrating the validity of a trust-formation model that explicitly accounts for both a professional and a relational component; on the other, we wish to investigate whether different types of financial advisory induce different trust formation processes. The latter goal is of particular relevance with respect to the introduction of the MiFiD II Directive, as different trust formation processes may rely on features that are differentially affected by the regulatory changes. Through the estimation of a structural equation model, we are able to prove both its validity and the differential impact of the two dimensions in the trust-formation process. In particular, we find that the novelties introduced by the

legislator, favouring the anticipated reciprocation dimension, could help increasing competition in the advisory industry. In fact, this dimension is the one that plays a fundamental role for the advisors of new entrant institutions and that could help support their accreditation in the market.

**SESSION 3**

**Monday 8:30 - 10:15 a.m.**

**Liszt III**

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**CAPITAL STRUCTURE I**

*Session Chair:* Michael LaCour-Little - Fannie Mae, USA

**"Product Market Competition and Labor Investment Efficiency"**

Sabri Boubaker - South Champagne Business School, France

Viet Anh Dang - University of Manchester, UK

Syrine Sassi - South Champagne Business School, France

*Discussant:* Yi Jiang - California State University, Fullerton, USA

In this paper, we analyze the link between product market competition and labor investment efficiency. Using a large panel of U.S. listed firms over the 1998-2013 period, we document that product market competitive pressure leads to higher deviations of actual net hiring from its optimal level predicted by economic fundamentals, i.e. lower labor investment efficiency. This result is consistent with the prediction that, since competition reduces profit margins, it increases concerns over the firm's short-term performance, which in turn leads managers to under-invest in human capital as a way to meet earnings targets. Our findings stand up to a battery of robustness checks including the use of alternative estimation techniques, alternative variable definitions, and additional control variables. We provide further support for the causal relation between competition and labor investment efficiency by exploiting an exogenous source of variation in product market competition, i.e., large reductions in import tariff rates. Furthermore, our additional analysis shows that the role of competition in deteriorating labor investment efficiency is stronger in highly unionized industries where firms face higher labor adjustment costs.

**"The Channels of Capital Supply, Financial Intermediaries, and Competition in Peer Effects"**

Matthew Billett - Indiana University, USA

Jon Garfinkel - University of Iowa, USA

Yi Jiang - California State University, Fullerton, USA

*Discussant:* Christian Flor - University of Southern Denmark, Denmark

We explore three jointly related channels in peer effects by studying SEOs. Constrained firms' SEO timing accelerates in their peers' prior SEO activity. Plausibly exogenous positive shocks to a firm's capital supply diminish the effect, and vice-versa. Shared intermediaries between constrained firm and peers accelerate firm SEO timing. SEO peer effects are not apparent when the firm and peers are direct product market competitors, consistent with competitive dynamics (Asker and Ljungqvist (2010)). We conclude that capital supply, financial intermediaries, and competition play key roles in the transmission of peer-to-peer financial policies.

**"Detecting Determinants of Capital Structure"**

Christian Flor - University of Southern Denmark, Denmark

Kirstine Petersen - University of Southern Denmark, Denmark

*Discussant:* Christophe Godlewski - University of Strasbourg, France

The determinants of the leverage of firms are widely used as a means to study optimal capital structure decisions. However, empirical studies do not agree on the importance of several commonly proposed determinants. We provide a dynamic capital structure model which endogenously generates the indeterminacy found in empirical studies, and thus we explain why such studies are inherently deemed

to be problematic. Specifically, we demonstrate how interdependence between leverage determinants can cause us to falsely reject important correlations. Our findings add to the insights of the challenges attached to understanding how firms choose their capital structure.

### **"The Effects of Bank Loan Renegotiation on Corporate Policies and Performance"**

Christophe Godlewski - University of Strasbourg, France

*Discussant:* Syrine Sassi - South Champagne Business School, France

I investigate the effects of bank loan renegotiation on firm's financial and investment policies, and performances. I employ OLS and endogenous switching regime regressions using a large sample of loans to firms from 28 European countries over a long period from 1999 to 2015. I find that bank loan renegotiation has a significant and causal impact on financial policy and performances. Renegotiation provides the firm with additional degrees of freedom and unlocks its economic potential, causing important effects regarding the impact of firm's tangibility, growth, opportunities and cash on financial policy and performances. Depending on specific loan, lenders or firm characteristics, bank loan renegotiation has a certification and signaling effect which can increase its impact on financial policy.

## **SESSION 4**

**Monday 8:30 - 10:15 a.m.**

**Lehár I**

### **GARCH**

*Session Chair:* Jose Guedes - Universidade Católica Portuguesa, Portugal

### **"Modeling and Forecasting Electricity Price Volatility: A GARCH-Jump Approach"**

Anupam Dutta - Vaasa University, Finland

Probal Dutta - University of Vaasa, Finland

*Discussant:* Khamis Al-Yahyaee - Sultan Qaboos University, Oman

Although the presence of extreme jumps in electricity prices is a common phenomenon, investigating the jump behavior in the power market does not receive significant attention in the earlier studies. The present study aims to conceal this void in the existing literature. To do so, we employ the autoregressive conditional jump intensity (ARJI) model, combining with the GRACH method, to describe the volatility process and the jump behavior in Nordic electricity prices. The empirical findings reveal that the Nordic power market is highly volatile and time-varying jumps do exist in the electricity prices. In addition, the GARCH-jump models produce more accurate out-of-sample volatility forecasts than do the GARCH and EGARCH models. In summary, the results demonstrate that energy economists, energy policymakers and market analysts should consider the existence of time-varying jumps in the Nordic power market, because the GARCH-jump model provides the best forecasts for electricity prices.

### **"Modeling and Forecasting the Volatility of Bitcoin and Commodity Markets"**

Khamis Al-Yahyaee - Sultan Qaboos University, Oman

Walid Mensi - Sultan Qaboos University, Oman

Atef Hamdi - Al Imam Mohammad Ibn Saud Islamic University, Saudi Arabia

Sang Kang - Pusan National University, Korea, Republic of

*Discussant:* Carlos Esparcia - Universidad De Castilla-La Mancha, Spain

This paper models and forecasts the volatility performance of Bitcoin-oil and Bitcoin-gold commodity pairs. To do this, we use five bivariate GARCH competing models (GARCH, FIGARCH, FIAPARCH, FIEGARCH and HYGARCH models), as well as the mean of square errors (MSE), the mean of absolute errors (MAE), and the Diebold and Mariano (DM) (1995) test. The results show negative conditional correlations between oil and Bitcoin and weak (close to zero) conditional correlations between gold and oil. Moreover, by comparing the fitting and forecast performance of five GARCH models, we find that

GARCH and HYGARCH models provide the most accurate forecasting performance for oil and gold, respectively. These results are robust according to the DM test. Finally, we find strong evidence of diversification benefits, hedging effectiveness, and downside risk reductions. Overall, our results have implications for energy traders, portfolio managers, and policy makers.

### **"Time-Varying Risk Aversion. An Application to European Optimal Portfolios"**

Antonio Díaz - Universidad De Castilla-La Mancha, Spain

Carlos Esparcia - Universidad De Castilla-La Mancha, Spain

*Discussant:* Stavroula Yfanti - Lancaster University, UK

Despite the influence of risk aversion in the optimal portfolio context, there are not many studies which have explicitly estimated the risk aversion parameter. Instead of that, researchers almost always choose random fixed values to reflect the common levels of risk aversion. However, the above could generate optimal portfolios, which not reflect the actual investor's attitude towards risk. Otherwise, as it is well known, an individual is more or less risk averse according to the economic and political circumstances. Given the above, we model the risk aversion attitude so that it changes over time, in order to take into account the variability in agents' expectations. Therefore, the aim of this paper is to shed light on the choice of the risk aversion parameter that correctly represents the investors' behaviour. For that purpose, we build optimal portfolios for different types of investment profiles in order to compare whether is better to use a constant risk aversion parameter or a dynamic one. In particular, our proposal is based on estimating the time-varying risk aversion parameter as a derivation of the market risk premium. For that purpose, we implement several statistical univariate and multivariate models. Specifically, we use conditional variance and correlation models, such as GARCH (1, 1), GARCH-M (1, 1) and DCC-GARCH.

### **"Stylized Facts for Extended HEAVY/GARCH Models and MEM: The Importance of Asymmetries, Power Transformations, Long Memory, Structural Breaks and Spillovers"**

Menelaos Karanasos - Brunel University, UK

Yongdeng Xu - Cardiff University, UK

Stavroula Yfanti - Lancaster University, UK

*Discussant:* Anupam Dutta - Vaasa University, Finland

This paper studies and extends the HEAVY model. Our main contribution is the enrichment of the model with asymmetries, power transformations and long memory -fractionally integrated or hyperbolic. The conclusion that the lagged realized measure does all the work at moving around the conditional variance of stock returns, while it holds in the benchmark specification, it does not hold once we allow for asymmetric, power and long memory effects, since we find that the two power transformed conditional variances are significantly affected by the lagged power transformed squares of negative returns. Other findings are as follows. First, hyperbolic memory fits the model of the realized measure better, whereas fractional integration is more suitable for modelling the conditional variance of the returns. Second, the augmentation of the HEAVY framework with the Garman-Klass range-based volatility estimator further improves the forecasting accuracy of the volatility process. Third, the structural breaks applied to the trivariate system capture the time-varying behavior of the parameters, in particular during and after the global financial crisis of 2008.

**FINANCIAL REGULATION**

*Session Chair:* Gabrielle Wanzenried - Lucerne University of Applied Sciences and Arts, Switzerland

**"The Valuation of Deposit Insurance Premiums when Considering Financial Regulations for Restricting the Bank's Default Probability"**

Ming Shann Tsai - National University of Kaohsiung, Taiwan

Shu Ling Chiang - National Kaohsiung Normal University, Taiwan

*Discussant:* David Musto - Wharton, University of Pennsylvania, USA

After undergoing several financial crises, many countries have required that each bank obeys strict financial regulations. The general purpose of these financial regulations is to require bank's default probability lower than a specific official default rate. Thus, when pricing a fair deposit insurance (DI) premium for banks obeying these financial regulations, the official default rate should be incorporated into the valuation model. In this paper, we present a valuation formula for DI premiums based on this premise. Moreover, we discuss a bank's optimal investment based on the efficient frontier. Doing so can avoid probable inaccurate estimation of DI premiums caused by using market equity data. We use data from Taiwanese commercial banks to illustrate the application of our model. The empirical evidence clearly shows that the DI premium for banks that obey the financial regulations is lower than the premium estimated by the traditional model. According to the results, we suggest that the DI premium should be lower for banks that fully obey the financial supervisory regulations and do an excellent job in keeping their risks low. Doing so should be able to incentivize these banks to decrease their likelihood of default by strictly implementing the financial regulations, thus stabilizing the financial environment.

**"Why Do Institutions Delay Reporting Their Shareholdings? Evidence from Form 13F"**

Susan Christoffersen - University of Toronto, Canada

Erfan Danesh - Federal Reserve Board, USA

David Musto - Wharton, University of Pennsylvania, USA

*Discussant:* Victoria Geyfman - Bloomsburg University, USA

Institutional investors are allowed to delay their disclosures of quarter-end holdings via form 13F for up to 45 days. This forbearance may help protect the institutions from potentially damaging behavior by other traders, in particular from free-riding copycaters and from front-runners. It also may help the institutions hide their voting power, and this has prompted public corporations to request a much shorter maximum reporting lag. We look at 14 years of 13F filings to gauge the role of these three motives in the decision to delay disclosure, and the results indicate that front-running and voting, but not copycatting, motivate delays.

**"Bank Participation in Capital Markets: Evidence from European Emerging Markets"**

Victoria Geyfman - Bloomsburg University, USA

*Discussant:* Evaluz Cotto - University of Puerto Rico, Puerto Rico

A critical aspect of integration of emerging markets (EM) of Eastern Europe into the global financial system is the continuing financial liberalization process and the development of effective domestic capital markets. While these countries have made considerable progress in this area since the early stages of economic transformation in the 1990s, the level of financial development and market capitalization remains weak by the developed world's standards. Furthermore, the systems are still dominated by foreign financial institutions. This study examines the development of capital markets and the effect of macroeconomic, bank-level, and regulatory fundamentals on the banking institutions' decision to participate in public capital markets. The study also examines the predominance of foreign-owned banks in EM and assesses their effect on the development of financial markets. The study suggests that the regulatory void and an increased level of exposure to volatile stock markets are the likely culprits of

banks' reluctance to list their shares on local exchanges.

### **"Puerto Rico Financial System's Stability and PROMESA's Oversight Board"**

Evaluz Cotto - University of Puerto Rico, Puerto Rico

*Discussant:* Ming Shann Tsai - National University of Kaohsiung, Taiwan

In June 2016, the US PROMESA Act was enacted to avert the forthcoming Puerto Rico fiscal crisis. The PROMESA Act has placed Puerto Rico finances under the control of an Oversight Board. This Paper examines the Oversight Board's actions towards Puerto Rico cooperative credit unions and explains their financial stability implications.

## **SESSION 6**

**Monday 8:30 - 10:15 a.m.**

**Lehár III**

### **MUTUAL FUNDS**

*Session Chair:* Liam Gallagher - Dublin City University, Ireland

### **"Mutual Funds' Exits, Financial Crisis and Darwin"**

Ania Zalewska - University of Bath, UK

Yue Zhang - University of Bath, UK

*Discussant:* Selim Topaloglu - Queen's University, Canada

It is well-recognized in the literature that performance and external environment are strong determinants of divestitures. This paper provides a theoretical justification in support of the thesis that the role of performance in determining divestitures declines during a market crash. The empirical analysis of the performance of over 19,000 U.S. mutual funds in the 2000–2014 period strongly supports the existence of the negative exit-performance relationship outside the period of the global financial crisis 2008, and shows that this relationship did not hold during the crisis. Such distortion to the role of performance in divestiture decision-making shows yet another impact global financial crisis 2008 has had on businesses and markets, and raises questions about ethical behavior of the asset management industry.

### **"(Ab)Use of Leverage, Short Sales, and Options by Mutual Funds"**

Paul Calluzzo - Queen's University, Canada

Fabio Moneta - Queen's University, Canada

Selim Topaloglu - Queen's University, Canada

*Discussant:* Heung-Joo Cha - Univeristy of Redlands, USA

We study the use of leverage, short sales, and options by equity mutual funds and find that their use is associated with poor performance. We find evidence that moral hazard and agency costs drive this underperformance. Funds that use these complex instruments hold riskier equity positions and attempt to use the instruments to reduce the risk of their portfolios, but in an imperfect and costly way. Furthermore, the negative outcomes associated with complex instrument use dissipate in funds that are well-monitored, well-incentivized, and transparent. Our results suggest that investors are better off choosing simplicity over complexity.

### **"Empirical Study of Japanese Security Prices and Mutual Fund Flows"**

Heung-Joo Cha - Univeristy of Redlands, USA

*Discussant:* John Watson - Monash University, Australia

To study dynamic relations between stock returns and investment trust flows at the macro level in the

Japanese market, we combine information from the stock market with information from bond and money markets in a system method. The empirical evidence from DSUR, SURECM and Granger causality tests indicates that there is a positive long-run relationship between stock returns and flows, and the returns are likely to lead trust flows. Furthermore, if there is a deviation from long-run equilibrium, stock returns seem to force the deviation to go toward the long-run equilibrium. Thus, the most important element explaining investment trust flows seems to be security performance in the Japanese market.

**"Do Socially Responsible Investment Fund Managers Differ from Conventional Fund Managers When it Comes to Risk-Shifting Behaviour?"**

Lin Wang - Monash University, Australia

John Vaz - Monash University, Australia

John Watson - Monash University, Australia

*Discussant:* Ania Zalewska - University of Bath, UK

Many studies analyse the performance of Socially Responsible Investments (SRIs) compared to conventional funds. However, none have analysed and contrasted the relative risk-shifting behaviour by SRI fund managers. This study makes a major attempt to fill this gap by investigating whether fund managers of US equity SRI funds exhibit differential risk shifting behaviour. Strong evidence is found to support the existence of risk-shifting behaviour by conventional fund managers. Specifically, we find that interim period managers who are mid-period winners are more likely to take on more risk subsequent to the mid-period than losers. We find little evidence of risk shifting by SRI fund managers general however, in bear markets or when they are in turmoil. The implication of the finding is that when the market is in a downturn or in turmoil, fund managers take on more risk in attempts to achieve improved returns and to compete for future capital inflows, regardless of whether they are classified as motivated by SRI or non SRI objectives.

**SESSION 7**

**Monday 8:30 - 10:15 a.m.**

**Brahms I**

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**BANKRUPTCY AND FINANCIAL DISTRESS**

*Session Chair:* Hubert De La Bruslerie - University Paris Dauphine, France

**"Fire-Sale Channel of Industry Contagion: Evidence from the Pricing of Industry Recovery Rate"**

Yi-Ting Hsieh - Shih Chien University, Taiwan

Peter Miu - McMaster University, Canada

Wenchien Liu - Chung Yuan Christian University, Taiwan

Yuanchen Chang - National Chengchi University, Taiwan

*Discussant:* Bertrand Maillet - EMLyon Business School (CEFRA), France

How does bankruptcy contagion propagate among industry peers? We study the fire-sale channel of industry contagion by examining whether the cost of a company's debt is affected by the observed recovery rates of its bankrupt industry peers. Our results show that lower industry recovery rates are associated with higher loan spreads but only when the contracts are originated during industry bankruptcy waves. Confirming the fire-sale channel of industry contagion, we find that the negative effect of industry recovery rate is significantly stronger under conditions where fire-sale discount is expected to be more salient.

## **"A Meta-Analysis of Systemic Risk Measures for Gauging Financial Stability"**

Massimiliano Caporin - University of Padua, Italy

Michele Costola - SAFE Goethe University Frankfurt, Germany

Jean-Charles Garibal - Orleans University (LEO), France

Bertrand Maillet - EMLyon Business School (CEFRA), France

*Discussant:* Peter Carayannopoulos - Wilfrid Laurier University, Canada

After the last major financial crisis of 2008, the financial literature has proposed several systemic risk measures as attempts for quantifying the magnitude of the financial system distress. In this article, we suggest the construction of an overall meta-index for the measurement of systemic risk based on a Sparse Principal Component Analysis of main systemic risk measures, which ultimately aims to provide an index with a more stable dynamic and with an explicit link to severe economic recessions.

## **"Pricing Dynamics in the Market For Catastrophe Bonds"**

Peter Carayannopoulos - Wilfrid Laurier University, Canada

Olga Kanj - Wilfrid Laurier University, Canada

Fabricio Perez - Wilfrid Laurier University, Canada

*Discussant:* Jiri Svec - The University of Sydney, Australia

In this paper we study the time variation of the market price of Catastrophe bonds for the period 1999-2016. While we find an overall decreasing trend in the expected loss premium, large catastrophes increase the expected loss premium by an order of 20% on average. Our empirical tests show that the latter effect is temporary and unlikely to be caused by behavioral changes in investors perceptions about catastrophic risk as previously documented. Instead, we find evidence that the changes in expected loss premiums are explained by changes in investor effective risk aversion, initiated by investors reaching habit consumption levels when a catastrophic event triggers Cat bond losses. Contagion effects from the reinsurance markets are more relevant after main catastrophes given the levels of liquidity in the markets. Furthermore, contagion effects from financial markets are minor and only relevant during the subprime financial crisis.

## **"Accounting Information, Life Cycle and Debt Markets"**

Attila Balogh - University of New South Wales, Australia

Jiri Svec - The University of Sydney, Australia

Danika Wright - The University of Sydney, Australia

*Discussant:* Peter Miu - McMaster University, Canada

We examine the previously unexplored relation between risk of default and life cycle. Using credit default swap (CDS) spread data for a US sample of firms from 2007 to 2016, we find large variations in the market pricing of default across the firm life cycle. Specifically, CDS spreads are lowest for growth and mature firms, and highest for introduction and decline-stage firms. We show that life cycle provides additional information to assess credit risk not captured by age, as the life cycle measure allows firms to evolve in a non-monotonic and non-sequential manner.

**IPOS & BUYOUTS**

*Session Chair:* Joseph Farhat - Central Connecticut State University, USA

**"Under-pricing of South-East Asian IPOs: An Investigation of the Relevance of Governance Quality Indicators"**

Lakshman Alles - Sri Lanka Institute of Information Technology, Sri Lanka

Louis Murray - University College Dublin, Ireland

*Discussant:* Hui Zhu - University of Ontario Institute of Technology, Canada

In this paper, we investigate the impact of governance quality on the under-pricing of new equity issues in South and East Asian equity markets. Previously identified as markets in which there is evidence of excessively high levels of under-pricing in Initial Public Offerings, we test for evidence that indicators of the quality of national governance will offer explanatory power. We identify a sample of recent IPOs in six South and East Asian equity markets, and we test whether the World Bank Governance Indicators are related to the extent of under-pricing of these new issues. Our regression results indicate that governance quality indicators are significantly related to the level of under-pricing of new issues in these markets.

**"Does Going Public in U.S. Market Affect Corporate Innovation: International Evidence"**

Kelly Cai - University of Michigan - Dearborn, USA

Hui Zhu - University of Ontario Institute of Technology, Canada

*Discussant:* Nils Janssen - HHL - Leipzig Graduate School of Management, Germany

We examine how going public in U.S. market influences corporate innovation. Using 185 foreign and 2,948 U.S. domestic firms going public in U.S. market over the 1980-2006 period, we find that before going public in U.S. market, non-U.S. firms exhibit similar innovativeness as U.S. domestic firms. We also find that non-U.S. firms tend to generate more innovation than U.S. domestic firms after going public. The findings are robust to adopting various measures of innovation and accounting for truncation problems. Results from Heckman self-selection correction and instrumental variable analysis imply that our findings are robust to accounting for potential endogeneity concerns. Further tests show that the change in innovation around IPO tends to be less prominent for non-U.S. firms that domiciled in countries with more developed equity market and higher level of economic freedom. Our study provides insights into the real effect of going public in U.S. market on innovation activities.

**"Stick to Your Knitting? Determinants and Implications of Private Equity Firms Operating Outside Their Area of Competitive Advantage"**

Benjamin Hammer - HHL - Leipzig Graduate School of Management, Germany

Nils Härtel - HHL - Leipzig Graduate School of Management, Germany

Nils Janssen - HHL - Leipzig Graduate School of Management, Germany

*Discussant:* Donia Trabelsi - Telecom Ecole de Management, France

This paper investigates the determinants and effects of investments outside of a private equity (PE) sponsor's relative competitive advantage on a hand-collected sample of 727 PE-backed buyouts. We find that the probability for investments outside the PE sponsor's relative competitive advantage is higher if the PE sponsor faces external market pressure through increased competition (+9% c.p.), whereas having a fund that is at least four years after inception decreases this probability by up to 14% c.p.. We show that the portfolio firm's productivity and profitability exhibit lower growth in the three year time span following the buyout if the PE sponsor invests outside its relative competitive advantage. Participation of the incumbent management, large fund size and large portfolio firm size mitigate this effect to some degree, thus supporting our explanation that the lack of industry-specific expertise is the main driver for the portfolio firm's lower growth rates.

### **"Internal vs External R&D: A Real Options Approach"**

Sana Elouaer-Mrizak - Telecom Ecole de Management, France

Baran Siyahhan - Telecom Ecole de Management, France

Donia Trabelsi - Telecom Ecole de Management, France

*Discussant:* Louis Murray - University College Dublin, Ireland

This paper proposes a model that investigates firms' choice over internal R&D and corporate venture capital. Central to our model is an incumbent firm's ability to successfully deploy a startup firm's intellectual capital in the context of a corporate venture capital project and the degree of knowledge spillovers in the absence of a corporate venture capital engagement. Although a higher ability to integrate a startup's intellectual capital combined with a low degree of knowledge spillovers creates an incentive to engage in corporate venture capital, we show that this incentive is tempered by the future economic benefit the incumbent firm expects from the project.

**SESSION 9**

**Monday 10:30 - 12:15 p.m.**

**Liszt I**

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### **ASSET PRICING II**

*Session Chair:* Tanweer Hasan - Roosevelt University, USA

### **"Prediction of Chinese Market with a New Measure of Market Sentiment"**

Anurag Banerjee - Durham University, UK

Xing Wang - Durham University, UK

Cheng Lu - China Securities Depository and Clearing Corporation Limited, China

Junqi Li - Durham University, UK

*Discussant:* Andrei Semenov - York University, Canada

We develop a new measure of Chinese market sentiment using the information from corresponding Chinese ETFs. Combining with the previous day's S&P500 return, we show that the market sentiment has strong explanatory power on the contemporaneous half-daily index return, and has some in-sample and out-of-sample forecasting ability. In addition, we find the continuity of market sentiment in the same day and propose a relevant two-step prediction process. In the conditional mean models, the market sentiment improves the accuracy of forecast. Overall, we present a study worthy of further research that can lead to a high frequency trading strategy in actual trading.

### **"Measuring the Stock's Market Risk"**

Andrei Semenov - York University, Canada

*Discussant:* Anmar Al Wakil - University Paris-Dauphine, PSL Research University/Natixis Investment Managers, France

We present a method for measuring the individual stock's market beta at different investment horizons. We show that the market beta is a weighted sum of the stock's loadings on the contemporaneous and lagged daily market returns, with the weights that decline linearly with the lag and increase as the investment horizon lengthens. The number of lags used depends on the length of the holding period and the number of the distributed-lag betas that are priced in the cross-section of expected daily stock returns. As the investment period increases in length, the market beta converges to the simple sum of the priced distributed-lag betas, i.e., the long-run effect of the daily market return on the daily stock return, or Dimson's (1979) beta computed at the daily frequency. Empirically, the proposed estimator is found to more accurately (compared with the conventional CAPM and Dimson's (1979) daily betas) assess the relative riskiness of stocks.

### **"Do Hedge Funds Hedge? New Evidence from Tail Risk Premia Embedded in Options"**

Anmar Al Wakil - University Paris-Dauphine, PSL Research University / Natixis Investment Managers, France

Serge Darolles - University Paris-Dauphine, PSL Research University, France

*Discussant:* Lea Bouhakkou - Paris Nanterre University, France

This paper deciphers tail risk in hedge funds from option-based dynamic trading strategies. It demonstrates multiple and tradable tail risk premia strategies as measured by pricing discrepancies between real-world and risk-neutral distributions are instrumental determinants in hedge fund performance, in both time-series and cross-section. After controlling for Fung-Hsieh factors, a positive one-standard deviation shock to volatility risk premia is associated with a substantial decline in aggregate hedge fund returns of 25.2% annually. The results particularly evidence hedge funds that significantly load on volatility (kurtosis) risk premia subsequently outperform low-beta funds by nearly 11.7% (8.6%) per year. This finding suggests to what extent hedge fund alpha arises actually from selling crash insurance strategies. Hence, this paper paves the way for reverse engineering the performance of sophisticated hedge funds by replicating implied risk premia strategies.

### **"A Portfolio Approach to The Optimal Mix of Funded and Unfunded Pensions"**

Lea Bouhakkou - Paris Nanterre University, France

Alain Coen - University of Quebec, Canada

Didier Folus - Paris Nanterre University, France

*Discussant:* Xing Wang - Durham University, UK

In this paper we address the optimal funding of pensions by means of portfolio choice approach. Considering the unfunded (Paygo) pension system as a “quasi-asset” with hedging and diversification properties, we derive the optimal portfolio mix of unfunded and Paygo systems within a Mean Variance and Bell linear exponential models. Our analysis involves both analytical computation and empirical estimations of optimal values using real long term data for equity, bonds and Paygo asset for several OECD countries and several time periods covering the time span 1897-2016. We find that in most cases a mix of both systems is desirable with a larger magnitude of Paygo system in the case of the Bell Framework as we capture attitudes towards asymmetry and tail risks that are typical to equity markets.

**SESSION 10**

**Monday 10:30 - 12:15 p.m.**

**Liszt II**

#### **BEHAVIORAL II**

*Session Chair:* Shuh-Chyi Doong - National Chung Hsing University, Taiwan

### **"Do Google Trends Help Forecast Sovereign Risk in Europe?"**

Marcos Gonzalez - Universidad de León, Spain

Carmen González-Velasco - Universidad de León, Spain

*Discussant:* Graham Partington - University of Sydney, Australia

The aim of this paper is to analyze whether internet activity, as measured through Google data, influences the evolution of sovereign bond yields. For this purpose, we focus on 27 European countries. We run panel data regressions and perform VAR models and Granger causality tests between the Google Search Volume Index (GSVI) for keywords related to the sovereign debt crisis and 10-yr sovereign bond yields. The panel data results reveal a positive relationship between Google data and sovereign yields for the whole sample. The VAR models and the causality tests for five core and five peripheral countries suggest that in the latter, especially Greece, Google data have had the highest positive impact on sovereign yields.

### **"Sovereign Ratings and National Culture"**

Graham Partington - University of Sydney, Australia

Huong Dang - University of Canterbury, New Zealand

*Discussant:* Haitian LU - The Hong Kong Polytechnic University, Hong Kong

Whether sovereign governments default in part depends upon their willingness to pay and this in turn may depend on national culture. National culture may also affect capacity to pay and the assessment by rating analysts of sovereign risk. We therefore argue that culture affects ratings and empirically test the effects of culture on levels and changes in sovereign ratings. Levels and changes in sovereign ratings have traditionally been modeled in terms of macro-economic variables, rating outlook and rating history. The addition of culture variables to such models significantly improves the models fit to the data.

### **"Stereotypes in Person-to-Person Lending: Evidence from Debt Crowdfunding"**

Iftekhhar Hasan - Fordham University, USA

Qing He - Renmin University of China, China

Haitian LU - The Hong Kong Polytechnic University, Hong Kong

*Discussant:* Tai Ma - National Sun Yat Sen University, Taiwan

How much do stereotypes affect person-to-person economic exchange? We present evidence from a debt-crowdfunding website that individual borrowers from high social capital regions enjoy higher funding success, larger loan size and bid size, lower interest rates, and more concentrated loan ownership. The effect is more pronounced among borrowers of no credit history or lower quality. Dyadic data show lenders from regions higher in social capital offer smaller loans at higher interest rates to borrowers from lower social capital regions. We consider a range of explanations and find our results most easily explained by investors using region-based stereotype as a heuristic in making credit decisions.

### **"Rational or Irrational a Comprehensive Studies on Stock Market Crashes"**

Tai Ma - National Sun Yat Sen University, Taiwan

Kuo Hsi Lee - National Sun Yat-sen University, Taiwan

Chien Huei Lai - National Sun Yat-sen University, Taiwan

Yang Shen Lee - National Sun Yat-sen University, Taiwan

*Discussant:* Marcos Gonzalez - Universidad de León, Spain

This study attempts to illustrate the contributing factors for different patterns of crashes. In addition to the fundamental macro-economic factors, this paper argues that the existence of herding behavior and the level of investor attention are also important factors affecting the pattern of stock price fluctuations. By differentiating the rational and irrational component of behavioral factors, more insight concerning financial crisis can be drawn. Patterns of crashes are defined by the cumulative decline, the speed of decline, and the duration of the crash. Comprehensive analyses of crash are conducted based on three sets of explanatory factors : macroeconomic, market microstructure and behavioral factors. Results show that behavioral factors are the most influential factors explaining the magnitude and the duration of crash; while the speed of decline is mainly related to market microstructure factor. Investors' irrational behavior is more important than fundamental factors in explaining or predicting market crashes. The main contributions are (1) Crashes in 40 markets are defined and categorized into different crash patterns, providing interesting statistics for international market crashes. (2) We differentiate between rational and irrational components of behavioral factors in explaining the causes of market crashes, which are largely neglected in past literatures. The results of this paper can provide valuable information in risk management and pre-warning system.

**CAPITAL STRUCTURE II**

*Session Chair:* Ming Shann Tsai - National University of Kaohsiung, Taiwan

**"Liquidity, Leverage Deviation, Target Change and the Speed of Leverage Adjustment"**

Ron Bird - University of Technology Sydney, Australia

Ly Ho - Waikato University, New Zealand

Susanna Lu - Waikato University, New Zealand

*Discussant:* Nana Kwansa - Heriot-Watt University, UK

This paper examines the impact of equity liquidity, leverage deviation and target change on a firm's dynamic leverage adjustments. Using a sample of U.K. firms over the period from 1996 to 2016, we find that firms whose equity is more liquid have a significantly faster speed of adjustment (SOA) than firms whose equity is less liquid. Importantly, we document that the positive relationship between liquidity and SOA is most pronounced for firms that are relatively close to their target leverage ratio and whose target ratio is relatively stable but is dissipated for firms with both large leverage deviation and large target moves. Overall, our results are not only consistent with the previous research but also in line with the dynamic trade-off theory of capital structure.

**"Internationalisation, Capital Structure and Capital Raising"**

Edward Jones - Heriot-Watt University, UK

Nana Kwansa - Heriot-Watt University, UK

Hao Li - Heriot-Watt University, UK

*Discussant:* Ana Monte - Applied Management Research Unit (UNIAG), Polytechnic Institute of Bragança, Portugal

Previous studies have identified an association between internationalisation and agency costs. Agency costs, in turn, affect the two main decisions in finance i.e. the investment decision and the financing decision. In this study, we examine the impact of internationalisation on capital structure and capital raising, viewed through the perspective of agency costs. The literature on the role of internationalisation on capital structure has so far failed to arrive at a consensus. While some studies argue that increased access to international financial markets and greater ability to exploit capital market imperfections provide the theoretical expectation that multinational companies (MNCs) will use increased debt financing (Doukas and Pantzalis 2003, Errunza and Senbet 1981, Robbins and Stobaugh 1973), empirical studies find that MNCs tend to use lower leverage than domestic companies (Lee and Kwok, 1988, Burgman, 1996, Doukas and Pantzalis, 2003). We argue that agency costs provide the link between internationalisation and capital structure. Taking a large sample of UK companies from 1996 to 2015, we test the impact of internationalisation on the capital raising and capital structure decisions of domestic and multinational companies. We find that UK multinational companies use lower leverage than their domestic counterparts, despite increased access to international capital.

**"Performance, Efficiency and Capital Structure in Portuguese SMEs"**

Ana Monte - Applied Management Research Unit (UNIAG), Polytechnic Institute of Bragança, Portugal

Clara Vaz - Centre for Management and Industrial Engineering (CEGI/INES TEC), Portugal

António Fernandes - Applied Management Research Unit (UNIAG), Polytechnic Institute of Bragança, Portugal

*Discussant:* Xin Chang - Nanyang Technological University, Singapore

This paper aims to analyse the bidirectional relationship between technical efficiency as measure of companies' performance and capital structure (proxied by short-term leverage) to explain the capital structure decisions in Portuguese SMEs from the secondary and tertiary sector of activity. The technical efficiency was estimated by the DEA methodology and corrected to obtain statistical inferences using

a suitable bootstrap method. To test the agency cost hypothesis, asymmetric information hypothesis, risk-efficiency hypothesis and franchise value hypothesis (under pecking order and trade off theories framework) two models were performed using some determinants of capital structure such as size, profitability, tangibility, liquidity as control and explanatory variables. The sample consists on small and medium size companies from the interior of Portugal from secondary and tertiary sector during the period 2006-2009. The agency cost hypothesis (H1) was not validated for companies of the secondary sector nor the efficiency-risk hypothesis (H2) or franchise-value hypothesis (H2a). For tertiary sector the bidirectional relationship was confirmed: H1 and H2 were validated. There is some indications that companies of the tertiary sector follow Pecking Order Theory as profitability is negatively related.

### **"Corporate Environmental Liabilities and Capital Structure"**

Xin Chang - Nanyang Technological University, Singapore

Kangkang Fu - Hong Kong Baptist University, Hong Kong

Tao Li - Central University of Finance and Economics, China

Lewis H.K. Tam - University of Macau, China

George Wong - Hong Kong Polytechnic University, China

*Discussant:* Constantin Mellios - University Paris 1 Panthéon-Sorbonne, France

We investigate the capital structure implications of corporate environmental liabilities, which are captured using the amount of firms toxic production-related waste. We document that firms with higher environmental liabilities maintain lower financial leverage ratios, suggesting that environmental liabilities work as a substitute for financial liabilities. The substitution effect is more pronounced for larger firms, firms covered by more analysts, firms that have higher sales to principal customers, and firms with greater community concerns. Further analysis shows that less environmentally responsible firms have a lower fraction of bank debt in total debt, all else equal, consistent with the notion that banks are more environmentally sensitive than other lenders. Overall, our findings imply that being environmentally responsible can enhance firms' debt capacity and improve the availability of bank credit.

**SESSION 12**

**Monday 10:30 - 12:15 p.m.**

**Lehár I**

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### **CRYPTOCURRENCIES**

*Session Chair:* Stuart Locke - The University of Waikato, New Zealand

### **"The Intraday Dynamics of Bitcoin"**

Andrea Eross - Heriot Watt University, UK

Frank McGroarty - University of Southampton, UK

Andrew Urquhart - University of Southampton, UK

Simon Wolfe - University of Southampton, UK

*Discussant:* Ifigenia Georgiou - University of Nicosia, Cyprus

Bitcoin has received much investor attention in recent years, however, there remains a lot of scepticism and lack of understanding of this cryptocurrency. We contribute to the growing literature of Bitcoin by examining the intraday variables of the leading Bitcoin exchange with the highest information share from 1st November 2014 to 31st October 2016 to reveal the intraday stylized facts of Bitcoin and also study the intraday interaction between returns, volume, bid-ask spread and volatility. Employing GMT-stamped tick data aggregated to the 5-minute frequency, we find that volume, bid-ask spread and volatility all experience n-shaped patterns throughout the day which suggests that European and North American traders are the main drivers of Bitcoin trading and volatility. It also suggests that volatility and the bid-ask spread are highly related as suggested by Roll (1984), which is probably due to the lack of market makers in Bitcoin markets. We also find that all intraday variables are highly correlated, possess significant lead-lag relationships and there is significant bilateral Granger causality.

### **"The Effect of Volume on Bitcoin Volatility and Returns"**

Svetlana Sapuric - University of Nicosia, Cyprus

Ifigenia Georgiou - University of Nicosia, Cyprus

Angelika Kokkinaki - University of Nicosia, Cyprus

*Discussant:* Antonio Rubia - University of Alicante, Spain

In this study, we substantiate with financial data collection and analysis the hypothesis regarding the volatility of Bitcoin exchange rate against common currencies. Financial data were collected from January 2010 until November 2017. The raw annualized volatility of Bitcoin is compared to conventional and major exchange rates. The first set of results indicates a high value of annualized volatility for the Bitcoin exchange rate. However, when the volume of Bitcoin transactions is considered, the volatility of the Bitcoin exchange rate stabilizes significantly. Moreover, we use asymmetric GARCH models that include the natural logarithm of the volume of the Bitcoin both as a regressor in the mean equation as well as in the specification of the conditional variance as multiplicative heteroskedasticity to show that volume and returns, as well as volume and volatility are positively and significantly related. Further, the price volatility of Bitcoin increases as a result of good news in comparison to bad news.

### **"Self-Normalized/Scale-Invariant CUSUM Based Ratio Tests for Parameter Constancy: With Application to Variance Stability"**

Uwe Hassler - Goethe University Frankfurt, Germany

Mehdi Hosseinkouchack - Goethe University Frankfurt, Germany

Paulo M.M. Rodrigues - Universidade Nova de Lisboa, Portugal

Antonio Rubia - University of Alicante, Spain

*Discussant:* Steven Zhu - University of Toronto, Canada

New CUSUM based tests for parameter constancy are introduced following a class of ratio tests recently proposed by Hassler and Hosseinkouchack (2016), which are based on a Karhunen-Loeve expansion. Theoretical results are presented and an in-depth Monte Carlo analysis is performed to evaluate the finite sample performance of the procedure and a comparison with available approaches, such as the tests proposed by Berkes et al. (2006) and Shao and Zhang (2010), is provided. The new tests present superior finite sample size properties and interesting power behaviour. An empirical application to the Bitcoin Coindesk index is also included.

### **"Contagion Effects of Cryptocurrencies: A Copula Approach"**

Steven Zhu - University of Toronto, Canada

*Discussant:* Frank McGroarty - University of Southampton, UK

For the most part saying that cryptocurrencies had a great year in 2017 would be likely considered an understatement. Not only have many of these cryptocurrencies exponentially increased in value over the course of the year, sometimes by up to 10X their price even a year earlier. However, volatility in the value of cryptocurrencies are has always been extreme. Due to the exponential increase and subsequent fall in 2018, many in the financial industry have drawn clear battle lines regarding both its potential uses and how it can be applied to the world as a whole, and more importantly whether there are any relationships between cryptocurrencies and the larger marketplace. Using daily data from three of the largest cryptocurrencies (e.g., Bitcoin, Ripple and Ethereum) and the S&P 500 index I use a Copula approach to investigate whether there is tail dependence between cryptocurrency returns and S&P 500 returns. The results show strong evidence that both static and time variant Gaussian and the symmetric Joe Clayton copulas capture the symmetric tail dependent structure of cryptocurrencies and S&P 500 returns, suggesting that cryptocurrencies and S&P 500 returns move together to some degree on both lower tail and upper tail.

**BANKING AND MORTGAGES**

*Session Chair:* Francisco Jareno - Universidad de Castilla-La Mancha, Spain

**"Does Corporate Culture Affect Bank Risk-Taking? Evidence from Loan-Level Data"**

Duc Duy Nguyen - University of St Andrews, UK  
Hoai Linh Nguyen - University of St Andrews, UK  
Vathunyoo Sila - University of Edinburgh, UK

*Discussant:* Michael LaCour-Little - Fannie Mae, USA

Using comprehensive corporate and retail loan data, we show that the organisational culture of banks explains their risk-taking behaviour. Banks whose organisational culture leans towards aggressive competition are associated with riskier lending practices: higher approval rate, lower borrower quality, and fewer covenant requirements. Consequently, these banks incur larger loan losses and make greater contributions to systemic risk. The opposite behaviour is observed among banks whose culture emphasises control and safety. Our findings cannot be explained by heterogeneity in a bank's business model, CEO compensation incentives, and CEO characteristics. We use an exogenous shock to the US banking system during the 1998 Russian default crisis to support a causal inference.

**"Home Equity Conversion Mortgages: The Secondary Market Investor Experience"**

Jaclene Begley - Fannie Mae, USA  
Hamilton Fout - Fannie Mae, USA  
Michael LaCour-Little - Fannie Mae, USA  
Nuno Mota - Fannie Mae, USA

*Discussant:* Jose Guedes - Universidade Católica Portuguesa, Portugal

We analyze Fannie Mae's experience with the Home Equity Conversion Mortgage product. From 1993-2010, Fannie Mae acquired 492,465 of these loans, representing 75% of the total market. During this period, prior to recent program changes, credit screening was not an element in the underwriting process. Using loan and borrower characteristics, we model the probability of adverse terminations; and given adverse termination, loss severity. We then show how the addition of credit information affects our models. Finally, we use credit data to provide a counterfactual assessment of the extent to which better screening might have affected portfolio performance. We find that imposing a minimum borrower credit score of 620 would have prevented 22.7% of loans with credit information from being originated and, simultaneously, would have reduced adverse terminations by 31% and subsequent losses by nearly \$250 million, or 32%.

**"Relative Performance, Banker Compensation and Systemic Risk"**

Rui Albuquerque - Boston College, USA  
Luis Cabral - New York University, USA  
Jose Guedes - Universidade Católica Portuguesa, Portugal

*Discussant:* Gabrielle Wanzenried - Lucerne University of Applied Sciences and Arts, Switzerland

We show that, in the presence of correlated investment opportunities across banks, risk sharing between bank shareholders and bank managers leads to (a) compensation contracts that include relative performance evaluation; and (b) investment decisions that are biased toward such correlated opportunities, thus creating systemic risk. We analyze various policy recommendations regarding bank managerial pay and show how shareholders optimally undo the policies' intended risk-reducing effects. We discuss alternative measures that can effectively decrease the systemic risk arising from pay packages.

## **"What Determines the Net Stable Funding Ratio and the Liquidity Coverage Ratio of Swiss Retail Banks?"**

Andreas Dietrich - Lucerne University of Applied Sciences and Arts, Switzerland

Fabio Sigrist - Lucerne University of Applied Sciences and Arts, Switzerland

Gabrielle Wanzenried - Lucerne University of Applied Sciences and Arts, Switzerland

*Discussant:* Vathunyoo Sila - University of Edinburgh, UK

New liquidity rules phased in under Basel III define the new net stable funding ratio (NSFR) and the liquidity coverage ratio (LCR) to promote sustainable funding structures at financial institutions. Using the GMM estimator technique by Arellano and Bover (1995), this paper analyzes characteristics and drivers of the NSFR for a sample of 65 retail banks in Switzerland between 2006 and 2016. We include bank-specific, system-specific and macroeconomic variables as main determinants of the NSFR. We also analyze the impact of the latest financial crisis as one of the main drivers for the revision of the liquidity rules under Basel III. We find that that safer banks, i.e., those with higher capital ratios, do not have stronger structural liquidity as we would have expected. But banks that are more aggressive in terms of credit expansion have a lower NSFR as they might rely more on short-term funds in order to support their loan growth. Even though in Switzerland, the 'too big to fail' issue is of big importance, we do not see any relationship between the NSFR and the bank size. Our results also highlight the importance of the macroeconomic environment for the level of the NSFR. Our paper is the first study that investigates the determinants for an extensive sample of smaller and medium-sized retail banks over a longer time period. Also, due to the structure and size of the Swiss banking market, Switzerland provides an ideal environment to study these questions.

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### **SESSION 14**

**Monday 10:30 - 12:15 p.m.**

**Lehár III**

#### **HEDGE FUNDS**

*Session Chair:* Peter Spencer - University of York, UK

#### **"Opacity, Risk, Performance and Inflows in Hedge Funds"**

Flavia Januzzi - Federal University of Juiz de Fora, Brazil

Aureliano Bressan - Federal University of Minas Gerais, Brazil

Fernando Moreira - University of Edinburgh, UK

*Discussant:* Liam Gallagher - Dublin City University, Ireland

This paper analyzes the relationship between opaque assets and the risk, return and inflow of hedge funds. In particular, we use a unique dataset containing information required by a Brazilian regulator to evaluate the amount invested by funds in forward and future contracts, swaps and options in the context of qualified and non-qualified investors. Our results show a positive association between the positions in derivatives and the variations in risk and a negative association between derivatives (especially swaps) and performance in the short term. Hedge funds adopting leveraged operations with derivatives also present a lower performance in the long term. In general, there is significant evidence that swaps are related to fund inflows in a negative way with regard to qualified and non-qualified investors.

#### **"Does Convertible Arbitrage Risk Exposure Vary Through Time?"**

Liam Gallagher - Dublin City University, Ireland

Mark Hutchinson - University College Cork, Ireland

John O'Brien - University College Cork, Ireland

*Discussant:* Mui Kuen Yuen - Massey University, New Zealand

This paper models the returns of the convertible arbitrage hedge fund strategy using a non-linear framework. Investors in the CA strategy have experienced long periods of persistent positive returns accompanied by low volatility, followed by shorter periods of extreme negative returns and high

volatility, associated with periods of broad market upheaval. The smooth transition regression (STR) model specified in this study is particularly appropriate for assessing the performance of a strategy of this nature, as it allows for smooth transition between risk regimes. We find that in the alternate regimes the strategy exhibits relatively high (low) exposure to risk factors and alpha is high (low). We suggest that evidence reported in this paper accounts for abnormal returns reported for the strategy in previous studies.

### **"Hedge Fund Factors and Survival Analysis: Evidence from Asia Pacific"**

Mui Kuen Yuen - Massey University, New Zealand

Martin Young - Massey University New Zealand, New Zealand

Jianguo Chen - Massey University New Zealand, New Zealand

*Discussant:* Dimitrios Stafylas - Aston University, UK

This paper investigates the issue of hedge fund attrition in the context of hedge funds domiciled in the Asia Pacific from January 1994 to June 2012. Using the parametric probit regression model and the less restrictive semi parametric Cox proportional hazard model, larger, better performing funds with lower redemption frequency have a higher likelihood of survival. Higher standard deviation is positively related to the survival of hedge funds domiciled in the Asia Pacific. This is because most of the defunct funds died before the global financial crisis began in 2007 and the remaining surviving funds have a higher standard deviation. Management fees, incentive fees and lock up provisions as part of the hedge fund incentive structure do not seem to impact on fund attrition. Lastly, the probit model shows that higher leverage is beneficial for fund survival.

### **"Hedge Fund Performance Persistence and Mixed Strategies of Hedge Fund Investors"**

Dimitrios Stafylas - Aston University, UK

Athanasios Andrikopoulos - University of Hull, UK

*Discussant:* Fernando Moreira - University of Edinburgh, UK

We examine performance persistence of hedge funds (HF) and momentum (contrarian) strategies of HF investors across different economic and market conditions using parametric and nonparametric methods. During bad (good) times HF (risk-adjusted) returns do (not) fluctuate a lot. There is no performance persistence against the market. During good (bad) times there is persistence up to one year (six months) within each strategy group and is mainly driven by the top performers. Moreover, recessions are severer than bear regimes for HF persistence. Finally, we construct zero investment portfolios using momentum, contrarian and "momentarian" strategies with high excess returns.

## **SESSION 15**

**Monday 10:30 - 12:15 p.m.**

**Brahms I**

### **MERGERS AND ACQUISITIONS I**

*Session Chair:* Hsiu-I Ting - National Taipei University of Technology, Taiwan

### **"Why do Surviving Targets Leverage so Much After an Acquisition? A Governance Explanation"**

Hubert De La Bruslerie - University Paris Dauphine, France

*Discussant:* Sean Davis - University of North Florida, USA

Surviving public firms after an acquisition will show important changes as the new controller generally undertakes investment and reorganization decisions to create additional value and seize synergies. An important issue is to balance a creditor's holdup mechanism with the possibility for the creditors to capture a part of the synergy gains at the target's level. We demonstrate empirically that an increase in leverage is developed to limit a transfer of value to creditors. The changes in financing structure are implemented shortly after the acquisition.

### **"Short Interest in Mergers: Anomalies in the Overvaluation Hypothesis"**

Sean Davis - University of North Florida, USA

Jeffrey Coy - Penn State Erie, The Behrend College, USA

Fernando Guillen Solis - University of North Florida, USA

*Discussant:* Carmen Cotei - University of Hartford, USA

We examine short interest as a predictor of acquisition likelihood and the premiums paid in mergers and acquisitions, finding results that contradict the overvaluation hypothesis for short interest levels. High short interest is commonly associated with overvalued stocks, yet we not only find M&A targets tend to have high short interest, short interest increases acquisition likelihood, suggesting undervaluation. We find that highly shorted firms also experience outsized reductions in share prices prior to merger announcements. Regressions to predict the premiums paid are also significantly predicted by short interest levels. Our results are consistent with research indicating that short sellers may hold positions for long periods in anticipation of bad news and do not predict reversals well.

### **"The M&A Exit Outcome of New, High-tech Ventures"**

Carmen Cotei - University of Hartford, USA

Joseph Farhat - Central Connecticut State University, USA

*Discussant:* Erin Oldford - Memorial University of Newfoundland, Canada

We examine the exit outcome of new, high-tech businesses and the way the exit is shaped by their innovative capabilities and their growth in employment. Using the Kauffman Firm Survey, a sample of startups founded in 2004 and tracked over time until 2011, we find that new, high-tech ventures have very different exit outcomes based on whether they exhibit innovation capabilities or not. These different exit outcomes could be explained by differences in innovation and growth potential in the startup year as well as throughout the business' lifetime. Our results suggest that higher innovation and employment growth explain the likelihood of M&A exit but not the exit by closure. These results indicate that acquirers value the growth potential signaled through intellectual property rights, research and development activity and growth in employment and therefore, businesses with high quality innovations are the most attractive targets for acquisitions. Our results also show that new, high-tech ventures owned by highly educated entrepreneurs are more likely to exit via M&A. Highly educated owners not only have access to financial and social capital, which positively impact the entrepreneur's ability to create a business that is harvestable, but also increase the chance that the business will, indeed, be harvested.

### **"Cross-Border Acquisitions and Host Country Competitiveness"**

Isaac Otchere - Carleton University, Canada

Erin Oldford - Memorial University of Newfoundland, Canada

*Discussant:* Hubert De La Bruslerie - University Paris Dauphine, France

We investigate the competitive effects of cross-border takeovers on targets of cross-border acquisitions and rivals of those targets. We find that following the acquisition, the competitiveness of cross-border targets improves. The results for industry rivals, however, are mixed. Cross-border rivals react to the foreign acquisition in the long-term with improvement in their competitive position, while at the same time, their growth and market share suffer. We also report evidence that cross-border acquisitions enhance host country financial market development, and lead to increases in innovation rates in the host country. Overall, our results cast some doubt on the often pessimistic view of foreign takeovers and the fears of their impact on firms' and the host country's competitiveness. Cross-border acquisitions lead to shifting of market share from rivals to targets of cross-border, which is suggestive of increased industry concentration.

**SME FINANCING**

*Session Chair:* Nikolaos Philippas - University of Piraeus, Greece

**"Collateral and the Disruption of Firms as Non-Financial Intermediaries: Evidence from Chinese Property Law"**

Bing Xu - Bank of Spain, Spain

*Discussant:* Faten Slimane - Université Paris Est MARne La VAllée, France

By allowing large classes of movable assets to be used as collateral, the Chinese Property Law reform transformed firms role as non-financial intermediaries. We find after the legal reform, firms relied on trade credit financing substituted to more short-term bank credit, and the providers of trade credit reduced significantly their provision of trade credit. In particular, the Property Law has disrupted the practice in which firms redistribute short-term bank credit via trade credit. Instead, the providers of trade credit started to accumulate more fixed asset investment, which in turn allowed for more long-term borrowing from banks. Our findings are not driven by confounding factors such as liquidity drain due to financial crisis or other contemporary reforms. This study highlights the importance of looking at credit transactions between firms when investigating the effect of collateral laws.

**"What Drive Success of a Campaign of Crowdfunding for Renewable Energy?"**

Faten Slimane - Université Paris Est MARne La VAllée, France

Antoine Rousseau - University Paris 1 Panthéon-Sorbonne, France

*Discussant:* Pawel Mielcarz - Kozminski University, Poland

Despite its recent rapid growth rate, crowdfunding is still considered a relatively new phenomenon. Typically, it is becoming an alternative funding source for many start-ups and small and medium enterprises (SMEs) in various sectors including in renewable energy. While this type of financing has attracted considerable attention from practitioners and scholars, there is yet little research that focuses on the crowdfunding in general and in the energy and environment sector in particular. This article examines the crowdfunding of projects specialized in renewable energy. Specifically, the study explores crowdfunding platforms dedicated to renewable energy in France and also identifies the factors that drive the crowd. The findings are relevant for the entrepreneurs and crowdfunding platforms, as both parties benefit from campaign success.

**"Predatory Trade Finance: The Impact of Bargaining Power and Financing Constraints on the Demand and Supply of Trade Credit"**

Pawel Mielcarz - Kozminski University, Poland

Dmytro Osiichuk - Kozminski University, Poland

*Discussant:* Olga Kandinskaia - CIIM, Cyprus

Anecdotal evidence suggests that in trade credit relations, as in any other form of negotiation, the economic outcome of a trade deal is contingent on the bargaining power of transacting parties. We empirically demonstrate that the 'predator-prey' metaphor may be well-suited to describe the trade finance mechanisms in an emerging economy. Having analyzed the dynamics of trade credit in the Polish corporate sector over the period between 1997 and 2014, we found that the suppliers of trade credit were smaller, younger, less liquid, less indebted and more financially constrained than the beneficiaries of the extended trade credit. The firms, which increased trade receivables during the analyzed period, improved their asset turnover ratio at the expense of operating profitability. In a quest for growth and cash flows, these firms appear to be forced to supply trade credit to their counterparties with a stronger bargaining position. In turn, the companies, which reported higher trade payables, appear to enjoy higher cash flows and a better access to external financing, yet with no significant improvements to the operating KPIs. In contrast to the conventional wisdom, which praises trade credit for its beneficial role in accelerating firm

growth, we hypothesize that trade credit bargaining may be a negative-sum game with the consequences possibly being particularly detrimental to the smaller and more constrained companies.

### **"Warehouses De Pauw: Raising Equity for Growth in the Highly Competitive Market of Logistics and Semi-Industrial Real Estate"**

Nancy Huyghebaert - KU Leuven, Belgium

Olga Kandinskaia - CIIM, Cyprus

*Discussant:* Bing Xu - Bank of Spain, Spain

This paper presents a decision case intended for the use in the classroom and for the publication in a peer-reviewed case research academic journal. It contains the case and the teaching note. In 2016, Warehouses De Pauw (WDP), a key player in the logistics and semi-industrial real estate market in Europe, was one of the 17 publicly listed RRECs, Regulated Real Estate Companies, in Belgium. It had developed an ambitious growth strategy for a total amount of about 215 million euros. The company planned to issue approx. 2.4 million new shares for an amount of about 190 million euros. "Which is the best financing option to support the company's ambitious growth plan? Can we find an innovative solution which will allow us to raise equity quickly and at an appropriate price, while at the same time maintaining the government-imposed gearing ratio and dealing with the other constraints of our RREC status, such as, for example, the rule of the 80% dividend payout policy?" Mr. Van den Hauwe, the CFO of WDP, and Mr. Uwents, the company's co-CEO, had to prepare the detailed implementation plan for this SEO. In the highly antagonistic industrial real estate market in Europe, the success in raising sufficient capital quickly and at low cost would mean a substantial leap ahead of the competition.

## **LUNCHEON**

**12:15 - 1:15 p.m.**

**Arcade Restaurant**

## **KEYNOTE SPEECH**

**1:15 - 2:00 p.m.**

**Bartok II**

**Professor Kris Jacobs**

**C.T. Bauer College of Business - University of Houston, USA**

## **ESTIMATING OPTION PRICING MODELS: EXISTING CHALLENGES AND NEW APPROACHES**

Estimating option valuation models is challenging due to the complexity of the models and the richness of the available option data. Many existing studies therefore limit the time-series dimension and especially the cross-sectional dimension of the option data. This complicates the identification of model parameters from option data, especially the parameters characterizing the tails of the distribution. We propose new techniques to overcome these constraints, based on particle filtering with particle weights based on model-implied spot volatilities rather than model prices. We also use his approach to estimate option valuation models based on returns and options jointly, which allows us to identify the pricing kernel.

**ASSET PRICING III**

*Session Chair:* Alexandre Rubesam - IÉSEG School of Management, France

**"Deflation and Stock Prices"**

Michael Clemens - BankInvest, Denmark

*Discussant:* Maria De La O Gonzalez Perez - University of Castilla - La Mancha, Spain

While the literature on inflation and stock prices is plentiful, there is little literature on deflation and stock prices. This paper explores the empirical data and makes a theoretical analysis of the likely impact on stock prices when expectations changes from inflation to deflation. The main conclusions are: 1: The 1930s was a statistical outlier and not representative for a deflationary period; 2: Deflation does not seem to create recessions, causality goes the other way; 3: Real stock returns are lowest in high inflation environments, while real stock returns are positive and around average in the periods leading up to and following the onset of deflation; 4: The empirical evidence and the theoretical exercises are mixed as regards the impact on P/E ratios from deflation. When moving from low inflation to mild deflation, P/E is virtually unchanged, or perhaps even slightly higher; and 5: Deflation illusion might explain the surprisingly small decline in P/E ratios in the face of severe deflation.

**"A Quantile Regression Approach to Extensions of Fama & French Models"**

Maria De La O Gonzalez Perez - University of Castilla - La Mancha, Spain

Francisco Jareño - University of Castilla-La Mancha, Spain

*Discussant:* Rasha Abadi - University of Minho, NIF (502011378), Portugal

This research compares twelve different factor models in explaining variations in US sector returns between November 1989 and February 2014 using the quantile regression approach. Specifically, these models rely on the Fama and French three- and five- factor models (1993 and 2015), adding other explanatory factors, such as nominal interest rates and its components: real interest and expected inflation rates, the Carhart (1997) risk factor for momentum and for momentum reversal and the Pastor and Stambaugh (2003) traded liquidity factor. This paper concludes that the most complete model shows the highest explanatory power. Furthermore, the extreme quantile 0.1 of the return distribution shows the best results in all the factor models and, also, some sectors such as Industrials and Financials consistently evidence more statistically significant coefficients, and therefore higher Adj. R2 values. Contrarily, Utilities shows the lowest explanatory power constantly for all the models and quantiles.

**"The Performance of Cap-Weighted Portfolios Versus Fundamental-Weighted Portfolios in the Mena Equity Markets"**

Rasha Abadi - University of Minho, NIF (502011378), Portugal

Florinda Silva - University of Minho, Portugal

*Discussant:* Stella Spilioti - Athens University of Economics and Business, Greece

The fundamental indices are found to be a successful alternative to cap-weighted indices. This study investigates the performance of the cap-weighted portfolio in compare with fundamental, equal weighted and smoothed cap-weighted portfolios in Middle East and North Africa markets from 2005 to 2015. The analysis is conducted using different risk-adjusted measures, different concentration levels, different construction schemes and different sub-regions. The results show that the equal weighted portfolio outperforms the market cap-weighted and the smoothed cap-weighted portfolios while the market cap-weighted portfolio outperforms the different fundamentally weighted portfolios using the simple risk-return measures. However, using the more robust measures show that the equal weighted portfolio outperformance is found to be a result of size factor loadings, while the other constructed portfolios continue to underperform the cap-weighted portfolio. However, the fundamental weighted portfolios outperform only if the portfolios are constructed using the smallest stocks based on different constituents

in each portfolio. The findings also show that the performance of the constructed portfolios is similar across the sub-regions and is almost the same as the performance in the MENA region as a whole. This result suggests that the fundamentally weighted portfolios might underperform in the MENA region since this region faced and is still facing political and economic crises.

### **"Investor Sentiment Effects on Share Price Deviations from Accounting Fundamentals"**

Yiannis Karavias - University of Birmingham, UK

Stella Spilioti - Athens University of Economics and Business, Greece

Elias Tzavalis - Athens University of Economics and Business, Greece

*Discussant:* Michael Clemens - BankInvest, Denmark

In this paper, we examine if there exist asymmetric effects of investor sentiment on share price deviations from their intrinsic values based on accounting fundamentals, across different sentiment regimes of the market. This is done throughout a panel data threshold model using as threshold variable a proxy for market sentiment effects. The model enables us to identify from the data, endogenously, the threshold value of a sentiment index triggering shifts from the low to the high-sentiment regime and to investigate investor sentiment asymmetries, without using out-of-sample information. To calculate the intrinsic values of shares, we rely on the residual income valuation model, which facilitates calculation of the intrinsic values of shares based on book values of them. Implementation of the model to the UK share market data indicates that there are apparent asymmetries in the effects of investor sentiment on share prices. These concern both the dynamic (generic) and the cross-section pattern of share prices with respect to firm-specific characteristics of them.

**SESSION 18**

**Monday 2:00 - 3:45 p.m.**

**Liszt II**

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### **BEHAVIORAL III**

*Session Chair:* Chu Zhang - Hong Kong University of Science and Technology, Hong Kong

### **"Interpreting Market Inefficiency vs. Irrationality Using News Sentiment and Information Transfer Entropy"**

Anqi Liu - Cardiff University, UK

Jing Chen - Cardiff University, UK

Steve Yang - Stevens Institute of Technology, USA

Alan Hawkes - Swansea University, UK

*Discussant:* Thanos Verousis - Newcastle University, UK

News sentiment, an investor sentiment proxy, has been widely explored in behavioral finance; yet the linkage between investor sentiment and market irrationality and inefficiency has not been thoroughly examined. In this study, we consider the financial market as a bivariate system that consists of news sentiment and market returns. We adopt the concept of transfer entropy to quantify information flow between these two types of events and formulate irrationality regime proxies. Testing with an intraday dataset from 2003 to 2014 for the major U.S. markets, we find that the information flow follows a trimodal distribution that clearly distinguishes financial markets into three regimes: the “price-driven”, “transitional”, and “news-driven” regimes. We provide evidence to show that the proposed irrationality proxy is positively correlated with three market inefficiency indicators in the current literature; and also we identify a significant cutoff threshold to delineate the market into price-driven and news-driven regimes, showing that news-driven investment decision is a key factor of market inefficiency.

## **"Can Information From the Options Market Explain Herding in Stocks?"**

Nikolaos Voukelatos - University of Kent, UK

Thanos Verousis - Newcastle University, UK

*Discussant:* Dionisis Philippas - ESSCA Grand Ecole de Management, France

We examine if herding behavior in the equity market can be explained by information extracted from the options market. Our empirical results confirm the commonly reported absence of herding as a general tendency in the US equity market. However, we find evidence of significant herding behavior during periods when option-implied information reflects a pessimistic view about the future prospects of the equity market. More specifically, we find that individual stock returns tend to cluster more closely around the market consensus during days of high implied index volatility, more pronounced negative implied skewness and higher trading volume in index puts.

## **"Behavioural Patterns of Italian Financial Intermediaries: A Multivariate Mixture Approach"**

Dionisis Philippas - ESSCA Grand Ecole de Management, France

Alexandros Leontitsis - Dubai Data Establishment, United Arab Emirates

Catalin Dragomirescu-Gaina - Universita Cattolica del Sacro Cuore, Italy

Stephanos Papadamou - University of Thessaly, Greece

*Discussant:* Enrico Maria Cervellati - Ca' Foscari University of Venice, Italy

The paper uses a value-added approach to model financial intermediaries, but takes into account their industry classification type as an exogenous factor. We propose a multivariate Gaussian mixture model, which allows us to identify a number of unobserved behavioural factors embedded in the network-like structure of the financial sector. Industry type is never found to be the main factor driving financial intermediaries' assignment into network clusters, raising therefore challenges for financial regulators that limit their approach to industry-specific problems and disregard behavioural aspects.

## **"Behavioral Biases and Entrepreneurial Under-Diversification"**

Enrico Maria Cervellati - Ca' Foscari University of Venice, Italy

Pierpaolo Pattitoni - University of Bologna, Italy

Marco Savioli - University of Salento, Italy

*Discussant:* Anqi Liu - Cardiff University, UK

Entrepreneurs typically overinvest in their own companies, overexposing themselves to idiosyncratic risk. Our theoretical model explains entrepreneurial under-diversification by measuring the effect of cognitive bias on entrepreneurs' portfolio allocations. Specifically, we focus on overconfidence and over optimism, for which we propose a new parameterization in our model. Simulation analyses show a stronger role for overconfidence than over optimism in determining entrepreneurs' portfolio allocations and allow us quantifying the implicit levels of overconfidence and over optimism from observable portfolio choices. Using a unique dataset including information on Italian entrepreneurs and their companies, and a structural equation modelling approach, we test the effect of the latent variables overconfidence and over optimism on entrepreneurs' portfolio allocations. Consistent with our theoretical predictions and simulations, we find a positive relationship between overconfidence and entrepreneur investments in their own companies. On the other hand, the role of over optimism seems to be negligible.

**CORPORATE GOVERNANCE I**

*Session Chair:* J. Jimmy Yang - Oregon State University, USA

**"Voluntary Disclosures on Control System Over Financial Reporting and Corporate Governance Characteristics: Evidence from Poland"**

Jacek Gad - University of Lodz, Poland

*Discussant:* Tanweer Hasan - Roosevelt University, USA

The paper presents the results of research on the mechanisms of corporate governance functioning on the emerging Polish capital market. The purpose of this article is to identify the characteristics of corporate governance affecting the length of disclosures about the control system over financial reporting. The research covered 367 companies listed on the Warsaw Stock Exchange and their disclosures published in 2013. The results indicate that the length of voluntary disclosures on the control system over financial reporting is positively correlated with the presence of supervisory board committees and the number of independent supervisory board members. At the same time, the length of these disclosures is negatively correlated with the level of managerial ownership. The results of the analysis show that on the emerging Polish capital market the quality of corporate governance affects the length of disclosures on the control system over financial reporting. The results are similar to results of research conducted in developed economies. These results may serve as a benchmark for further research in the area of corporate governance conducted among listed companies in emerging capital markets. The conducted research indicates that the scope of disclosures on the control over financial reporting may be a good tool for measuring the level of transparency of public companies.

**"Role of Governance on Performance of Microfinance Institutions in Bangladesh"**

Tanweer Hasan - Roosevelt University, USA

*Discussant:* Tomoe Moore - Brunel University London, UK

Using a sample of sixty-eight microfinance institutions (MFIs) from Bangladesh, this study investigates the possible impact of various governance attributes on their financial performance. Our results show that powerful CEOs do have a positive impact on financial performance of MFIs, and that gender diversity in board can only have a positive impact when it is also augmented by gender diversity in management. However, the correlation between financial performance and board size was not statistically significant in our empirical analysis.

**"The Impact of Firm's Political Connections on Dividend Policy: Evidence from Jordan"**

Ahmad Alsaraireh - Brunel University London, UK

Tomoe Moore - Brunel University London, UK

*Discussant:* Philipp Krueger - University of Geneva & SFI, Switzerland

This article empirically examines how firm's political connections affect its dividend-policy with a unique data set of 131 Jordanian firms over the sample period 2000-2014. By isolating the effect of firm characteristics, we find that a firm's political connections have a significant positive impact on both the propensity to pay dividends and the dividend-payout ratio supporting the substitute theory. However, an interesting finding is that this effect is found to be robust in weaker political connections. This appears to suggest the easy access to alternative external finance and also an exploitative behaviour for strongly politically-connected firms with less concerns for corporate governance and asymmetry information. In the extended analysis, the relationship between political connections and dividends appears to subside as such events as the Global Financial Crisis, the Arab Uprisings and the adoption of the International Financial Reporting Standards unfolded since 2008.

## **"The Sustainability Footprint of Institutional Investors"**

Rajna Gibson - University of Geneva, Switzerland

Philipp Krueger - University of Geneva & SFI, Switzerland

*Discussant:* Jacek Gad - University of Lodz, Poland

Little is known about the environmental and social (or sustainability) preferences of 13F institutional investors. In this paper, we propose a novel measure to quantify the portfolio-level sustainability of institutional investors. We show that portfolios of institutions with longer investment horizons exhibit higher sustainability and that risk-adjusted performance is positively related to sustainability, primarily through a reduction of portfolio risk. Using exogenous shocks to investor sustainability induced by natural disasters we provide evidence of a causal impact of sustainability on risk-adjusted performance. An instrumental variable strategy using geographic variation in constituency statutes further supports a causal interpretation of our results.

**SESSION 20**

**Monday 2:00 - 3:45 p.m.**

**Lehár I**

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### **COINTEGRATION**

*Session Chair:* Anna Merika - Deree College, Greece

#### **"Multivariate Testing for Fractional Integration"**

Marina Balboa - University of Alicante, Spain

Paulo Rodrigues - Banco de Portugal, Portugal

Antonio Rubia - University of Alicante, Spain

Robert Taylor - University of Essex, UK

*Discussant:* Pedro Serrano - University Carlos III of Madrid, Spain

This paper introduces a testing procedure to detect (common) fractional integration in a multivariate time series context. The setting extends the results of Robinson (1994), Agiakloglou and Newbold (1994), Tanaka (1999) and Breitung and Hassler (2002), to a multivariate framework. The proposed test procedures can be easily implemented in practical settings and are flexible enough to accommodate a broad spectrum of long- and short-memory specifications, including VAR and/or multivariate GARCH-type dynamics among others, generalizing in this way also the approach in Nielsen (2005). Furthermore, these tests have power against different types of alternative hypotheses and enable inference to be conducted under critical values drawn from a standard Chi-squared distribution, irrespective of the long-memory parameters.

#### **"Supercointegrated"**

Isabel Figuerola-Ferretti - ICADE Universidad Pontificia Comillas, Spain

Pedro Serrano - University Carlos III of Madrid, Spain

Tao Tang - Jinan University, China

Antoni Vaello - University Balearic Islands, Spain

*Discussant:* Raul Susmel - University of Houston, USA

This paper uses S&P100 data to examine the performance of pairs trading portfolios that are sorted by the significance level of cointegration between their constituents. We find that portfolios formed with highly cointegrated pairs, named as "supercointegrated", yield the best performance reflecting a positive relationship between the level of cointegration and pairs trading profitability. The supercointegrated portfolio also shows superior out-of-sample performance when compared to the simple buy-and-hold investment on the market portfolio in terms of Sharpe ratio. We link the time-varying risk of the pairs trading strategy to aggregated market volatility. Moreover we report a positive risk-return relationship between the strategy and market volatility, which is enhanced during bear market conditions. Our results remain valid when applying the strategy to European index data.

## **"Price Dynamics and Convergence in Real Estate Prices in the U.S. West Coast"**

Raul Susmel - University of Houston, USA

*Discussant:* Xiaoquan Jiang - Florida International University, USA

In this paper we study the dynamics of monthly price changes in three cities in the U.S. West Coast: Los Angeles, San Diego, San Francisco. Real estate prices are very persistent and autocorrelated. We incorporate these features into a simple model to study the dynamic behavior of relative price changes in those three cities. We find some evidence of mean reversion in relative prices, but the reversion toward the long-run mean, or relative price parity, is very slow. We incorporate the deviations from long-run parity in a dynamic model for relative price changes. We also include in the model some conditioning lagged variables: State Leading Indicators changes, Tech Pulse changes, Realized Volatility of Price changes and Unemployment differentials. We find that deviations from long-run parity do not have a big impact, with only a significant effect on the LA/SD market, with a significant negative corrective impact on price differentials. The Tech Pulse and unemployment differentials also play a role in the dynamic behavior of relative prices.

## **"Information Contents of Appraisal-Based Index and Transaction-Based Index of Commercial Real Estate"**

Bill Harding - Florida International University, USA

Xiaoquan Jiang - Florida International University, USA

Zhonghua Wu - Florida International University, USA

Qianying Zhang - Allegheny College, USA

*Discussant:* Marina Balboa - University of Alicante, Spain

The commercial real estate market provides a unique environment to evaluate the information content of appraisal-based index of commercial real estate and the movement of transaction price to value. The assumption that asset prices, especially financial assets including stocks and bonds, reflect intrinsic value is the cornerstone of modern financial theory. Given the latent nature of intrinsic value, however, definitive empirical assessment has been difficult. The commercial real estate market's long-term use of both judgment (appraisal) based returns and transaction returns provides a test of the role of intrinsic value. Statistically significant results from cointegrating models suggest that transaction based returns deviate from judgment based returns in the short run, but converge back to the equilibrium state. Additional tests show that the cointegrating residuals among transaction, appraisal and REIT returns predict the one-quarter-ahead transaction returns. The transaction or price returns are predictable with convergence to intrinsic value. The market moves to intrinsic value.

**SESSION 21**

**Monday 2:00 - 3:45 p.m.**

**Lehár II**

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### **BANKING I**

*Session Chair:* Can Inci - Bryant University, USA

## **"Bank Efficiency and Presidential Election: The Role of Ownership Structure"**

Shuh-Chyi Doong - National Chung Hsing University, Taiwan

Anh-Tuan Doan - Ton Duc Thang University, Viet Nam

*Discussant:* Othmane Kettani - Natixis Bank, France

This paper uses a new dataset from 20 emerging economies to reassess the relation between political uncertainty and bank efficiency. Using a stochastic frontier approach (SFA) to estimate bank cost efficiency, we find evidence that political uncertainty during election years tends to impede bank efficiency. With respect to the impact of ownership, we find that state-owned banks tend to have lower efficiency than comparable private banks, while no difference exist in cost efficiency between foreign-owned and domestic private banks. Our results also reveal that commercial banks located in civil

law countries and parliamentary systems tend to be less efficient during the election year, while changes in efficiency among banks in common law countries and presidential systems are not driven by political uncertainty. Our findings highlight the implications of political uncertainty and ownership for efficiency and are relevant to bank regulators who are considering additional regulations on bank efficiency.

### **"CVA Capital Requirements Under the New Regulation FRTB Framework: A Comparative Study"**

Othmane Kettani - Natixis Bank, France

Constantin Mellios - University Paris 1 Panthéon-Sorbonne, France

Adil Reghai - Natixis Bank, France

*Discussant:* Zsuzsanna Voneki - Corvinus University of Budapest, Hungary

In this paper, we compare the CVA capital charge under the FRTB-CVA framework and the basic CVA framework. Under the FRTB-CVA framework and provided that some regulatory conditions are satisfied, a bank may compute the capital charge using either the 'Internal models' approach or the 'Standardized' approach. We study the impact of choosing either method to model exposures and compare the resulting CVA capital charge to that obtained under the basic framework. The impact of model parameters is also studied, our test portfolio being an Equity Return Swap.

### **"What Do the Risk Disclosures Present about Banking Operational Risk Processes? Content Analysis of Banking Risk Reports in Visegrad Four Countries"**

Zsuzsanna Voneki - Corvinus University of Budapest, Hungary

Gabriella Lamanda - ELTE, Hungary

*Discussant:* Rudra Pradhan - Indian Institute of Technology, India

This paper analyses the operational risk part of Risk Reports and Annual Reports of twenty nine large banks in the Hungarian, Slovakian, Czech and Polish market in the period of 2008 and 2016. The authors research purpose was to provide a comprehensive picture about how the examined banks present this heterogenic and important risk, as well as, the related risk management processes. We examined if – beyond the general information – important facts like existing losses, trends and the risk management process's integration into the organisation can be found in the reports. The content analysis shows that reports are quite limited and hardly contain relevant and specific information. However, in the examined period, the quality of the reports increased monotonously and their content widened as well, the real significant losses and the potential risk factors are lacking from them. The “new” risk types like conduct, model and reputational risk did not receive sufficient attention. The authors suggest that banks should reconsider their reporting policy related to operational risk based on the paper's results.

### **"Banking Sector Depth and Economic Growth in European Countries: The Causality Analysis and Causes"**

Saurav Dash - Indian Institute of Technology, India

Rudra Pradhan - Indian Institute of Technology, India

Manju Jayakumar - Indian Institute of Technology, India

Kunal Gaurav - Indian Institute of Technology, India

Ajoy Sarangi - Indian Institute of Technology, India

*Discussant:* Shuh-Chyi Doong - National Chung Hsing University, Taiwan

This paper examines the nexus between banking sector depth and economic growth in European countries for the period 1961-2016. Using Granger causalities, we find the presence of both bidirectional and unidirectional causality between banking sector depth and economic growth. The policy implication of this study is that the economic policies should recognize the differences in the banking sector depth and growth in order to maintain sustainable development in the European countries.

**LIQUIDITY**

*Session Chair:* Balasingham Balachandran - La Trobe University, Australia

**"Portfolio Valuation Under Liquidity Constraints with Permanent Price Impact"**

Peter Csoka - Corvinus University of Budapest, Hungary

Judit Hever - Corvinus University of Budapest, Hungary

*Discussant:* Endong Yang - Nanyang Technological University, Singapore

When institutional investors rearrange their portfolios, they should consider both the temporary and the permanent price impacts. After a temporary price impact the order book fully recovers, whereas a permanent price impact changes the equilibrium price, having effects on the resulting portfolio. In this paper, for a given period, we introduce an optimization problem for valuing illiquid portfolios with permanent price impacts. We show how to find the optimal trade to satisfy certain portfolio constraints. As a policy implication, we note that introducing permanent price impacts in internal or external regulation can substantially change liquidity risk or capital requirements.

**"Stock Liquidity and Corporate Social Responsibility"**

Xin Chang - Nanyang Technological University, Singapore

Weiqiang Tan - Hong Kong Baptist University, Hong Kong

Endong Yang - Nanyang Technological University, Singapore

Wenrui Zhang - Chinese University of Hong Kong, Hong Kong

*Discussant:* Nihad Aliyev - University of Technology Sydney, Australia

We show that stock liquidity negatively affects firms' corporate social responsibility (CSR) ratings. To identify the causal effect, we use the decimalization of stock trading as an exogenous shock to liquidity. The negative liquidity effect on CSR is more pronounced for firms with CEOs approaching the retirement age, firms with more analyst coverage, or those with larger short-term institutional ownership. These findings suggest that stock liquidity induces managerial short-termism, thereby discouraging firms from engaging in CSR activities. Overall, our analysis reveals a dark side of stock liquidity in terms of exacerbating the conflict between shareholders and other stakeholders.

**"Learning About Toxicity: Why Order Imbalance can Destabilize Markets"**

Nihad Aliyev - University of Technology Sydney, Australia

Xue-Zhong He - University of Technology Sydney, Australia

Talis Putnins - University of Technology Sydney, Australia

*Discussant:* Stuart Locke - The University of Waikato, New Zealand

How does a market digest order imbalance? We show that when market participants learn about the level of adverse selection (the risk of trading against better-informed counterparties) from order flow, a large order imbalance can be destabilizing, causing sharp price movements and evaporation of liquidity, as it signals high toxicity. While such effect is consistent with the practitioner view that order flow is informative about toxicity, it contrasts with standard microstructure models in which the level of adverse selection is assumed to be known and thus order imbalance improves liquidity by revealing private information. Our model helps to understand when markets are most susceptible to imbalance-induced instability and the dynamic process of how markets digest order imbalance.

## **"ICT and Financial Inclusion Among MSMEs? A Panel Evidence from South-East Asian (SEA) Countries"**

Francis Agyekum - Valley View University, Ghana

Stuart Locke - The University of Waikato, New Zealand

Nirosha Hewa Wellalage - University of Waikato, New Zealand

*Discussant:* Peter Csoka - Corvinus University of Budapest, Hungary

This paper examines the impact of information and communication technologies (ICT) services, especially ownership and usage of internet, on financial inclusion among small and medium-size enterprises (SMEs) in emerging South-East Asia (SEA) markets. Using the World Bank Enterprise Survey (WBES) indicator database, the study finds that usage of ICT-based services dominates as contributory reasons for a likelihood of success in accessing external credit. The results further establish that firm's risk disposition to exclusion from the mainstream financial system reduces when the enterprise owns websites, uses e-mail to communicate to suppliers and clients, and are both matured and formalised. The primary mode of estimating the relationships relies on a conditional fixed effect panel logistic regression model using WBES microdata of 6805 firms. Policy priorities for donors and policymakers are unambiguous; pay attention to technological infrastructure and amenities such as internet services that help dissipate opacity in supplying credit to SMEs. This will ultimately ensure reduced risk predisposition to financial exclusion among enterprises, with the potential for growth and sustainability.

**SESSION 23**

**Monday 2:00 - 3:45 p.m.**

**Brahms I**

### **REAL ESTATE**

*Session Chair:* Frank McGroarty - University of Southampton, UK

#### **"Risk Retention and Qualified Commercial Mortgages"**

Yildiray Yildirim - Baruch College-CUNY, USA

Sumit Agarwal - Georgetown,

Brent Ambrose - Penn State University,

Jian Zhang - Hong Kong Baptist University,,

*Discussant:* Shu Ling Chiang - National Kaohsiung Normal University, Taiwan

Regulations arising from the Great Recession and nancial crisis have dramatically altered the mortgage market. For example, issuers are now required to retain 5% of the credit risk in CMBS deals (the risk retention rule). However, the rule does not apply uniformly across all commercial mortgages. For example, the carve-out for CMBS deals comprising multifamily loans guaranteed by the GSEs creates a natural experiment for testing the impact of the risk retention rule on the commercial loan market. Since the primary objective of this rule is to require deal sponsors to participate in the risks associated with the loans backing securitization deals, we expect that underwriting standards should tighten following the implementation of the rule. As a result, the Dodd-Frank Act regulations may have a profound impact on capital costs in the commercial real estate market. The results of this study will shed light on the implications of regulations on credit to the commercial real estate market.

#### **"The Influences of Foreclosure Factors on the Value, Yield, Duration and Convexity of a Risky Mortgage"**

Shu Ling Chiang - National Kaohsiung Normal University, Taiwan

Ming Shann Tsai - National University of Kaohsiung, Taiwan

Shan Jiang - Integrated Financial Engineering Inc., USA

*Discussant:* Alain Coen - University of Quebec in Montreal, Canada

This paper presents a theoretical model that considers the influence of the foreclosure factors (including

the foreclosure lag, the foreclosure costs and the ratio of the auction price to the unpaid balance of mortgage-hereafter denoted as APUPB ratio) on the analysis of the formulas for mortgage value, yield, duration and convexity. Furthermore, we used data obtained by FHA to perform the numerical analyses. The results indicate that the average default period of a mortgage and the average foreclosure lag are 2.4749 years and 1.9 years, respectively. For each percentage increase in APUPB ratio, the foreclosure lag decreases by about 4.57 days. The lender's opportunity cost is greater than the foreclosure settlement costs, and the total foreclosure costs are 25% of the house auction price. Moreover, the foreclosure lag, foreclosure costs and the discounted auction price (i.e.,  $1 - \text{APUPB ratio}$ ) are negatively correlated with the mortgage value, duration and convexity, but positively correlated with the mortgage yield. Also, the results reveal that a change in the default probability has the greatest influence on mortgage convexity and the next greatest on mortgage yield. Our model and results should provide portfolio managers and lenders a useful tool to more appropriately measure the yield, duration and convexity of a mortgage and thus help them to more effectively hedge their mortgage holdings.

### **"International Listed Real Estate Returns: Evidence from the Global Financial Crisis"**

Alain Coen - University of Quebec in Montreal, Canada

Patrick Lecomte - University of Reading Malaysia, Malaysia

*Discussant:* Clare Branigan - University College Dublin, Ireland

Using the Global Financial Crisis (GFC) as a breakdown, we revisit the risk and return characteristics of publicly traded real estate companies from 14 countries proxied by FTSE EPRA indices over the period 2000 to 2015 in presence of errors-in-variables. We extend the seminal work of Bond, Karolyi and Saunders (2003), and shed a new light on the relative performance of listed real estate before and after the GFC. First, we suggest the use of various asset pricing models including the Fama-French (2015) five-factor asset pricing model with global and country-level factors. Second, we implement unbiased estimators to correct for the econometric bias induced by errors-in-variables (EIV) in asset pricing models. Third, we deal with the impact of illiquidity (measured by serial correlation) on the risk properties of international securitized real estate returns. Our findings show that international listed real estate risk factors changed radically after the GFC, which has resulted in more homogeneous markets internationally and less diversification opportunities for US-based investors.

### **"Auction Competitive Dynamics and Guide (List) Prices in a Bubble Market"**

Clare Branigan - University College Dublin, Ireland

Paul Ryan - University College Dublin, Ireland

*Discussant:* Yildiray Yildirim - Baruch College-CUNY, USA

The auction literature finds competition drives price outcomes and has both rational and psychological components. In bubble markets psychological factors are likely to be heightened impacting on the dynamics of competitive behavior (Shiller, 2014). We find, in a real estate bubble, guide prices have no influence in generating greater auction competition. In addition, our findings are supportive of the strength of the guide price in acting as an anchor on price outcomes. Thus we find no evidence that auction fever (e.g. Adam et al, 2015) occludes any assimilative role for the guide as an anchor. Interestingly, however, we find evidence consistent with real estate agents systematically setting low guide prices relative to fundamentals, in an apparent belief in the reversal-of-the-anchoring effect (Ku et al, 2006), suggesting their actions in setting guide prices may have, in fact, paradoxically, dampened the effect of the bubble rather than amplifying it.

**FAMILY FIRMS**

*Session Chair:* Mahfoud Djebbar - Setif University, Algeria

**"Another Case on Discounted FCF Vs P2S Valuation: Privately Held Food & Drinks Firms in Greece"**

Athanasios Karampouzis - University of Macedonia, Greece

Dimitrios Ginoglou - University of Macedonia, Greece

*Discussant:* Hsiu-I Ting - National Taipei University of Technology, Taiwan

This paper is a follow-up attempt in applying two different valuation methodologies on privately held firms in Greece. Initially the two methodologies - free cash flows to equity and the price-to-sales multiple - are being explained. These two models are further developed under the Greek accounting standards (especially the first model, as being a more fundamental approach), in order to be applied more correctly to Greek firms' data. The application of these two models follows right afterwards and is upon privately held food & drinks firms' financial statements, collected for each year (2013 up to 2015). The final step consists of the analysis and discussion of the results with the help of descriptive statistics (frequencies), as well as the Pearson statistic, as a simple correlation tool.

**"Are Family Firms Friendly to Women?"**

Hsiu-I Ting - National Taipei University of Technology, Taiwan

Ming-Chun Wang - National Kaohsiung First University of Science and Technology, Taiwan

Vincent Yu - National Taiwan University of Science and Technology, Taiwan

*Discussant:* Ying-Juan Wong - National Kaohsiung University of Science and Technology, Taiwan

This study used listed firms in Shanghai and Shenzhen from 2004 to 2014 to investigate whether family firms help women break the glass ceiling. We find that family firms appoint female CEOs more often than non-family firms. Our finding does not result from the limitation of family firms to recruit talent from family members. Family firms even provide a female-friendly workplace for professional CEOs. Family firms that operate under conservative management are inclined to appoint women regarded as risk-averse. The tendency of family firms to hire female CEOs is partially attributed to homophily.

**"The Effect of Family CEO Successors on Strategic Change"**

Ying-Juan Wong - National Kaohsiung University of Science and Technology, Taiwan

Cheng-Yu Lee - Southern Taiwan University of Science and Technology, Taiwan

Heng-Yu Chang - Chang Gung University, Taiwan

*Discussant:* Xin Yu - University of Queensland, Australia

While CEOs play a major role in the facilitation of strategic change, little research has documented how a succession CEO, particularly a family CEO successor, affects the strategic change of a firm. Incorporating behavioral agency theory with the perspective of family socioemotional wealth, this study complements previous research by investigating how a family CEO successor affects the level of strategic change implemented by a firm, and how performance aspiration gaps influence family CEO successors' willingness to initiate such change. We additionally investigate how this willingness to execute strategic change is further affected when the interests of the family CEO successor is aligned with that of the firm through aligning cash flow rights and voting rights. The results show that, in general, family CEO successors negatively affect a firm's degree of strategic change. However, when firms experience negative performance aspiration gap (performance below the aspiration level), these successors increase the firm's degree of strategic change. The mitigating effect of a negative aspiration gap is further enhanced when the firm's cash flow rights are aligned with its voting rights.

## **"Family Monitoring the Family"**

Joseph Fan - The Chinese University of Hong Kong, Hong Kong

Xin Yu - University of Queensland, Australia

*Discussant:* Dimitrios Ginoglou - University of Macedonia, Greece

This study examines how founding family participation in firm ownership and management shapes related-party transactions that concern public investors in more than 1,200 Chinese publicly traded private sector firms. Surprisingly, we find that firms with more family member participation engage in fewer abnormal related-party transactions that are suspicious with respect to expropriation, suggesting a potential monitoring role by firm founding family members. Such effects are stronger in stocks that are thinly traded and followed by few analysts, suggesting a substitutional effect of family governance for weak market governance. Moreover, seniority and closeness of family relationships matter to the strength of family monitoring. The family monitoring effects are stronger when more senior or distantly related family members participate in the firms and weaker when more children of the founders participate. The family members' role as owners and/or managers also matters. Shareholding family managers are associated with fewer suspicious related-party transactions than are family managers without shares and family owners who do not act as managers. Overall, this study's evidence supports the view that the checks and balances among founding family members benefit public investors, particularly when market governance is weak in enforcing investor rights.

**Refreshments**                      **3:45 - 4:00 p.m.**

**SESSION 25**

**Monday 4:00 - 6:00 p.m.**

**Liszt I**

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## **ASSET PRICING IV**

*Session Chair:* Cristiana Cerqueira Leal - Universidade do Minho, Portugal

## **"Searching the Factor Zoo"**

Soosung Hwang - Sungkyunkwan University, Korea, Republic of

Alexandre Rubesam - IÉSEG School of Management, France

*Discussant:* Thomas Renault - IÉSEG School of Management, France

Hundreds of factors have been proposed to explain asset returns during the past two decades, a situation which Cochrane (2011) has dubbed "a zoo of new factors". In this paper, we develop a Bayesian approach to explore the space of possible linear factor models in the "zoo". We conduct an extensive search for promising models using a set of 83 candidate factors based on the literature and applying the methodology to thousands of individual stocks. Despite the large number of factors that have been proposed, our results show that (i) only a handful of factors appear to explain the returns on individual stocks; (ii) from these, the only factor that is consistently selected over time is the market excess return; and (iii) other factors which are selected during certain periods are not those in widely used multi-factor models.

## **"Market Manipulation and Suspicious Stock Recommendations on Social Media"**

Thomas Renault - IÉSEG School of Management, France

*Discussant:* Haim Kedar-Levy - Ben Gurion University, Israel

Social media can help investors gather and share information about stock markets. However, it also presents opportunities for fraudsters to spread false or misleading statements in the marketplace. Analyzing millions of messages sent on the social media platform Twitter about small capitalization firms, we find that an abnormally high number of messages on social media is associated with a large price increase on the event day and followed by a sharp price reversal over the next trading week. Examining users' characteristics, and controlling for lagged abnormal returns, press releases, tweets

sentiment and firms' characteristics, we find that the price reversal pattern is stronger when the events are generated by the tweeting activity of stock promoters or by the tweeting activity of accounts dedicated to tracking pump-and-dump schemes. Overall, our findings are consistent with the patterns of a pump-and-dump scheme, where fraudsters/promoters use social media to temporarily inflate the price of small capitalization stocks.

### **"Liquidity might come at cost: The role of heterogeneous preferences"**

Shmuel Hauser - Ono Academic College, Israel

Haim Kedar-Levy - Ben Gurion University, Israel

*Discussant:* Chu Zhang - Hong Kong University of Science and Technology, Hong Kong

Asset-pricing models with volume are challenged by the high turnover-rates in real stock markets. We develop an asset-pricing framework with heterogeneous risk preferences and show that liquidity and turnover increase with heterogeneity to a maximum, and then decline. With U.S. parameters, turnover exceeds 55%. Liquidity is costly since it facilitates a large share redistribution across agents, causing changes in average risk aversion, which increases Sharpe ratio variability, and hence stock return volatility. Illiquidity and its risk are minimized at moderate heterogeneity levels, highlighting an "optimal" heterogeneity level, yet, there is no "optimal" combination between liquidity level and Sharpe ratio variability.

### **"The Macroeconomic Announcement Premium over Business Cycles"**

Chu Zhang - Hong Kong University of Science and Technology, Hong Kong

Shen Zhao - The Chinese University Of Hong Kong (Shenzhen), China

*Discussant:* Haimanot Kassa - Miami University, USA

It is well documented that the average U.S. stock market excess return on days when important macroeconomic news is pre-scheduled for announcement is significantly higher than those on other trading days. Our evidence shows that this difference is only significant during normal times, not recessions. We further show that controlling for the expected daily market volatility, the excess return on the announcement day is negatively correlated with learning related uncertainty, e.g. forecast errors, which is pro-cyclical. Our empirical findings highlight the importance of disentangling the force forming the risk-return trade-off relation and the force cyclically weakening the relation for the theory to explain equity premium around macroeconomic announcements.

### **"Betting Against Beta Under Incomplete Information"**

Colin Campbell - University of Cincinnati, USA

Haimanot Kassa - Miami University, USA

*Discussant:* Alexandre Rubesam - IÉSEG School of Management, France

We show analytically and empirically that Betting-Against-Beta (BAB) – low beta stocks outperforming high beta stocks – is consistent with market segmentation due to the cost of information acquisition, as in Merton's (1987) model. Consistent with our predictions, expected returns and CAPM alphas from a BAB strategy (long low beta stocks and short high beta stocks) are positive and vary (1) negatively in the cross-section with firm visibility, and (2) positively in the time-series with the portfolio's shadow cost of information and beta spread. These results cannot be fully explained by alternate explanations such as funding illiquidity or preference for lottery-like stocks.

**BEHAVIORAL IV**

*Session Chair:* George Athanassakos - University of Western Ontario, Canada

**"Revisiting Sports Sentiment and Stock Returns: A BIRG Effect in NBA and MLB"**

Chia-Chen Teng - Chung Yuan Christian University, Taiwan

J. Jimmy Yang - Oregon State University, USA

*Discussant:* Konstantinos Gavriilidis - University of Stirling, UK

This study examines the impact of East Asian players' performances in the U.S. National Basketball Association (NBA) and Major League Baseball (MLB) on the players' home stock markets. We find that East Asian NBA players' superior performance and MLB players' wins have significant and positive impact on their home stock markets, not only at the index level but also for related industries and firms. Poor performance and losses do not seem to have significant impact. We argue that if game results do not lead to immediate elimination, the effect of winning can be stronger than that of losing, which is consistent with the phenomenon of basking in reflected glory (BIRG).

**"Institutional Herding and Mood"**

Konstantinos Gavriilidis - University of Stirling, UK

Vasileios Kallinterakis - University of Liverpool, UK

Belma Öztürkkal - Kadir Has University, Turkey

*Discussant:* Yi-Ling Chen - National University of Kaohsiung, Taiwan

Drawing on a unique data set of daily portfolio holdings for Turkish mutual funds we investigate the relationship between mood and institutional herding on the premises of various established mood proxies (weekend effect; holiday effect; Ramadan; sunshine; new/full moon) for the January 2002 – August 2008 period. Results indicate that fund managers in Turkey herd significantly, with their herding growing in magnitude as the number of active funds per stock rises and appearing stronger on the buy- than the sell-side. Although the relationship of mood with institutional herding occasionally assumes the correct sign as per theoretical expectations, institutional herding is found to be insignificantly different across various mood states, thus denoting that mood does not impact the propensity of fund managers to herd.

**"Internet Search Queries and Herding Behavior"**

Shu-Fan Hsieh - National Kaohsiung University of Science and Technology, Taiwan

Chia-Ying Chan - Yuan Ze University, Taiwan

Ming-Chun Wang - National Kaohsiung University of Science and Technology, Taiwan

Yi-Ling Chen - National University of Kaohsiung, Taiwan

*Discussant:* Julio Sarmiento - Pontificia Universidad Javeriana, Colombia

Studies have shown that information not only may induce investor herding behavior but also institutional and individual investors may exhibit different information attention and herding. In this paper, we argue that internet is one of the information resources for investors who lack of information required to make investment decision, since Google search is a free information resource for retail investors, in a country with high internet usage, retail investors obtain identical information from Google search, leading to herding behavior. Empirical results confirm that Google Search Volume Index can be a proxy for the information attention of uninformed individual investors, and the measure of ASVI (abnormal search volume index) shows that individual investors become more attentive to the information and hence exhibit more herding behavior. Empirical evidence also shows that reaching the limit generates an information-grabbing effect which further enhances the impact of information attention on individual investor herding behavior. Further, in general, small cap firms generate more intensive herding by individual investors. In addition, we explore the asymmetric impact of ASVI on herding behavior for bull and bear markets, and confirm that the individual investor buy herding phenomenon is stronger in bull

markets, especially for small capitalization firms.

### **"The Disposition Effect: Evidence on Institutional Investors and Mutual Funds in the United States of America"**

Julio Sarmiento - Pontificia Universidad Javeriana, Colombia

Jairo Rendon - Pontificia Universidad Javeriana, Colombia

Juan Sandoval - Pontificia Universidad Javeriana, Colombia

Edgardo Cayon - Colegio de Estudios Superiores de Administración, Colombia

*Discussant:* Arun Upadhyay - Florida International University, USA

The Disposition Effect is a concept that describes the disposition to sell winners too early and ride losers too long. Using institutional and mutual fund data in USA from 1980 to 2014 we found evidence of the Disposition Effect if we use trades as the unit of measure for both agents, institutions and mutual funds, but if we use share or dollars as the unit of measure, the Disposition Effect vanishes as the reference period becomes more distant. This reflects that the reference period has an important role to measure this phenomenon and give some clues about the short living effect in the markets. Also the agent with the highest DE tends to have small value portfolios, last in, and have a lower cumulative returns.

### **"Risk and Return Comparison of Firms Led by Founders and Outside CEOs"**

Yuka Nishikawa - Florida International University, USA

Edward Lawrence - Florida International University, USA

Arun Upadhyay - Florida International University, USA

*Discussant:* J. Jimmy Yang - Oregon State University, USA

In this paper we study if firms led by a founder as Chief Executive Officer (CEO) are significantly different from those that are led by an outsider as CEO in terms of their appetite for risk and the resulting performance. Because of the differences in ownership stakes, the founder-CEOs may be able to seek long term goals whereas the outside CEOs are focused more on short term goals. We hypothesize that firms led by founder-CEOs will have higher risks and higher performance than the firms led by outside CEOs. Our results confirm the hypothesis as we find higher risk as measured by firm's option implied volatility, beta, idiosyncratic volatility and standard deviations of monthly returns over the next 12 and 24 months for firms that are led by founder CEOs. We also find higher ROA and Tobin's Q for firms led by founder CEOs indicating better performance.

**SESSION 27**

**Monday 4:00 - 6:00 p.m.**

**Liszt III**

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### **CORPORATE GOVERNANCE II**

*Session Chair:* Christian Flor - University of Southern Denmark, Denmark

### **"Interlocking Leadership and Agency Conflicts in the Shipping Industry"**

Andreas Andrikopoulos - University of the Aegean, Greece

Andreas Georgakopoulos - Deree College, Greece

Anna Merika - Deree College, Greece

Andreas Merikas - University of Piraeus, Greece

*Discussant:* Jerry Yu - University of Baltimore, USA

We explore the effect of interlocking directorates on agency conflicts and corporate performance. We employ social network analysis to discover central nodes in the network of personal and corporate connections in an international sample of 110 listed shipping companies. Assessing network structure, we find that the network of corporate leaders is denser than the network of shipping companies. The network of shipping companies is populated with many isolated nodes; the network of shipping

executives and directors is populated with many cohesive groups in which the longest distance between two corporate leaders is two companies. We find that interlocking corporate leadership can help resolve agency conflicts in the shipping industry, bearing a negative effect on the magnitude of agency costs. The extent of leadership overlaps is associated with corporate size, financial leverage and profitability.

### **"CEO-Employee Pay Ratio and Bond Yield Spreads"**

Guan-Ying Huang - Southwestern University of Finance and Economics, China

Hongren Huang - National Central University, Taiwan

Jerry Yu - University of Baltimore, USA

*Discussant:* Ping Wang - university of birmingham, UK

This study explores the effect of CEO-employee pay ratio on bond yield spreads. We find that there exists a positive relation between CEO-employee pay ratio and bond yield spreads. Since bond yield spread has been used as a proxy for a corporation's cost of debt, our finding suggests that bondholders tend to perceive a higher CEO-employee pay ratio as a risk factor, therefore requiring a higher return from the debt, thus the higher cost of debt. We further analyze how labor unionization, which proxies for employee's bargaining power, affects such a relation and find that employee's bargaining power plays a mitigating role on the effect of CEO-employee pay ratio on bond yield spreads. Finally, we investigate how such a relation is affected by a firm's financial constraints. The result shows that the effect of CEO-employee pay ratio on bond yield spreads tends to be more pronounced when the firm has higher level of financial constraints.

### **"Political Corruption and Corporate Cash Holdings: Evidence from the Recent Chinese Anti-corruption Campaign"**

Xinyu Yu - University of Birmingham, UK

Ping Wang - university of birmingham, UK

*Discussant:* Can Inci - Bryant University, USA

By taking advantage of the recent anti-corruption campaign launched in China, this paper investigates the impact of political corruption on corporate cash holdings based on a quasi-natural experiment. We find that firms increase corporate cash holdings significantly in the post-campaign period, after controlling for operational, investment and financing factors, and the increase in cash is more evident in firms located in regions with high rent-seeking incentives for public officials. Furthermore, we find that the campaign results in a higher market value of cash. In addition to the cash, our results reveal that political expropriation also plays an important role in shaping the investment decision through its impact on cash policy, and it significantly influences corporate capital structure and income taxes as well. Overall, our findings provide strong evidence that political corruption is a key determinant of corporate cash holdings. The recent anti-corruption campaign has had a significantly negative impact on political corruption, allowing firms to move back to their optimal levels of liquid assets.

### **"Gender Equality and Firm Performance"**

Can Inci - Bryant University, USA

*Discussant:* Balasingham Balachandran - La Trobe University, Australia

I investigate the impact of gender equality in the workplace reflected to the profitability of the firm. Fair and equal treatment of employees in the workplace should increase efficiency and effectiveness within the firm. This in turn would lead to more profitability for the owners of the firm, in the form of higher stock returns. It is well-established that gender equality is a significant problem in the workplace, a problem seen all over the world. Some countries, mainly the northern European countries have places rules and regulations to eradicate this problem. In this paper, I present a qualitative analysis and an overview of the developments taking place in certain countries of note. I also focus on the United States and present the results of an examination gender inequality. Specifically, I present an identification tool

for gender inequality at the firm. Using the identification tool, I investigate a subset of firms in the United States equity markets that exhibit gender equality. In this subset of firms, I present evidence of the fair flow of sensitive information to executives of the firm, regardless of the gender of the executive. I also propose to explore the stock return and profit comparison of firm with gender equality vs. firms that exhibit gender inequality. The international expansion of the exploration follows.

### **"Corporate General Counsels, Financial Reporting Opacity and Stock Price Crash Risk"**

Md Al Mamun - La Trobe University, Australia

Balasingham Balachandran - La Trobe University, Australia

Huu Nhan Duong - Monash University, Australia

Ferdinand Gul - Deakin University, Australia

*Discussant:* Andreas Andrikopoulos - University of the Aegean, Greece

Motivated by recent interests on the role of corporate general councils (CGCs) in financial reporting practices and concerns about overall financial reporting quality in the US, this study examines whether the presence of CGCs in top management are associated with lower crash risk. Our results show that firms with CGCs are associated with lower crash risk, after controlling for other determinants of crash risk, board independence, takeover susceptibility and dedicated institutional investor ownership. However, for firms with opaque financial reporting, proxied by high discretionary accruals and low frequency of management earnings forecasts, we show that the first-time appointments of CGCs are associated with higher crash risk, consistent with the idea that new CGCs appointment on firms with opaque financial reporting are more likely to release hoarded bad news, thus triggering a crash.

## **SESSION 28**

**Monday 4:00 - 6:00 p.m.**

**Lehár I**

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### **SPILLOVER EFFECTS**

*Session Chair:* David Musto - Wharton, University of Pennsylvania, USA

### **"International Consumption Risk Sharing: The Role of Good and Bad Volatility"**

Helena Chuliá - University of Barcelona, Spain

Jorge Uribe - Universidad del Valle, Colombia

*Discussant:* Marinela Adriana Finta - Singapore Management University, Singapore

Recent literature has shown that international financial integration facilitates cross-country consumption risk sharing. We extend this line of research and demonstrate that the decomposition of financial integration into good and bad plays an important role. We also propose new measures of countries' capital market integration, based on good and bad volatility shocks, as well as country specific indices of consumption risk sharing. We document a decoupling of individual consumption growth from global risk sharing after episodes of negative cross-spillovers, and a recoupling after positive spillovers. Our results support current views in the literature that advocate for an asymmetric treatment of good and bad volatility shocks, in order to assess the macroeconomic dynamics that follow risk episodes. They also challenge previous views in the literature that present capital market integration (without differentiating between positive and negative shocks) as a prerequisite for higher international consumption risk sharing. Overall, they cast doubts on the actual scope for consumption risk sharing across global financial markets.

### **"Risk Premium Spillovers Among Stock Markets: Evidence from Higher-Order Moments"**

Sofiane Aboura - Universite de Paris XIII, France

Marinela Adriana Finta - Singapore Management University, Singapore

*Discussant:* Geoffrey Ngene - Mercer University, USA

This paper investigates the volatility, skewness and kurtosis risk premium spillovers among U.S., U.K., German and Japanese stock markets. We define risk premia as the difference between risk-neutral and realized moments. Our findings highlight that during periods of stress and after 2014, cross-market and cross-moment spillovers increase, and this is mirrored by a decrease in within spillovers. We document strong bi-directional spillovers between skewness and kurtosis risk premia and emphasize the prominent role played by the volatility risk premium. Finally, we show that several macroeconomic and financial factors increase with the intensity of risk premium spillovers.

### **"Dynamic Linkages Between US and Eurodollar Interest Rates: New Evidence from Quantiles and Spectral Causalities"**

Geoffrey Ngene - Mercer University, USA

Kenneth Tah - Mercer University, USA

*Discussant:* Christian Bucio - Universidad Autónoma del Estado de Mexico, Mexico

We investigate the causal linkage between US and Eurodollar interest rates using the Granger causality test in quantiles, and the frequency domain causality test. Our empirical results suggest a quantile causal effect between US interest rates and offshore Eurodollar interest rates. US interest rates Granger cause offshore Eurodollar interest rates. The effect is positive at lower quantiles and negative at upper quantiles. On the other hand, Eurodollar interest rates Granger cause US interest rates, but the effect is negative at the lower quantile and positive at the upper quantile. The estimated causality coefficients at both the lower and the higher quantiles are significantly different from the median coefficients. The frequency domain causality test reveals unidirectional causality running from U.S interest rates to Eurodollar rates in the short run (high frequency), uneven bidirectional causality in the medium-run and an even presence of bidirectional causality in the long run or low frequency.

### **"Financial Contagion Effect During the Subprime Crisis: Evidence from the North American Free Trade Agreement Stock Markets"**

Raúl De Jesús Gutiérrez - Universidad Autónoma del Estado de Mexico, Mexico

Christian Bucio - Universidad Autónoma del Estado de Mexico, Mexico

*Discussant:* Helena Chuliá - University of Barcelona, Spain

This work applies Archimedean family copulas in order to examine the out of sample dependence dynamics among the stock markets from the NAFTA bloc for three periods of time: Before, during and after the subprime crisis. To test the existence of contagion among these markets the time series covers the period January 2nd, 2002 to December 31st, 2016. The econometric methodology includes a t-statistics test based on a bootstrap analysis. Results from the earlier and post subprime crisis periods are different and statistically significant from those obtained for the USA subprime crisis. Another finding shows that the contagion shock of USA subprime crisis is stronger during the earlier crisis period than in the post crisis period, considering the bootstrap p-value, under Clayton, Frank and Gumbel copula approaches. Findings provide useful information for investment allocation and international diversification strategies, as well as for risk management practice and derivative pricing.

**SESSION 29**

**Monday 4:00 - 6:00 p.m.**

**Lehár II**

#### **BANKING II**

*Session Chair:* Syrine Sassi - South Champagne Business School, France

### **"Zero Interest-Rate Policy and Islamic Financial Model Revisited"**

Mahfoud Djebbar - Setif University, Algeria

*Discussant:* Bernhard Kronfellner - Boston Consulting Group, Austria

The ultimate goal of any central bank's, CB, monetary policy is prices stability, an acceptable economic growth rate and better resource allocation by making money and credit available to the economy in sufficient quantities and at a reasonable cost. However, under zero interest rate, ZIR, environment and high deflation pressures, like the case of many advanced economies during the last two decades; it becomes vital to CBs to cope with this unprecedented situation in order to perform their functions properly; and therefore, have to implement some unconventional monetary policy, MP. Islamic financial model, IFM, on the other hand, is deemed to provide such a policy since it is originally based upon riba-free or interest-free financing policy; and consequently becomes an alternative financing model, especially when it is implemented for a considerable period of time. The primary purpose of this paper is to review the ZIR within both conventional and Islamic central banking, centering mainly on the specificities of the Islamic model. Of course, Islamic monetary policy is essentially distinguished from conventional one in that, unlike mainstream CBs, Islamic CBs are allowed to use only riba-free, equity-based monetary instruments, and Islamic commercial banks are obliged to carry out solely interest-free transactions.

### **"P&L Attribution in FRTB – Quo Vadis? Suggestions for Improving the FRTB's P&L Attribution Test"**

Bernhard Kronfellner - Boston Consulting Group, Austria

Michael Buser - The Boston Consulting Group, Austria

*Discussant:* Dimitris Kenourgios - National and Kapodistrian University of Athens, Greece

In January 2016, the Basel Committee on Banking Supervision (BCBS) issued the final version of the revised minimum capital requirements for market risk, also labeled as the "Fundamental Review of the Trading Book" (FRTB). Under FRTB, banks have to apply the standardized approach (SA) and can request approval for using the internal model approach (IMA) on desk level to determine the capital requirements for market risk. In addition to several qualitative requirements, banks need to pass two tests, backtesting and P&L attribution, to use the IMA, which generally results in a lower capital charge. We describe key issues of the current IMA eligibility framework, particularly regarding the P&L attribution test. By building and expanding on Thompson et al. (2017) we show that under the current framework banks will have to plan with desks losing and regaining IMA approval over time. We point out how under certain conditions adopting a more volatile trading strategy could improve the first metric of the P&L attribution test, which we do not see as a regulatory intention. We also highlight a strong correlation requirement implied by the test's second metric and discuss why it will be demanding for banks. Finally, we propose a set of measures to improve the IMA eligibility framework going forward.

### **"The Impact of ECB's Unconventional Monetary Policies on Cross-Financial-Market Correlations"**

Dimitris Kenourgios - National and Kapodistrian University of Athens, Greece

Emmanouela Drakonaki - National and Kapodistrian University of Athens, Greece

Dimitrios Dimitriou - National and Kapodistrian University of Athens, Greece

*Discussant:* Basel Awartani - Westminster University, UK

This paper examines the effects of the unconventional monetary policies (UMPs) launched by the European Central Bank on the cross-market correlations between bond, stock and currency forward markets. Using both a dynamic conditional correlation model and a wavelet-based semblance analysis, we investigate possible differences on the correlation dynamics across four UMP periods and across a range of developed and emerging countries (GIIPS, BRICS, MIST). The empirical results indicate a spillover impact on both developed and emerging markets, although this impact is not identical across assets and countries. We also find that the new UMP phase started in 2014 has a more prominent impact, highlighting differences on the impact between the earlier and the new wave of UMPs and across cross-market correlations.

## **"The Factors Influencing the Decision to List on Abu Dhabi Securities Exchange"**

Aktham Maghyreh - UAEU University, United Arab Emirates

Basel Awartani - Westminster University, UK

*Discussant:* Mahfoud Djebbar - Setif University, Algeria

The Abu Dhabi Securities Exchange is established to help corporate funding, investment and growth. However, many operating firms choose not to list their shares in the market. In this paper we survey a sample 145 chief financial officers to explain why firms refrain from going public and float their shares in the market. Our findings are interesting and they indicate that the poor quality of the Abu Dhabi equity market in terms of its inefficiency and inadequate liquidity plays crucial role in discouraging firms to list their shares. This result is important for policy makers and it shows that corporate decisions are not independent of the quality of the Abu Dhabi Securities Exchange and that further measures have to be taken in order to improve the equity market.

## **"A Quantile Parsimonious Modeling of Yield Curves: The Mexican Case"**

Jorge Razo-De Anda - National Polytechnic Institute, Mexico

Ana Parada-Rojas - Instituto Politécnico Nacional, Mexico

Salvador Cruz-Aké - Instituto Politécnico Nacional, Mexico

*Discussant:* Giovanna Zanotti - Bergamo University, Italy

The Nelson-Siegel model allows estimating the zero coupon curve, assuming normality. However, if the distribution of the nodes is not normal, the parametric estimation may have a poor fit as a consequence of the extreme values present in the interest rates, which are associated to periods of macroeconomic adjustment or high volatility. Given that the Nelson - Siegel model strongly depends on the adjustment parameter Tau, the short rate and the maturity of the assets, the estimation of the best fit parameters through an iteration process implies an econometric and computational problem. This article analyzes the adjustment differences of the traditional Nelson-Siegel model (three-factor model) and the model by quantiles version for the Mexican economy case. An algorithm to obtain the Tau adjustment parameter for each quantile is proposed including the mean, and an Early Warning System based on the economic expectations implicit in the term structure based on the statistical difference of the adjustment parameters Tau for each quantile.

**SESSION 30**

**Monday 4:00 - 6:00 p.m.**

**Lehár III**

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### **VOLATILITY IN EQUITY MARKETS**

*Session Chair:* Christophe Godlewski - University of Strasbourg, France

#### **"Does Customer Loyalty Affect Equity Value?"**

Nandkumar Nayar - Lehigh University, USA

*Discussant:* Pankaj Chandorkar - Northumbria University, UK

Customer loyalty maps directly into sales revenue which should affect equity value. This serves as the motivation underlying our paper. We suggest and validate a metric for customer loyalty that can be directly employed to test for a causal relationship to equity value. Importantly, we provide robust evidence that stock returns are directly related to consumer loyalty. Specifically, our results show that the stock market perceives customer loyalty as adding value to a firm's equity. Further, we find that customer loyalty is valuable to firms with high profit margins and embedded growth options. Importantly, from a risk perspective, customer loyalty is extremely valuable in recessions, and once achieved, leads to lower equity risk.

## **"Do Not Fear the Fear Index: Evidence From US, UK and European Markets"**

Pankaj Chandorkar - Northumbria University, UK

Janusz Brzeszczyński - Northumbria University, UK

*Discussant:* Pei-Lin Hsieh - Xiamen University, China

The VIX index is popularly known as “the fear index” both in the business media and in academic literature. Following the popularity of the VIX, similar indices were introduced in the UK and European stock markets as an indication of investor uncertainty. In this article, we investigate this popular idea by examining whether these indices indeed reflect investor fear. The results of long horizon predictive regressions show that these fear indices as well as extreme jumps in them fail to predict statistically significant negative market returns up to next five years. Moreover, response of valuation ratios and leading business cycle indicators to shocks in the fear indices are statistically insignificant. However, monetary policy in US, UK and Europe appear to respond significantly to fear indices. Collectively, the results imply that long-term investors do not need to fear these fear indices.

## **"No Free Lunch: Episode Two A Supply Side Model to Explain the Moment Risk Premia"**

Ren-Raw Chen - Fordham University, USA

Pei-Lin Hsieh - Xiamen University, China

Hong Biao Zhao - Xiamen University, China

*Discussant:* Radu Lupu - Bucharest University of Economic Studies, Romania

In this paper, we provide a new model to explore the information embedded in option prices. There are several novel advantages of our model. First, our model can be viewed as an umbrella of existing models that incorporate desirable parametric features such as jumps and stochastic volatility. Second, our model is cast in the discrete time framework and hence can explore risk premiums more easily and explicitly. Third, our model is based upon a microstructure theory where a representative market maker (MM) dynamically hedges his risk positions and seeks the minimum variance of hedging errors. As a result, our model carries a supply-side story. As a result, our model can answer a wide variety of research questions in the area of information contents of option prices; including the shapes of implied volatility (IMV) curves and the risk premiums and rare event predictions embedded in higher order moments of the underlying distributions. In addition, our model provides a new perspective to risk premiums in that the utility function (and hence his risk attitude) and the hedging activity of our representative market maker can be used to directly test the risk-neutral density function defined by Breeden and Litzenberger (1978).

## **"Persistent Impact of Macroeconomic Announcements in Financial Market Data"**

Radu Lupu - Bucharest University of Economic Studies, Romania

Nicolas Boitout - European Business Services, Romania

*Discussant:* Zana Grigaliuniene - QAHE NU London campus, UK

The impact of scheduled releases of macroeconomic variables on the dynamics of financial markets has always attracted a great deal of academic attention in efforts to quantify market responses in terms of volatility and jumps. We investigate whether the occurrence of market reaction due to macroeconomic announcements has an impact on the probability of a reaction caused by the next release of the same macroeconomic value. We measure this impact by means of both post-event volatility changes and a proposed methodology for jump matching. Our findings show that previous market impact significantly changes the probability of an impact detected for the current release.

## **"The More the Merrier? The Reaction of Euro Area Stock Markets to New Members"**

Zana Grigaliuniene - QAHE NU London campus, UK

Dmitrij Celov - Vilnius University, Lithuania

Christopher A. Hartwell - Kozminski University, Poland

*Discussant:* Nandkumar Nayar - Lehigh University, USA

The adoption of the euro is a crucial turning point for the economy of any EU member and the culmination of a long process of exchange rate management and macroeconomic convergence. But how does the prospect of euro area enlargement play out in the countries that have already adopted the euro? Are new members seen as a way to expand the club of like-minded countries, or are they perceived as a threat to stability, either because there exists a moral hazard risk from the side of old members to adopt riskier behavior on behalf of new members or vice versa? This paper looks at the effects of the news of the euro's adoption event in new members on the stock returns of nineteen euro area countries, employing both an event study methodology and APARCH modeling to capture and test the form of responses of European financial market volatility. Our results show that markets were indeed pleased when new members joined the euro area, with negative responses due solely to local conditions rather than euro area-wide travails. In our most interesting finding, the expansion of the euro actually helped to dampen local market volatility in the post-crisis period in the founding member states, while euro adoption quelled volatility both pre- and post-crisis for non-founding members.

### **SESSION 31**

**Monday 4:00 - 6:00 p.m.**

**Brahms I**

#### **INTEREST RATES**

*Session Chair:* Raul Susmel - University of Houston, USA

#### **"Interest Rate Structured Products: Can They Improve the Risk-Return Profile?"**

Gianluca Fusai - Universita degli Studi del Piemonte Orientale, Italy

Giovanna Zanotti - Bergamo University, Italy

*Discussant:* Jorge Razo-De Anda - National Polytechnic Institute, Mexico

In this paper we investigate the contribution of interest rate structured bonds to portfolios of risk-averse retail investors. We conduct our analysis by simulating the term structure according to a multifactor no-arbitrage interest rate model and comparing the performance of a portfolio made of basic products (zero-coupon bond, coupon bond and floating rate notes) with a portfolio containing more sophisticated products (like cms, collars, spread and volatility notes). Our analysis, performed under different market environments like interest rate term structure shapes, as well as volatility and correlation levels, takes into account the combined effect of risk-premium required by investors and fees that they have to pay. Our simulation results show that structured products allow investors to improve risk-return trade off if no fees are considered. When fees are introduced, our simulations show that structured products add value to the basic portfolio in a number of limited cases. We focus on interest rate structured products that have been little studied in the literature but are very popular in investors portfolio. We believe our paper contributes to understand the role of structured products on investors portfolio also in light of the current regulatory debate in the use of complex financial products by retail investors.

#### **"European Insurers: Interest Rate Risk Management"**

Francisco Jareno - Universidad de Castilla-La Mancha, Spain

M. Ángeles Medina - University of Alcalá, Spain

Marta Tolentino - University of Castilla-La Mancha, Spain

María De La O González - University of Castilla-La Mancha, Spain

*Discussant:* Thomas Lustenberger - University of Basel, Switzerland

This paper focuses on analysing the sensitivity and behaviour of some of the leading insurers currently

operating in the Euro area to changes in benchmark interest rates. The methodology used is the Quantile Regression (QR) approach and the period analysed covers from 2003 to 2015. The empirical results show that European insurance market returns have a statistically significant sensitivity to interest rate variations and that there are important differences according to the period analysed, being the sensitivity most pronounced in extreme market conditions.

### **"International Evidence on Professional Interest Rate Forecasts: The Impact of Forecasting Ability"**

Aelx Cukierman - Tel Aviv University, Israel

Thomas Lustenberger - University of Basel, Switzerland

*Discussant:* Peter Spencer - University of York, UK

This paper develops a model of honest rational professional forecasters with different abilities and submits it to empirical verification using data on three and twelve months ahead forecasts of short term interest rates and of long term bond yields for up to 33 countries using data collected by Consensus Economics. The main finding is that, in many countries, less precise forecasters weigh public information more heavily than more precise forecasters who weigh their own private information relatively more heavily. One implication of this result is that less precise forecasters herd after more precise forecasters even in the absence of strategic considerations. The second part of the paper discusses and examines the cross-country relationships between measures of forecast uncertainty, dispersion of forecasts across individual forecasters and the variabilities of short term interest rates and of long term bonds. The main findings are: (i) Forecast uncertainty and dispersion are positively and significantly related across countries for both short rates and yields. (ii) A similar positive, albeit somewhat weaker, association is found between uncertainty and variability. (iii) Dispersion of short term interest rate forecasts and the variability of those rates are also positively associated. The paper also documents differences between the average forecasting errors of more and less able forecasters as well as substantial correlations between the forecast errors.

### **"What Does the Eurodollar Futures Market Tell us About the Effects of Credit Shocks and Monetary Policy at the Lower Bound?"**

Peter Spencer - University of York, UK

*Discussant:* Michael Arghyrou - Cardiff University, UK

This paper develops a shadow rate Gaussian term structure model of the Eurodollar futures and Treasury bond markets to study the effects of credit shocks and monetary policy at the lower bound. This research was initially motivated by the observation that the shadow rate model gives a relatively simple closed form for a futures price, while, in contrast, tractable formulae for bond yields and forward rates are only available as approximations. In addition, the use of data for Eurodollar and Treasury markets allows me to study the links between these markets and distinguish between credit and policy shocks, yielding new insights into the effect of the recent financial crisis.

### **"“Whatever it Takes” to Resolve the European Sovereign Debt Crisis? Bond Pricing Regime Switches and Monetary Policy Effects"**

Antonio Afonso - ISEG-UL – Universidade de Lisboa, Portugal

Michael Arghyrou - Cardiff University, UK

Maria Dolores Gadea - University of Zaragoza, Spain

Alexandros Kontonikias - University of Essex, UK

*Discussant:* Francisco Jareno - Universidad de Castilla-La Mancha, Spain

This paper investigates the role of unconventional monetary policy as a source of time-variation in the relationship between sovereign bond yield spreads and their fundamental determinants. We use a two-step empirical approach. First, we apply a time-varying parameter panel modelling framework to

determine shifts in the pricing regime characterising sovereign bond markets in the euro area over the period January 1999 to July 2016. Second, we estimate the impact of ECB policy interventions on the time-varying risk factor sensitivities of spreads. Our results provide evidence of a new bond-pricing regime following the announcement of the Outright Monetary Transactions (OMT) programme in August 2012. This regime is characterised by a weakened link between spreads and fundamentals, but with higher spreads relative to the pre-crisis period and residual redenomination risk. We also find that unconventional monetary policy measures affect the pricing of sovereign risk not only directly, but also indirectly through changes in banking risk. Overall, the actions of the ECB have operated as catalysts for reversing the dynamics of the European sovereign debt crisis.

## SESSION 32

Monday 4:00 - 6:00 p.m.

Brahms II

### EVENT STUDIES

*Session Chair:* Simon Wolfe - University of Southampton, UK

#### **"The Relationship Between Broker's Investment Recommendation and Abnormal Returns Considering the Media Effect"**

Yu-Chen Wei - National Kaohsiung First University of Science and Technology, Taiwan

Yang-Cheng Lu - Ming Chuan University, Taiwan

Yi-Hung Lee - Ming Chuan University, Taiwan

Yu-Ping Chang - Ming Chuan University, Taiwan

*Discussant:* Milena Petrova - Syracuse University, USA

In view of the large number of individual investors in the Taiwan stock market, the investment recommendation announced by the broker is professional and important for the market investors in the reception of public messages. This study explores whether investment behavior with reference to investment recommendation can achieve profitability, making investment returns beyond the market index to obtain abnormal returns. This study focuses on the analysis of the broker's investment recommendation before and after the announcement date. Besides, related financial variables, media coverage and news sentiment are included to explore the effect of media message and confirm that abnormal returns are affected during the event of an investment recommendation. The study sample used in this study consists of foreign and domestic brokers investment recommendations of listed companies for the study period from January 1, 2010 to December 31, 2016. Furthermore, this study applies the linguistic analysis to construct the proxies of news effect, which covers media coverage and News Sentiment Index to discuss the news effect on abnormal returns of investment recommendation. The empirical results show that there is abnormal returns of the trading position according to the brokers announcement of the investment recommendation. The media effect of investment recommendation on the event date shows the most significant effect than the other periods around the recommendation event date.

#### **"The Effect of the Financial Advisor's Reputation in M&A Deals by European Firms"**

Chinmoy Ghosh - University of Connecticut, USA

Lisa Hartmann - Boston Consulting Group, USA

Milena Petrova - Syracuse University, USA

*Discussant:* Yuriy Zabolotnyuk - Carleton University, Canada

We study the role of the reputation of investment banks as financial advisors and the role of investment banks in general in M&As taking place among firms incorporated in the member countries of the European Monetary Union (EMU). Surprisingly, the reputation of bidder advisors does not influence bidder CARs. Results indicate that the usage of an advisor in general is value increasing for the bidder. We also look at the impact of bidder advisors separately for acquirers of public, private and subsidiary targets. Using an advisor is value decreasing for public bidders that bid for public targets, while it is value increasing for public bidders that bid for subsidiary targets. Bidder CARs are higher when the

target uses an advisor. However, bidder CARs are lower if the target advisor is a top-tier advisor. Further, bidder advisors increase bidder CARs in domestic deal, whereas they do not influence bidder CARs in cross-border deals. Results for other deal outcomes indicate that top-tier advisors used by the bidder are not associated with higher completion rates and that top-tier advisors used by the bidder are associated with a longer time to resolution.

### **"Information Content of Bond Rating Announcements in Canada"**

Yuriy Zabolotnyuk - Carleton University, Canada

*Discussant:* Onur Enginar - Hacettepe University, Turkey

This paper examines the information content of bond rating announcements in Canada during the period of 1983-2016. Using a sample of 1,521 downgrades and 922 upgrades, I find that the average 3-day cumulative abnormal return associated with bond downgrades is -2.96% and is statistically significant while the cumulative abnormal return associated with bond upgrades is statistically significant 1.62%. Certain bond and firm characteristics such as initial bond rating, firm size, magnitude of a rating change or a credit watch placement have significant effects on the size of abnormal returns. These results are in line with the international evidence.

### **"Using Neural Network in Event Study"**

Onur Enginar - Hacettepe University, Turkey

Mehmet Baha Karan - Hacettepe University, Turkey

*Discussant:* Yu-Ping Chang - Ming Chuan University, Taiwan

Recent technological breakthroughs in computer science has given a rise to complex models in range of areas of science and this is reflected directly in machine learning realm. Having this superior computational power, automated, complex tasks or calculations have become much more easier to calculate sufficiently by machines than ever. Specifically, deep learning, subset of machine learning, allows users /professionals /scholars performing tasks, such as classification, prediction, pattern recognition, language processing or optimal decision making from data. However, not also limited to these areas, rise of AI, in general, has triggered 'winds of change' in almost every area in cooperation with computer science, including finance. In finance literature, linear models are prominent in theory. However, the model performance of these models questionable, since, assumption of unrealistic conditions. In this context, we examine the predictive power of recurrent neural network, a class of deep learning model, and compare it with well known linear models employed in event study literature, mean model, armax model and also with Kalman filter method. By applying bootstrapping method to the dataset of S&P500, and performing one step ahead prediction with models employed, we, thereby, assess the predictive performance of these model.

### **"Credit Rating Driven by Macroeconomic Elasticities on the Firms Ratios"**

Ana Parada-Rojas - Instituto Politécnico Nacional, Mexico

Jorge Razo De Anda - Instituto Politécnico Nacional, Mexico

Salvador Cruz Áke - Instituto Politécnico Nacional, Mexico

*Discussant:* Panagiota Boura - University of Patras, Greece

The factors that are considered in the credit rating assigning process are unknown because it is not transparent, the internal factors are fundamental to manage the risk of default of a corporation; however, the macroeconomic environment cannot be left aside. In this research is considered the response of a shock to a macroeconomic variable has different repercussions for each company due in part to the financial structure of the company. The object of this paper is determine a set of rules that allow foreseeing for a change in the credit rating of a Mexican company, considering the sensitivity levels of the financial ratios against macroeconomic variables (financial ratio-macroeconomic aspect) through an iterative process used to eliminate the elasticity with less statistical importance in a Logit model and

a classification tree. The selection process indicates that the elasticity of liquidity-product, acid test-product, total debt-capital stock-output, working capital-inflation and profit margin-GDP in the services sector are significant. A tree with seven final nodes was estimated; the model correctly classifies 86.4% of the data and use only the elasticity of the acid test with respect to GDP, the profit margin with respect to the GDP of the services sector and labor capital affected by inflation, like decision criterion.

**SESSION 33**

**Tuesday 8:30 - 10:15 a.m.**

**Liszt I**

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**ASSET PRICING V**

*Session Chair:* Tony Van Zijl - Victoria University of Wellington, New Zealand

**"Another Look at Currency Risk in International Stock Returns"**

Andrew Karolyi - Cornell University, USA

Ying Wu - Stevens Institute of Technology, USA

*Discussant:* Anandi Banerjee - NEOMA Business School, France

This paper offers new evidence on how currency risk is priced in the cross-section of international stock returns. Our experiment examines this long-standing question for a wide variety of test asset portfolios comprised of monthly returns for over 37,000 stocks from 46 countries over a two-decade period. We obtain some positive evidence of the pricing of currency risk, but the implied premia on the currency risk factors are economically small. The inferences are fragile - they depend critically on the benchmark factor models used, the sub-period evaluated, and even the composition of the test asset portfolios assessed. Overall, we judge that currency risk factors do not help to capture much of the time-series or cross-sectional variation in stock returns for global and regional portfolios.

**"Error-in-Variables and Tests of Asset Pricing Models with Liquidity Risk"**

Anandi Banerjee - NEOMA Business School, France

*Discussant:* Elyas Elyasiani - Temple University, USA

This paper diagnoses the impact of error-in-variables (EIV) on inferences in asset pricing models. I test the CAPM and the LCAPM in a manner that explicitly accounts for EIV, without pooling stocks into portfolios. I find that the single-factor CAPM beta is not priced. I prove that the aggregate liquidity risk in the liquidity-adjusted CAPM of Acharya and Pedersen (2005) is priced, and the portfolio-based approach is unable to capture this relationship. The cumulant-based approach to handle EIV enables me to test the effects of the individual components of aggregate liquidity risk, and I document that the risk associated with the commonality in illiquidity has a positive premium and the risk associated with the sensitivity of a stock's illiquidity to the value-weighted market return has a negative premium. I also show that for microcap stocks, the risk attributable to the covariance between stock return and market-wide liquidity has a negative relationship with average returns. I prove that the LCAPM cannot be rejected when the betas are estimated at the stock-level.

**"Moment Risk Premia and the Cross-Section of Stock Returns in the European Stock Market"**

Elyas Elyasiani - Temple University, USA

Luca Gambarelli - University of Modena and Reggio Emilia, Italy

Silvia Muzzioli - University of Modena and Reggio Emilia, Italy

*Discussant:* Jose Faias - Catolica Lisbon SBE, Portugal

We investigate whether volatility, skewness, and kurtosis risks are priced in the European stock market and we assess the signs and the magnitudes of these higher order moment risk premia. To this end, we use estimates of the moments of the market returns extracted from index options. These estimates are forward-looking and represent the investors' forecast of the future realized moments in the next thirty

days. We adopt two approaches to assess the pricing of moment risk: the model-free approach based on swap contracts (Zhao et al. (2013)), and the model-based approach built on portfolio-sorting techniques. The portfolio-sorting techniques used include multivariate sorting, four-way sorting and Fama-Macbeth regressions. We control for known risk factors such as market excess return, book-to-market, size and momentum. Several results are obtained. First, stocks with high exposure to innovations in implied market volatility (skewness) exhibit low (high) returns on average. Second, the estimated premium for bearing market volatility (skewness) risk is negative (positive) and robust to the two methods employed. These premia are both statistically and economically significant and cannot be explained by common risk factors such as market excess return, book-to-market, firm size and momentum, which are at the core of the commonly used models.

### **"Predicting the Equity Risk Premium Using the Smooth Cross-Sectional Tail Risk: The Importance of Correlation"**

Jose Faias - Catolica Lisbon SBE, Portugal

Pavel Onyshchenko - EDP Renewables North America, USA

*Discussant:* Ying Wu - Stevens Institute of Technology, USA

We provide a new monthly cross-sectional measure of stock market tail risk, defined as the average of the daily cross-sectional tail risk, rather than the tail risk of the pooled daily returns within a month. The former better captures monthly tail risk rather than merely the tail risk on specific days within a month. We show that this difference is important in generating strong in- and out-of-sample predictability and performs better than the historical risk premium and other commonly used predictors for short- and long-term horizons. This strong predictability improves investor performance in a mean-variance setting.

**SESSION 34**

**Tuesday 8:30 - 10:15 a.m.**

**Liszt II**

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### **INVESTORS**

*Session Chair:* Khelifa Mazouz - Cardiff University, UK

### **"What Drives the Dispersion Anomaly?"**

Byoung-Kyu Min - University of Sydney, Australia

Buhui Qiu - University of Sydney, Australia

Tai-Yong Roh - Auckland University of Technology, New Zealand

*Discussant:* Ernest Biktimirov - Brock University, Canada

This paper shows that the anomalous negative relation between dispersion in analysts' earnings forecast and future stock returns is driven by the information content of dispersion about future firm profitability. Greater dispersion predicts lower future profitability, and the return predictive power of dispersion disappears after controlling for its information content on future profitability. We propose disclosure manipulation as a potential explanation for the relation between dispersion and future profitability. Consistent with our conjecture, disclosure quality is inversely related to analysts' earnings forecast dispersion. Moreover, the return predictive power of dispersion decreases monotonically in disclosure quality and is no longer statistically significant in the post-Sarbanes-Oxley period during which disclosure manipulation is attenuated. Finally, our results remain robust to considering the previously suggested explanations for the dispersion anomaly, including short-sale constraints, leverage, and credit risk.

### **"Impact of Changes in the Nasdaq 100 Index Membership"**

Ernest Biktimirov - Brock University, Canada

Yuanbin Xu - University of Alberta, Canada

*Discussant:* Mehmet Goktan - California State University, East Bay, USA

This study examines changes in stock returns, investor awareness, institutional ownership, and liquidity for companies added to and deleted from the Nasdaq 100 index, which offers at least four advantages over the S&P 500 index for analyzing the impact of stock index reconstitution. We differentiate between stocks added to the Nasdaq 100 index for the first time and repeated additions, as well as between stocks added at annual index revisions and stocks added irregularly throughout the year. We find asymmetric responses in stock price, investor awareness, and percentage of institutional shareholdings between the firms added to the Nasdaq 100 index for the first time and repeated additions. On the other hand, both new and repeated additions show significant increases in the number of institutional shareholders and significant improvements in liquidity. Deletions from the Nasdaq 100 index experience a temporary stock price decline and do not show consistent evidence on the change in investor awareness and liquidity. One of the main findings of this study is that liquidity, investor awareness, and downward-sloping demand curve hypotheses simultaneously explain the cumulative abnormal returns observed around addition to the Nasdaq 100 index.

### **"Informed Versus Uninformed Investors: Internet Searches, Options Trading, and Post-Earnings Announcement Drift"**

Eric Fricke - California State University-East Bay, USA

Scott Fung - California State University-East Bay, USA

Mehmet Goktan - California State University, East Bay, USA

*Discussant:* Miriam Sosa Castro - Universidad Nacional Autónoma de México, Mexico

This paper examines the relationship between informed and uninformed investors through their trading and information search activities prior to earnings announcements. We use option market trading to represent informed investor interest and internet search volume for firm earnings information to represent uninformed investor interest. To study the informational effects and interactions of internet searches and option market trading, we examine their ability to predict post-earnings announcement drift (PEAD). Our results indicate that both options trading and internet searches predict PEAD, but when combined, options trading subsumes the information in internet search volume and renders it insignificant. Our findings suggest that the proxy for informed investors captures future returns better than the proxy for uninformed investors and that uninformed investors continue to be at an informational disadvantage around earnings announcements despite the increasing availability of information through the internet.

### **"Dynamic Stock Dependence and Monetary Variables in the United States (2000-2016): A Copula and Neural Network Approach"**

Miriam Sosa Castro - Universidad Nacional Autónoma de México, Mexico

Christian Bucio - Universidad Autónoma del Estado de Mexico, Mexico

Edgar Ortiz - Universidad Nacional Autónoma de México, Mexico

*Discussant:* Byoung-Kyu Min - University of Sydney, Australia

This paper investigates dynamic dependence between the United States Stock Market (S&P 500) and the World Share Market (MSCIW); additionally, it examines whether key monetary variables (short- and long-term interest rates, interest rate spreads and exchange rate) explain changes in this relation, during the period January 2000 - June 2016. Methodology includes a Dynamic Copula approach and a Multilayer Perceptron Network. Results suggest that there is interdependence between the U.S. and the global stock markets, and that the dynamic dependence is mainly explained by the short-term interest rate spread, 3-month T-bills rate and 3-month Libor rate.

**CORPORATE GOVERNANCE III**

*Session Chair:* Harikumar Sankaran - New Mexico State University, USA

**"Executive Pay, Firm Performance and Shareholder Return: The Case of Brazilian Public Firms"**

Pedro Hofmeister - FGV-EAESP, Brazil

Richard Saito - Fundação Getulio Vargas (FGV), Brazil

*Discussant:* Young Kim - Northern Kentucky University, USA

This study focuses on the relation between the pay and performance of executives of Brazilian publicly listed firms. We used a series of multiple linear regressions with OLS estimation to investigate whether compensation is positively associated with shareholder return. Our sample includes 525 observations and comprises a three-year period (2014, 2015 and 2016). We find that in general, pay is positively associated with performance but that this sensitivity is not sufficiently large. We also confirm that stock-based compensation and a higher governance level are important for aligning pay and performance. Firms with concentrated ownership tend to pay less, which suggests that monitoring decreases the need of pay to align incentives or decreases the power of executives to set their own compensation. Finally, our model suggests that fixed compensation is adjusted to meet the reservation utility and information rent, whereas variable compensation serves to address moral hazard.

**"Geographic Density of Firms and Corporate Policies"**

Seoungpil Ahn - Sogang University, Korea, Republic of

Pornsit Jiraporn - Pennsylvania State University, USA

Doseong Kim - Sogang University, Korea, Republic of

Young Kim - Northern Kentucky University, USA

Kyojik Song - Sungkyunkwan University, Korea, Republic of

*Discussant:* Sheng-Hung Chen - National Kaohsiung University of Science and Technology, Taiwan

Prior research shows that firms tend to recruit directors from the geographically-proximate area. Due to a limited supply of qualified individuals in a given area, firms located in close proximity have to share a limited pool of talented individuals. As a result, the larger the number of firms in the same area, the fewer directors each firm in the area is able to obtain on average. Consistent with this notion, our results show that firms located in a zip code with a larger number of other firms exhibit significantly smaller board size. We then exploit the variation in the numbers of firms across the zip codes and estimate the effects of board size on various corporate outcomes. Our results show that larger board size leads to lower firm value, lower accounting profitability, higher leverage, higher dividend payouts, and a stronger propensity to be an acquirer.

**"Corporate Social Responsibility and Firm Life-Cycles"**

Feng-Jui Hsu - National Taichung University of Science and Technology, Taiwan

Sheng-Hung Chen - National Kaohsiung University of Science and Technology, Taiwan

*Discussant:* Feixue Xie - University of Texas at El Paso, USA

This paper assesses U.S.-based firms from 2005 to 2015 to determine whether firms with better corporate social responsibility (CSR) performance will allocate capital through their life-cycle to better maintain or extend total assets. We find (1) A firm's equity and debt issuance assume a hump shape over the life-cycle under CSR practice, and higher-CSR firms face fewer significant issues as they mature; (2) payout, RETA, and FCF decreased from high-CSR-performance firms to low-CSR-performance firms; and (3) cash holdings also exhibit a hump shape over the life-cycle and higher CSR practices are associated with significantly lower cash holdings. CSR performance is a useful predictor for forecasting firm life-cycle and superior CSR performance ensures efficient capital allocation throughout firm life-cycle. Furthermore, CSR practice is an indicator of firm life-cycle sustainability and indicates a

firm's future cash flow patterns.

**"Does it Pay to be Environmentally Responsible? Evidence from Chinese Listed Firms"**

Junnan Hu - East China Jiaotong University, China

Shujing Wang - Shanghai Lixin University of Accounting and Finance, China

Feixue Xie - University of Texas at El Paso, USA

*Discussant:* Pedro Hofmeister - FGV-EAESP, Brazil

Using a large panel of listed firms in China from 2010 to 2015, this study investigates the effect of corporate environmental responsibility (CER) on firm performance. We find that CER has a significantly positive effect on firm performance. The positive relation is more pronounced for firms in high polluting industries, with high asset tangibility, and that have low state ownership. Furthermore, firms with weak corporate governance tend to benefit more from their environmentally responsible activities, suggesting that enhanced environmental engagement may serve as a strategic tool in reducing the negative effects of agency costs and weak corporate governance on firm value. Our results are robust to various estimation methods and alternative measures of performance.

**SESSION 36**

**Tuesday 8:30 - 10:15 a.m.**

**Lehár I**

**DERIVATIVES**

*Session Chair:* Iraj Fooladi - Dalhousie University, Canada

**"Financial Market and the Value of CSR: Evidence from Option-Implied Volatility"**

Hyoung-Goo Kang - Hanyang University Business School, Korea, Republic of

Sol Kim - Hankuk University of Foreign Studies, Korea, Republic of

Geul Lee - NongHyup Financial Group Inc., Korea, Republic of

*Discussant:* Antoni Vaello-Sebastia - University of Balearic Islands, Spain

We introduce an innovative method to quantify the risk-management benefit of CSR. Option-implied volatility captures the expectation of financial market on the future risk and uncertainty of a firm. Therefore, if CSR produces risk management benefits, CSR should reduce implied volatility. We find that CSR and implied volatility show negative concurrent correlation after controlling for variables. In addition, the higher CSR, the lower the future implied volatility. These findings are consistent with the view that CSR creates risk management benefit to a firm, and financial market strongly appreciates the benefit.

**"Can We Really Discard the Forecasting Ability of Risk-Neutral Distributions?"**

Antoni Vaello-Sebastia - University of Balearic Islands, Spain

M. Magdalena Vich-Llompарт - University of Valencia, Spain

*Discussant:* Lung-Fu Chang - National Taipei University of Business, Taiwan

This paper analyzes the forecasting ability of option-implied Risk-Neutral densities (RNDs) for three US indexes, S&P500, Nasdaq 100 and Russell 2000 and for a long series (from 1996 to 2015) encompassing two major crisis. Traditional tests rely on restrictive assumptions (mainly normality and independence). In order to overcome these assumptions, we calculate block-bootstrap-based critical values. Different to existent literature, our results conclude failure to reject their forecasting ability, being these results consistent across different forecast horizons, methodologies and indexes considered. We also analyze the fit of the tails of the RNDs separately, finding that they tend to overestimate the frequency of occurrence of events in the left tail, providing a good fitting for the right tail.

## **"A Generalization of the Static Hedging Method for the Analytic Valuation of American Options"**

Lung-Fu Chang - National Taipei University of Business, Taiwan

Jia-Hau Guo - National Chiao Tung University, Taiwan

Mao-Wei Hung - National Taiwan University and Taiwan Academy of Banking and Finance, Taiwan

*Discussant:* Jr-Yan Wang - National Taiwan University, Taiwan

This article provides a general accelerated static hedge portfolio (SHP) method for pricing American options based on stochastic volatility and double jump processes. Our proposed model is a generalization of the static hedge portfolio approach of Derman, Ergener, and Kani to evaluate American options by utilizing the Richardson extrapolation. Numerical results demonstrate that the numerical efficiency of our accelerated static hedge portfolio approach is comparable to recent advanced numerical methods such as the least-squares Monte Carlo simulation method proposed by Longstaff and Schwartz (2001). Numerical results show that our proposed method is efficient and accurate in pricing American options with stochastic volatility and double jump processes.

## **"Semi-Static Hedging and Pricing American Floating Strike Lookback Options"**

San-Lin Chung - National Taiwan University, Taiwan

Yi-Ta Huang - National Taiwan University, Taiwan

Pai-Ta Shih - National Taiwan University, Taiwan

Jr-Yan Wang - National Taiwan University, Taiwan

*Discussant:* Sol Kim - Hankuk University of Foreign Studies, Korea, Republic of

The valuation and replication of an American floating strike lookback option are important yet difficult in the literature even under the Black-Scholes model. We first extend the static hedging approach of Derman et al. (1995) and Carr et al. (1998) to price American floating strike lookback options based on a hypothetical static hedging portfolio (HSHP). The proposed method is numerically efficient because (1) it has the desirable pattern of monotonic convergence when the number of time points with matched boundary increases; and (2) the recalculation of the option prices is much quicker than the tree methods. In addition, we apply the put-call symmetry to transform an HSHP into a semi-static hedging portfolio (SSHP) so that the replication of an American floating strike lookback option becomes feasible in reality. The SSHP needs to be rebalanced only whenever a new maximum of the stock price is observed. The numerical results indicate that the hedging performance of an SSHP is far less risky than that of a delta-hedged portfolio.

**SESSION 37**

**Tuesday 8:30 - 10:15 a.m.**

**Lehár II**

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### **ENERGY MARKETS**

*Session Chair:* Sonia Benito-Muela - UNED, Spain

## **"U.S. Quantitative Easing and the Global Price of Oil: Unintended Consequences"**

Anastasios Malliaris - Loyola University Chicago, USA

Mary Malliaris - Loyola University Chicago, USA

*Discussant:* Song-Zan Chiou-Wei - National Kaohsiung University of Science and Technology, Taiwan

Oil continues to play a significant role in the global economy. It influences global economic growth and in turn is also affected by global economic and geo-political conditions. Numerous significant studies have documented various economic variables driving the price of oil as well as its impact on the various economies of the world. In this paper we propose a model that describes the price of oil depending on six inputs: Fed Assets following the Quantitative Easing by the Fed, the 10 Year Treasury Note, the price of copper, the Trade Weighted dollar, the S&P 500 Index and a risk measure as the difference between the CCC Bond rate and the 10-Year Treasury Note. We hypothesize that Quantitative Easing by the Fed reduced longer term interest rates that in turn reduced junk bond rates that financed the fracking

technology that increased the supply of oil and reduced its price. The model is supported by various narratives using economic reasoning and is tested by using weekly data from 2003 to August 2016. The methodology we follow is overlapping 52-week regressions. We find that all six independent variables behave according to economic reasoning and the R-square indicates that the proposed six independent variables have high correlation with the price of oil.

### **"Oil News Sentiment and Volatility in Energy Market"**

Song-Zan Chiou-Wei - National Kaohsiung University of Science and Technology, Taiwan

Sheng-Hung Chen - National Kaohsiung University of Science and Technology, Taiwan

Zhen Zhu - University of Central Oklahoma, USA

*Discussant:* Ibrahim Jamali - American University of Beirut, Lebanon

Using weekly data from September 2006 to August 2016, this paper empirically investigates the effects of oil news sentiment on both of spot and future returns in energy commodity (crude oil, heating oil, gasoline, and natural gas). Specifically, the asymmetric effects of sentiment (pessimism versus optimism) on volatility of spot and future returns in energy markets are modelled by GARCH (1,1) and DCC-MGARCH, respectively. Our empirical results indicate that based on the univariate GARCH (1,1) model, optimistic sentiment (positive sentiment change) significantly enhances both of spot and futures returns while showing the robustness as the alternative measure of percentage change in oil news sentiment index. Moreover, the results of multivariate GARCH model using DCC-MGARCH confirm the similar findings that optimistic sentiment economically proliferates both of spot and futures returns. Besides, optimistic sentiment change significantly mitigates the volatility for spot returns while pessimistic sentiment change only increases the volatility risk of crude oil. Moreover, optimistic sentiment change significantly decreases the volatility for futures return as pessimistic sentiment change conversely increases the volatility risk into crude oil and gasoline.

### **"Predicting Daily Oil Prices: Linear and Non-Linear Models"**

Wassim Dbouk - American University of Beirut, Lebanon

Ibrahim Jamali - American University of Beirut, Lebanon

*Discussant:* Petko Kalev - La Trobe University, Australia

In this paper, we assess the accuracy of linear and nonlinear models in predicting daily crude oil prices. Competing forecasts of crude oil prices are generated from parsimonious linear models which require no parameter estimation, as well as linear and nonlinear models. Two of the linear models that we employ exploit the informational content of oil demand and the increasing correlation between oil and equity prices and are novel to the literature. The nonlinear model that we consider is an artificial neural network. More specifically, we consider a bagged neural network, a neural network trained using the genetic algorithm as well as a neural network with fuzzy logic. We find that some of the linear models outperform the random walk in terms of out-of-sample statistical forecast accuracy. Our findings also suggest that while the buy-and-hold strategy dominates some of the models in terms of dollar payoffs and risk-adjusted returns under a long-only strategy, all the models that we consider generate higher dollar payoffs than the buy-and-hold strategy under the short-only strategy. An investor obtains the largest profits by trading based on the moving average convergence divergence which is a technical indicator.

### **"Information Content of the Limit Order Book for Crude Oil Futures"**

Jason Tain - La Trobe University, Australia

Huu Duong - Monash University, Australia

Petko Kalev - La Trobe University, Australia

*Discussant:* Anastasios Malliaris - Loyola University Chicago, USA

This paper investigates the information content of the limit order book (LOB) in crude oil futures market. We propose a time-weighted LOB slope that incorporates the duration of each bid and ask update. The

LOB slope correlates negatively with price volatility after controlling for various trade-related metrics. When volatility is expected to increase, we observe that the LOB slope decreases significantly before regular energy market information releases. We also show that the time-weighted LOB slope is informative about price volatility one day ahead. Overall, our findings illustrate the importance of the LOB as a conduit for volatility information.

**SESSION 38**

**Tuesday 8:30 - 10:15 a.m.**

**Lehár III**

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**PORTFOLIO MANAGEMENT I**

*Session Chair:* Roman Horvath - Charles University, Czech Republic

**"Do the Actively Managed Mutual Funds Exploit the Stock Market Mispricing?"**

Hyunglae Jeon - Korea Advanced Institute of Science & Technology, Korea, Republic of  
Changjun Lee - Hankuk University of Foreign Studies, Korea, Republic of

*Discussant:* Nitin Deshmukh - Middlesex University Business School, UK

Constructing a proxy for mispricing with the fifteen well-known stock market anomalies, we examine whether actively managed equity mutual funds exploit mispricing. We find that, in the aggregate, mutual funds over-weight the over-valued stocks and under-weight the under-valued stocks relative to passive benchmark. We show that this phenomenon is explained by investment constraints and agency issues of fund managers. In addition, we find that mutual funds with the highest weights in under-valued stocks outperform those with the highest weights in over-valued stocks by the annualized four-factor alpha of 2.99% ( $t=2.56$ ). Overall, our findings indicate that underperformance of mutual funds is related with adverse allocation to anomalies' implied mispricing.

**"Utility Enhanced Index Investing"**

Ephraim Clark - Middlesex University, UK  
Nitin Deshmukh - Middlesex University Business School, UK  
Barkan Guran - Management Engineering, Istanbul Technical University, Turkey  
Konstantinos Kassimatis - Athens University of Economics and Business, Greece

*Discussant:* David Edelman - University College Dublin, Ireland

Passive index investing involves investing in a fund that replicates a market index. Enhanced indexation uses the returns of an index as a reference point and aims at outperforming this index. The intuition behind enhanced indexing is that market inefficiencies can be exploited to yield better returns. In this paper we propose a novel technique based on the concept of cumulative utility area ratios and the Analytic Hierarchy Process (AHP) to construct enhanced indices from the DJIA and S&P500. Four main conclusions are forthcoming. First, the technique, called the utility enhanced tracking technique (UETT), is computationally parsimonious and applicable for all return distributions. Second, if desired, cardinality constraints are simple and computationally parsimonious. Third, the technique requires only infrequent rebalancing, monthly at the most. Finally, the UETT portfolios generate consistently higher out-of-sample, after-cost returns for the fully enhanced portfolios as well as for the enhanced portfolios adjusted for cardinality constraints.

**"Long-term Investment Management with Minimax Regret: A Template for Pension Funds?"**

David Edelman - University College Dublin, Ireland  
Ekaterina Goryagina - University College Dublin, Ireland

*Discussant:* Yi Wang - The Hong Kong Polytechnic University, Hong Kong

A method of pension portfolio management based on the Minimax Regret approach proposed by the authors previously is reviewed and a set of Empirical comparisons with more traditional approaches

using data from Germany is presented. For the data examined, the resulting comparison demonstrates a clear superiority of the Minimax-based approach over the traditional from the point of view of both long-term cumulative performance and risk profile as measure chiefly by Drawdown.

### **"Appraisal Ratio and the Mutual Fund's Stock Picking Skill"**

Yi Wang - The Hong Kong Polytechnic University, Hong Kong

*Discussant:* Changjun Lee - Hankuk University of Foreign Studies, Korea, Republic of

According to the costly arbitrage theory, stocks with high idiosyncratic volatility deter arbitrageurs from trading against the temporal mispricing to gain profits. Hence, long equity holders, such as equity mutual funds, would not take on too much 'idiosyncratic risk' in their portfolios, unless they have strong beliefs that those assets are undervalued. In this study, we use the holding-based fund-level 'appraisal ratio', based on the Treynor and Black (1973) model, to infer the stock picking skill of actively managed mutual funds in the U.S. equity market. Overall, we find that the degree of a fund portfolio tilting towards stocks with higher 'appraisal ratio' helps to identify those funds with superior stock picking ability, which leads to better future performance. And the effect is stronger following periods with lower investor sentiment, indicating that this approach can identify those skilled fund managers who are active in terms of searching for undervalued stocks. Evidences from quarterly earnings announcements and analyst recommendations complement our conjecture that this measure is a good proxy for the stock picking ability of skilled fund managers in the U.S. active management industry.

**SESSION 39**

**Tuesday 8:30 - 10:15 a.m.**

**Brahms I**

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### **MERGERS AND ACQUISITIONS II**

*Session Chair:* Janne Äijö - University of Vaasa, Finland

### **"The Effects of Corporate Governance Reforms on Mergers and Acquisitions in Japan"**

Wolfgang Bessler - Justus-Liebig University Giessen, Germany

Gerrit Henrich - Justus-Liebig University Giessen, Germany

*Discussant:* George Leledakis - Athens University of Economics & Business, Greece

We analyze the effects that the introduction of new corporate governance and other regulatory reforms in Japan had on the market for corporate control and especially on mergers and acquisitions of public companies. We analyze the wealth effects for bidder and target shareholders and find that the magnitude of announcement abnormal returns converge towards US and European results. We also provide robust empirical evidence of a development towards a more capital market orientated corporate governance structure in Japan with less dependence on bank debt and an increase in foreign equity ownership as well a higher M&A activity. After regulatory reforms in 2004, bidder, target and deal characteristics changed substantially. Further, we analyze the phenomenon of bidder and target sharing the same financial advisor in M&A transactions for the period between 1998 and 2004. This phenomenon is most prominent in Japan. Surprisingly, the overall effects are less negative and not as clear-cut as expected. There is some evidence that the premium the bidder paid is lower. With respect to the time to deal completion, the results are mixed. Overall, we provide evidence for the success of the corporate governance reforms in Japan creating a higher M&A activity and a more active market for corporate control. However, we also observe that these improvements are volatile and still in progress.

### **"Do Crises Create Opportunities of Shareholder Wealth Creation in M&As? Evidence from the European Banking Industry"**

George Leledakis - Athens University of Economics & Business, Greece

Emmanouil Pyrgiotakis - Athens University of Economics and Business, Greece

*Discussant:* Kyung Suh Park - Korea University, Korea, Republic of

Financial crises often create opportunities for the strong and dangers for the weak. In the market for corporate control, strong firms become bidders while weaker firms become targets. Following this argument, we retrieve a sample of European bank M&As over the period 1990 to 2016, and we examine whether the ongoing financial crisis has any impact on the way market participants anticipate such deals. Our findings contrast the consensus view that bidding banks lose at the announcement of a merger. More precisely, after the crisis, bidders experience positive and significant abnormal returns in the scale of 1.96%, figure that translates to an average shareholder value increase of \$34.20 million. Furthermore, at the completion of these post-crisis deals, bidders earn an additional abnormal return of 0.89%. Finally, the results of the cross-sectional analysis indicate that these reported gains are positively related with the financial condition of the bidding bank.

### **"Product Market Competition and Corporate Takeover: Complement vs. Substitution"**

Ji Lee - Construction Economy Research Institute of Korea, Korea, Republic of

Hee Byun - Hallym University, Korea, Republic of

Kyung Suh Park - Korea University, Korea, Republic of

*Discussant:* Yoko Shirasu - Aoyama Gakuin University, Japan

This study investigates the effect of product market competition as an external control mechanism on the operation and efficiency of corporate takeovers in an emerging economy. Empirically, we find that firms in more competitive product markets are more likely to experience a change in control than those in less competitive markets, after controlling other firm and industry characteristics. Furthermore, the positive effect of a change in control on shareholder wealth is observed in more competitive product markets but disappears in less competitive markets. The results imply that product market competition improves the efficiency of the market for corporate control in an emerging economy with less developed capital markets and weak investor protection, supporting the complement hypothesis between product market competition and corporate takeover.

### **"The Performance Effects of Bank M&As: The Foreign Institutional Investors Matter in Asian and EU Countries"**

Yoko Shirasu - Aoyama Gakuin University, Japan

Yukihiro Yasuda - Hitotsubashi University, Japan

*Discussant:* Wolfgang Bessler - Justus-Liebig University Giessen, Germany

We empirically investigate the performance effects of M&As on acquirer banks focusing on their ownership structure. We use a comprehensive sample of banks' M&As in Asia and EU countries from 2000 to 2014. We find that when foreign financial institutional investors hold large stakes in the acquirer banks, then it makes the probability of completion of M&As higher in EU countries, whereas the opposite results are found in Asian countries. The higher fraction held by Fund financial foreign investors prevents acquire banks from completing the M&A deals. Then, we investigate the performance improvement differences by the type of foreign institutional investors from the view of their M&A strategies; first, the strategies for coping with accumulated nonperforming loans are found across all the types of investors, especially it is stronger effects for the fund investors with top10 largest shareholders, in EU. Finally, the higher ROA is accomplished by the investment investors in Asia, but by the fund investors in EU, in spite of fail of traditional investors in Asia. In addition, the higher fraction held by fund investors prevents acquirer banks from expanding unnecessary loan-business associated with nonperforming loans in EU, and thereby leads to the higher ROA in the long run perspective. It is same as the high fraction held by investment investors in Asia.

**EARNINGS MANAGEMENT I**

*Session Chair:* Chanaka Edirisinghe - Rensselaer Polytechnic Institute, USA

**"How Much Influence Do CFOs have on Earnings Management?"**

Chris Florackis - University of Liverpool, UK

Sushil Sainani - University of Liverpool, UK

*Discussant:* Kiridaran Kanagaretnam - York University, Canada

This paper investigates how and to what extent do Chief Financial Officers (CFOs) affect earnings management. We introduce the concept of CFO resilience (or resistance to pressure). We attempt to identify the conditions/factors that enable the CFO to withstand to pressure to manage earnings. We find a negative association between the CFO resilience and discretionary accruals, which suggests that firms with resilient CFOs (i.e. higher values of CFO resilience) are less likely to engage in earnings management. This relation is robust to the inclusion of firm, CEO- and governance-level controls, including fixed effects and to various approaches used to address potential endogeneity. The negative effect of resilient CFOs on accruals seems to persist even in firms where CEOs have higher equity incentives and more power to engage in opportunistic earnings management. This suggests that resilient CFOs may play an important monitoring role in the governance process.

**"Banks' Funding Structure and Earnings Quality"**

Justin Jin - McMaster University, Canada

Kiridaran Kanagaretnam - York University, Canada

Yi Liu - SUNY Oswego, USA

*Discussant:* In Jung Song - Hankuk University of Foreign Studies, Korea, Republic of

Using a sample of U.S. public and private banks, we examine the implications of banks' funding strategies for banks' earnings quality. We find that the ratio of core deposits to total liabilities (CDL), our proxy for bank reliance on retail deposits over wholesale funds, is negatively and significantly associated with the magnitude of earnings management through discretionary loan loss provisions (DLLP). This finding is consistent with the arguments that retail deposits are relatively more stable and information-insensitive, reflect a more conservative business model, and attract more intensive monitoring from the Federal Deposit Insurance Corporation (FDIC) than wholesale funds. We find that the inverse relationship between retail funding and earnings management holds for both income-increasing and income-decreasing DLLP. Besides, reliance on retail funding decreases the likelihood of meeting-or-beating earnings benchmark, and the extent of income smoothing through loan loss provisions (LLP). In an additional analysis, we find that banks with higher CDL are exposed to lower asset deterioration risk, proxied by large non-performing loans and loan charge-offs during the financial crisis period 2007-2009. Collectively, our results indicate that the banks' funding strategy that relies more on retail deposits as opposed to wholesale funds increases banks' earnings quality.

**"Internal Capital Markets and Loss Reserve Error Volatility"**

In Jung Song - Hankuk University of Foreign Studies, Korea, Republic of

*Discussant:* Jared DeLisle - Utah State University, USA

A rich literature on insurer loss reserve errors has developed since the 1970s. In this paper, we provide the first examination of the relation between loss reserve error volatility and internal capital markets. We first look at firm characteristics, e.g., whether the firm is affiliated with an insurer group, that may be associated with firm-level loss reserve error volatility. We hypothesize that insurers who are part of a group—i.e., insurers who have access to internal capital markets— have less volatility in their reserve errors than unaffiliated insurers. Then we further inspect the relation between group-level loss reserve error volatility and the extent of internal capital markets activity. Results provide evidence that 1)

affiliated insurers have lower firm-level loss reserve error volatility than unaffiliated insurers, and 2) insurer groups having greater internal capital markets activity have relatively lower group-level loss reserve error volatility. It suggests that internal capital markets provide alternative means of managing insurer capital. Thus, affiliated insurers are able to utilize ICMs as part of the group structure to help gain a competitive advantage in the marketplace.

### **"Passive Ownership and Earnings Manipulation"**

Ahmed Baig - Texas Tech University, USA

Jared DeLisle - Utah State University, USA

Gulnara Zaynutdinova - West Virginia University, USA

*Discussant:* Chris Florackis - University of Liverpool, UK

We examine the relation between passive ownership and financial reporting quality measured by Beneish's (1999) earnings' manipulation score (M-score). We find that passive ownership is negatively related to M-score and to the likelihood of being designated as a "manipulator" firm. However, these relations are muted when one of the four largest auditing firms audits the firm in the previous year. The evidence is consistent with the notion that passive owners act as monitors, but relinquish their monitoring role to the Big 4 auditing firms. We also find that higher passive ownership for the lowest M-score quintile yields higher risk-adjusted returns.

**SESSION 41**

**Tuesday 10:30 - 12:30 p.m.**

**Liszt I**

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### **STOCK PRICE REACTION**

*Session Chair:* Minna Martikainen - Hanken School of Economics, Finland

### **"How Much Do Investors Trade out of Confusion? Intraday Evidence"**

Vadim Balashov - Rutgers University-Camden, USA

Andrei Nikiforov - Rutgers University-Camden, USA

*Discussant:* Usman Talat - University of Salford, UK

We conduct the first systematic market-wide search for companies with similar names and/or ticker symbols. We find that over 55% of public companies are exposed to 'confusion' trading where one company can be confused for another. Narrowing the search to the pairs with the highest likelihood of confusion and using intraday data, we find only 39 pairs with significant co-movement in volumes. For them, we estimate that trades made by mistake constitute 5% of the trading volume and transaction costs. Despite the outsized media attention to the confusion trades, they are relatively infrequent and their economic significance is remarkably subdued.

### **"Investor Sentiment Regimes and the Stock Price Reaction to Monetary Policy News"**

Haifeng Guo - University of Glasgow, UK

Chi-Hsiou Hung - University of Glasgow, UK

Alexandros Kontonikas - University of Essex, UK

*Discussant:* Khelifa Mazouz - Cardiff University, UK

This paper shows that investor sentiment regimes strongly affect the response of stock prices to news about the Fed's conventional and non-conventional monetary policies. We find that the stock price reaction to monetary policy news is significant only following periods of high sentiment and during periods of decreasing sentiment. In the cross-section of stock portfolios sorted on size, book-to market ratio and momentum, stocks that are likely to be more sensitive to monetary policy news are those that are more exposed to overpricing when sentiment is high, and consequently more prone to lose value when the mispricing is corrected. Our evidence posits a challenge to the rational asset pricing viewpoint.

### **"Firm Fundamentals, Short Selling, and Stock Returns"**

Yuliang Wu - Bradford University, UK

Khelifa Mazouz - Cardiff University, UK

*Discussant:* Josh Della Vedova - The University of Sydney, Australia

This study uses short selling activity to test whether the relation between fundamentals and future returns is due to rational pricing or mispricing. We find that the strength of fundamentals negatively predicts short selling. We also find that short sellers exploit the overpricing of growth firms whose fundamentals are incongruent with market expectations (i.e., growth firms with weak fundamentals). A number of tests suggest that short selling activity increases the speed of price adjustment to negative information and reduces the ability of poor fundamentals to predict returns. Our findings are consistent with the gradual incorporation of information and contradict the rational pricing explanation.

### **"Faulty Anchors: Individual Investor Order Intensity and Order Type at the 52 Week High"**

Josh Della Vedova - The University of Sydney, Australia

Andrew Grant - The University of Sydney, Australia

Joakim Westerholm - The University of Sydney, Australia

*Discussant:* Aris Kartsaklas - Brunel University London, UK

We present clear and economically significant evidence that individual investors are paying upwards of seven percent in lost returns due to their strong contrarian anchoring at the 52 week high day. We investigate the importance of the 52 week high as an anchor for individual investors to trade with institutions. We show that stock price nearness to the 52 week causes a sharp and monotonic increase in selling by individuals with increased limit orders. Using event study methodology we find that around the 52 week high day selling intensity and limit order use sharply increases from up to 5 days prior, resulting in large abnormal returns and household selling preceding the 52 week high. This effect is intensified by volatility and time since the last 52 week high being crossed. This suggests that individuals rely more heavily on anchors when stock values are uncertain and that they are relatively indifferent to adverse selection risk when responding to anchors.

### **"Residual Income Valuation and Stock Returns. Evidence from a Value-to-Price Investment Strategy"**

Aris Kartsaklas - Brunel University London, UK

Ahmad Haboub - University of Northampton, UK

*Discussant:* Alexandros Kontonikas - University of Essex, UK

This paper contributes to accounting anomalies literature by investigating the value-to-price strategy, where the fundamental value ( $V$ ) is estimated using the residual income valuation model. The paper explores the performance of value-to-price ( $V/P$ ) strategies, examines the relationship between  $V/P$  ratio and several risk proxies, and tests the risk explanation of the  $V/P$  market anomaly using asset pricing factor models. Our findings, for the US market from 1987 to 2015, show that high  $V/P$  portfolios outperform low  $V/P$  portfolios across horizons extending from one to three years. We further suggest that the  $V/P$  ratio is positively correlated to future stock returns after controlling for several firm characteristics, which are well known risk proxies. The findings clearly indicate that the five-factor model of Fama and French performs better than either the CAPM or the traditional Fama and French three factor model. The results confirm that the excess returns of  $V/P$  strategy vary due to the differences in size, the  $B/M$  ratio, operating profit and betas across quintile portfolios. However, these factors cannot explain all the variation in excess returns.

**MARKET STUDIES**

*Session Chair:* Chris Florackis - University of Liverpool, UK

**"The Reversal Strategy: A Study Across All Emerging Markets"**

Mohsin Sadaqat - National University of Sciences and Technology, Pakistan

Hilal Butt - Institute of Business Administration, Pakistan

*Discussant:* Edward Lawrence - Florida International University, USA

The emerging markets being volatile and illiquid provide ideal setting for the success of reversal strategy. Surprisingly, only 8 emerging markets have significant reversals out of 21 markets being analyzed. For markets in which reversal is present, it is linked with firm size and illiquidity, but the strongest association of reversal is with higher volatility of the stocks. Overall, reversal profits, once present cannot be explained by commonly known market-based risks factors. We also analyzed the performance of conditional reversal strategies which are workable in the US, but we do not find any conclusive evidence in case of emerging markets.

**"A Pristine Perspective on Additions to S&P 500: Direct Additions vs. Transfers"**

Rajnish Kumar - Queen's University Belfast, UK

Edward Lawrence - Florida International University, USA

Arun Prakash - Florida International University, USA

Ivan Rodriguez - Florida International University, USA

*Discussant:* Philip Gharghori - Monash University, Australia

We study additions to the S&P 500 by separating the firms in two groups – those added directly and those transferred from other S&P indices. We find that turnover ratio and abnormal return (AR) for firms added directly significantly exceed their counterparts for firms transferred. For transfers the price increase is only on the announcement. The price increase for direct addition continues till the effective date. The AR is permanent for firms added directly, whereas it is temporary for firms added from other S&P indices. The price increase on the announcement of transfers is due to price pressure alone. The price increase for direct addition is due to price pressure and new information.

**"Return Drift Following Stock Split Announcements"**

Philip Gharghori - Monash University, Australia

Annette Nguyen - Deakin University, Australia

*Discussant:* Dina Gabbori - Plymouth University, UK

The aim of this study is to examine why underreaction following stock split announcements persists over the long-term. To do so, we analyze long-run abnormal returns after split announcements over the period 1975-2011. A significant abnormal return of 5% p.a. is observed over the entire dataset but this finding is not robust across sub-periods or segregations based on market cap. It is also documented that abnormal returns can be enhanced by focusing on splitting firms that have not split previously within the last three years. A key result of this study is that abnormal returns are conditional on whether firms split again in the next three years. Unsurprisingly, firms that split again perform very well in the year after the current split. However, for the roughly two-thirds of the sample that do not split again, the abnormal return is -11%. This suggests that the average long-term underreaction following stock split announcements is difficult to exploit.

### **"The Impact of Islamic Events on Herding Behaviour in Saudi Arabia Financial Market"**

Dina Gabbori - Plymouth University, UK

Nader Virk - Plymouth University, UK

Basel Awartani - Westminster University, UK

*Discussant:* Mohsin Sadaqat - National University of Sciences and Technology, Pakistan

The focus of this study is to look at the impact of social mood on the herd behavior in religious context. Muslims mood associated with Islamic events may encourage herding around these days more than non-event days. We investigate the impact of different religious events using the Saudi equity market setting for the period of October 2005-February 2016. This period includes the events of global financial crisis and the Arab Spring and thus leads comparison of herding results across various subsamples. Our results show a significant effect of Eid-ul-Fitr and Ashoura in Saudi Arabia stock market. In our subsample analysis, evidence of herding around Eid-ul-Fitr and Ashoura is present during the financial crisis period only. Our results support our motivation that investor mood is carried over during the festive months of the Eidul-Fitar, Ashoura and Eid-ul-Adha instead of earlier reported evidence of herding in Ramadan.

### **"Mental Models of Investor Choice: Prospects for Behavioral Finance Theory"**

Usman Talat - University of Salford, UK

Jia Liu - University of Salford, UK

*Discussant:* Vadim Balashov - Rutgers University-Camden, USA

In the current paper we argue that due to advances in information communication technology agents in financial markets are exposed to large volumes of information often over short time periods. This means that agents will likely generate creative mental models that represent new visuospatial possibilities to accommodate volumes of information influx. The biasing impact of such mental models in the context of technologically advanced financial markets is poorly understood, yet they have the power to explain agent or investor behaviour, which often deviates from rationality. Drawing on interdisciplinary studies we suggest theoretical and practical implications of our argument, namely, that 1/ creative models often bias choices based on visual formats of representation and 2/ emotional content of models skews predictions.

**SESSION 43**

**Tuesday 10:30 - 12:30 p.m.**

**Liszt III**

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#### **BOARD OF DIRECTORS**

*Session Chair:* David Edelman - University College Dublin, Ireland

### **"Gender Diversity on Boards of Directors, Capital Investment and Investment-to-Q Sensitivity"**

Wenjing Ouyang - University of the Pacific, USA

Jeffrey Miles - University of the Pacific, USA

Samuel Szewczyk - Drexel University, USA

*Discussant:* Lu Xing - University of Glasgow, UK

This study examines the effect of gender diversity of boards of directors on the firm's level of investment and the response of investment making to cues in the market. Prior studies suggest that man and women process information differently when making financial decisions. Men are more selective in choosing certain sets of information, and woman are more comprehensive in processing information. Other studies suggest that man and women are different in their risk preference. Men are willing to take more risk to pursue returns. Women have a greater desire for security and a lower risk preference. Women directors may also bring knowledge, skills, and experiences to boards that differ from male directors. We find that female diversity on boards decreases investment and decreases the sensitivity of investment to Q. However, we find that the decrease of investment sensitivity to Q related to gender diversity is found

when the firm is likely to be overvalued. As overvalued equity can lead to over investment and loss of firm value (Jensen 2004), our results indicate female directors on boards positively affect the firm's investment decisions.

### **"Does Cooperation Among Women Enhance or Impede Firm Performance?"**

Lu Xing - University of Glasgow, UK

Angelica Gonzalez - University of Edinburgh, UK

Vathunyoo Sila - University of Edinburgh, UK

*Discussant:* Daniel Havran - Corvinus University of Budapest, Hungary

Based on the notion that women cooperate more with women than with men, we investigate the cooperation effect among women at the top hierarchy of Chinese firms. We show that the stock market responds negatively to the cooperation between female leaders and female directors, although the cooperation produces higher accounting returns. The opposite effects are a result of earnings management, which leads to overstated accounting numbers but unfavourable stock market reactions. We further find that only the newly appointed female leaders engage in this earnings management. The results suggest that the pressure on women to perform leads to 'women helping women', which is detrimental to shareholder value.

### **"The Impact of Number of Women at Corporate Boards to Performance How Does it Matter in the Central-Eastern European Region?"**

Henriett Primecz - Corvinus University of Budapest, Hungary

Daniel Havran - Corvinus University of Budapest, Hungary

Zsolt Lakatos - Corvinus University of Budapest, Hungary

*Discussant:* Harikumar Sankaran - New Mexico State University, USA

The study investigates the impacts of corporate board gender diversity on the firm performance in six Central-Eastern-European post-communist EU member countries. This region is interesting in terms of gender relations since the changes in gender roles were not linear, and consequently is different from the evolutionary changes in gender relations in Western countries. Besides its particularity in gender relations, there were essential changes in corporate governance in the last three decades. Not to mention the fact that there were no such studies in the region. While one-tier corporate management system is prevalent in the USA, two-tier system is typical in Western-Europe, both types can be found in Central-Eastern-Europe. In our study operative firm performance (ROA) is explained by the number of women on boards; and control for firm performance and motivation of boards hiring female directors endogeneity. Using the 294 publicly listed companies' data between 2007 and 2016, we found that the higher number of women in the supervisory board positively affect the firm performance. Gender diversity plays no role in the management boards in principle, while in one-tier systems higher women presence decreases firm performance.

### **"Do Well-Connected Boards Invest in Productive R&D Activities?"**

Subramanian Iyer - University of New Mexico, USA

Harikumar Sankaran - New Mexico State University, USA

Yan Zhang - New Mexico State University, USA

*Discussant:* Wenjing Ouyang - University of the Pacific, USA

Prior research finds that well-connected directors and CEOs foster innovative activity by spending more on R&D, that yield patents and patent citations which ultimately result in higher value to stakeholders. These findings at a micro level do not explain the macro level observation that the R&D expenditures in the U.S. are at an all-time high but contributions of innovation have been on the decline. Since, not all inventions are patentable and not all patents add value, many studies have attempted to estimate R&D productivity based on firm-level production function. We use output elasticity of R&D expenditures,

estimated from a firm's production function, and find that as boards become more connected, marginal R&D productivity and market to book value of equity decline. The output elasticity of R&D expenditures allows an estimation of optimal R&D expenditures that is not possible with measures such as patents and patent citations. Our analysis indicates that the decline in productivity and consequently market to book value of equity is caused by overinvestment in R&D by boards with a high level of network centrality, especially in high-tech firms.

**SESSION 44**

**Tuesday 10:30 - 12:30 p.m.**

**Lehár I**

**RISK MANAGEMENT I**

*Session Chair:* Lawrence Kryzanowski - Concordia University, Canada

**"Real Duration and Inflation Duration: A Multidimensional Hedging Strategy"**

Iraj Fooladi - Dalhousie University, Canada

Gady Jacoby - The University of Manitoba, Canada

*Discussant:* Lidija Lovreta - EADA Business School, Spain

In this study we consider two different duration measures: (i) real duration, which is a measure of a financial instrument (asset or liability) value sensitivity with respect to changes in the real interest rate, and (ii) expected-inflation duration, which is a measure of the instrument value elasticity with respect to changes in the expected rate of general price inflation. These two measures arise because the nominal interest rate is divisible into a real rate and the expected-inflation rate. Thus, when inflation is present, a duration measure depends on the source of the change in the interest rate. In our analysis we consider different inflation-indexation schemes. We show that under-protection of cash flows against inflation may significantly lower the asset value with a sizeable expected-inflation duration. On the other hand, assets with an indexation scheme that over protects against inflation, will be significantly more expensive with nontrivial and negative elasticity with respect to the inflation rate. Finally, we demonstrate that the real and expected-inflation durations can be utilized to simultaneously hedge the net worth of a firm against adverse impacts of changes in the real interest rate and changes in the expected-inflation rate.

**"Do the Stock and CDS Markets Price Credit Risk Equally in the Long-run?"**

Lidija Lovreta - EADA Business School, Spain

Zorica Mladenovic - University of Belgrade, Serbia

*Discussant:* Kata Váradi - Corvinus University of Budapest, Hungary

In this paper, we examine the existence and stability of the long-run equilibrium relation between the price of credit risk in the stock and CDS markets for a sample of non-financial iTraxx Europe companies during the 2004-2014 period. We show that standard cointegration tests with no breaks frequently fail to detect cointegration. Once we formally account for the breaks in the cointegrating vector, we are able to detect cointegration over the entire sample period for the vast majority of the companies considered. An application of these results to CDS-equity trading shows that the profitability of traditional trading strategies crucially depends on the presence of cointegration and on the stability of the cointegrating vector.

**"Special Issues of Initial Margin Calculation for Certificates Based on the Requirements of the EMIR Regulation"**

Marcell Béli - FX Software Ltd, Hungary

Kata Váradi - Corvinus University of Budapest, Hungary

*Discussant:* Sonia Benito-Muela - UNED, Spain

Initial margin is the part of the multilevel guarantee system, operated by central counterparties. The main

goal of this guarantee system is to manage the risk caused by taking over counterparty risk from the participants during trading on stock exchanges. Based on this risk overtaking, the counterparty risk is being centralized, and concentrated at the central counterparties. The regulators have perceived this risk, and established the so called EMIR regulation in Europe in 2012. Our paper will focus on an initial margin calculation method of a European central counterparty, which is compliant with the requirements of the EMIR regulation. Our focus, will be a special type of financial asset, the certificates. We show how the initial margin calculation model should be changed, and developed in order to be able to capture the specialities of these asset.

**"Assessing the importance of the choice threshold in quantifying market risk under the POT method (EVT)"**

Sonia Benito-Muela - UNED, Spain

Carmen López-Martín - National Distance Education University (UNED), Spain

Ángeles Navarro - National Distance Education University (UNED), Spain

*Discussant:* Iraj Fooladi - Dalhousie University, Canada

The conditional extreme value theory has been proven to be one of the most successful in estimating market risk. The implementation of this method in the framework of the Peaks Over Threshold (POT) model requires one to choose a threshold for fitting the generalized Pareto distribution (GPD). In this paper, we investigate whether the selection of the threshold is important for the quantification of market risk. For measuring risk, we use the value at risk (VaR) measure and the expected shortfall (ES) measure. The study has been done for a large set of assets. The results obtained indicate that the quantification of the market risk through the VaR and ES measures does not depend on the threshold selected. This result is also found in a smaller sample.

**SESSION 45**

**Tuesday 10:30 - 12:30 p.m.**

**Lehár II**

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**MACROFINANCE**

*Session Chair:* Kiridaran Kanagaretnam - York University, Canada

**"The Dollar Ahead of FOMC Target Rate Changes"**

Nina Karnaukh - Ohio State University, USA

*Discussant:* Roman Horvath - Charles University, Czech Republic

I find that the U.S. dollar appreciates over the two-day period before contractionary monetary policy decisions at scheduled Federal Open Market Committee (FOMC) meetings and depreciates over the two-day period before expansionary monetary policy decisions. The federal funds futures rate forecasts these dollar movements with a 22% R-squared. A high federal funds futures spread three days in advance of an FOMC meeting not only predicts the target rate rise, but also predicts a rise in the dollar over the subsequent two-day period. A simple trading strategy, which exploits this predictability, exhibits a 0.93 Sharpe ratio. My findings imply that information about monetary policy changes is reflected first in the fixed income markets, and only later becomes reflected in currency markets.

**"The Determinants of Wealth Inequality: War, Finance, and Redistribution"**

Iftekhhar Hasan - Fordham University, USA

Roman Horvath - Charles University, Czech Republic

Jan Mares - Charles University, Czech Republic

*Discussant:* Trinil Arimurti - University of Bath, UK

We examine the determinants of wealth inequality using Bayesian model averaging to address regression model uncertainty stemming from the lack of encompassing model of wealth inequality. We use a global

sample of 67 countries and include nearly 40 different determinants of wealth inequality capturing various economic, political, financial, institutional, and geographical indicators. Our results show only a handful indicators explain cross-country differences in wealth inequality. More globalized countries with greater technological progress and higher savings rate exhibit greater inequality. Higher inflation and conflicts such as civil wars tend to increase wealth inequality, too. We find that financial sector exerts a complex effect on wealth inequality. While greater financial depth increases inequality, better access to finance decreases it. The countries, which are able to attract foreign investment and which redistribute income more, exhibit a lower degree of wealth inequality.

### **"What Drives the International Financial Inflows? Two Dimensions of Disaggregation Analysis"**

Trinil Arimurti - University of Bath, UK

*Discussant:* Marta Gómez-Puig - Universitat de Barcelona, Spain

This study aims to identify the main drivers of capital inflows by focusing on two dimensions of disaggregation approach, the type of flows (direct investment, portfolio investment, and other investment) and the markets (emerging and advanced economies), as a contribution to the existing literatures. Extensive panel data from 179 countries during the period of 1980-2015 are analysed to determine the domestic and global factors of capital inflows. Our empirical result shows the importance of disaggregating the analysis. There are significant differences, and a one size fits all approach, as can be found in the literature, is not appropriate. The estimation results for total inflows indicates that emerging economies are more related to domestic factors, while for advanced economies, although there are significant indicators from both domestic and global factors, the later shows a more dominant impact. The next dimension relates to disaggregating inflows rather than analysing them collectively. Again, our results suggest that the factors that drive direct investment are not, for example the same as those which drive portfolio investment. Among all drivers, the depth of capital market development is the only indicator that consistently shows significant impact to aggregate and disaggregated inflows in all set of our samples. Another noteworthy finding comes from the US stock market index as a crucial factor, particularly for portfolio and other investment in advanced economies.

### **"Nonfinancial Debt and Economic Growth in Euro-Area Countries"**

Marta Gómez-Puig - Universitat de Barcelona, Spain

Simon Rivero - Universidad Complutense de Madrid, Spain

*Discussant:* Nina Karnaukh - Ohio State University, USA

In this paper, we analyse the effects of all sources of the accumulation of nonfinancial debt (household, corporate as well as government) on economic growth in ten euro-area countries during the 1980-2015 period. To this end, we make use of three models (a baseline, an asymmetric and a threshold model) based on the empirical growth literature augmented by debt to assess whether debt has an impact on growth over and above other determinants, treating the different types of borrowers separately. By exploring the time series dimension in order to properly account for the historical experience of each country in the sample, we aim to detect potential heterogeneities in the relationship across euro area countries. Our results with both the baseline and the asymmetric models suggest that although the effects on nonfinancial debt accumulation clearly differ across countries, on average, the highest marginal impact of a rise in debt corresponds to the household and public sector, with an increase in private debt being more harmful in peripheral than in central countries; in contrast, the average effect of a rise in public debt does not differ between these two groups of countries. As for the effects of a debt increase beyond the turning point estimated in the threshold model, our findings indicate that the highest marginal impact corresponds to the household sector.

**PORTFOLIO MANAGEMENT II**

*Session Chair:* Yolanda Fuertes-Callén - Universidad de Zaragoza, Spain

**"Does the F-score Improve the Performance of Different Value Investments Strategies in Europe?"**

Jarno Tikkanen - OP Financial Group Wealth Management, Finland

Janne Äijö - University of Vaasa, Finland

*Discussant:* Chanaka Edirisinghe - Rensselaer Polytechnic Institute, USA

This study examines whether the performance of different value investment strategies can be improved with Piotroski's (2000) F-score screening method for the European stock markets. Our aim is to investigate the ability of the screening method to distinguish between winners and losers among several value investment strategies that use different financial ratios to form portfolios, such as B/M, E/M, D/M, and EBITDA/EV ratios. The results of the study provide compelling evidence that the F-score screening method significantly improves the performance of all investigated investment strategies. The results regarding the superior performance of the high F-score portfolios are robust across investment strategies, various performance measures and risk-adjustment methods. The results are useful for individual investors and professional portfolio managers.

**"Estimation Risk and Implicit Value of Index-Tracking"**

Brian Clark - Rensselaer Polytechnic Institute, USA

Chanaka Edirisinghe - Rensselaer Polytechnic Institute, USA

Majeed Simaan - Rensselaer Polytechnic Institute, USA

*Discussant:* Maria Cortez - University of Minho, Portugal

We study Roll's (1992) conjecture that there may exist an implicit value in index-tracking relative to forming a MV-optimal portfolio due to potential estimation error in return parameters. We show that benchmark orientation helps mitigate the risk of error in the optimal portfolio. Explicit analytical conditions that are sufficient for the latter risk mitigation are derived. The implicit value improves with risk tolerance, asset betas, and the number of assets; but it decreases with market volatility and sample size. An empirical design with bootstrapping strongly supports our analytical conclusions. An index-tracking-long, but MV-optimal-short, portfolio provides evidence of excess risk-adjusted returns.

**"Socially Responsible Investing and the Performance of Bond Portfolios: Evidence from Europe"**

Patricia Pereira - University of Minho, Portugal

Maria Cortez - University of Minho, Portugal

*Discussant:* Didier Maillard - Conservatoire national des arts et metiers, France

This paper investigates the performance of socially screened bond portfolios of 189 Eurozone companies between 2003 and 2016. Bond portfolios are formed on the basis of an aggregate measure of corporate social responsibility (CSR) as well as on specific dimensions of CSR: environment, social and governance dimensions. The high- and low-rated portfolios consist of the best and worst rated companies with bonds in each period, respectively. Our results suggest that the performance of high-rated bond is not statistically different from that of low-rated bond portfolios. We further analyze the evolution of bond portfolio performance over time. The results indicate that in an earlier stage portfolios of high-rated bonds outperformed portfolios of low-rated bonds. Yet, over time this outperformance slowly diminishes and loses statistical significance. These results suggest that the errors-in-expectations hypothesis and the shunned-stock hypothesis are not only useful to explain the performance of equity portfolios but they are also useful in explaining the performance of fixed-income securities over time. When analyzing the performance of SRI portfolios in different market states, the results show no performance differences in periods of recessions compared to expansions.

## **"Retirement Savings: Asset Allocation and Risk"**

Didier Maillard - Conservatoire national des arts et metiers, France

*Discussant:* Janne Äijö - University of Vaasa, Finland

Retirement is not the only motivation for saving but it is a prominent one. Whether channelled through pension funds or individual accounts, the question of how to allocate retirement savings, and in particular which degree of risk to tolerate, is a fundamental issue. There are indeed other issues relating to the efficiency of retirement savings: how to annuitize, how to deal with longevity risk, how to manage taxation. This paper focuses on the asset allocation issue. Investing in risky assets should not be viewed as a way to compensate for insufficient savings during a life time, or a way to optimize the likelihood of reaching a future consumption target, whatever the consequences in bad circumstances. However, as risk free assets tend to vanish, or yield negative returns, investing in risky assets is a way to improve expected returns on savings, and thus expected purchasing power at old age, provided the cost of risk can be mitigated. One way of increasing the tolerance to investment risk is the potential stream of future labour income if there is some flexibility on the retirement departure age or the possibility having a job (full or parttime) during the first years of retirement. With reasonable parameters, such flexibility provides a significant incentive to increase investment in risky assets and provide significant welfare gains. Finally, labour supply flexibility gives a substantiated reason for the optimal share of risky assets to decline with age.

**SESSION 47**

**Tuesday 10:30 - 12:30 p.m.**

**Brahms I**

### **CORPORATE FINANCE I**

*Session Chair:* Begoña Gutiérrez-Nieto - Universidad de Zaragoza, Spain

## **"Entrepreneurship and Corporate Cash Holdings"**

Laurence Booth - University of Toronto, Canada

*Discussant:* Alexander Vedrashko - Simon Fraser University, Canada

Entrepreneurship has an enormous impact on the U.S. economy. However, entrepreneurship, as measured by the percentage of young firms, declined by 33% in the U.S. from 1982 to 2012. This paper looks at whether less entrepreneurship can partly explain why US firms hold more cash than they used to. We find that entrepreneurship is negatively related to corporate cash holdings. The decline in entrepreneurship explains a significant part of the increase in cash holdings. The results are robust to alternative measures of entrepreneurship based on migration and venture capital. Finally we find that the negative impact of entrepreneurship on cash holdings is stronger in firms with higher precautionary motive for cash.

## **"Lured by the Consensus: The Implications of Treating All Analysts as Equal"**

Roni Michaely - Cornell University, USA

Amir Rubin - Simon Fraser University, Canada

Dan Segal - IDC, Israel

Alexander Vedrashko - Simon Fraser University, Canada

*Discussant:* Panagiotis Artikis - University of Piraeus, Greece

Despite the persistently superior forecasting ability of high quality (HQ) analysts, the market systematically underweights price-relevant information in HQ analysts' forecasts and recommendations due to its fixation on the consensus. In particular, we find that only the HQ analysts' recommendation changes and forecast dispersion predict the firm's stock returns and return volatility one month ahead. The PEAD phenomenon occurs only when HQ analysts are relatively uncertain about the firm's performance. At the aggregate level, recommendation changes of HQ analysts predict future industry and market returns, while LQ analysts' recommendation changes do not. Our findings conclude that the market's focus on the consensus earnings forecast and its negligence in differentiating among analysts

according to quality has significant negative economic implications.

### **"Asymmetries in the Persistence and Pricing of Cash Flows"**

Panagiotis Artikis - University of Piraeus, Greece

Georgios Papanastasopoulos - University of Piraeus, Greece

*Discussant:* Uwe Walz - Goethe University of Frankfurt, Germany

Consistent with the implications of conditional conservatism, we show that the differential persistence of cash flows relative to that of accruals is higher across loss firms than profit firms. Further, we find that the positive relation of cash flows with future returns is more severe in loss years relative to profit years. The abnormal return earned from a hedge strategy on cash flows for loss firms is more than two times higher than the respective return for profit firms. Overall, we conclude that naïve fixation on earnings is a key factor in explaining the cash flow effect on future returns.

### **"Financial Constraints, Newly Founded Firms and the Financial Crisis"**

Julia Hirsch - Universidad Autonoma de Querretaro, Mexico

Uwe Walz - Goethe University of Frankfurt, Germany

*Discussant:* Laurence Booth - University of Toronto, Canada

This paper aims to analyze the effects of financial constraints and the financial crisis on the financing and investment policies of newly founded firms. Thereby, the analysis adds important new insights on a crucial segment of the economy. We make use of a large and comprehensive data set of French firms founded in the years 2004-2006, i.e. well before the financial crisis. Our panel data analysis shows that the global financial crisis imposed a shock (mostly demand-driven) on the financing as well as on the investments of these firms. Moreover, we find that financially constrained firms use less external debt financing and invest smaller amounts. They also rely on less trade credit. With regard to bank financing, newly founded firms which are more financially constrained accumulate less bank debt and repay initial bank debt slower than their non-financially constrained counterparts. Finally, we find that financially constrained firms are affected to a smaller degree by the financial crisis than their less financially constrained counterparts.

### **"The Impact of Fiscal Incentives on Foreign Direct Investment in an European Integrated Environment"**

Panagiota Boura - University of Patras, Greece

Antonios Georgopoulos - University of Patras, Greece

*Discussant:* Ana Parada-Rojas - Instituto Politécnico Nacional, Mexico

The article has as a purpose to investigate the effect of fiscal incentives, subsidies and grants on fdi attraction in integrated regions, by emphasizing on the environment of European Integration. In the analysis, European Integration is divided by the degree of integration in European Union and Eurozone. The above mentioned incentives are referred in two group of countries (country of origin and host country) and are expressed by the help of bilateral variables, which point out the situation of home country as well as host country. Moreover, the effect of incentives on investment choices of MNEs is appeared in two steps: whether MNE is going to invest and in case that MNE decides to invest, how much its level of investment will take place. Their effect is increasing in case that integration is included. In other words, an integrated region gains in investment interest when it has, besides agglomeration effects, also number of other incentives. Furthermore, the effect of subsidies comparing with grants is more effective but in any case is smaller than tax incentives. For this reason fiscal incentives have a complementary role and not a decisive role in FDI attraction.

**EARNINGS MANAGEMENT II**

*Session Chair:* Carlos Serrano-Cinca - Universidad de Zaragoza, Spain

**"Protection of Proprietary Information and Financial Reporting Opacity: Evidence from a Natural Experiment"**

Jeffrey Callen - University of Toronto, Canada

Xiaohua Fang - Florida Atlantic University, USA

Wenjun Zhang - Dalhousie University, Canada

*Discussant:* Zhaoyang Gu - Chinese University of Hong Kong, Hong Kong

We utilize the staggered adoption of the Inevitable Disclosure Doctrine (IDD) by U.S. state courts as an exogenous shock to the proprietary costs of disclosure, and study the impact of the IDD on corporate financial reporting policy. We find compelling evidence that firms headquartered in states that adopt the IDD exhibit a significant increase in financial reporting opacity relative to firms headquartered in states that fail to adopt the IDD. Our finding is robust to a battery of sensitivity tests. Further evidence shows that the impact of the IDD on opacity is more pronounced for firms with weak external monitoring and firms operating in competitive product markets.

**"Security Classification Decisions and Subsequent Earnings Management – Evidence from China"**

Zhaoyang Gu - Chinese University of Hong Kong, Hong Kong

Amy Sun - University of Houston, USA

Yutao Wang - Central University of Finance and Economics, China

Jian Xue - Tsinghua University, China

*Discussant:* Manu Gupta - Virginia Commonwealth Univ, USA

In 2006, the Ministry of Finance of China released the new China Accounting Standards (CAS), which require firms to classify financial assets into trading securities (TS), available for sale securities (AFS), held to maturity investments, loans and receivables. We examine the initial classification decisions of marketable securities under the new CAS and subsequent earnings management for a large sample of non-financial firms. We find that firms with less persistent earnings, more volatile earnings, higher idiosyncratic risk, and larger differences between the fair value and the historical cost of their financial assets are more likely to classify their marketable securities as AFS, as opposed to TS. Subsequently, firms that classify more AFS securities report more persistent and less volatile earnings and are associated with lower idiosyncratic risk. Gains and losses on the sales of AFS securities are negatively associated with earnings before such gains and losses, consistent with firms using sale of AFS securities to smooth earnings. The negative association is more pronounced for firms with a larger proportion of marketable securities classified initially as AFS securities, suggesting that initial accounting choices were made in anticipation of subsequent earnings smoothing. Our findings inform the debate on the market effect of fair value accounting and speak to the dynamic feature of earnings management by linking accounting choices to real activities manipulation.

**"Short-Horizon Incentives and Stock Price Inflation"**

Jianxin Chi - University of Nevada, USA

Manu Gupta - Virginia Commonwealth Univ, USA

Shane Johnson - Texas A&M University, USA

*Discussant:* Panagiotis Andrikopoulos - Coventry University, UK

Does managerial incentive horizon have any real capital-market consequence? We find that it does when short-sale constraints are more binding. Firms with short-horizon CEO incentives experience significant stock price inflation. These short-horizon CEOs sell more stocks at inflated price and generate greater abnormal trading profits. The stock price inflation is partly explained by greater earnings surprises and

more positive investor reaction to the surprises. To sustain the inflated price, short-horizon firms are more likely to employ income-increasing discretionary accruals. Consistent with theoretical prediction, all these effects become attenuated or statistically insignificant when short-sale constraints are less binding.

### **"Earnings Management and the Operating Performance Around the Private Placement of Equities (PPEs)"**

Binqing Xiao - Nanjing University, China

Panagiotis Andrikopoulos - Coventry University, UK

Xiaowei Liu - Coventry University, UK

Jun Wang - Coventry University, UK

*Discussant:* Ling Chu - Wilfrid Laurier University, Canada

This paper investigates the post-issue operating performance of private placement of equities (PPEs) and its relationship with pre-issue earnings management. We find that 1) there is persistent post-PPE long-term operating performance decline for issuing firms, 2) discretionary accruals are significantly positive in issuing year and after for issuing firms, 3) post-PPE long-term operating performance are driven, at least in part, by pre-PPE upward earnings management. Overall, these results suggest that firms manipulate earnings prior to PPEs. We also investigate the alternative explanations including overinvestment effect, agency problem, and leverage effect, all of which are ruled out in this study. The main results are robust to a variety of operating performance measures, earnings management measures, matching methods, and the effect of split share structure reform in China.

### **"Business Strategy, Earnings Quality, and Financial Flexibility"**

Muhammad Houqe - Victoria University of Wellington, New Zealand

Reza Monem - Griffith University, Australia

Tony Van Zijl - Victoria University of Wellington, New Zealand

*Discussant:* Jeffrey Callen - University of Toronto, Canada

We investigate business strategy's link to earnings quality and financial flexibility. We find evidence that prospector (defender) firms have lower (higher) earnings quality as indicated by earnings persistence and smoothness. In addition, prospector (defender) firms are likely to have larger (smaller) cash holdings and likely to pay less (more) dividends than other firms. Unlike prior studies, we explicitly recognize the simultaneity of the relationships between business strategy, earnings quality, and financial flexibility. Furthermore, to the extent a firm's business strategy drives its fundamental earnings process, we provide indirect evidence of the link between the fundamental earnings process and earnings quality.

## **LUNCHEON**

**12:30 - 1:15 p.m.**

**Arcade Restaurant**

## **KEYNOTE SPEECH**

**1:15 - 2:15 p.m.**

**Bartok II**

**Professor Jarrad Harford**

**Foster School of Business - University of Washington, USA**

## **WHY MERGERS MATTER: THE BROADER IMPACT OF MERGERS**

This talk starts with a brief review of the highlights of what four decades of academic study of mergers has taught us and then moves on to more recent work studying the impact of mergers more broadly. This

includes how clusters of mergers activity affect bargaining power within the supply chain, creating ripples of follow-on activity throughout the economy, how mergers of key players in an industry alter the landscape for their competitors and trading partners, forcing them to react, how trade flows across borders impact and are impacted by merger activity, and finally how the ownership structure of firms is partly an outcome of the mergers those firms have done over time.

**SESSION 49**

**Tuesday 2:15 - 4:00 p.m.**

**Liszt I**

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**FIXED INCOME SECURITIES**

*Session Chair:* Sangwon Suh - Chung-Ang University, Korea, Republic of

**"Trend Momentum in Corporate Bonds"**

Hai Lin - Victoria University of Wellington, New Zealand

Chunchi Wu - State University of New York at Buffalo, USA

Guofu Zhou - Washington University in St. Louis and CAFR, USA

*Discussant:* Zvika Afik - Ben-Gurion University of the Negev, Israel

This paper investigates bond momentum by exploiting all trend signals in the short-, intermediate and long-term simultaneously. Using this informationally efficient strategy, we uncover, for the first time, economically significant momentum effects for corporate bonds in all rating categories. Bond trend momentum has little correlation with stock momentum, and is robust to various controls. It is stronger for low-grade bonds and in the post-TRACE era, and in periods with slow economic growth. The significant bond return momentum documented in this study presents the most pronounced cross-sectional anomaly in the corporate bond market to date that challenges existing rational pricing models.

**"Are High-Yield Bonds Hazardous to Bond Portfolio Performance?"**

Zvika Afik - Ben-Gurion University of the Negev, Israel

Daniel Chernyak - Ben-Gurion University of the Negev, Israel

Koresh Galil - Ben-Gurion University of the Negev, Israel

*Discussant:* Ana Escribano - Universidad de Castilla-La Mancha, Spain

For many decades, institutional investors restrict their investments in speculative bonds. However, since the Global Financial Crisis and the Dodd-Frank act, institutional investors reaching for yield have shifted the risk in their managed portfolios by increasing the share of high-yield bonds. This paper examines the portfolio performance effect of this phenomenon. We explore the addition of BB bonds to an investment-grade bond portfolio, comprehensively analyzing the risk-return performance, using a wide range of risk measures and a large database of bond trades. We find that adding BB bonds may be beneficial primarily to investment managers targeting classical performance measures (e.g. Sharpe ratio). However, tail-risk measures show that this risk-shifting does not benefit investors.

**"Rating-Based Investment Constrains-Induced Trading: Other Thresholds Beyond the Investment-Grade Boundary"**

Pilar Abad - Universidad Rey Juan Carlos, Spain

Antonio Díaz - Universidad de Castilla-La Mancha, Spain

Ana Escribano - Universidad de Castilla-La Mancha, Spain

M. Dolores Robles - Universidad Complutense de Madrid, Spain

*Discussant:* Yan Xie - University of Michigan-Dearborn, USA

This paper investigates the effect of rating-based portfolio restrictions that many institutional investors face on the trading of their bond portfolios. Formal regulations and informal investment guidelines

require limiting or even prohibit from investing in securities rated below a certain rating category. We explore how credit rating downgrades affect to bondholders that are subject to such rating-based constrains in the US corporate bond market. These boundaries go beyond the well-documented investment-grade threshold. We also control for downgrades that cross any of the buckets established in the NAIC's risk-based capital system. We state that the informativeness of rating downgrades will be different according to whether they imply crossing investment-policy thresholds or not. We analyze corporate bond data from TRACE to test our main hypothesis and find a clear response around the announcement date consistent with portfolio adjustments made by institutions in their fulfillment of nonregulatory investment constrains. Downgrades affecting the three subcategories within the "A" rating class have the larger impact on pricing and trading activity.

### **"Equity Correlation, Taxes and Prediction of Default Correlation"**

Sheen Liu - Washington State University, USA

Howard Qi - Michigan Tech University, USA

Jian Shi - Bank of America/Merrill Lynch, USA

Yan Xie - University of Michigan-Dearborn, USA

*Discussant:* Hai Lin - Victoria University of Wellington, New Zealand

We develop an entirely self-consistent structural framework based on the Merton (1974) and the improved Leland-Toft (2006) default risk models to predict default correlations from equity correlations. We also carefully examine how taxes affect the prediction of default correlations. Moreover, we find that the interval of equity returns has significant impact on the predicted default correlations. The empirical results suggest that no single model can completely fit the empirical default correlations for all ratings. Our Merton default correlation model does a fine job of predicting default correlations for higher quality bonds. However, our Leland-Toft default correlation model predicts more accurately for lower rated bonds. Taxes do not alter the predictions of the Merton model. However, taxes exhibit nonlinear yet mild effect on the predictions of the LT model. Our findings shed new light on various aspects of default correlations and thereby help financial practitioner price credit derivatives more accurately and formulate more effective strategies to manage default risk of credit portfolios.

**SESSION 50**

**Tuesday 2:15 - 4:00 p.m.**

**Liszt II**

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### **PAYOUT POLICY**

*Session Chair:* Shing-yang Hu - National Taiwan University, Taiwan

### **"Dividends from Unrealized Earnings and Default Risk"**

Ester Chen - Peres Academic Center, Israel

Ilanit Gavious - Ben-Gurion University, Israel

Nadav Steinberg - Bank of Israel, Israel

*Discussant:* M. Farooq Ahmad - IESEG School of Management, France

Using hand-collected data on Israeli firms' unrealized earnings and debt restructurings following adoption of the IFRS, we investigate whether and how dividend payments based on unrealized revaluation earnings affect a firm's default risk. Our results indicate that in the era of fair value accounting, the origin of the dividend payout—coming from unrealized versus realized earnings—has a significant effect on a firm's default risk above and beyond the effect of the extent of the payment. Specifically, controlling for various determinants of financial risk, including the amount of the dividends paid (originating from either realized or unrealized earnings), companies are over three times more likely to subsequently require debt restructuring if they distribute dividends based on unrealized earnings. However, this enhanced risk seems to be mispriced by the market; firms that distribute dividends based on unrealized earnings exhibit an insignificantly different cost of debt than firms that never do so.

## **"Employment Protection and Payout Policy"**

M. Farooq Ahmad - IESEG School of Management, France

Christof Beuselinck - IESEG School of Management and LEM, France

Helen Bollaert - Université Côte d'Azur, France

*Discussant:* Erik Fernau - University of Mannheim, Germany

This paper examines the relationship between employment protection legislation (EPL) and corporate payouts. Employees are corporate claimants who compete with shareholders to extract economic rents generated by the firm, so management is influenced by workforce power via the EPL framework in setting its corporate payout policy. For a large international sample of 21 OECD countries for the period 1985-2013, we find that a one standard deviation increase in labor protection leads to a 5.07% (12.17%) lower dividend (total) payout. Consistent with the flexibility hypothesis, we find that EPL has a greater impact on payout in firms which are more resource-constrained, such as labor intensive firms, firms that face financial constraints and firms with higher operating leverage. The effects of tightening and loosening EPL are not symmetrical. Firms increase dividend payouts after employment protection is softened but are reluctant to cut dividends when employment protection is tightened. Finally, and consistent with the idea that pro-labor laws create frictions affecting corporate financial flexibility, we document that in higher EPL environments, firms use the cash retained to reduce debt and working capital.

## **"What Drives Dividend Smoothing? A Meta Regression Analysis of the Lintner Model"**

Erik Fernau - University of Mannheim, Germany

Stefan Hirsch - ETH Zurich, Switzerland

*Discussant:* Viet Do - Monash University, Australia

We revisit the view of dividend smoothing as one of the most robust findings in the empirical corporate finance literature by employing meta-regression analysis (MRA). Using 117 empirical studies that employ Lintner's dividend payout model we investigate the heterogeneity in reported dividend smoothing effects. We find evidence for (i) a mediocre degree of dividend smoothing across the analyzed literature, (ii) publication bias -i.e. a tendency to preferably report positive and statistically significant smoothing coefficients-, and (iii) several drivers for the heterogeneity in reported smoothing coefficients such as the set of control variables or the investigated country. Our MRA provides guidance for investors' expectations and future research on dividend smoothing.

## **"Dividend Premium Uncovered"**

Daniel Chai - Monash University, Australia

Viet Do - Monash University, Australia

Maria Strydom - Monash University, Australia

Kit Lee - Monash University, Australia

*Discussant:* Ilanit Gavious - Ben-Gurion University, Israel

The current literature documented abnormal returns when dividend expected. This is due to an increase in demand for dividend paying stocks prior to expected ex-dividend date. The cause of such increase in demand for these stocks remain unclear. The literature provides two possible explanations: tax-related clientele effects and/or from catering effects. However, there is no clear consensus on what is the real driver of the price pressure on dividend paying stocks. The Australian tax system provides two classes of dividends that allow a nature experiment to be performed. The objective of this study is to utilize the unique Australian setting to untangle the drivers of the dividend premium. Our results confirm dividend month premium also exist in Australian market. These excess returns are not due to rises in systematic risk or volatility. We show that tax-related clientele effects and catering effects are both responsible for creating demand for these stocks. Price pressure also change when regulation on dividend changed and the magnitude of price pressure also depend on investor sentiment. These findings have wide-reaching implications for future studies of dividend pricing in both Australia and in the US, as well as the

investment community given the importance of dividend payouts in trading strategies.

**SESSION 51**

**Tuesday 2:15 - 4:00 p.m.**

**Liszt III**

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**CORPORATE ISSUES**

*Session Chair:* Yukihiro Yasuda - Hitotsubashi University, Japan

**"Corporate Insider Trading and Social Networks"**

Jyri Kinnunen - Hanken School of Economics, Finland

Juha-Pekka Kallunki - University of Oulu, Finland

Minna Martikainen - Hanken School of Economics, Finland

*Discussant:* Ali Sheikhabahaei - Monash University, Australia

We explore whether corporate insiders in different locations in a network of directorship earn different abnormal stock returns on their reported insider transactions. We measure insiders' connectedness to other insiders by their centrality in the network. Although previous literature shows that insiders' personal attributes explain a large part of variation in abnormal insider profits, an association between insiders' trading behavior and their social networks has received little attention. Our results imply that well-networked insiders earn higher abnormal returns after stock purchases, suggesting that insiders use their connectedness and resulting informational advantage over other investors to extract economic rents via insider trading. We also find that the level of connectedness is also associated with reputational costs of misusing insider information, limiting well-networked insiders' willingness to engage in aggressive selling before stock price declines. These results remain after controlling for various firm- and insider-level characteristics, including executive hierarchy.

**"Corporate Governance Strength and Cost of SEOs"**

Ali Sheikhabahaei - Monash University, Australia

Balasingham Balachandran - La Trobe University, Australia

Amalia Di Iorio - La Trobe University, Australia

Huu Duong - Monash University, Australia

*Discussant:* Hyonok Kim - Tokyo Keizai University, Japan

Although it is not directly observable, governance strength can give confidence to investors in the event of a seasoned equity offering. Prior studies find that corporate governance can be evaluated through proxies at firm level; however, these are subjected to endogeneity. Another strand of the literature employs a single takeover enactment to exogenously determine the strength of governance. Empirical evidence shows that investors react positively if governance is not insulted by particular anti-takeover legal enactments. We employ the Hostile Takeover Index (HTI) as a middle ground proxy between firm-level and external governance mechanisms to gauge the strength of corporate governance. Overall, we find that investors react positively to issuing firms that experience a higher probability of a hypothetical hostile takeover. We also find that when the market is surprised by an announcement with a low price run-up, governance strength plays a significant role in reducing uncertainty among investors.

**"Who, When, and How Much Corporate Parents Help: Evidence from Japanese Consolidated and Unconsolidated Financial Statements"**

Hyonok Kim - Tokyo Keizai University, Japan

James Wilcox - University of California at Berkeley, USA

Yukihiro Yasuda - Hitotsubashi University, Japan

*Discussant:* György Andor - Eötvös Loránd University, Hungary

We derived annual amounts of internal and of external lending by individual, Japanese companies for

1984-2014. We used their unconsolidated and consolidated data to calculate the annual amounts of longer-term loans that parent companies extended to their separately-incorporated, subsidiary companies and to companies outside their business groups. We controlled for the effects of parent-specific and of subsidiary-specific factors on internal lending. We found that, when banks or the economy generally had problems, parents lent more internally, especially to their more important subsidiaries. Internal lending rose when banks were more willing to lend to parent-sized companies and when banks were less willing to lend to subsidiary-sized companies, which tended to be smaller than their parents. Our results suggest that internal capital markets partially offset some shocks. Our results also suggest considerable internal competition for funds. Parents lent more internally when they recently invested less themselves or when their subsidiaries had invested more. Loan from parents also rose when subsidiaries' sales rose to companies outside their business group. However, when they sold more to outside businesses, parents then lent less internally.

### **"Non-Financial Background of Financial Performance – Evidence from Eastern Europe"**

György Andor - Eötvös Loránd University, Hungary

Tamas Toth - Eötvös Loránd University, Hungary

*Discussant:* Minna Martikainen - Hanken School of Economics, Finland

The research is about the relationship between progress in financial performance and firm characteristics – applied capital budgeting methods, presence of a code of ethics, firm size, extent of management ownership and presence of western management culture – of Central and Eastern European firms. Data of 218 non-listed companies are used from a survey in 2006, which focused on the capital budgeting practices and other firm characteristics of firms. The most important financial indicators are followed up reflecting these firms' financial progresses – sales, profit before tax, net income, earnings before interest and taxes, total assets, equity, debt, return on equity, return on assets and number of employees – from 2005 to 2012. Companies that do not use any kind of formal capital budgeting technique have significantly worse financial performance on average, while companies using the discounted cash flow (DCF) methods have the highest performance indicators. No significant difference in financial progresses between firms using only the accounting based (AB) or the DCF methods are found. Companies where DCF methods are frequently used, and simultaneously there is a code of ethics achieve the best financial performance. Our results provide a strong support for the theory of business ethics. Presence of a code of ethics seems to be a strong separation parameter: companies with code of ethics over-perform companies without it.

**SESSION 52**

**Tuesday 2:15 - 4:00 p.m.**

**Lehár I**

### **RISK MANAGEMENT II**

*Session Chair:* Mehmet Karan - Hacettepe University, Turkey

### **"Value at Risk Based on Skewed Distributions: Evidence from Asian Equity Market"**

Jo Yu Wang - Feng Chia University, Taiwan

Duc Tran Cong - Feng Chia University, Taiwan

Juo-Lien Wang - Chaoyang University of Technology, Taiwan

*Discussant:* Ángeles Navarro - National Distance Education University (UNED), Spain

As Basel committee on Banking Supervision (BCBS) announced Capital Accord in governing market risks, risk management became a critical issue in banking sector Polanski and Stoja (2010). Value at risk has become the essential and critical tool in measuring market risk in the financial institutions since J.P. Morgan proposed its technical document of Risk Metrics in 1994, which is based on normal distribution. In this paper, three skew distributions such as Generalised hyperbolic distribution Tian, Wang et al. (2014), Generalized skew Student t-distribution and normal-inversed Gaussian distribution are applied to fit the distributions of equity indexes and to measure market risk of them. We predict one-day ahead value at risk Polanski and Stoja (2010) and Expected shortfall for five Asian markets that earn less

attentions in previous studies. The results indicate that Normal-inverse Gaussian distribution outperforms three other models, especially to South Korea. Viet Nam was an interesting case showing the similarity to others despite the fact that its market was more immature and inexperienced than most of Asian equity markets. All evidence excepting Malaysia seems to be slightly conservative in risk management and they could certainly lose the advantage in investing.

### **"Risk Measures for Investment Values and Returns Based on Skewed-Heavy Tailed Distributions: Analytical Derivations and Comparison"**

Panayiotis Theodossiou - Cyprus University of Technology, Cyprus

*Discussant:* Marco Guidi - University of Glasgow, UK

The skewed generalized t (SGT) displays an exceptional ability in modelling the tails of the empirical distributions of returns of financial and other assets. This feature makes it an appealing candidate for the computation of value at risk and expected shortfall measures, used by regulators, investors, portfolio managers and actuaries to measure and manage the risk exposure of their assets. This paper makes a specific contribution by deriving the analytical equations for the computation of value at risk, expected shortfall and downside risk measures for asset values and returns based on the SGT distribution. An assessment using simulations and estimation show that risk measures based on returns overestimate risk exposure.

### **"Financial Institutions Tail-Risk Strategies, Government Safety-Net Subsidies and Stakeholders Payoffs"**

Marco Guidi - University of Glasgow, UK

*Discussant:* Lidia Sanchis - University of Castilla la Mancha, Spain

In modern times society faces devastating financial crises (accidents) emerging from financial institutions (FIs) tail-risk strategies that opportunistically exploit poorly designed government safety-net policies/subsidies. This study uses an interdisciplinary approach to analyse the interrelationship between FIs opportunistic high tail risk strategies, government safety arrangements, and stakeholders payoffs.

### **"Measuring Financial Risk Co-Movement for Commodity Market"**

Gema Avilés - University of Castilla-La Mancha, Spain

José Montero - University of Castilla-La Mancha, Spain

Lidia Sanchis - University of Castilla la Mancha, Spain

*Discussant:* Jo Yu Wang - Feng Chia University, Taiwan

The behavior of commodities indices is crucial for developing and developed economics. We analyze the co-movement of commodity indices in extreme world financial episodes in the commodity market. The main aim of this study is to provide a set of financial risk maps based on Expected Shortfall (ES) estimates to capture the structure of a variety of commodities indices across different sectors during distress periods. We apply Multidimensional Scaling (MDS) technique, a method that produce in a low dimensional map data points whose similarities are defined in a higher dimension. To this purpose, we use nine monthly commodity index time series between 1970 and 2016 for global commodity market (Energy, Metals and minerals, Beverages, Fats and oils, Fertilizers, Grains, Food, Row materials, Timber) and we investigate the co-movement among these indices. First, for the whole period and, second in the distress periods studied—First oil crisis (1973-1974), Coffee price shock (1977), Second oil crisis (1979), War Gulf Persian (1990-91), Gas natural price shock (2001), Global crisis (2007-2008) and Coffee price shock (2011). We provide a comprehensive analysis of the financial risk maps obtained. The results show that the risk financial map changes depending on the distress periods considered. Therefore, Energy index is the most affected in oil crises and Beverage during food crises. Furthermore, the co-movement is analyzed with the risk distances in the financial risk maps.

**EMERGING MARKETS**

*Session Chair:* Alejandra Cabello - Universidad Nacional Autónoma de México, Mexico

**"Systematic Risk Premia in EM Bond Markets"**

Engelbert Dockner - Vienna University of Economics and Business, Austria

Stephan Kranner - Vienna University of Economics and Business, Austria

Josef Zechner - Vienna University of Economics and Business, Austria

*Discussant:* Dongwook Seo - Korea Advanced Institution of Science and Technology, Korea, Republic of

Despite the fact, that emerging market (EM) bond investments have yielded decent returns over the last 15 years and have recently become more and more popular among risk-taking investors due to the low interest-rate environment, the academic research on this asset class is still quite meager. We address this issue by firstly developing a three-factor model that allows to systematically explain the return-generating process of EM bond investments. We find that up to 83.1% of the variation of local currency bond returns can be explained by a market, a duration and a carry factor. We use linear regressions to show the importance of the carry factor in explaining EM bond specific return dynamics, since this factor does not only capture currency risk but also sovereign credit risk - two components inherently connected to EM bond investments. In a final step, we find that the average long-term risk premia of all three factors are significantly positive, but substantially vary over time. A Fama-MacBeth framework based on EM bond fund returns is used to get monthly out-of-sample estimates of the time-varying risk premia.

**"Political Corruption and Corporate Cash Holdings"**

Dongwook Seo - Korea Advanced Institution of Science and Technology, Korea, Republic of

Seung Hun Han - Korea Advanced Institution of Science and Technology, Korea, Republic of

*Discussant:* Malick Sy - RMIT University, Australia

This study empirically analyzes the effects of political corruption on corporate cash holdings policy and the impact of cash holdings on firm performance using 97 multinational data. We find that there is a nonlinear cubic function relationship between the political corruption and corporate cash holdings with a negative coefficient of cubic term of political corruption. Specifically, in developed countries with low levels of political corruption, there is a U-shape relationship between political corruption and cash holdings; however, in frontier and emerging countries, there is an Inverted-U-shape relationship. These results show that two hypothesis 'Expropriation Shielding hypothesis' and 'Preoccupancy hypothesis' on previous literature are not conflicting, but can be explained differently according to the level of development of countries and the level of political corruption. In addition, we find that the effects of political corruption on firm performance when firms use cash are different in developed and developing countries. From these results, we suggest that political corruption is an important variable in corporate financial policy and firm performance.

**"Pricing of Cryptocurrency Use of Deep Learning and Recurrent Neural Networks technology-Application to Bitcoin, Ethereum and Litecoin – Empirical Evidence"**

Malick Sy - RMIT University, Australia

Sam Morris - RMIT University, Australia

*Discussant:* Stephan Kranner - Vienna University of Economics and Business, Austria

The cryptocurrency market has become increasingly accessible and significant to the financial markets. This is understood by not only major financial firms, governments, and investors, but also the individual market participants globally. We delve into the history of cryptocurrency to begin our examination of the Bitcoin, Ethereum and Litecoin. Understanding the circumstances of their humble beginning, the purpose it served, and the path of their evolution, helps us to create a fuller understanding of its functions, its

limitations, and the drivers to its value. We identify a robust approach in pricing and product offerings associated with Bitcoin, Ethereum and Litecoin. In order to fully capture the volume, variety, and velocity of data associated with these cryptocurrency, the adoption of machine learning provides an advantageous approach to model development for cryptocurrencies pricing. This paper provides the development of a promising initial prototype pricing model for Bitcoin, Ethereum and Litecoin. Our proposed pricing models resulted an average 7% difference between actual and predicted price for Bitcoin and Ethereum, and a 4% difference for Litecoin along a time line, through the use of machine learning and deep learning, artificial neural networks. However with the inclusion of sentiment market data into the model, along with larger datasets the accuracy of the model will be further increased.

**SESSION 54**

**Tuesday 2:15 - 4:00 p.m.**

**Lehár III**

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**PORTFOLIO MANAGEMENT III**

*Session Chair:* Edgar Ortiz - Universidad Nacional Autónoma de México, Mexico

**"Global Portfolio Rebalancing and Exchange Rates"**

Nelson Camanho - UCP - Catolica Lisbon School of Business & Economics, Portugal

Harald Hau - University of Geneva, Switzerland

Helene Rey - London Business School, UK

*Discussant:* Jordan Moore - Rowan University, USA

We examine international equity allocations at the fund level and show how different returns on the foreign and domestic proportion of portfolios determine rebalancing behavior and trigger capital flows. We document the heterogeneity of rebalancing across fund types, its greater intensity under higher exchange rate volatility, and the exchange rate effect of such rebalancing. The observed dynamics of equity returns, exchange rates, and fund-level capital flows are compatible with a model of incomplete FX risk trading in which exchange rate risk partially segments international equity markets.

**"Optimal Investment Management for Prospect Theory Investors"**

Jordan Moore - Rowan University, USA

*Discussant:* Lawrence Kryzanowski - Concordia University, Canada

How should an investment manager allocate her client's contributions throughout the year? How should she allocate her own management fees throughout the year? I evaluate the answers to these problems under two important assumptions. First, her client has prospect theory preferences over account gains and losses. Second, he measures gains and losses as changes in his account balance including contributions and fees. The optimal strategy for allocating contributions is to try to offset small portfolio losses. The optimal strategy for allocating fees is to try to reduce large portfolio gains. I compare the optimal strategies to "naive" strategies that allocate contributions or charge fees equally every quarter or month. The client is indifferent between contributing 1.4% to 1.6% allocated naively and contributing 1% allocated optimally. The client is indifferent between paying fees of only 0.58% to 0.70% assessed naively and paying fees of 1% assessed optimally. Managers can use behavioral insights to structure contributions and fees to increase their own earnings and still make their clients happier.

**"Currency Hedging of International Bond Portfolios: Effects of Unconventional Monetary Policy Regimes"**

Lawrence Kryzanowski - Concordia University, Canada

Jie Zhang - Trent University, Canada

Rui Zhong - Central University of Finance and Economics, China

*Discussant:* Arie Gozluklu - University of Warwick, UK

This paper examines the effectiveness and performance (E&P) of hedging international portfolios of bonds from developed and emerging countries. The excess returns and the variances of these portfolios are significantly lower during the QE versus pre-QE period. During the QE period, excess return and variance sensitivities are positive and negative with the Fed's MBS holdings and become less positive and less negative with the Fed's holdings of Treasuries. Hedging E&P during the QE depends on the chosen hedging strategy and level of economic development. Results are robust using other hedging E&P measures and excluding countries with their own QEs.

### **"Life-cycle Asset Allocation of Ambiguity Averse Investor: Habit Formation and Term Life Insurance"**

Zhezhi Hu - University of Warwick, UK

Nalan Gulpinar - University of Warwick, UK

Arie Gozluclu - University of Warwick, UK

*Discussant:* Nelson Camanho - UCP - Catolica Lisbon School of Business & Economics, Portugal

This paper studies a life-cycle consumption and asset allocation problem introducing habit formation preferences, bequest motive and demand for term life insurance. We model an investor is not only risk-averse but also averse to ambiguity about stock returns in a max-min expected utility framework. Our key findings are, but not limited to: (i) fraction of wealth allocated in stocks is negatively correlated with the degree of ambiguity aversion and follows a hump-shaped profile over the life cycle, (ii) the demand for term life insurance increases with ambiguity aversion while it decreases substantially with higher degrees of habit formation. Other features of the model such as subjective survival belief and borrowing option also affect investor's decisions in interesting ways.

## **SESSION 55**

**Tuesday 2:15 - 4:00 p.m.**

**Brahms I**

### **CORPORATE FINANCE II**

*Session Chair:* Simon Sosvilla-Rivero - Universidad Complutense de Madrid, Spain

### **"Financial Conservative Companies as a Countercyclical Buffer for Job Creation"**

Myriam Hernández-Robles - Universidad Politecnica de Cartagena, Spain

F. Javier Sanchez-Vidal - Universidad Politecnica de Cartagena, Spain

*Discussant:* Jorge Mota - University of Aveiro, Portugal

This article aims to analyse the phenomenon of financial conservatism in firms' capital structures and relate it to their employment variation for a sample of Spanish companies during the 2008-2013 period. Financial conservatism is described as following a low-leverage/high cash no-short-term capital structure policy. We use Jovanovic's model (1982) that relates growth, age, and size, to which we add a dummy indicating financial conservatism. As the growth of a company is measured as its number of employees' variation, we are ultimately analyzing how financial conservatism affects job creation. Evidence shows that a financially conservative policy at a given company is a positive factor for job creation.

### **"Does Diversification Affects the Efficiency of Firms' Financing? Evidence from the Euro Area"**

Jorge Mota - University of Aveiro, Portugal

Mário Coutinho Dos Santos - Catholic University of Portugal, Portugal

*Discussant:* John Hall - University of Pretoria, South Africa

This paper investigates the efficiency of the financing behavior of firms from the euro area over the 2004–2013 period, using data drawn from Amadeus database for two subsamples of 773 firms each, in a total of 15,460 testable firm-years. Using a dynamic panel data econometric regression, we find that firms operating within an active internal capital market (ICM) exhibits, on average, lower costs of capital

than their comparable stand-alone peers. Additionally, we document that total debt ratios are significantly higher for ICM firms than for stand-alones, and that both ICM and stand-alone firms tend to have a preferred target leverage ratio. Regression results, using bias-corrected estimators, provide evidence that business group subsidiaries adjust dynamically their financial leverage ratios towards their preferred targets, at a speed equivalent to that of their comparable standalones. These findings are consistent with the view that that ICM membership is linked to information and agency problems, lowering ICM participants' cost of capital, having target leverage ratios, and adjusting their capital structures similarly to their stand-alone peers.

### **"Shareholder Value Creation Measures: Evidence From a Developing Economy"**

John Hall - University of Pretoria, South Africa

*Discussant:* Matthew Wynter - University of Illinois at Chicago, USA

This study aimed to compare the shareholder value creation measures used in developed countries, as opposed to developing countries, and to identify the shareholder value creation measure and value drivers (with time lag adjustments) best suited to express shareholder value creation for a particular industry in a developing economy. The analysis was performed on 192 companies listed on the Johannesburg Stock Exchange, classified into nine different samples or industries. Four shareholder value creation measures were examined, namely market value added, the market to book ratio, Tobin's Q ratio and the return on capital employed divided by cost of equity. Time lags were applied to the variables. It was found that there were no differences between developed and developing countries' use of shareholder value creation measures, but that there were differences in the number and types of variables that drive or explain shareholder value creation. Analysis on the data of a developing country, South Africa, indicates that depending on the specific industry, Tobin's Q ratio, market value added and the market-to-book ratio are the best measures to use to express and measure value creation. For management, the value drivers identified for each industry present a clear indication of industry-specific variables on which it can concentrate in its operating activities to increase shareholder value most efficiently.

### **"Does Frugality Influence Firm Behavior? Evidence from Natural Disasters"**

Matthew Wynter - University of Illinois at Chicago, USA

*Discussant:* F. Javier Sanchez-Vidal - Universidad Politecnica de Cartagena, Spain

Across 42 countries, I show that nonfinancial firms in more frugal countries tend to have shorter debt maturity, and when large natural disasters occur, they raise debt with a much shorter maturity structure and smaller amounts of equity. Additionally, firms in more frugal countries are more likely to tap global capital markets the year after the disasters, not before. Lastly, while firms in thriftier countries reduce corporate investments at higher rates when disasters occur, those that have foreign assets and foreign income do not, as would be expected if residents' frugality can intensify frictions on firms' local capital supply.

**SESSION 56**

**Tuesday 2:15 - 4:00 p.m.**

**Brahms II**

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### **ACCOUNTING ISSUES I**

*Session Chair:* Anthony Yanxiang Gu - State University of New York, USA

### **"Analysing the Relation Between Aggregate Stock Returns and Aggregate Earnings"**

Dimitrios Gounopoulos - University of Bath, UK

Dimitrios Kousenidis - Aristotle University of Thessaloniki, Greece

Anestis Ladas - University of Macedonia, Greece

Christos Negkakakis - University of Macedonia, Greece

*Discussant:* Michael Tang - New York University, USA

Previous studies have long established the positive relation between earnings and stock returns. However, recent evidence in the aggregate level point towards a negative relation between the two aggregate counterparts. A number of studies during the last years attempted to provide explanations of this puzzle and offered a number of different approaches among which was the relation of aggregate stock returns and aggregate earnings with inflation, as well as the relation of aggregate earnings with the components of stock returns. In this study we attempt to provide further evidence by examining the idiosyncratic and systemic components in the two variables. In this respect, the analysis attempts to reconcile the previous evidence and provide new insights in the relation between aggregate earnings and aggregate stock returns.

### **"Asymmetric Timely Loss Recognition and Insider Trading Profitability"**

Michael Tang - New York University, USA

Hua (Christine) Xin - University of Louisville, USA

*Discussant:* Vasileios Zisis - University of Piraeus, Greece

We provide evidence that the profitability of corporate insiders' trading decreases in the degree of asymmetric timely loss recognition (TLR) of their firms' financial reporting. Consistent with TLR reducing insiders' information advantages over outside shareholders about future negative news about the firm, we find that the reduced insider trading profitability is mainly driven by: (a) stock sales, as opposed to purchases; (b) the price change component of trading, as opposed to its volume; and (c) insiders' non-routine trades, as opposed to less information-driven routine trades. Although CEOs/CFOs are more likely to influence TLR, the effect is more pronounced for non-CEO/CFO insiders, inconsistent with reverse causality. Our findings suggest that TLR reduces managers' abilities to extract rents from investors via insider trading, thus upholding the integrity of capital markets.

### **"A Note on Sticky Cost Phenomenon: The Determinants of Cost Asymmetry in an Industry with "Sticky" Activity Level"**

Vasileios Naoum - University of Piraeus, Greece

Vasileios Zisis - University of Piraeus, Greece

*Discussant:* Begoña Gutiérrez-Nieto - Universidad de Zaragoza, Spain

The present study investigates the cost behavior in the renewable energy production sector and attempts to explore the sticky cost theory under a distinctive research design. The unique business setting of our study is based on the adoption of the feed in tariff policy that is a worldwide accepted policy in the renewable energy production sector. The data sample includes available data for Greek renewable energy firms and covers the time period from 2005 to 2014. We explore the premise of sticky cost behavior for different types of costs that are subject to managerial discretion, including operating expenses and cost of goods sold. Our empirical evidence suggests that, in contrast to common manufacturing firms, there is a symmetric relation between costs and activity volume in the renewable energy production sector under the feed in tariff policy. Our study contributes to accounting literature by expanding our understanding of how managerial deliberate decisions are influenced by specific industry characteristics. Finally, our results might have policy implications in the energy sector and for energy dependent countries given the systematic effect on the symmetric relationship between revenues and costs for regulated energy producers.

### **"20 Years of Research in Microfinance: A Scientometric Approach"**

Begoña Gutiérrez-Nieto - Universidad de Zaragoza, Spain

Carlos Serrano-Cinca - Universidad de Zaragoza, Spain

Beatriz Cuéllar-Fernández - Universidad de Zaragoza, Spain

Yolanda Fuertes-Callén - Universidad de Zaragoza, Spain

*Discussant:* Luc Paugam - HEC Paris, France

In the last 20 years microfinance has moved from a mere promise to reality, although with lights and shadows. This paper reviews 1,395 papers published from 1997 to 2017. The literature review is based on bibliometric data: keyword co-occurrence networks and citation networks were exploited for knowledge mapping. Data analysis shows the two research traditions: those papers focusing on clients or welfarists, facing those papers focusing on microfinance entities themselves or institutionalists. Other papers do not belong to these categories; many of them analyze general aspects of microcredit, following a theoretical approach. Institutionalism has surpassed welfarism, both in number of papers and in impact, measured by the number of received citations. A chronological analysis reveals the evolution of the topics most interesting for researchers: a first stage described the methodological innovations of the microcredit practices and its impact; the second and very expansive stage where aspects such as microfinance institutions peculiarities were analyzed; and the current stage, normalizing the sector, but with negative aspects arising, such as mission drift. The keywords' analysis discovers emerging research topics like Islamic finance, shows the use of sophisticated techniques such as randomized trials for impact studies and panel data to analyze the institutions, and recognizes an emerging trend of the sector: to achieve financial inclusion.

**Refreshments**                      **4:00 - 4:15 p.m.**

**SESSION 57**                                      **Tuesday 4:15 - 6:00 p.m.**                                      **Liszt I**

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### **MARKET ANOMALIES**

*Session Chair:* Elyas Elyasiani - Temple University, USA

#### **"Unexploited Currency Carry Trade Profit Opportunity"**

Sangwon Suh - Chung-Ang University, Korea, Republic of

*Discussant:* Francisco Santos - Norwegian School of Economics, Norway

In this paper, we find a significant amount of profit opportunities unexploited by conventional currency carry trade strategies. This finding implies that the uncovered interest parity fails to a greater extent than the conventional carry trade suggests. To find the unexploited profit opportunities, we propose a new currency carry trade strategy to exploit differential predictive capacity of forward discounts on future currency excess returns. We also find that emerging market currencies provide relatively large profit opportunities. While both strategies show decreasing carry trade profits as FX markets get volatile, the relative outperformance of the new carry trade strategy tends to be found in stable periods but disappears in volatile periods. The superiority of the new method relative to the conventional one is robust to various specification changes.

#### **"The Effect of Arbitrage Activity in Low Idiosyncratic Volatility Strategies"**

Francisco Santos - Norwegian School of Economics, Norway

Christian Tjaum - Norwegian School of Economics, Norway

Simen Wiedswang - Norwegian School of Economics, Norway

*Discussant:* Esad Smajlbegovic - Erasmus University Rotterdam, Netherlands

In this paper, we create a measure of arbitrage activity for the idiosyncratic volatility strategy, which goes long in stocks with low idiosyncratic- and short stocks with high idiosyncratic volatility. We use this to examine the implications and effects arbitrageurs have on prices. Our findings indicate that abnormal returns to the idiosyncratic volatility strategy, conditional on the arbitrage activity, are decreasing with time and activity. More specifically, we find that when activity is at its lowest, we achieve an average alpha of 1.71% per month for the first six months after portfolio formation. This alpha decreases monotonically with activity, and eventually becomes insignificant when arbitrage activity peaks. We conclude that arbitrageurs exploiting the idiosyncratic volatility anomaly have a stabilizing effect on prices.

## **"Dissecting Short-Sale Performance: Evidence from Large Position Disclosures"**

Stephan Jank - Deutsche Bundesbank, Germany

Esad Smajlbegovic - Erasmus University Rotterdam, Netherlands

*Discussant:* Sangwon Suh - Chung-Ang University, Korea, Republic of

Short sellers are perceived as informed, sophisticated investors. Yet little is known about their identity and the determinants of their performance. Using novel data of daily disclosures in Europe, we identify large short positions of individual institutions and study their performance. Hedge funds, the predominant short sellers, receive on average an annualized Fama-French risk-adjusted return of about 5.5%. Although this return is explained by trading on mispricing-related factors, there is considerable variation across funds. Local, diversified, and active funds outperform other funds. We also document a first-mover advantage and an outperformance related to investment horizon and industry experience.

**SESSION 58**

**Tuesday 4:15 - 6:00 p.m.**

**Liszt II**

### **OWNERSHIP**

*Session Chair:* Miriam Sosa Castro - Universidad Nacional Autónoma de México, Mexico

#### **"Insider Pledging: Its Information Content and Forced Sale"**

Hung-Kun Chen - Tamkang University, Taiwan

Shing-yang Hu - National Taiwan University, Taiwan

*Discussant:* François Belot - Université de Cergy-Pontoise, France

This paper examines the information content of insider pledging and forced sale of insider shares due to pledging. Given many proxy advisers and public media have offered a caution on insider pledging and even suggested to prohibit such practice, we provide the opposite evidence using the US data. First, we find that the announcement of insider pledging has no significant impact on shareholders wealth. There is even opposite results that the one-year abnormal stock returns after the disclosure is positive. Our results still hold when we control for many asset pricing factors and firm-specific risk. Second, the stock price does not drop significantly after the forced sale of pledged shares, suggesting that the forced sale does not create a downside risk for shareholders. In short, our results suggest that the practices of insider pledging is not harmful to shareholder values in the US.

#### **"Family Control, Stock Price Levels, and Stock Split Activity"**

François Belot - Université de Cergy-Pontoise, France

Timothée Waxin - Federation Bancaire Française, France

*Discussant:* Ran Zhang - University of Edinburgh Business School, UK

We investigate the impact of family control on both the share price level and the decision to split the firm's stock. Low stock prices are associated with higher volatility and have been shown to attract more speculative trading, which may force managers to excessively focus on short-term earnings. Moreover, a reduction in the stock price level is often associated with a loss of prestige. We hypothesize that family owners, who are typically long-term investors and are especially concerned about corporate reputation, prefer to set higher stock prices to mitigate short-termism, focus on long-term planning, and reinforce the firm's prestige. Using a comprehensive sample of firms in the Société des Bourses Françaises (SBF) 120 Index from 1998 to 2016, we find a positive correlation between share prices and family control. Our investigations also indicate that family firms are less likely to conduct price reductions through stock splits. These findings suggest that a high stock price is a distinctive feature of family firms and that family owners have a specific norm in mind with respect to prices.

### **"Ownership Links and Return Predictability"**

Ran Zhang - University of Edinburgh Business School, UK

Angelica Gonzalez - University of Edinburgh, UK

*Discussant:* Yilmaz Yildiz - Hacettepe University, Turkey

We investigate the return predictability between subsidiaries and their parent firms by using an international sample of parent firms with complex ownership structures from 23 developed markets. We find that portfolio returns of the ownership-weighted subsidiaries can significantly predict the future returns of a parent firm. Specifically, a simple long/short portfolio strategy for a global sample sorted by lagged monthly returns of subsidiaries yields an abnormal return of 142 basis points per month. We find that subsidiaries' diversity, subsidiaries' importance, limits to arbitrage, and investors' limited attention may be mechanisms and reasons for the underreaction of parent firm returns to subsidiaries' returns.

### **"Is Conservative Reporting Attractive to Foreign Institutional Investors? Evidence from an Emerging Market"**

Mehmet Karan - Hacettepe University, Turkey

Aydin Ozkan - University of Bradford, UK

Yilmaz Yildiz - Hacettepe University, Turkey

*Discussant:* Shing-yang Hu - National Taiwan University, Taiwan

This study, using a unique dataset of firms in Turkey, investigates the relation between conservative reporting and the corporate ownership of foreign institutional investors. In doing so, we distinguish between foreign funds and corporations. Contrary to prior findings, our analysis shows that conservative reporting is not necessarily a desirable accounting feature for foreign investors. It exerts a significant negative effect on foreign institutional ownership. Importantly, we also find that the interplay between conservative reporting and ownership is significantly different between foreign funds and corporations. Specifically, the estimated negative relation holds only for foreign funds, while foreign corporations are indifferent to the degree of conservative reporting. More interestingly, further analysis reveals that foreign funds are also insensitive to accounting conservatism in high-asymmetric information firms and reduce their ownership in low-asymmetric information firms if such firms adopt conservative reporting practices. The findings are not only important to understand better the factors that influence the investment decisions of foreign institutional investors in emerging markets. They also shed significant lights on the relevance of conservative reporting in alleviating the negative investment consequences of asymmetric information.

**SESSION 59**

**Tuesday 4:15 - 6:00 p.m.**

**Liszt III**

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### **CAPITAL BUDGETING**

*Session Chair:* Young Kim - Northern Kentucky University, USA

### **"Does Supplier Financing Ease Capital Allocation Inefficiencies?"**

Amandeep Sahota - University of Strathclyde, UK

*Discussant:* Ryosuke Fujitani - Hitotsubashi University, Japan

In this paper, we ask the following question: does trade credit affect efficiency of internal capital markets? Using firm- and segment-level data from the UK over the period 1985-2015 we report three key findings consistent with the hypothesis that trade credit, to a certain extent, provide better monitoring and stable access to resources: (i) investment policies of focused firms become more efficient when supplier financing increases, (ii) efficiency of internal capital market within multi-segment firms decreases when supplier financing increases and (iii) we find extending credit to other firms has no effect on issuing firms' internal capital market, and (iv) diversified firms use more supplier financing (as well as extend more credit) than focused firms.

## **"Stock Market Listing, Investment, and Business Groups: How Firm Structure Impacts Investment?"**

Joseph French - University of Northern Colorado, USA

Ryosuke Fujitani - Hitotsubashi University, Japan

Yukihiro Yasuda - Hitotsubashi University, Japan

*Discussant:* Wenrui Zhang - Chinese University of Hong Kong, Hong Kong

We investigate the effects of stock market listing on the investment decisions of Japanese business groups and standalone firms. We find that unlisted parents of business groups invest more than their public counterparts. This result suggests that short-term market pressures exerted on public firms leads them to underinvest relative to comparable private firms. However, further analysis suggests a more nuanced investment listing relationship. Results using a subsample of standalone firms demonstrate that public standalone firms invest more and are more sensitive to investment opportunities than private firms. These findings suggest that listing relaxes the financing constraint and allows for greater investment and investment sensitivity for listed standalone firms compared to unlisted independent firms. Finally, we show for all firms that higher levels of ownership by directors or financial institutions facilitates greater investment.

## **"Stock Market Liberalization and Innovation"**

Fariborz Moshirian - UNSW Australia, Australia

Xuan Tian - Tsinghua University, China

Bohui Zhang - UNSW Australia, Australia

Wenrui Zhang - Chinese University of Hong Kong, Hong Kong

*Discussant:* Mehmet Karan - Hacettepe University, Turkey

We investigate the impact of stock market liberalization on technological innovation. Using a sample of 20 developed and emerging economies that experience stock market liberalization between 1981 and 2008, we find that these economies exhibit a higher level of innovation output after liberalization, and this effect is disproportionately stronger in more innovative industries. The financing channel and the risk-sharing channel are the plausible mechanisms through which stock market liberalization promotes innovation. However, we do not find support for the corporate governance channel. Our paper provides new insights into the real effects of stock market liberalization on the economy and growth.

## **"The Impact of Financial Leverage on Investment Decisions: Evidence from Developed and Emerging Markets"**

Tugba Akca - Hacettepe University, Turkey

Mehmet Karan - Hacettepe University, Turkey

*Discussant:* Amandeep Sahota - University of Strathclyde, UK

The aim of this study is to examine the effect of financial leverage on investment decisions of companies in developed and emerging countries. Data of the companies that traded in the stock markets of five developed countries including USA, Germany, France, Britain and Japan and six developing countries including Brazil, India, South Africa, Indonesia, China and Turkey between the years 2005- 2015 are evaluated. The impact of borrowing, cash flow, sales and Tobin Q ratio values on investment decisions was mainly analyzed by panel data analysis and two-step least squares method. Although, findings differ from country to country, it is observed that leverage has negative effect on investment. In contrast to developed countries where the effect is very high, in developing countries, observed effect is low. In developed countries, the investment decision is boosted by the sales variable in positive direction, whereas in developing countries, this boost is provided from the cash flow variable. In companies with low growth potential, the negative impact of financial leverage is stronger than that of companies with high growth potential.

**VOLATILITY**

*Session Chair:* Doseong Kim - Sogang University, Korea, Republic of

**"Systemic Risk with Multiple Horizon Extreme Value: Evidence from Carry-Trade and Stock Markets"**

Hsin-Feng Yang - Far East University, Taiwan

Ray Chou - Academia Sinica, Taiwan

Hsian-Ming Liu - National Defense University, Taiwan

*Discussant:* Stefan Lyócsa - University of Economics, Slovakia

In this paper, we exploit extreme asset prices (high–low ranges) on multiple horizons and use a conditional value-at-risk (CoVaR) model to evaluate the degree of risk contagion between stock markets and carry-trade markets. We associate the systemic risk of a financial market with conditions in related markets during periods of crisis. The model can be empirically applied to diversified portfolio strategies, but the systemic risk involved is conditional on closely related financial markets. Most notably, our evidence shows that this propagating effect was significant during the 2000–2001 dot-com bubble and 2007–2009 global financial crisis periods. Moreover, the CoVaR value is shown to be a strong alternative indicator of risk management and asset allocation, especially for investments in carry-trade and stock markets.

**"Exploiting Intraday Highs and Lows: Asymmetric Volatility Effect and Volatility Forecasts"**

Jozef Kyselak - Institute of Mathematics, Slovakia

Stefan Lyócsa - University of Economics, Slovakia

Neda Todorova - Griffith University, Australia

Tomas Vyrost - University of Economics in Bratislava, Slovakia

*Discussant:* Hilal Butt - Institute of Business Administration, Pakistan

We introduce a new class of volatility estimators: The upside volatility estimator which is the sum of squared returns between high and closing prices of intraday periods, and the downside volatility estimator, based on the sum of squared returns between low and closing values. Both estimators are shown to be consistent and are at least as efficient as the usually employed realized volatility. An in-sample empirical study of 86 current S&P 100 constituents uncovers that these estimators successfully identify asymmetric volatility effects. In-sample results materialize also in an out-of-sample framework. Further on, we find that the dynamics captured by upside and downside volatility estimators can be used to create combination forecasts that outperform the reference model in over 90% of stocks for all forecast horizons. Finally, our findings shows that upside and downside volatility estimators are parsimonious and easy to use new estimators that are a viable alternative to existing realized volatility even in an asset allocation problem.

**"Investment Horizon Related Momentum in Volatility Scaled Momentum Strategies"**

Hilal Butt - Institute of Business Administration, Pakistan

Mohsin Sadaqat - National University of Sciences and Technology Islamabad, Pakistan

*Discussant:* Brice Dupoyet - Florida International University, USA

This study highlights two important aspects of the relationship between volatility and returns of the momentum strategy and then links this relationship with the performance of the volatility scaled momentum strategies. For instance, we find that the negative relationship between volatility and returns only exists across extreme volatile states of momentum strategy, further there is strong persistence in these volatility related states. Both of these effects links the increase in Sharpe ratios and alphas of the volatility scaled momentum strategies over traditional momentum strategy with the length of the investment horizons. We also find that the excess returns on the volatility scaled momentum strategies

are strongly associated with the excess variance loaded on winner side of these strategies.

### **"A Dimension-invariant Cascade Model for VIX Futures"**

Zhiguang Wang - South Dakota State University, USA

Brice Dupoyet - Florida International University, USA

*Discussant:* Ray Chou - Academia Sinica, Taiwan

We propose a new model of volatility by allowing for a cascading structure of volatility components. The cascading feature is achieved by introducing an increasing structure to the speed of mean reversion. It allows us to add as many components as desired with no additional parameter, effectively defeating the curse of dimensionality often seen in traditional models. The flexibility in choosing the number of components enables rich dynamics in the term structure of both spot VIX and VIX futures, without the need to introduce price jumps. We derive a semi-closed form solution to the VIX futures price, and that our 6-factor model with only 6 parameters can closely fit spot VIX and VIX futures data from 2004 to 2015 and produce out of sample pricing errors of magnitudes similar to those of in-sample errors.

**SESSION 61**

**Tuesday 4:15 - 6:00 p.m.**

**Lehár II**

### **FINANCIAL CRISIS**

*Session Chair:* Lung-Fu Chang - National Taipei University of Business, Taiwan

### **"Subprime and Eurozone Crisis Contagion to the Latin American Stock Markets: Modeling with Fractals and Copula Analysis"**

Romina Moreno-Maldonado - Universidad Nacional Autónoma de México, Mexico

Edgar Ortiz - Universidad Nacional Autónoma de México, Mexico

Alejandra Cabello - Universidad Nacional Autónoma de México, Mexico

*Discussant:* Crysanthi Balomenou - Epoka University, Greece

This paper examines financial contagion between developed markets and emerging markets using stock market indices of the following countries: Germany (DAX), Spain (IBEX 35), U.S.A. (S & P500), France (CAC 40), England (FTSE 100), Argentina (MERVAL), Brazil (BOVESPA), Chile (IPSA), Mexico (IPC) and Peru (IGBVL). Dependency changes from 2004 to 2015 is analyzed. In order to detect the contagion effect before, during and after the 2007-2008 crisis, first of all, a multifractal model is applied to estimate the volatility for each market and transform returns into a normal distribution (0,1) by the integral probability of transformation. Finally, to test the effect of contagion, the theory and methodology of copulas are used to analyze the variation in dependence of the tail between the afore mentioned stock markets.

### **"Intraregional Comparison Analysis Between Start Ups and Existing Firms that are Benefited from National Strategic Reference Framework Program: A Case Study of R.U. Serres, Greece"**

Crysanthi Balomenou - Epoka University, Greece

Marianthi Maliari - Hellenic Open University, Greece

Simeon Semasis - Hellenic Open University, Greece

*Discussant:* Simon Sosvilla-Rivero - Universidad Complutense de Madrid, Spain

At the remains (?) of crisis, on February 2016, Hellenic Republic Ministry of Economy & Development in order to support entrepreneurship announced the Operational Program Competitiveness, Entrepreneurship and Innovation 2014-2020. This work mainly focuses on a thorough investigation of the influence of the National Strategic Reference Programs on Regional Unity of Serres-the poorest at NUT3 Level-Regional Unity in Greece. Furthermore taking under consideration the fact that only a few start ups enterprises will benefit from NSRF Programs, the main aim of our paper is to compare the

different categories of the eligible firms (start ups and existing firms) of R.U. of Serres, in order to calculate whether there are equally or not supported by this program. In such an adverse macroeconomic environment, downturn in Greece strongly affected entrepreneurship. Reverberations of crisis on local enterprises are enormous as 30% of local enterprises have closed during this “great depression”. Our empirical research relies upon a formalized questionnaire. It is conducted in December 2017. All the local enterprises that are eligible and potentially eligible on two NSRF Programs were participated in this research. The used methodology is the calculation of the main descriptive statistical measures Our main finding is that the existing firms have better access to funding than the new ones, as start ups confront more obstacles due to uncertainty.

### **"Incorporating Creditors' Seniority in Contingent Claim Models: Application to Peripheral Euro-Area Countries"**

Marta Gómez-Puig - Universitat de Barcelona, Spain

Manish Singn - Universitat de Barcelona, Spain

Simon Sosvilla-Rivero - Universidad Complutense de Madrid, Spain

*Discussant:* Anthony Yanxiang Gu - State University of New York, USA

This paper highlights the role of multilateral creditors (i.e., the ECB, IMF, ESM etc.) and their preferred creditor status in explaining the sovereign default risk of peripheral euro area (EA) countries. Incorporating lessons from sovereign debt crises in general, and from the Greek debt restructuring in particular, we define the priority structure of sovereigns' creditors that is most relevant for peripheral EA countries in severe crisis episodes. This new priority structure of creditors, together with the contingent claims methodology, is then used to derive a set of sovereign credit risk indicators. In particular, the sovereign distance-to-default indicator, proposed in this paper (which includes both accounting metrics and market-based measures) aims to isolate sovereign credit risk by using information from the public sector balance sheets to build it up. Analyzing and comparing it with traditional market-based measures of sovereign risk suggests that the measurement and predictive ability of credit risk measures can be vastly improved if we account for the changing composition of sovereigns' balance sheet risk based on creditors' seniority.

### **"Dynamic Unemployment along Recessions and Recoveries: The U.S. Experience 1968 – 2015"**

Anthony Yanxiang Gu - State University of New York, USA

Christopher Annala - State University of New York, USA

*Discussant:* Edgar Ortiz - Universidad Nacional Autónoma de México, Mexico

This research examines the dynamics of the unemployment rate and jobless recoveries in The United States. We find that GDP, productivity, and inflation are positively related to employment recovery and real wage growth has a negative impact on employment recovery. A low inflation rate is a major factor associated with lengthened recoveries. The unemployment rate is significantly negatively related with productivity, real wage, and lagged GDP growth. Rising imports as a percentage of GDP put upward pressure on the unemployment rate. We find that unknown and unmeasurable factors associated with recessions are positively related to the unemployment rate.

**MARKET MICROSTRUCTURE**

*Session Chair:* Petko Kalev - La Trobe University, Australia

**"A Microstructure Study of Circuit Breakers in the Chinese Stock Markets"**

Shuye Wang - Renmin University of China, China

Kuan Xu - Dalhousie University, Canada

Hao Zhang - University of Victoria, Canada

*Discussant:* Cagdas Tahaoglu - Concordia University, Canada

Based on recent rare policy changes, we study how circuit breakers in the presence of price limits affect market microstructure and test whether the magnet effect exists in a falling stock market. We use both two-sample tests and significance tests in the system of equations for market microstructure and intraday data. We find that the implementation of market-wide circuit breakers induces the magnet effect with falling stock returns, increased volatility, higher bid-ask spreads, significant quote imbalances, and changed traders' behaviors in terms of trades of various sizes. The magnet effect is not pronounced for triggering individual stock price limits.

**"Effects of the Single Stock Circuit Breaker on the Stock Market: Canadian Evidence"**

Lorne Switzer - Concordia University, Canada

Cagdas Tahaoglu - Concordia University, Canada

*Discussant:* Guzhan Gulay - Borsa Istanbul, Turkey

This study looks at the effects of regulatory changes in which restrictions on short sales on stocks with declining prices are replaced by circuit breakers that are triggered when individual stocks experience large upside or downside movements. The focus is on all stocks traded on the Toronto Stock Exchange since the inception of the single stock circuit breaker rule in February 2012. The results reject the delayed price discovery hypothesis since the material information that caused the circuit breaker induced trading halt is incorporated in stock prices at the time of the halt. We find that with the exception of implied volatility, intraday volatility measures decline for stocks affected by the circuit breaker. This volatility decline is not associated with reduced market liquidity, however.

**"Does Tick Size Really Matter? Regression Discontinuity - Evidence on Market Quality"**

Yasar Ersan - Borsa Istanbul, Turkey

Guzhan Gulay - Borsa Istanbul, Turkey

*Discussant:* Joshgun Mehdiyev - University of Essex, UK

The role of tick size regime on market quality has not been systematically examined in a quasi-random methodology in the literature. In order to fill this gap in the literature we run a regression discontinuity design via exploiting a regulatory rule in Borsa Istanbul. Using unique BIST order level data, we show that a larger tick size leads to wider spread and relative spread. Similarly, wider tick size increases the aggregate depth and the depth at best bid offer. Moreover an increase in tick size increases volatility of the price of a stock. Finally, there is no evidence that tick size has an impact on trading volume and turnover.

**"Does Investor Sentiment Forecast the Stock Market Liquidity?"**

Neil Kellard - University of Essex, UK

Chiara Banti - University of Essex, UK

Joshgun Mehdiyev - University of Essex, UK

*Discussant:* Shuye Wang - Renmin University of China, China

Previous findings suggest that investor sentiment is linked to market liquidity with direct volume channels as well as indirect behavioural channels. In this paper, we assess whether investor sentiment has the power to forecast the stock market liquidity. We adopt Amihud (2002) for the price-impact measure, bid-ask spread for the transaction cost measure of liquidity. In the meantime, we use the individual investor sentiment spread and the Baker and Wurgler (2006) sentiment index for the measurements of investor sentiment. By applying NYSE stocks from 1994 to 2015 over the weekly and monthly estimations, we find investor sentiment as a statistically and economically significant predictor of the stock market liquidity. Investor sentiment may become a useful indicator to forecast the NYSE liquidity 1-4 steps ahead for the weekly, 1-2 steps ahead for the monthly forecasts. However, the results are found to be more significant and robust in the weekly than monthly estimations. Moreover, the sentiment survey spread is able to forecast the NYSE liquidity better than the sentiment index.

**SESSION 63**

**Tuesday 4:15 - 6:00 p.m.**

**Brahms I**

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**CORPORATE FINANCE III**

*Session Chair:* Song-Zan Chiou-Wei - National Kaohsiung University of Science and Technology, Taiwan

**"Social Capital as a Hedging Tool: The Relation Between CEO Risk-Related Incentives and Corporate Social Responsibility"**

Kyumin Cho - Korea Advanced Institute of Science and Technology, Korea, Republic of  
Hyeong Joon Kim - Korea Advanced Institute of Science and Technology, Korea, Republic of  
Seung Hun Han - Korea Advanced Institute of Science and Technology, Korea, Republic of

*Discussant:* Milos Vulanovic - EDHEC Business School, France

This study examines the relationship between managerial compensation incentives and firm corporate social responsibility (CSR). We follow Hayes et al. (2012) to address potential endogeneity using the implementation of FAS 123R, representing an exogenous change that affects managerial incentives. We find that CEOs with higher CEO pay-performance sensitivity (delta) and inside debt holding (CEO relative leverage) have positive effect to firm's socially responsible activities. In addition, our results show that sensitivity of CEO wealth to stock volatility (vega and total sensitivity) have no impacts on CSR performance. Overall, our empirical evidence suggest that risk averse CEOs prefer less risky corporate policies and long-term investments in social activities, leading to better CSR performance.

**"Serial Entrepreneurs: Evidence from SPACs"**

Milos Vulanovic - EDHEC Business School, France

*Discussant:* Robert Mathieu - Wilfrid Laurier University, Canada

This study examines whether the previous entrepreneurial experience of founders contributes to improved overall performance using a sample of Specified Purpose Acquisition Companies (SPACs) fairly innovative entities that entered the U.S. financial markets since August 2003. Based on subsample analysis, evidence shows that previous experience has important positive implications only for some within sample companies, but in overall they hardly outperform SPACs founded by novice managers.

**"Independent Directors, Business Risk and the Informativeness of Accounting Earnings for Debt Contracting"**

Robert Mathieu - Wilfrid Laurier University, Canada  
Ling Chu - Wilfrid Laurier University, Canada  
Chima Mbagwu - Wilfrid Laurier University, Canada

*Discussant:* Hue Hwa Au Yong - Monash University, Australia

We examine whether business risk attenuate the positive effect of independent board of directors on debt contracting (lower interest charge on bank loans). We start by verifying that higher proportion of independent directors is associated with a reduction in the interest rates on bank loans. We further show that the effect of operating income on the interest rate is enhanced by a high proportion of outside directors. Our main analysis reveals that the effect of a higher proportion of independent directors on the informativeness of earnings for setting interest rates decreases as the business risk increases. In other words, when business risk is high, a higher proportion of independent directors does not help in reducing the interest rate. Our results hold for various robustness checks.

### **"Rational Apathy? Retail Shareholder Participation in Private Placements"**

Hue Hwa Au Yong - Monash University, Australia

Christine Brown - Monash University, Australia

Chloe Ho - University of Western Australia, Australia

Chander Shekhar - University of Melbourne, Australia

*Discussant:* Kyumin Cho - Korea Advanced Institute of Science and Technology, Korea, Republic of

A share purchase plan (SPP) structure in Australia affords all eligible shareholders the opportunity to buy new shares at the same price as those sold to institutions in the initial private placement. Using daily ownership data, we find that retail shareholders eschew participation in the SPP to a much larger extent than institutions, resulting in average wealth transfer of 3%, and that this wealth transfer is significantly greater than in a comparable traditional private placement. Although retail participation rates and announcement returns are higher in offers requiring shareholder approval, at least some retail shareholders simply leave money on the table.

**SESSION 64**

**Tuesday 4:15 - 6:00 p.m.**

**Brahms II**

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### **ACCOUNTING ISSUES II**

*Session Chair:* Laurence Booth - University of Toronto, Canada

### **"Enforcement and Cash Flow Management to Delay Goodwill Impairments under IFRS"**

Andrei Filip - ESSEC Business School, France

Gerald Lobo - University of Houston, USA

Luc Paugam - HEC Paris, France

*Discussant:* Panayiotis Tahinakis - University of Macedonia, Greece

Under IFRS, managers can use two approaches to increase the estimated recoverable value of a cash generating unit (CGU) to which goodwill has been allocated in order to justify not recognizing impairment: (1) make overly optimistic valuation assumptions (e.g., about discount rate, revenue growth, terminal growth rate), and (2) increase future cash flow estimates by increasing current cash flows. Because enforcement constrains the use of optimistic valuation assumptions we propose that the strength of enforcement influences the relative use of these two choices. Using an international sample of listed firms that report under IFRS, we document that the use of cash flow increasing management for firms that delay goodwill impairment is more positively associated with enforcement relative to a control sample that recognizes impairments. We also find that as enforcement increases, firms that delay goodwill impairment shorten the cash conversion cycle in the current year by delaying cash payments to suppliers, and that these transactions reverse in the next year. Finally, we show that cash flow management to delay goodwill impairment is detrimental to future performance.

## **"The Deterioration of Eurozone Audit Quality Services and the Effect on Accounting Conservatism"**

Panayiotis Tahinakis - University of Macedonia, Greece

Michalis Samarinas - University of Macedonia, Greece

*Discussant:* Maria Dimitriou - University of Macedonia, Greece

This paper seeks to examine the relation between audit quality and accounting conservatism in the diverse setting of the Eurozone. More specifically, our study focuses on whether a deterioration of audit quality determinants, expressed by auditor size and expertise, will be followed by a parallel decline of the auditees conditional conservatism. Based on a sample of all the Eurozone listed companies available from COMPUSTAT Global for the period 2005-2016, our methodology employs and adjusts a well-established approach by Khan and Watts (2009) to examine the aforementioned relation. The analysis performed demonstrates that the deterioration in the form of a switch from Big N to non-Big N auditors will be accompanied by a decline in the level of accounting conservatism. In addition to the aforementioned, we observe that firms experiencing switches from an industry expert to non-industry expert auditor also exhibit a decrease in the level of conditional conservatism. The findings seem to present some consistency with prior research in this area and attempt to provide useful insights for auditors and regulators concerning the quality of audits and establish whether its decline should remain a continuously increasing concern for the orderly operation of the firms and the economy.

## **"The Accounting Treatment of Firms' Valuation Based on IFRS and Greek GAAP for Appropriate Investment Decision Making Using ICT: Example of Investment Research/Valuation Report in Food & Beverages Industry: Alcohol-Free Beverage Sector"**

Maria Dimitriou - University of Macedonia, Greece

*Discussant:* Mine Aksu - Sabanci University, Turkey

This detailed research proposal is an introduction to firm valuation and financial reporting under IAS/IFRS and Greek GAAP using ICT (Information and Communications Technology) for appropriate stock recommendation: Example of investment research /valuation report in Food & Beverages Industry: Alcohol-free Beverage Sector. These recommendations include which stocks to buy, which stocks to sell, and which stocks to hold. The highly complexity and diversity of analyst's valuation process today have far-reaching implications for investment decision-making and valuation practice. The increasing uncertainty during financial crisis and the volume of risk that drives to analysts' target price, earnings forecasts and stock recommendation often draws rigorous scientific search in the hope of finding winning formulas for firm or business units valuation in regions with different level of growth, margin and risk, and the way they contribute to value firm's stock separately and totally, to find the secret to avoid problems such as inaccurate forecasts or valuation errors.

## **"Engagement Partner Attributes and Audit Quality: Does the Partner's Ownership Stake Matter?"**

Mine Aksu - Sabanci University, Turkey

Sebahattin Demirkan - University of Maryland, USA

*Discussant:* Gerald Lobo - University of Houston, USA

This study investigates the association between audit quality and some unique attributes of the engagement audit partners in the Turkish audit market during 2008-2014. We specifically examine the impact of the engagement partner's ownership stake in his audit firm, whether he is the top guy with the largest % ownership, his busyness and tenure in his current firm on the probability of restatements, qualified opinions, going concern qualifications, and less egregious and less direct earnings management type audit failures such as the use of discretionary accruals by the client firm. The results show that ownership % plays a role in correct audit judgments only in more egregious audit failures. We contribute to literature by introducing the engagement partner's ownership share in his firm as a comprehensive proxy for auditor's supply of audit quality. This variable could also be helpful in many emerging markets

where audit fees data are not publicly disclosed. Turkey's special audit environment also provides interesting insights, which may be of interest to researchers, regulators and audit and client firms.

**PRESENTATION & AWARDS CEREMONY**

**7:45 - 8:30 p.m.                      Gallery Level Foyer of Patria Room**

**GALA DINNER**

**8:30 - 11:00 p.m.                      Gallery Level Foyer of Patria Room**