The 27th Annual Conference on Pacific Basin Finance, Economics, Accounting, and Management

15-16 June 2019,
National Taiwan University, Taiwan

Conference Venue
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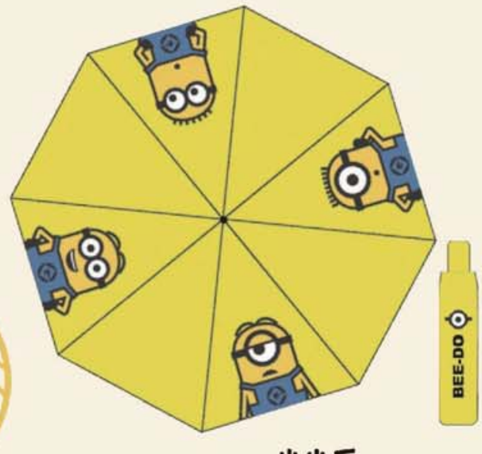

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The 27th Annual Conference on Pacific Basin Finance, Economics, Accounting, and Management

15-16 June 2019,
National Taiwan University, Taiwan

Conference Venue:
NTU College of Social Sciences Building

The 27th Annual Conference on Pacific Basin Finance, Economics, Accounting, and Management

Conference Organizers:

Department of Economics, National Taiwan University, Taiwan
Rutgers Business School, Rutgers University, USA

Conference Co-Organizers:

Department of Information Management and Finance, National Chiao Tung University, Taiwan
College of Management, National Taiwan University, Taiwan
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Re-Jin Guo, University of Illinois at Chicago, USA

Conference Agenda: Day 1

Saturday, 15th June 2019	
9:00AM～ 9:10AM	Opening Remarks by **Ming-Jen Lin, National Taiwan University, Taiwan** (Liang Kuo Shu International Conference Hall)
9:10AM～9:30AM	Honorary Guest Speech **Dr. Rong-I Wu, Chairman of Taiwania Capital, Taiwan (Former Vice Premier of Executive Yuan, Taiwan (R.O.C.)** (Liang Kuo Shu International Conference Hall)
9:30AM～10:15AM	First Keynote Speech： **Professor Kose John, New York University, USA** ➢**Creativity and Innovation in Financial Economics** Chairperson: Humin Chung, National Chiao Tung University, Taiwan (Liang Kuo Shu International Conference Hall)
10:15AM ~ 10:30AM Tea Break	
10:30AM ~ 12:10PM	Special Session **Business Education Reform** 商業教育改革 Chairperson: Cheng-Few Lee, Rutgers University, USA (Liang Kuo Shu International Conference Hall)
12:10PM～1:00PM	Luncheon Speech: **Joseph Jye-Cherng Lyu, Chairman，Taiwan Financial Holdings & Bank of Taiwan (**呂桔誠董事長 臺灣銀行**)** 全球經濟新挑戰與台灣的策略 Chairperson: Henry Horng-Shing Lu, National Chiao Tung University, Taiwan (Liang Kuo Shu International Conference Hall)
1:00PM ~ 2:00PM Lunch	

2:00AM～3:30PM	**BREAKOUT SESSION I** Session 1 Empirical Corporate Finance (Room 301) Session 2 Financial Accounting (A) (Room 302) Session 3 Banking Management (Room 305) Session 4 Big Data (Room 306) Session 5 Innovation & Sustainability (Room 307) Panel Session1 2019金融科技應用新趨勢(Application Trends of FinTech in 2019)(Room 404) Panel Session 2 公司治理(Corporate Governance) (Room 405)
3:30PM ~ 3:45PM	**Tea Break**
3:45PM～5:15PM	**BREAKOUT SESSION II** Session 6 Corporate Finance (A) (Room 301) Session 7 Marketing (Room 302) Session 8 Corporate Finance (B) (Room 305) Session 9 Investment (A) (Room 306) Session 10 Auditing (Room 307) Panel Session 3 "How to Publish a Paper in top Finance or Accounting Journal?" (Room 404) Panel Session 4 創投基金(Venture Capital) (Room 405) 證券交易與機器學習之實作演示(A Demo for Trading via A.I. & Machine Learning)(Room 406)
5:30PM～6:30PM	Second Keynote Speech: **Dr. Terry Marsh, Quantal International Inc. and University of California, Berkeley, USA** ➢ **Scheduled News Announcements: Equity Premiums at the Macro and Corporate Levels** Chairperson: Ming-Jen Lin, National Taiwan University, Taiwan(Room 101)
7:00PM～9:00PM	**Conference Dinner** (14F Howard Civil Service International House福華文教會館14樓貴賓廳) [For people on the program only]

Conference Agenda: Day 2

Sunday, 16th June 2019	
9:00AM～ 10:00AM	Third Keynote Speech: **Professor Bharat Sarath, Rutgers University, USA** ➢**In for a Penny or in for a Pound -- How Much Do Auditors Pay in Malpractice Settlements and Why Do They Pay it?** Chairperson: Po-Hsuan Hsu, National Tsing Hua University and CRETA of National Taiwan University, Taiwan (Liang Kuo Shu International Conference Hall)
10:00AM～ 11:00AM	Fourth Keynote Speech: **Professor John K. C. Wei, The Hong Kong Polytechnic University, Hong Kong** ➢**The Trend and Challenge of Cross-Sectional Anomalies** Chairperson: San-Lin Chung, National Taiwan University, Taiwan (Liang Kuo Shu International Conference Hall)
11:00AM ~ 11:15AM	**Tea Break**
11:15AM～12:00PM	Fifth Keynote Speech: **Professor Cheng-Few Lee, Rutgers University, USA** ➢**Financial Econometrics, Mathematics, Statistics, and Machine Learning: Theory & Application** Chairperson: Hong-Chang Chang, National Taiwan University, Taiwan (Liang Kuo Shu International Conference Hall)
12:00PM ~ 1:00PM	**Lunch**

1:00PM～2:30PM	**BREAKOUT SESSION III** Session 11 Corporate Finance (C) (Room 301) Session 12 Financial Accounting (B) (Room 302) Session 13 Options & Futures (Room 305) Session 14 Investment (B) (Room 306) Session 15 Artificial Intelligence on Finance (Room 307) Panel Session 5 產業轉型及創新的併購成長策略 (Achieving Transformational Growth through Mergers & Acquisition) (Room 404) Panel Session 6 證券分析與基金管理 (Security Analysis & Mutual Fund Management) (Room 405)
2:30PM ~ 2:45PM Tea Break	
2:45PM～4:15PM	**BREAKOUT SESSION IV** Session 16 Corporate Finance (D) (Room 301) Session 17 Economic & Financial Policies (In Memory of Professor Hu Sheng-Cheng) (Room 302) Session 18 Investment (C) (Room 305) Session 19 Asset Pricing & Return Predictability (Room 306) Session 20 Financial Accounting (C) (Room 307) Session 21 Financial Statistics and Risk Analysis (Room 404)
4:15PM ~ 4:30PM Tea Break	
4:30PM～6:00PM	**BREAKOUT SESSION V** Session 22 Corporate Finance (E) (Room 301) Session 23 Investment (D) (Room 302) Session 24 Investment (E) (Room 305) Session 25 Special Session in Finance & Accounting (Room 306) Session 26 Vertical Competition, Corporate Investment, & Global Risk (Room 307)
6:30PM～9:00PM	**Dinner** (Taidatable 曉鹿鳴樓) No. 85, Sec. 4, Roosevelt Rd., Da'an Dist., Taipei City台北市大安區羅斯福路四段85號 [For people on the program only]

First Keynote Speaker:

Professor Kose John, New York University, USA

Kose John

Kose John is the Charles William Gerstenberg Professor of Banking and Finance at New York University, Stern School of Business. He holds a Ph.D. from University of Florida. He has also taught at the University of Chicago, Columbia University, Temple University and Institutd' Etudes Politiques de Paris (Sciences Po). He has won several awards, including the Batterymarch Fellowship in 1983 and the Jensen Prize for the best paper published in 2000 in the *Journal of Financial Economics.* He is on the Nomination Committee for the Nobel Prize in Economics for 2018. He is the author of two books (on futures markets and corporate dividend policy), and the editor of 24 books and special issues in finance Journals on topics such as financial stability, financial distress, and valuation of distressed securities; corporate governance; and investments innovations in finance. He has published over 103 research articles in the major finance and economics journals. His recent research focuses on religiosity, whistleblowing, innovation, banking, financial crisis, corporate governance, top-management compensation, and financial distress, valuation of distressed claims and comparative bankruptcy and governance systems. He served as the president of the Financial Management Association International during 2014-15. He also serves as the program chair of the Association of Financial Economists (AFE) . He has been a mentor and advisor to 105 doctoral students who are finance professors and finance practitioners all over the world.

Second Keynote Speaker:

Dr. Terry Marsh, Quantal International Inc. and University of California, Berkeley, USA

Terry Marsh

Terry Marsh is the CEO of Quantal International and an Emeritus Professor of Finance at U.C. Berkeley. He grew up in the Australia neighborhood of the Pacific Basin where he received a Bachelor of Commerce (Honors) and University Medal from the University of Queensland in Australia! He then moved to the U.S. and received his MBA and Ph.D. degrees from the University of Chicago.

He was a finance professor and former chairman of the Finance Group at U.C. Berkeley until 2005 when he became Emeritus. Before joining Berkeley, Terry was an Associate Professor of Finance at MIT. He received a Batterymarch Fellowship and was a National Fellow at Stanford's Hoover Institution. He has consulted for the New York Stock Exchange, the Options Clearing Corporation, Banamex in Mexico, and was a member of the U.S. Presidential Task Force on Market Mechanisms that investigated the October 1987 stock market crash.

Terry again lived twice in Asia, in Japan: He was a consultant to the Industrial Bank of Japan and New Japan Securities in 1990-1991, and a Visiting Professor of Economics at the University of Tokyo in 1993.

Terry is an Associate Editor of the Journal of Fixed Income, the Journal of Investing, and the Review of Pacific Basin Financial Markets and Policies. He is a Member of the Advisory Board for Studies in Economics and Finance, a Board Member of the Japan Society of Northern California, a Member of the Rosebrook Capital Advisory Board, and a member of Manifold Partners' Scientific Advisory Board.

Third Keynote Speaker:

Professor Bharat Sarath, Rutgers University, USA

Bharat Sarath

Bharat Sarath is a professor of accounting at Rutgers University and Editor-in-Chief of the Journal of Accounting, Auditing and Finance. Prior to coming to Rutgers, Dr. Sarath taught Mathematics at Shiraz University and the University of Calgary and Accounting at the Wharton School, University of Pennsylvania, the Stern School at New York University and the Stan Ross School of Accountancy at CUNY/Baruch. He received a BA (Honors) in Mathematics from Pembroke College, Cambridge and also holds doctorates in Mathematics (University of Calgary) and Accounting (Stanford University). Dr. Sarath has published papers in Mathematics, Physics, Economics and Accounting.

Dr. Sarath's experience in teaching includes Executive Teaching for Rutgers University, Morgan Stanley, Credit-Suisse and FCMG, CUNY/Baruch, the University of Pennsylvania Engineering School, and the United Nations. His business-related consulting experience includes development of costing systems for the New York City Board and the United Nations as well as Statistical analysis related to legal actions. Dr. Sarath has travelled widely and speaks several languages including Russian, Farsi and Tamil.

Fourth Keynote Speaker:

Professor John K. C. Wei,
The Hong Kong Polytechnic University, Hong Kong

John Wei

Professor **John Wei** is currently Chair Professor of Financial Economics at The Hong Kong Polytechnic University (Poly). He received his PhD in Finance from the University of Illinois, Champaign-Urbana. He previously taught at University of Mississippi, University of Miami, and Indiana University. Before joining Poly, he served as Chair Professor of Finance at Hong Kong University of Science and Technology (HKUST) and had worked there for 24 years. He previously served as Director of Value Partners Center for Investing and Director of the Center for Asian Financial Markets and Director of Master of Science (Financial Analysis)/(Investment Management) Programs at the HKUST for many years. He served as Acting Head in the Department of Finance at HKUST during the period of January 2000-August 2002, February-June 2003, and June 2015. Moreover, he assisted to develop wealth management and investment models for, among others, Hang Seng Bank Limited, HSBC Corporation Limited, and Fidelity Investments Management (Hong Kong) Limited.

Professor Wei's research interests are mainly in the areas of empirical asset pricing, international finance, and corporate governance. He has published more than 60 articles in leading finance and accounting journals, including *Journal of Finance, Journal of Financial Economics, The Accounting Review, Management Science, Journal of Financial and Quantitative Analysis*, and *Journal of Business*, among others.

Professor Wei is best known for his extensive research on the cross-section of stock returns in the U.S. and international markets. He has discovered some new and important anomalies associated with cross-sectional return predictability and have first introduced “individualism” to the empirical asset pricing literature. Four of these papers have been cited by 2013 Economic Nobel Prize Laureate, Eugene Fama, and his co-author, Kenneth French. Most of his papers are well cited. Many of his papers are associated with the foundation of those factors in the Fama and French (2015) five-factor model and the Hou, Xue, and Zhang (2015) q-factor model.

Fifth Keynote Speaker:

Professor Cheng-Few Lee, Rutgers University, USA

Cheng-Few Lee

Cheng-Few Lee is a Distinguished Professor of Finance at Rutgers Business School, Rutgers University and was chairperson of the Department of Finance from 1988-1995. He has also served on the faculty of the University of Illinois (IBE Professor of Finance) and the University of Georgia. He has maintained academic and consulting ties in Taiwan, Hong Kong, China and the United States for the past three decades. He has been a consultant to many prominent groups including, the American Insurance Group, the World Bank, the United Nations and The Marmon Group Inc., Wintek Corporation and Polaris Financial Group, etc.

Professor Lee founded the *Review of Quantitative Finance and Accounting* (RQFA) in 1990 and the *Review of Pacific Basin Financial Markets and Policies* (RPBFMP) in 1998, and serves as managing editor for both journals. He was also a co-editor of the *Financial Review* (1985-1991) and the *Quarterly Review of Economics and Business* (1987-1989). In the past 40 years, Dr. Lee has written numerous textbooks ranging in subject matter from financial management to corporate finance, security analysis and portfolio management to financial analysis, planning and forecasting, and business statistics. Dr. Lee has also published more than 220 articles in more than twenty different journals in finance, accounting, economics, statistics, and management. Professor Lee has been ranked the most published finance professor worldwide during 1953-2008. Professor Lee earned Siwei Cheng Award in Quantitative Management at International Academy of Information Technology and Quantitative Management (IAITQM) in May, 2013. Most recently, Professor Lee published his autobiography entitled *From East to West— Memoirs of a Finance Professor on Academia, Practice, and Policy* (by World Scientific Publishing Co., 2017).

SPECIAL SESSION: BUSINESS EDUCATION REFORM

ROOM NUMBER: Liang Kuo Shu International Conference Hall

Chairperson: Cheng-Few Lee, Rutgers University, USA

Panelists:

1. Humin Chung, Dean, College of Management, National Chiao Tung University, Taiwan
2. Simon S.M. Ho, President, Hang Seng University of Hong Kong, Hong Kong
3. Shing-Yang Hu, Dean, College of Management, National Taiwan University, Taiwan
4. Donald Lien, University of Texas at San Antonio, USA
5. William T. Lin, Professor & Director of the Research Center for Cross-strait Financial Markets, Tamkang University, Taiwan and former president of Financial Engineering Association of Taiwan

SESSION 1: EMPIRICAL CORPORATE FINANCE

ROOM NUMBER: Room 301

Chairperson: Sheng-Syan Chen, National Chengchi University, Taiwan

1. CEO Overconfidence and Bondholder Wealth Effects: Evidence from Mergers and Acquisitions

Sheng-Syan Chen, National Chengchi University, Taiwan
Keng-Yu Ho, National Taiwan University, Taiwan
Po-Hsin Ho, National Central University, Taiwan
Wei-Ying Nie, Chinese Culture University, Taiwan

Abstract: This study explores the influence of chief executive officer (CEO) overconfidence on acquirers' bondholder wealth effect during mergers from 1994 to 2014. We find that CEO overconfidence benefits acquirer bondholders. In addition, overconfident acquirers are more likely to merge low return correlation targets rather than relative lower risk ones. We further show that the positive wealth effects are stronger when overconfident acquirers merge targets with lower correlation. Overall, the coinsurance effect of CEO overconfidence on acquirers' bondholder wealth dominates the liquidity effect during mergers.

Discussant: I-Ju Chen, Yuan Ze University, Taiwan

2. Network-Based Trust in M&A Investment Bankers: Social Collateral and Acquisition Outcomes

Sheng-Syan Chen, National Chengchi University, Taiwan
Chia-Wei Huang, National Taiwan Normal University, Taiwan
Chih-Yen Lin, Fu Jen Catholic University, Taiwan

Abstract: We examine whether social connections between acquirers and investment bank advisors can serve as social collateral to help secure service quality that produces favorable acquisition outcomes. Socially connected acquirers experience better announcement returns and post-acquisition stock performance than unconnected acquirers. They also exhibit better post-acquisition operating performance and total factor productivity, enjoy higher synergy gains, and are more likely to complete acquisitions and in less time. The results are stronger when acquirers and advisors have more common friends, interact more frequently, and are geographically closer to each other. Overall, the evidence indicates that network-based trust generated by acquirer-advisor social ties is important in determining acquisition performance.

Discussant: Po-Hsin Ho, National Central University, Taiwan

3. Board Diversity and Corporate Innovation

Wei Chih Lin, Yuan Ze University, Taiwan
I-Ju Chen, Yuan Ze University, Taiwan
Sheng-Syan Chen, National Chengchi University, Taiwan

Abstract: This paper aims to investigate the effect of board diversity on corporate innovation. We develop three composite board diversity measures aggregated-diversity, inherent diversity and acquired diversity- to capture the diversity among board members. Inherent diversity index is constructed from directors' demographic characteristics: gender, age, and nationality and acquired diversity index is constructed from directors' experience characteristics: education and expertise. Our results indicate that board diversity is positively and significantly associated with a firms' innovation. Specifically, the inherent board diversity is positively correlated with patents and citations, while acquired board diversity is positively associated with all measures of corporate innovation, including R&D expense, patents, citations, patents and citations per unit of R&D expense. We also find that the relationship between board diversity and corporate innovation is affected through the level of industry competition, the proportion of CEO equity compensation, extent of a firm diversification, and CEO experience. Our results are still hold after addressing the endogeneity issues.

Discussant: Chih-Yen Lin, Fu Jen Catholic University, Taiwan

4. The Association Between Book-Tax Differences and CEO Compensation

Kin-Wai Lee and Gillian Hian-Heng Yeo, Nanyang Technological University, Singapore

Abstract: We examine the effect of book-tax differences on CEO compensation. We posit that CEOs can opportunistically exercise the discretion in GAAP to increase accounting income without affecting taxable income and in so doing increase their compensation. We test the data to determine which competing hypothesis dominates-efficiency or rent-seeking. Under the efficiency hypothesis, the board of directors uses the information in book-tax differences to undo CEOs' attempts to artificially inflate accounting income and hence CEO compensation is negatively associated with book-tax differences. Under the rent-seeking hypothesis, CEOs gain effective control of the pay-setting process so that they set their own pay with little oversight from shareholders and directors. Directors do not use the information in book-tax differences to undo CEOs' attempted earnings manipulation and this gives rise to a positive association between CEO compensation and book-tax differences. Consistent with the efficiency hypothesis, we find that CEO compensation is negatively associated with book-tax differences suggesting that directors use the information in book-tax differences to reduce excessive CEO compensation.We also find that strong corporate governance structure strengthens the negative association between CEO compensation and book-tax differences. Specifically, firms with high insider equity ownership and high proportion of independent directors on the board have lower CEO compensation when book-tax differences are large.

Discussant: Yang Zhao, National Chiao Tung University, Taiwan

SESSION 2: FINANCIAL ACCOUNTING (A)

ROOM NUMBER: Room 302

Chairperson: Tsung-Kang Chen, National Chiao Tung University, Taiwan

1. Customer Accounting Quality and Suppliers' Cash Holdings

Thomas G. Canace, Wake Forest University, USA
Ming Liu, University of Macau, Macau
Tao Ma, Texas Tech University, USA
Xiumin Martin, Washington University in St. Louis, USA

Abstract: We examine how customers' accounting quality affects suppliers' cash holdings along the supply chain. We document that suppliers hold more cash when transacting with customers with low accounting quality, and this effect is stronger when suppliers are financially constrained. In addition, we find suppliers' cash holdings are sensitive to customers' accounting quality only when suppliers are from competitive industries, suggesting that suppliers bear the costs of holding more cash when industry competition is high. In addition, our results are not driven by the asymmetric relation arising from customers that are larger than their suppliers. Lastly, consistent with our underlying assumptions, we find that customers with lower accounting quality indeed use more trade credit and suppliers experience a longer period converting this trade credit into cash. Overall, our results show that customers' accounting quality exerts an externality on suppliers' liquidity policy through trade credit.

Discussant: Jui-Chia Lin, National Chiao Tung University, Taiwan

2. Investor Stewardship Code Compliance and Investee Earnings Quality: Evidence from Japan

James Routledge, Hitotsubashi University, Japan

Abstract: This study examines whether compliance by institutional investors with the Japanese Stewardship Code is related to the earnings quality of their investee companies. Analysis of a sample of Nikkei 225 index companies shows they have higher earnings quality when more of their top-five institutional investors are Code compliant, and have more extensive Code compliance and compliance statement disclosures. Overall, the results indicate the stewardship regulatory model can mitigate earnings management by effectively complementing monitoring from internal governance.

Discussant: Ming Liu, University of Macau, Macau

3. Credit Rating, Post-Earnings-Announcement Drift, and Arbitrage from Transient Institutions

Guanming He, Durham University, UK

Abstract: This study first establishes a robust link between credit rating and post-earnings-announcement drift (PEAD). I find strong evidence that PEAD is more salient for firms with low credit ratings. This finding is consistent with the notion that investors are inclined to underreact to earnings news from low-credit-rating firms that are characterized by high uncertainty of future asset fundamentals. The credit rating effect on PEAD is unexplained by traditional information uncertainty proxies such as earnings volatility, cash flow volatility, accrual quality, firm age, idiosyncratic volatility, and analyst forecast dispersion. I further investigate whether transient institutions exploit the differential of PEAD among different rated firms in their arbitrage trades. The results reveal that transient institutions tend to focus their arbitrage on low-credit-rating firms which are featured as abundant in arbitrage profits. However, the existence and concentration of PEAD in low-credit-rating firms implies that transient institutions fail to arbitrage away PEAD among low-rated firms and that the arbitrage strategy is riskier than expected by the transient institutions.

Discussant: Tsung-Kang Chen, National Chiao Tung University, Taiwan

4. Analysts' Revenue Forecasts and Discretionary Revenues

Shih-Chu Chou, San Francisco State University, USA
Sunay Mutlu, Kennesaw State University, USA

Abstract: We investigate the disciplining role of analysts' revenue forecasts on firms' discretionary revenues. We analyze quarterly data and find evidence that the IBES coverage of analysts' revenue forecasts is associated with a decrease in the magnitude of discretionary revenues, controlling for several firm characteristics. The evidence is consistent with the disciplining role of financial analysts. The results are robust to alternative definitions of discretionary revenues and several counter-factual benchmark samples, including propensity score matching. Further analyses show that the magnitude of discretionary revenues do not show a consistent pattern prior to the first revenue forecast on IBES, but it decreases immediately after the first revenue forecast. Evidence in our cross-sectional analysis also shows that firms receiving more analysts' revenue forecasts report a lower level of discretionary accruals, yielding consistent inference that the extent of analysts' scrutiny increases as a firm receives more forecasts.

Discussant: James Routledge, Hitotsubashi University, Japan

SESSION 3: BANKING MANAGEMENT

ROOM NUMBER: Room 305

Chairperson: Hai-Chin Yu, Chung Yuan Christian University, Taiwan

1. Are Subsidiary Ownership Decisions in Bank Holding Companies Similar to Other Institutional Investors?

Wan-Jiun Paul Chiou, Northeastern University, USA
Wenling Lu, Western Michigan University, USA

Abstract: This study investigates the intertemporal change in the institutional ownership of U.S. publicly traded bank holding companies (BHCs) and further examines the variation of the determinants across institutional investors. Using the quarterly data between 1986 and 2014, the factors of prudence, liquidity, information, and historical returns are found to be associated with the level of BHC's institutional holdings. However, evidence shows that some determinants such as market risk, bank age, turnover, and bank size affect the ownerships of subsidiaries at different directions comparing to the ownerships of unaffiliated banks and non-bank institutions. This implies that subsidiary banks apply different investment criteria when investing in their parent BHCs, suggesting the decisions are more constrained by prudence and liquidity concerns. Non-bank institutions decrease their investments while subsidiary banks and unaffiliated banks increase shares in BHCs during the recession periods.

Discussant: Hai-Chin Yu, Chung Yuan Christian University, Taiwan

2. Fortune Favors the Bold: Evidence from an Asian Bank Merger

Dulani Jayasuriya Daluwathumullagamage, University of Auckland, New Zealand

Abstract: This study surveys prior literature on mergers and acquisitions (M&A) with a special focus on factors affecting M&A outcomes and valuation. In addition, this study analyses one of the largest and most controversial mergers from the Philippine Banking sector: The merger of the fifth largest bank (BDO) with the third largest bank (Equitable PCI) in Philippines. This merger provides an ideal setting for a case study, subsequent links to M&A theories and generalizable lessons for future bank mergers. Furthermore, this study identifies key factors and steps taken by BDO management and the combined entity BDO Uni bank to obtain success. The acquisition spanned from 2004 to 2006 and was fully completed on December 27th, 2006 with BDO as the surviving entity renamed as Banco de Oro Uni bank (BDO Uni bank). BDO Uni bank had an increase in net income of 3.4 million. In addition, a doubling of its assets from PHP (Philippine peso) to 600 Peso Billion (Pbn) in the subsequent years relative to pre-merger BDO levels. Presently, BDO Uni Bank continues to generate stable revenue and be ranked number one in the Philippine Banking sector.

Discussant: Wenling Lu, Western Michigan University, USA

3. Velocity of Money as an Indicator of Impending Economic Crisis: The Case of Singapore

Chew Soon Beng and Yvette Lim Yanxi, Nanyang Technological University, Singapore

Abstract: The inverted yield curve is a good indicator of impending economic slump for America. But for Singapore, our study finds that the velocity of money is a good indicator of impending economic crisis caused by excess liquidity from abroad.

Discussant: Donald Lien, University of Texas at San Antonio, USA

SESSION 4: BIG DATA

ROOM NUMBER: Room 306

Chairperson: Henry Horng-Shing Lu, National Chiao Tung University, Taiwan

1. Behavior Study in Trading Network

Fang-Pang Lin, National Center for High Performance Computing, Taiwan

Abstract: Persistent homology has been proven to be a useful tool for studying topology invariance in geometrical data with a wide variety of applications, such as system dynamics, social behaviors, functional genomics etc. It allows to calculate numbers of algebraical "cycles" in various dimensions of interest, which in accordance to basic understanding of cyclic trading structure in financial research. Such understanding may lead to further development in detecting trading anomalies. The real data set of trading records, which is derived from a 3 year transaction records of the listed companies in the stock markets of Taiwan, which behavior is well regulated and monitored, is used in this study. The data is deidentified and only the trading relationship and temporal order are revealed, which by nature forms a trading network. The dynamics features and the scale of the data make it challenge to understand the structure of how trading evolved. We will incorporate persistent homology and large scale graph visualization to tackle the issues. The initial result provides an evolution of structures of the trading network in scale and enables us to further compare and detect the changing of trading cycles, which leads to solutions of crucial issues such as anomalies detection.

Discussant: Henry Horng-Shing Lu, National Chiao Tung University, Taiwan

2. Variable Selection for High-Dimensional Regression Models with Time Series and Heteroscedastic Errors

Ching-Kang Ing, National Tsing Hua University, Taiwan

Abstract: Although existing literature on high-dimensional regression models is rich, the vast majority of studies have focused on independent and homogeneous error terms. In this article, we consider the problem of selecting high-dimensional regression models with heteroscedastic and time series errors, which have broad applications in economics, quantitative finance, environmental science, and many other fields. The error term in our model is not only allowed to be short- or long-range dependent, but also contains a high-dimensional dispersion function accounting for heteroscedasticity. By making use of the orthogonal greedy algorithm and the high-dimensional information criterion, we propose a new model selection procedure that can consistently choose the relevant variables in both the regression and the dispersion functions. The finite sample performance of the proposed procedure is also illustrated via simulations.

Discussant: Fang-Pang Lin, National Center for High Performance Computing, Taiwan

3. Toward AI Clinics

Henry Horng-Shing Lu, National Chiao Tung University, Taiwan

Abstract: With the thriving of deep learning techniques and high-speed graphics processing units, recent years have witnessed the beginning of a golden era of image analysis. Practicing smart healthcare and using machine learning techniques to segment, track and classify diseases in medical images, thereby relieving clinicians from the heavy burden of image diagnosis and improving healthcare quality, have evolved into a global trend. In particular, rapidly growing deep learning techniques such as transfer learning, YOLO, and U-Net may be combined with traditional machine learning methods and applied to medical images at varied data volume levels to broaden the spectrum of diagnostic techniques for medical images. This talk discusses practical clinical issues concerning atrial fibrillation, vertebral compression fracture, glaucoma, and intracranial metastasis as examples to explain how important machine learning techniques may be integrated with clinical medical data and professional clinicians' accumulated experience. In the long run, the development of machine learning techniques to medical image analysis and diagnosis methods is expected to enhance the establishment of real time, accurate, and comprehensive clinical diagnoses.

Discussant: Ching-Kang Ing, National Tsing Hua University, Taiwan

SESSION 5: INNOVATION & SUSTAINABILITY

ROOM NUMBER: Room 307

Chairperson: Po-Hsuan Hsu, National Tsing Hua University and CRETA of National Taiwan University, Taiwan

1.Tax Avoidance and Voluntary Disclosures of Tax in United Kingdom

Wei-Chuan Kao, National Taiwan University, Taiwan

Abstract: Voluntary disclosure theory predicts a negative relation because the information costs could be higher when conducting tax avoidance. Reducing tax related disclosures could alleviate the concern about whether and how the company has tax avoidance. On the other hand, sociopolitical theories suggest a positive relation because firms with higher tax avoidance may want to reduce the social concern or legitimize their tax strategy by voluntarily disclosing certain tax information. This disclosure could further reduce the concerns when confronting the public pressure or criticism of tax avoidance. Therefore, this study examines the relation between tax avoidance and voluntary tax disclosure by conducting a content analysis. Using a sample of listed corporations in United Kingdom during 2010-2014, I find a positive association between corporate tax avoidance and voluntary tax disclosures, consistent with the predictions in sociopolitical theories. This implies that to alleviate the increase in the political and reputation costs induced by public concerns, companies voluntarily disclose more tax related information to meet or alter societal expectations. Furthermore, because governments and shareholders have already relied on the tax-related information provided from annual reports or tax returns data, companies could voluntarily increase more disclosures of soft tax information to prevent regulatory scrutiny.

Discussant: Long Yi, Hong Kong Baptist University, Hong Kong

2. Corporate Social Responsibility and Firms' Resilience to Natural Disasters

Po-Hsuan Hsu, National Tsing Hua University and CRETA of National Taiwan University, Taiwan
Hsiao-Hui Lee, University of Hong Kong and National Tsing Hua University, Taiwan
Long Yi, Hong Kong Baptist University, Hong Kong

Abstract: We propose that corporate social responsibility (CSR) serves as an intangible investment in stakeholder relationships to guard against natural disasters. We develop a stylized model to show that CSR investment, while costly, helps firms recover from natural disasters, thanks to customers' and employees' preferences for CSR. Using factory location data from the toxic release inventory (TRI) database to specify firms' geographic distribution, we find that firms with higher CSR ratings are much less affected by natural disasters. We then examine the customer and employee mechanisms through which CSR engagement shields firms against natural disasters. We find that CSR helps firms survive natural disasters by enhancing customer satisfaction, which leads to more stable post-disaster sales, and by enhancing employee satisfaction, which leads to higher post-disaster productivity.

Discussant: Yanzhi Wang, National Taiwan University, Taiwan

3.The Effect of Trademark Protection on Bank Loan Contracting: The Evidence from the 1996 Federal Trademark Dilution Act

Wan-Chien Chiu, National Tsing Hua University, Taiwan

Po-Hsuan Hsu, National Tsing Hua University and CRETA of National Taiwan University, Taiwan

Chih-Wei Wang, National Sun Yat-sen University, Taiwan

Abstract: This paper examines the role of trademark protection in bank loan contracting by exploiting the 1996 Federal Trademark Dilution Act (FTDA) that substantially strengthened the protection of famous trademarks. We conduct a difference-in-differences analysis based on the FTDA and find that firms with famous trademarks pay significantly lower loan spreads, have lower cash flow volatility, and higher future profitability. We also find a significantly increased frequency in using famous trademarks as collateral secure bank loans. These results are consistent with the view that banks account for enhanced brand value through which trademark protection stabilizes cash flows and increases firm value, both of which mitigate default risk and liquidation risk in contracting loans.

Discussant: Wei-Chuan Kao, National Taiwan University, Taiwan

PANEL SESSION 1: 2019金融科技應用新趨勢 (Application Trends of FinTech in 2019)

ROOM NUMBER: Room 404

Chairperson: Tony K.A. Lyou, General Manager, Apex International Financial Engineering Research & Technology Co Ltd. , Taiwan (劉國安總經理 寶碩財務科技有限公司)

Panelists:

1. Rua-Huan Tsaih, Professor, Department of Management Information Systems, National Chengchi University, Taiwan(蔡瑞煌教授 國立政治大學資訊管理學系)
2. Ber-Lin Hsu, Executive Vice President, Hua Nan Bank, Taiwan(許柏林副總經理 華南銀行)
3. Tainyi Luor, Associate Professor, National Taiwan University of Science and Technology, Taiwan (羅天一副總經理 國際票券業務副總經理/國票金資訊長/台科大管理學院兼任副教授)
4. Tony K.A. Lyou, General Manager, Apex International Financial Engineering Research & Technology Co Ltd. , Taiwan (劉國安總經理 寶碩財務科技有限公司)

PANEL SESSION 2: 公司治理(Corporate Governance)

ROOM NUMBER: Room 405

Chairperson: Chen-En Ko, Professor, National Taiwan University, Taiwan
(柯承恩教授 國立台灣大學會計系)

Panelists:

1. Jerry Huang, Chairman, Grand Fortune Securities Financial Group（黃顯華董事長　福邦證券金融集團）
2. Hong-Chang Chang, Professor, National Taiwan University, Taiwan（張鴻章教授　國立台灣大學會計系）
3. William T. Lin, Professor & Director of the Research Center for Cross-strait Financial Markets, Tamkang University, Taiwan and former president of Financial Engineering Association of Taiwan（林蒼祥 淡江大學財金系教授、兩岸金融研究中心主任、前台灣財務工程學會理事長）
4. Der-tzon Hsieh, Professor, National Taiwan University, Taiwan（謝德宗教授　國立台灣大學經濟學系）

SESSION 6: CORPORATE FINANCE (A)

ROOM NUMBER: Room 301

Chairperson: Chih-Yung Lin, National Chiao Tung University, Taiwan

1. Acquiring Divestors

Giang Nguyen, NUCB Business school, Japan
Hung Pham, La Trobe University, Australia

Abstract: This paper examines the relationship between targets' asset divestitures and takeover premiums. We find that divesting assets negatively affects offered premiums and targets' announcement returns. In addition, divesting targets are traded at discount relative to non-divesting targets. We show that efficiency explains the negative effect of divestitures. Specifically, the effect is more pronounced when targets divest assets more efficiently before the transaction announcement, targets operate in non-competitive industries, or transactions are announced before the Sarbanes Oxley Act. We also document that the neo-agency view “eat or be eaten” is not supported when using target divestitures to explain takeover synergies and acquirer returns. Overall, our findings suggest that asset divestitures increase target efficiency but reduce bidders' interest.

Discussant: Chih-Yung Lin, National Chiao Tung University, Taiwan

2. Corporate Cash Holdings: Evidence from Chinese Corporate Listed Firms Using Alternative Panel Quantile Regression Analyses

Rizwan Ahmed, University of Birmingham and Coventry University, UK
Wu Qi, Cardiff University, UK
Aviral Kumar Tiwari, Montpellier Business School, France
Shawkat Hammoudeh, Drexel University, USA and Montpellier Business School, France

Abstract: This paper examines the determinants of corporate cash holdings of Chinese stock exchange-listed firms that make up a sample of 115 firms listed between 2012 and 2016, using two different and comparative approachesproposed byCanay (2011)and Powell (2016) regarding fixed effect quantile panel data methods. Our results indicate that the Powell (2016) panel quantile regression provides significantly robust results at the median (0.5) quantile for the determinants of cash holdings for those Chinese listed companies, except the variables: leverage, volatility and board independence. The variables: firm size, cash flow, bank debt, investment opportunity, dividend, non-cash liquid assets, ownership concentration and managerial ownership uphold the original hypotheses. However, based on the results using the Canay (2011) fixed effect quantile panel data approach, the cash holding levels have a significantly negative relationship at the median (0.5) quantile with leverage, volatility, bank debt, non-cash liquid assets, board independence and managerial ownership. We also find that corporate cash holdings levels in those Chinese listed firms have a significantly positive association at the median (0.5) quantile with firm size and ownership concentration.The findings are consistent with those of major research studies focusing on developed countries.

Discussant: Leh-Chyan So, National Tsing Hua University, Taiwan

3.Wealth Effects of Relative Firm Value in M&A Deals: Reallocation of Physical vs. Intangible Assets

Debarati Bhattacharya, Duquesne University, USA
Wei-Hsien Li, National Central University, Taiwan

Abstract: We distinguish between value creation through redistribution of physical assets and that from intangible assets. We find that mergers create wealth when high-value firms primarily acquire physical assets from low-value firms. In contrast, deals motivated by transfer of investment opportunities generate wealth when growth-constrained low-value firms acquire substantial intangible assets from high-value targets. By separating the two motives for mergers, we provide empirical evidence of two diametrically opposed effects of relative firm value on wealth gains to shareholders. Our empirical framework also considers the effects from mispricing, governance, and the size of assets reallocated.

Discussant: Giang Nguyen, NUCB Business school, Japan

4. A New Approach to Investigate Dividend Smoothing: Theoretical and Empirical Evidence

Cheng-few Lee, Rutgers University, USA
James Juichia Lin, National Chiao Tung University, Taiwan

Abstract: This study proposes a dividend smoothing model that integrates two prevailing dividend hypotheses to evaluate the degree of dividend smoothing behaviors and investigates crosssectional variation in determining a firm's propensity to smooth dividend. By using a sample of 1,193 U.S. firms, our empirical analysis classifies firms' payout patterns into five different policies and suggests that 54% of observed dividend behavior among U.S. firms is attributable to signaling incentive. Furthermore, this study decomposes dividend smoothing behaviors through two channels: (1) lagging channel (via speed of partial adjustment, SOA) and (2) leading or signaling channel (via earnings expectation coefficient). Our findings show that firms with a stronger monitoring mechanism or are subject to more agency conflicts will smooth dividend more through partial adjustment channel. Also, firms subject to higher information asymmetry or lower growth opportunity will smooth dividend more through the signaling-incentive channel.

Discussant: In-Mu Haw, Texas Christian University, USA

SESSION 7: MARKETING

ROOM NUMBER: Room 302

Chairperson: S. Chan Choi, Rutgers University, USA

1. Household Expenditures at Japanese Food and Beverage Retailers

Si Chen, University of Oklahoma, USA
Charles Ingene, University of Oklahoma, USA
Ikuo Takahashi, Keio University, Japan

Abstract: We assess determinants of household expenditures at Japanese off-premise food and beverage (F&B) retailers using data from a recent business census that provides data on 786 cities comprising 91% of Japan's population. We make three fundamental contributions to the literature. First, we determine the effect on expenditures from non-residents who regularly enter a city for education or employment; they alter the actual daytime population by up to 5/8ths more-or 5/8ths less-than the resident population. Second, we examine the impact of intratype and intertype competition on expenditures. Third, we use product assortment and customer service as mediators between our determinant variables and expenditures. We show that a city's daytime population raises demand at F&B retailers; intratype competition (i.e., supercenters) lowers sales at F&B retailers, and intertype competition (i.e., restaurants) benefits F&B retailers. Product assortment and customer service mediate the effects of independent variables on household expenditures.

Discussant: Chia-Chi Chang, National Chiao Tung University, Taiwan

2. Inter-Segment Lead Scoring Model in B2B Market

Jingyuan Yang, George Mason University, USA
Chuanren Liu, Drexel University, USA
S. Chan Choi, Rutgers University, USA
Hui Xiong, Rutgers University, USA

Abstract: An important aspect of customer acquisition in business-to-business (B2B) marketing is lead prospecting which guides the business to select the right leads to pursue. While the current practice is often to use arbitrary rules to select leads with ad-hoc basis or pure managerial intuitions, a more systematic and data-driven approach is needed to improve the quality of lead selection by quantifying a specific lead's tendency to become a customer. To this end, in this paper, we introduce a predictive lead scoring model which can help sales representatives to identify prospective leads from a large pool of candidates in a B2B environment. Existing studies along this line have a focus on predicting \propensity to buy", yet limited efforts have been made on exploring discrepancy between lead segments. In response, we provide a multi-focal lead scoring framework which can improve the performance of predictive lead scoring. Specifically, in this framework, leads are first divided into several focal groups (segments) based on their characteristic attributes (features) and marketing workflows. Then, a logistic regression scoring model is learned for each segment with multi-task learning (MTL) technique, a machine learning approach to jointly constructing predictive models for

multiple focal groups. Indeed, the key of multi-focal learning in this study is to allow predictive modeling in each segment consisting of leads with similar characteristics rather than modeling the whole population of leads with varying characteristics. However, independent modeling at focal level would be problematic for segments with few representative samples. We use the MTL framework to address this problem by exploiting commonalities shared by focal groups and automatically balancing between unification of all groups and individualization of each group. Empirical findings derived from real-world B2B marketing data demonstrate that different segments may have absolutely different conversion rates and leads in the same segment tend to have similar responses to a specific marketing campaign. Therefore, such a multi-focal tailored lead scoring model gives better prospecting performances and insights into factors influencing the conversion of leads.

Discussant: Cherng G. Ding, National Chiao Tung University, Taiwan

3. Offline Drugstore and Digital Shopping Behavior

Hyeasim Song, Yonsei University, Korea
Jeeyeon Kim, National Sun Yat-sen University, Taiwan
Kikyung (Jeanne) Kim, IE University, Spain
Keonghye Choi, Yonsei University, Korea

Abstract: The research aims to investigate the relationship between offline drugstore and digital single brand store in the case of one beauty brand. Specifically, we examine how the offline drugstore density impacts on digital repeat purchase. Also, we investigate whether the popularity of products in the first digital purchase is related to repeat purchase behavior. Lastly, we focus on whether the shopping device (i.e., mobile or online channels) in first purchase affect the chance of repeat purchase. We implement a survival analysis using sales data from one of the leading digital single brand cosmetic stores of which products are also selling in the offline multi-brand stores. Our results show three substantive findings as follows. The density of the offline drugstore is positively related to the repeat purchase of the new customers through the digital single brand store. On the other hand, opening a new offline drugstore in a region negatively moderates the effect of offline drugstore density on repeat purchase in the digital channel. Furthermore, customers who bought niche products are more likely to repeat their purchases than those who bought the popular ones. In addition, first purchase through mobile channel is correlated with an increased likelihood of repeat purchase in the digital channel. Our findings above, we contribute to crucial implications for academia and practitioners providing practical insights to marketing strategies of beauty products with multi-channel sales context.

Discussant: Jen-Hung Hwang, National Chiao Tung University, Taiwan

SESSION 8: CORPORATE FINANCE (B)

ROOM NUMBER: Room 305

Chairperson: YiLin Wu, National Taiwan University, Taiwan

1. Co-opted Directors, Gender Diversity, and Crash Risk: Evidence from China

Erin H. Kao, Tunghai University, Taiwan
Ho-Chuan (River) Huang, Tamkang University, Taiwan
Hung-Gay Fung, University of Missouri St. Louis, USA
Xiaojian Liu, Hunan University, China

Abstract: This study examines how the composition of the board of directors at Chinese firms affects crash risk. The results indicate that co-opted directors (i.e., directors appointed after the CEO assumed office) have a positive and significant effect on crash risk; the positive relation between board directors and crash risk is primarily driven by co-opted male directors, implying a gender difference on crash risk. Non-co-opted independent directors mitigate crash risk, but the negative relation between gender and crash risk is much stronger for female directors than for male directors. The results indicate that co-option/non-co-opted independence along with gender diversity on the board plays an important role in shaping crash risk behaviors. The director-crash risk linkage disappears at state-owned enterprises, suggesting that ownership structure affects board behaviors and board members play the role of rubber-stamp. Finally, the relation between gender and crash risk is more pronounced at crash-risk prone firms with high earnings management and high financial leverage.

Discussant: Yi-Hua Li, Chung Yuan University, Taiwan

2. More Pronounced Pecking Order in Face of Intensified Product Market Competition

Qie Ellie Yin, Hong Kong Baptist University, Hong Kong

Abstract: This paper examines how U.S. public firms' financing decisions react differently to intensified product competition given their different cash shortage levels. We find that the pecking order in capital structure becomes more pronounced in a more competitive market, identified by exogenous industrial deregulation and significant import tariff cut. It is the firms with cash shortage that increase their reliance on external debt and equity financing. They build up cash reserves to maintain financial flexibility, as a substitute for reducing debt issuance. Their debt composition change implies the incentive to avoid financial risk: they rely more on unsecured debt to avoid liquidation value loss of potential collaterals, long-term debt to avoid rollover risk, and private debt to avoid information leakage and maintain renegotiation flexibility. In contrast, firms without cash shortage deviate from those external funds with higher monitoring incentives, such as secured, long-term, and private debt, suggesting that they substitute external monitoring with the market discipline. Moreover, changes in debt composition are mainly driven by the recapitalization purpose, but the change in equity issuance is more consistent with changes in investment activities.

Discussant: Erin H. Kao, Tunghai University, Taiwan

3.Bank Performance and the Liquidity Management

I-Ju Chen and Wei Chih Lin, Yuan Ze University, Taiwan

Abstract: This paper investigates bank liquidity management and its effect on bank performance. Commercial banks tradeoff between holding liquid assets and investing risky assets to maximize the profits. Holding more liquid asset lowers liquidity risk of banks, but it also increases the operation costs and probably lowers profits made by banks. Therefore, we hypothesize that the liquidity management policy matters for bank performance. We analyze the bank data from Call Report from 1990 to 2015. Our results show that maintaining a suitable liquidity of a bank leads to better operating performance. However, holding more liquidity asset generally leads better operating performance during economic downturns. In particular, small banks holding suitable amount of liquidity assets are vulnerable to the external market conditions and therefore increases the insolvency risks. Our study complements the literature about the bank liquidity management.

Discussant: Qie Ellie Yin, Hong Kong Baptist University, Hong Kong

SESSION 9: INVESTMENT (A)

ROOM NUMBER: Room 306

Chairperson: Kai-Shi Chuang, Tunghai University, Taiwan

1. The Interdependence of Indexed Volatilities

Katlego Kola and Tumellano Sebehela, WITS University, South Africa

Abstract: Most studies on volatility spillovers are based on share prices of firms-volatilities based on indices are scanty indeed. More, studies on indexed volatilities use predominantly at most two indices. Indices are interesting because they represent most constituents listed in various stock markets around the world. This article uses vector auto-regression (VAR) and regime-switching models in order to illustrate international financialization among bonds, commodities, equities and real estate indices of BRICS countries. The results are interesting is so many ways; (i) volatility happens among same indices and across different indices, (ii) regimes patterns between origin-and non-origin regimes are non-sequential and (iii) illiquid indices can contribute more spillovers than liquid indices. Volatility strategies emanating from this study are equally applicable to both sell and buy sides in securities markets.

Discussant: Guanming He, Durham University, UK

2. Asymmetric Information and the Distribution of Trading Volume

Matthijs Lof, Aalto University, Finland
Jos van Bommel, University of Luxembourg, Luxembourg

Abstract: We propose the Volume Coefficient of Variation (VCV), the ratio of the standard deviation to the mean of trading volume, as a new and easily computable measure of information asymmetry in security markets. We use a microstructure model to demonstrate that VCV is strictly increasing in the proportion of informed trade. Empirically, we find that firm-year observations of VCV, computed from daily trading volumes, are correlated with extant firm-level measures of asymmetric information in the crosssection of US stocks. Moreover, VCV increases following exogenous reductions in analyst coverage induced by brokerage closures, and steeply decreases around earnings announcements.

Discussant: Te-Chien Lo, National Dong Hwa University, Taiwan

3. Earnings Management, Glamour versus Value and Firm Performance: Evidence from Mergers and Acquisitions

Kai-Shi Chuang, Tunghai University, Taiwan

Abstract: This study examines the role of earnings management on firm performance in M&As. Specifically, the current study takes into account different types of firms in terms of glamour versus value bidding firms to look into the effects of earnings management on firm performance in M&As. Using the standard event study methodology with 3404 bidding firms during the period of 2000-2013, the results show that bidders on average manage earnings

upward prior to merger and acquisition announcements. In addition, value bidders are generally associated with higher earnings management prior to merger and acquisition announcements relative to glamour counterparts. The results also indicate that bidders with high earnings management on average obtain lower announcement returns than those with low earnings management around merger and acquisition announcements. While glamour bidders, given high earnings management, obtain higher announcement returns, value bidders with low earnings management generate higher returns. A further analysis reveals that glamour bidders obtain lower post-announcement returns relative to value bidders regardless of high or low earnings management prior to mergers and acquisitions. Overall, this study sheds lights on the effects of earnings management on firm performance in M&As. The empirical evidence in this study can enhance our knowledge and understanding to the importance of earnings management on firm performance in M&As.

Discussant: Jia-Chi (Claire) Cheng, Yuan Ze University, Taiwan

4. Insider Trading and Voluntary Nonfinancial Disclosures

Guanming He, Durham University, UK

Abstract: Voluntary nonfinancial disclosure of product and business expansion plans occurs frequently in practice and is an important vehicle by which managers convey corporate information to outsiders, but little is known about how managerial opportunistic incentives affect the choice of such nonfinancial disclosures. This study examines whether managers strategically time, and make selectivity in, their voluntary nonfinancial disclosures for self-serving trading incentives. I find strong and robust evidence that managers manipulate the timing and selectivity of their nonfinancial disclosures to maximize trading profits. Specifically, managers tend to disclose bad (good) news on product or business expansion information before purchasing (selling) shares. I also find that such strategic behavior is more evident when the expected price impact of the disclosures is greater and when the CEOs are more powerful. However, I do not find evidence that such strategic disclosure and trading behavior is weaker for firms with high institutional stock ownership. Overall, my results contribute to understanding managers' use of nonfinancial disclosure strategies for fulfilling personal trading incentives, and should be of interest to boards of directors, which monitor and restrict opportunistic disclosures and insider trading within a firm.

Discussant: Kai-Shi Chuang, Tunghai University, Taiwan

SESSION 10: AUDITING

ROOM NUMBER: Room 307

Chairperson: Fang-Chi Lin, National Pingtung University, Taiwan

1. Does Excess Cash Lead to Higher Audit Fees? Evidence from China

Nan-Ting Kuo, Shu Li, and Shiyun Zhai, Nankai University, China

Abstract: Our study uses China's data to explore the association between audit fees and excess cash. Prior studies (Gul and Tsai 1998, 2001; Griffin et al. 2010; Gleason et al. 2015) suggest that this association is positive because agency problems from excess cash magnify auditor business risk, which induce auditors to charge higher fees as compensation. However, we find that this association is negative for Chinese listed companies. We further find that this negative association is attributable tothe institutional features of China, where auditor liabilities are not extended beyond the assurance of financial statements. Overall, our results highlight the importance of institutional regimes in shaping auditor perceptions and decisions. Future studies extending Jensen's (1986) free cash flow argument to auditing research must carefully consider the validity of such extension given the institutional features of their empirical environments.

Discussant: Reining Petacchi, Georgetown University, USA

2. The Impact of Aggressive Management Strategy on Auditor Changes

Yen-Yu Chou, Providence University, Taiwan
Ying-Chou Lin, Southeastern Oklahoma State University, USA
Yu-Chen Lin, National Cheng Kung University, Taiwan

Abstract: This study provides a novel examination for aggressive management strategy and focuses on its impact on auditor changes. We identify the companies who have high management opportunism and receive favorable audit opinions as having the propensities to aggressive management strategies; in contrast, those with low management opportunism and unfavorable audit opinions as having the propensities to conservative management strategies. Our empirical results document that the companies with aggressive management strategies more likely exploit the timing of receiving favorable audit opinions to change their incumbent auditors. Furthermore, these companies not only tend to dismiss their auditors but also choose smaller auditors when they making auditor changing decisions. This downward switch implies the risky and opportunistic behavior of management, given the positive effect of big audit firm size on audit quality. In sum, these findings of the association between aggressive management strategies and auditor changes reflect the concern of Securities and Exchange Commission for the auditor changing decision.

Discussant: Fang-Chi Lin, National Pingtung University, Taiwan

3.Do Audit Firms' Internal Inspection Programs Have Teeth? Evidence from the U.S. Operations of the Largest Audit Firms

Daniel Aobdia, Northwestern University, USA
Reining Petacchi, Georgetown University, USA

Abstract: We provide the first large sample evidence on the audit firms' internal inspection programs, an integral part of the quality control mechanisms within an audit firm. We find that internal inspections are highly predictable. Engagement partners can predict not only when they will be inspected, but also which of their engagements will be inspected. Engagement teams take advantage of this predictability and concentrate their effort on the audit that ultimately is selected for an inspection. We further find that engagement teams change their audit effort in response to the inspection outcome. If the inspection outcome is favorable, the team reverts audit effort back to the pre-inspection level. However, if the outcome is unfavorable, the team increases effort on the engagement. We do not find that the change in audit effort around internal inspections is associated with any change in audit fees or financial reporting quality, which suggests that the increased effort may merely reflect lower audit efficiency.

Discussant: Ying-Chou Lin, Southeastern Oklahoma State University, USA

PANEL SESSION 3: HOW TO PUBLISH A PAPER IN TOP FINANCE OR ACCOUNTING JOURNAL?

ROOM NUMBER: Room 404

Chairperson: Yin-Feng Gau, National Central University, Taiwan

Panelists:

1. Carl R. Chen, Editor-in-Chief of *International Review of Economics & Finance,* University of Dayton, USA
2. Bharat Sarath, Editor-in-Chief of the *Journal of Accounting, Auditing and Finance,* Rutgers University, USA
3. Kose John, Charles William Gerstenberg Professor of Banking and Finance, New York University, USA
4. Cheng-Few Lee, Editor-in-Chief of *Review of Quantitative Finance and Accounting* and *Review of Pacific Basin Financial Markets and Policies,* Rutgers University, USA

PANEL SESSION 4: 創投基金(VENTURE CAPITAL)

ROOM NUMBER: Room 405

Chairperson: Simon Fang, Co-founder & Partner, Darwin Venture Management, Taiwan (方頌仁　達盈管理顧問股份有限公司創辦人)

Panelists:

1. Edgar Chiu, Co-founder & Managing Partner, SparkLabs Taipei (邱彥錡SparkLabs Taipei創辦人)
2. Kay Lin, Vice President, Darwin Venture Management, Taiwan (林桂光副總經理　達盈管理顧問股份有限公司)
3. Brian Hsu, Principal of Corporate Development, MediaTek, Taiwan (許家碩　聯發創投投資總監)

證券交易與機器學習之實作演示
(A Demo for Trading via A.I. & Machine Learning)

ROOM NUMBER: Room 406

Chairperson: Ted Hong, Beyondbond, Inc., USA

Abstract:
本場次主要爲即將於7/1舉辦的AI workshop的一次現場演示過程。
我們將向與會者介紹如何使用樹狀結構（Decision Tree, Random Forest），強化深度學習（Reinforcement Learning）類神經網絡深度學習（Recurrent Neural Network, LSTM）方法等機器學習方法來建模必進行交易，以及如何測試模型的有效性以及相關的交易策略。
我們將使用一個現場演示模板，而每個參與者將能夠通過整個演示過程同時運用國網中心雲服務器上的計算，即時定制自己的證券和策略。這是互動教學的方式的一個新嘗試。

Speakers:
1. Fang-Pang Lin, National Center for High Performance Computing, Taiwan (林芳邦博士 國家實驗研究院國家高速網路與計算中心)
2. Ted Hong, Beyondbond, Inc., USA (洪哲雄博士 Beyondbond, Inc.)
3. Henry Horng-Shing Lu, National Chiao Tung University, Taiwan (盧鴻興博士　國立交通大學)

SESSION 11: CORPORATE FINANCE (C)

ROOM NUMBER: Room 301

Chairperson: Yan-Zhi Wang, National Taiwan University, Taiwan

1. Sticky Cost Behavior and Dividend Yield

Joanna Golden, The University of Memphis, USA
Kenneth Zheng, University of Wyoming, USA

Abstract: We investigate the effect of cost stickiness on dividend yield. Prior research shows that when a firm experiences a temporary sales decline, managers do not cut resources as quickly as they increase resources when sales grow due to the expectation that sales will bounce up (Anderson et al. 2003). Thus, managers, who choose a stickier form of costs, expect the earnings reduction in response to a sales decline to be transitory. Another stream of literature documents that firms with consistent earnings or transitory losses tend to pay dividends (Skinner and Soltes 2011). Using dividend payout as a forward-looking proxy for managerial optimism in the setting of resource allocation conditional on sales declines, we predict and find that cost stickiness is positively associated with dividend yield.. Because cost stickiness is a result of the optimal allocation of resources for generating shareholder value, managers are likely to confirm their beliefs about the resource allocation decisions through dividend payout. Furthermore, we find that the aforementioned positive association between cost stickiness and dividend yield is concentrated in firms with SG&A costs creating higher future value, firms with managers of higher ability, growth firms, firms without successive sales decreases, as well as firms in highly competitive industries.

Discussant: Huichi Huang, North Dakota State University, USA

2. Peer R&D Disclosure and Corporate Innovation: Evidence from American Depositary Receipt Firms

Elizabeth Gordon, Temple University, USA
Hsiao-Tang Hsu, Texas A&M University-Corpus Christi, USA
Huichi Huang, North Dakota State University, USA

Abstract: Studying the effect of R&D disclosures on innovation by peer firms in an industry can specify the information externalities of peer R&D disclosures. A sample of foreign firms cross-listed on U.S. exchanges (American Depositary Receipt [ADR] firms) provides the setting for studying a richer peer R&D disclosure environment. The findings reveal that R&D disclosures by ADR firms spur innovation for industry peers in the U.S. market, and the effect varies with the home country's legal protection systems, disclosure environments, and accounting reporting rules. The results hold even after controlling for endogeneity, using propensity matched samples or first-time ADR R&D disclosers in the focal setting. Cross-sectional analyses indicate that the externalities are more pronounced in industries or firms that rely more on external financing and firms subject to higher financial constraints; disclosures of higher quality appear to promote innovation by ameliorating financing frictions. Overall, this study provides evidence of an industry-wide determinant of innovation, thereby contributing to literature on the real effects of peer disclosures.

Discussant: Kenneth Zheng, University of Wyoming, USA

3. Tax Policy and Innovation Performance: Evidence from Enactment of the Alternative Simplified Credit

Sheng-Syan Chen, National Chengchi University, Taiwan
Wei-Chuan Kao, National Taiwan University, Taiwan
Yanzhi Wang, National Taiwan University, Taiwan

Abstract: We examine how direct tax incentives affect firm innovation performance using a new U.S. R&D tax credit regime enacted in 2007, the Alternative Simplified Credit (ASC). A difference-in- differences analysis indicates that innovation performance is poorer for ASC users than for firms using the original R&D tax credit method following the ASC enactment. The results are stronger for firms with poorer governance and greater innovation diversity. ASC users suffer from poorer profitability and lower valuations. The findings remain robust to self-selection bias and various robustness checks. Our evidence favors a dark-side view of R&D tax credit effects under the ASC.

Discussant: Po-Hsuan Hsu, National Tsing Hua University and CRETA of National Taiwan University, Taiwan

SESSION 12: FINANCIAL ACCOUNTING (B)

ROOM NUMBER: Room 302

Chairperson: She-Chih Chiu, National Taipei University, Taiwan

1. **Politics in Tax Office: Complicated Effects of Contributing to a Politician on Tax Avoidance Using Regression Discontinuity Design**
   Youan Wang and Zigan Wang, University of Hong Kong, Hong Kong

Abstract: Using a regression discontinuity design in a sample of close U.S. elections, this paper investigates how firms' tax avoidance is affected by four types of political contribution. With hand-collected datasets, we compare firms donating to marginally winning candidates and firms donating to marginally losing candidates in special and general elections of federal congress, gubernatorial elections, and general elections of state congresses. We find that: 1) only large firms gain tax benefits from donating to federal congressmen; 2) donating to state governor candidates only helps large firms avoid tax, while 3) donation to state congressional election winners of the losing party may even hurt. Our results reveal the complicatedness of U.S. political contribution's effects on firm tax avoidance.

Discussant: George J. Jiang, Washington State University, USA

2. **Earnings Manipulation or Investor Scrutiny Why does the Market Discount Earnings Announced Late?**
   Linda H. Chen, University of Idaho, USA
   George J. Jiang, Washington State University, USA
   Kevin X. Zhu, Xi'an Jiaotong-Liverpool University, China

Abstract: Holding earnings surprise constant, investors react negatively to earnings announced with a delay. One standard deviation of delay (5 days) corresponds to about 21 bps negative abnormal returns over a two-day announcement window. We show that the results are robust after further controlling for various firm characteristics, earnings characteristics and the industry effect. We examine the common explanation proposed in the literature, namely, earnings announced with a delay are more susceptible to manipulation and are thus discounted by the market. We find no evidence supporting the earnings manipulation hypothesis. Instead, our results are consistent with investor scrutiny hypothesis. We show that investors and analysts pay more attention to delayed earnings announcements relative to timely announcements. As a result, the market has a better understanding of the information content of reported earnings, particularly the implications of current earnings on future earnings. We show direct evidence that negative market reactions to delayed earnings announcements reflect the information content of future earnings and help impound future earnings information into current stock prices. Finally, we show that the effect of investor scrutiny is stronger for firms with weaker external monitoring or governance.

Discussant: Zigan Wang, University of Hong Kong, Hong Kong

3. Managerial Political Spending Choice and Earnings Management

Shuo Li, Western Washington University, USA
Yu Zhang, Lawrence Technological University, USA

Abstract: This study investigates whether CEOs' political spending choice is associated with their earnings management behavior. Using a sample of 8,502 observations from S&P 500 firms during 1993-2012 over 10 election cycles, we find that CEOs making campaign contributions mainly through the corporate channel to recipients advised by firm's political action committee engage in less earnings management than those contributing mainly through the private channel to their own selected recipients. This finding implies that CEOs' political spending choice of the private channel over the corporate channel represents their strong self-interests and is associated with higher agency costs. We further show that the distinction between the two channels is less important when the CEOs' private campaign contributions patterns are aligned with those of their firms. Our results are robust to techniques alleviating the potential endogeneity issue in political spending behavior.

Discussant: Linda H. Chen, University of Idaho, USA

SESSION 13: OPTIONS & FUTURES

ROOM NUMBER: Room 305

Chairperson: Tian-Shyr Dai, National Chiao Tung University, Taiwan

1. **The Price Discovery Processes in China, India, and Russia's Stock Index Futures Markets**

Qingfeng “Wilson” Liu, James Madison University, USA
Qingzhong Ma, California State University, USA
Hui Sono, James Madison University, USA
Wei Zhang, California State University, USA

Abstract: This study examines the price discovery patterns in the three BRICS countries' stock index futures markets that were launched after 2000-China, India, and Russia. We find that the futures market dominates the price discovery process in China and India, but less so in Russia. A closer examination confirms the findings of Yang et al. (2012) and Hou and Li (2013) regarding price discovery in China and, more importantly, reveals the dynamic nature of the price discovery process. And both China's regulatory changes in September 2015 and economic sanctions against Russia that began in March 2014 are found to have significant effects on futures' price discovery functions. Further, we find some evidence of day-of-the-week effects in certain periods in China, but not in India or Russia. Our GARCH model results show bidirectional volatility spillover between futures and spot in China and India, but only unidirectional in Russia.

Discussant: Emily Lin, St. John's University, Taiwan

2. **The Impact of Derivative Disclosures on Managerial Opportunism: Evidence from FASB Statement No.161**

Guanming He, Durham University, UK
Helen Ren, University of Warwick, UK

Abstract: Using the mandatory adoption of FASB Statement No.161 (SFAS 161) on derivative disclosures, we examine whether and how derivative disclosures influence managerial opportunistic behavior. We employ insider trades and stock price crash risk to capture managerial opportunism. Applying a difference-in-differences design with hand-collected data on derivative designations, we find that, after the enforcement of reporting standard SFAS 161, derivatives users that strictly comply with SFAS 161 experienced a significantly greater decrease in insider trades, compared to a matched control sample of non-derivative-users. We also find that the strict compliers had a larger decrease in stock price crash risk compared with the non-users in the post-SFAS 161 period. Our cross-sectional analyses reveal that such effects of SFAS 161 are stronger for firms that have high information opacity, high financial risk, or high business risk. Overall, our results suggest that enhanced disclosures on firms' objectives and strategies of using derivatives, as mandated by SFAS 161, curb managerial opportunism.

Discussant: Qingfeng “Wilson” Liu, James Madison University, USA

3. Volatility Spill-over and Price discovery in the Malaysian Gold Futures Market

Sunil S. Poshakwale, Cranfield University, UK
Jude W. Taunson, Universiti Malaysia Sabah, Malaysia
Anandadeep Mandal, University of Birmingham, UK

Abstract: The paper examines the information transmission, lead-lag and price discovery in the emerging Malaysian gold market. Using daily prices of the Gold Futures Contracts (FGLD) from its inception, the study investigates whether movements in the FGLD can be used to predict the changes in the spot gold prices. We find that the information from one market will have an asymmetric transmission effect on the other. However, the magnitude of volatility transmitted from FGLD to the spot gold market is relatively larger. We show that movements in the FGLD seem to reduce the “lead-lag gap”, while movement in the spot gold market tends to weaken the strength of relationship between these two markets. Our findings indicate that that price discovery occurs mainly in the gold futures market.

Discussant: Guanming He, Durham University, UK

SESSION 14: INVESTMENT (B)

ROOM NUMBER: Room 306

Chairperson: Chiu-Ling Lu, National Taiwan University, Taiwan

1. Advancement of Optimal Portfolio Models with Short-sales and Transaction Costs: Methodology and Effectiveness

Wan-Jiun Paul Chiou, Northeastern University, USA
Jing-Rung Yu, National Chi-Nan University, Taiwan

Abstract: This paper presents advancement of several widely applied portfolio models to ensure flexibility in their applications: Mean-variance (MV), Mean-absolute deviation (MAD), Linearized value-at-risk (LVaR), Conditional value-at-risk (CVaR), and Omega models. We include short-sales and transaction costs in modeling portfolios and further investigate their effectiveness. Using the daily data of international ETFs over 15 years, we generate the results of the rebalancing portfolios. The empirical findings show that the MV, MAD, and Omega models yield higher realized return with lower portfolio diversity than the LVaR and CVaR models. The outperformance of these risk-return based models over the downside-risk focused models comes from efficient asset allocation but not only the saving of transaction costs.

Discussant: Hanxiong Zhang, University of Sheffield, UK

2. Monetary Policy and Systemic Risk: U.S.A Evidence

Ioanna T. Kokores and Angelos Kanas, University of Piraeus, Greece

Abstract: We assess whether monetary policymakers follow systemic risk in adjusting monetary policy for the U.S.A. over a period spanning from 1960 to 2011. We evaluate the reactions of monetary policy variables during the corresponding periods of high and low systemic risk. We estimate a threshold Vector Autoregressive (VAR) model, and provide evidence that U.S.A. monetary policy is affected by systemic risk measured by CATFIN proposed by Allen et al. (2012). This effect is asymmetric between periods of high systemic risk and periods of low systemic risk. The threshold value of CATFIN is in the area of 0.048-0.054. Our results support the monitoring of CATFIN by the monetary authorities, as an effective proxy of financial fragility to be included in the monetary policy strategy.

Discussant: Wan-Jiun Paul Chiou, Northeastern University, USA

3. Political Uncertainty and Sentiment: Evidence from the Impact of Brexit on Financial Markets

Hanxiong Zhang, University of Sheffield, UK
Andrew Urquhart, University of Reading, UK
Robert Hudson, University of Hull, UK

Abstract: This paper investigates the impact of Brexit events on the behaviour of 37 financial assets from 01/01/2012 to 26/04/2017 in terms of return and risk. The empirical research uses two typical event study approaches (mean-adjusted-return approach and market model approach), and a time-series GARCH framework with the conditional variance/covariance as proxies for market risk. Results indicate that the event day return effect is largely justified by the risk, especially the risk premium on that day. This explains why political uncertainty can affect financial markets for so many different events, as the phenomenon is probably in line with the typical asset pricing models.

Discussant: Shin-Yun Wang, National Dong Hwa University, Taiwan

SESSION 15: ARTIFICIAL INTELLIGENCE ON FINANCE

ROOM NUMBER: Room 307

Chairperson: Min-Teh Yu, China University of Technology, Taiwan

1. **Calculating Risk Measures and Pricing Financial Derivatives Using Spherical Monte Carlo Simulation**

Huei-Wen Teng, National Chiao Tung University, Taiwan

Abstract: In finance, accurate and efficient calculation for risk measures and derivatives' prices remains critical and challenging both in theory and practice. Many of these values are related to the expectation of a performance function under a complex random system (or mathematically, an integral). Although Monte Carlo simulation is indispensable for high-dimensional integration, it is formidable due to its slow convergence. To overcome this problem, this paper proposes a spherical estimator as a randomized integration rule, and provides a simple yet general importance sampling method for the spherical distribution. The importance sampling can be combined to the spherical estimator to gain further variance reduction. Illustrations are given in two types of financial applications: (1) the Value-at-Risk and Expected Shortfall for the quadratic portfolio under heavy-tailed risk factors and (2) exotic options prices under GARCH models. Numerical experiments confirm that the superiority of our proposed simulation scheme in terms of variance reduction and computation efficiency.

Discussant: Chien-Ling Lo, Yuan Ze University, Taiwan

2. **Deep Learning Options Prices under Non-Arbitrage Conditions**

Chien-Hung Chang, Providence University, Taiwan
Min-Teh Yu, China University of Technology, Taiwan

Abstract: This paperdesignsno-arbitrage deep neural networks (NADNNs) for option prices subject to the no-arbitrage condition. No-arbitrage conditions of put pricing functions are formulated by inequalities and boundary conditions. The NADNNs satisfy the non-arbitrage conditions and the boundary behavior of put prices. Linked by put-call parity, loss function can involve put and call prices. The options prices trained by NADNNs are non-arbitrage prices and neural networks are explanatory. The ability of features extraction of DNNs on financial markets is examined on Black-Scholes models (constant volatility) and Heston models (stochastic volatility).

Discussant: Chung-Gee Lin, Soochow University, Taiwan

3. **The Profitability of TAIEX Weekly Options Trading Strategies: An Application of Random Forest Algorithm**

Tzu-Pu Chang and Yin-Luo Yao, National Yunlin University of Science and Technology, Taiwan

Abstract: This paper aims to construct a trading strategy framework for TAIEX weekly options via a popular machine learning technique-random forest algorithm. At first, this paper collects 30 inputs, including macroeconomic variables, technical indicators, and open interests of options and futures. We then apply a random forest algorithm to predict the trend of TAIEX next week during a research period from January 9, 2008 to May 31, 2017. According to the predictions, this paper uses several options strategies and explores the profitability of our proposed trading strategy framework. The empirical results show that (1) the accuracy of random forest algorithm is around 70%; (2) in average, weekly profit from proposed strategy is 22 points (NTD 1,100); (3) the maximum draw-down is about 400 points.

Discussant: Huei-Wen Teng, National Chiao Tung University, Taiwan

PANEL SESSION 5: 產業轉型及創新的併購成長策略 (Achieving Transformational Growth through Mergers & Acquisition)

ROOM NUMBER: Room 404

Chairperson: Lily Wong, PricewaterhouseCoopers Taiwan
(翁麗俐執行董事 普華國際財務顧問股份有限公司)

Panelists:

1. Jason Wang, Consultant, CTBC Financial Holding Company, Taiwan (王正新顧問 中國信託金控股份有限公司))
2. Eddie Chen, Senior Advisor, KHL Capital, Taiwan (陳彥松顧問 達勝財務顧問股份有限公司)
3. Amy Liu, Executive Director, Fosun Hani Securities Ltd., Hong Kong (劉欣綾執行董事 復星恆利證券有限公司)

PANEL SESSION 6: 證券分析與基金管理 (SECURITY ANALYSIS & MUTUAL FUND MANAGEMENT)

ROOM NUMBER: Room 405

Chairperson: Huo-Deng Lin, Chairman, Grand Fortune Securities Co., Ltd., Taiwan (林火燈董事長 福邦證券)

Panelists:

1. Lan-Chih Ho, Central Bank of the Republic of China (Taiwan) (賀蘭芝博士 中央銀行)
2. Ted Hong, Beyondbond, Inc., USA (洪哲雄博士 Beyondbond, Inc.)
3. Pengfei Yang, Cubist Systematic Strategies, LLC, USA

SESSION 16: CORPORATE FINANCE (D)

ROOM NUMBER: Room 301

Chairperson: Yin-Hua Yeh, National Chiao Tung University, Taiwan

1. **Board Diversity and Executive Pay-to-performance Sensitivity: The Case of Ethnic and Gender Diversity in Australia**
   Truc (Peter) Do, University of Queensland, Australia

Abstract: We examine how board diversity, namely ethnic and gender diversity, has an impact on executive pay-to-performance sensitivity. Using firm-year observations in Australia, we document that board ethnic diversity leads to higher executive pay-to-performance sensitivity, but we do not document that board gender diversity leads to higher executive pay-to-performance sensitivity. We further document that both board ethnic and gender diversity improve board monitoring, but only ethnic diversity has a weak impact on future firm performance. Lastly, we also document that the impact of board ethnic diversity on executive pay-to-performance sensitivity is more pronounced for firms suffering from high agency costs, but no such difference exists for the impact of board gender diversity on executive pay-to-performance sensitivity.

Discussant: Chao-Hsien Sung, National Pingtung University of Science and Technology, Taiwan

2. **Review of M&A the Vulnerable Triumphs in the Negotiation Bargaining ~ Asia as the Empirical Study**
   Tsai-Hsin Cheng, National Sun Yat-sen University, Taiwan
   Chung-Jian Huang, National Kaohsiung University of Hospitality and Tourism, Taiwan
   Chao-Hsien Sung, National Pingtung University of Science and Technology, Taiwan

Abstract: Mergers and Acquisitions," which are diverse. In a broad definition, it involves business activities in which a company is partially or wholly acquired by or integrated with another company.

In order to guide the parallel development of the domestic IT industry and the biotechnology industry, the Taiwan government is currently holding Bio Taiwan 2018 with the Institute for Biotechnology and Medicine Industry, attracting biotechnology enterprises to attend the exhibition in Taiwan from 20 countries, including China, Japan, Korea, Australia, Germany, Switzerland, the United States, Canada, etc. Taiwan's biotechnology industry is booming in various fields, including new drug research and development, cell therapy, innovative medical devices, test and diagnostic technology instruments, molecular testing, agricultural and fishery biotechnology, health food and biotech care products, genes and biotechnology, medical channels, etc.,.

In response to the impact of the rise of emerging markets, the transformation of the biotechnology industry, and the changes in the profit-generating model, we can see the popularity of strategic alliances formed in recent years, that is, a series of mergers, acquisitions, and joint ventures took place between multinational pharmaceutical companies. The favorable

price forecasting methods for the target company of the minority in an industry M&A are stated in this study. The equity value analysis includes market method (comparable company and comparable transaction), revenue method, and asset-based approach.

In term of the market method, among the over 1,000 standard data of the agricultural and fishery biotechnology industry of China, the USA, and Japan there are obtained from Bloomberg, 38 comparable companies and 16 comparable transactions are selected to explore and analyze the financial evaluation results of these methods in order to compare and obtain the most favorable price forecast methods for the target company of the minority.

The sensitivity analysis of the revenue method is with the CAPM adopted to calculate the adequate discount rate of the Free Cash Flow for the Firm, which is the WACC, and further considers the risk of the target company of the minority. The calculated WACC plus each company's risk premium of 6.5% and perpetual growth rate of 2% in order to calculate the target company's adjusted 100% equity value and implied value per share.

In terms of the asset-based approach, the real estate appraisal company has based the real estate added value analysis on the added-value of the right to use land, proprietary land, above-ground buildings, and the property.

John Forbes Nash Jr., (1951) proposed the “Nash equilibrium.” Chatterjee and Samuelson, (1983) proposed the “double auction” model. Game theory suddenly became mainstream economics and starting with game theory applied to complex economic issues. Game theory is combined with the business management, finance, and accounting in this study and then is used in the bargaining that is recognized by both parties in the process of mergers and acquisitions. Negotiation is a voluntary activity. In most cases, the negotiators are willing to participate in a negotiation. The reason why two parties choose to negotiate is because the two parties believe that the results can be improved through the negotiation process. The two parties can always accept the offer of the other party without challenging it or demanding more income, which is close to practical negotiations and can be applied to empirically study and explore the corporate valuation of the target company of the minority and it is a major breakthrough.

Discussant: Hao-Chang Sung, Jinan University, China

3. Purchase Order Financing and Impacts of Consumer's Sustainability Awareness

Hao-Chang Sung, Jinan University, China
Shirley J. Ho, National Chengchi University, Taiwan

Abstract: Several new methods have been proposed for supply chain finance (SCF) with bank credit, but none of them mentions how to solve the borrowers' moral hazard problems in SCF. This paper examines the moral hazard problems in supply chain financing with procurement contract (or purchase order). We show that since supply chain is an up-down directed structure, when financing with the procurement contract, the suppliers' effort monitoring task is rendered to the procurement contract, which can secure the suppliers' optimal effort and capital choices in production. Hence, compared to separate lending, the suppliers' credit rationing problem can be mitigated, and most importantly, the banks' under-estimation on the suppliers' default risks

and the over-estimation on the retailers' default risk can be decreased. Furthermore, we show that the retailers' corporate social responsibility (CSR) expenditure can increase consumers' brand recognition, thus when facing demand shocks arising from consumers' unexpected concerns, the retailer can better stabilize firm value.

Discussant: Truc (Peter) Do, University of Queensland, Australia

SESSION 17: ECONOMIC & FINANCIAL POLICIES
(In memory of Dr. Hu Sheng-Cheng)

ROOM NUMBER: Room 302

Chairperson: Ming-Jen Lin, National Taiwan University, Taiwan

1. Taiwan's Current Economic Bottlenecks and its Responding Strategies

Jiann-Chyuan Wang, Chung-Hua Institution for Economic Research, Taiwan

Abstract: Over the past few years, Taiwan has stepped into mediocre economic growth era. What are the major obstacles behind her low to medium economic growth, and what are the solution and strategies to regain her growth momentum deserves attention. Under such circumstance, the purpose of this paper are three folds. First, we analyze bottlenecks for Taiwan's stagnant economic growth. Second, we use Switzerland experience as a lesson for Taiwan. Third, we provide policy recommendations for Taiwan to revitalize its economy.

2. Financial Cycles and the Business Cycles: Evidence from Taiwan

Nan-Kuang Chen and Han-Liang Cheng, Central Bank of the Republic of China, Taiwan

Abstract: This paper studies the characteristics of financial cycles (credit and house prices) and their interactions with business cycles in Taiwan. We employ multivariate structural time series model (STSM) to estimate trend and cyclical components in real bank credit, real house prices, and real GDP. We find that credit and house price share similar cycles, financial cycles are roughly twice the length of the business cycles, and house price cycles lead both credit and business cycles. Nevertheless, the estimated length of financial cycles in Taiwan is much shorter than those in industrialized economies. We also conduct HP filter, frequency-based filter, and ARMA spectral analysis to measure financial cycles. We then use machine learning to evaluate the importance of a macroeconomic variable that predicts downturns of financial cycles. The best-fitted explanatory variables include not only domestic economic fundamentals and monetary policy, but also economic outlooks of China and US monetary policy and term spread, reflecting Taiwan's close linkage in trades and financial interdependence with China and spillover effects from the Fed's monetary policy.

3. Taiwan's Financial Conditions and Economic Forecasting

Tien-Huei Chang and Hao-Pang Chu, Central Bank of the Republic of China, Taiwan

Abstract: In this paper, we develop Taiwan's financial conditions index (FCI) using a wide range of financial indicators, especially encompassing real estate and credit data for studying the relationships of financial conditions and economic forecasting. We employ the two-step dynamic factor model of Doz et al. (2011), which makes estimation more accurate and efficient. The results indicate FCI not only performs better as a leading indicator of real economic variables, but also provides additional information for forecasting economic activity. Furthermore, the higher the future economic downside risks, the more prominent the FCI as a leading indicator. FCI (specifically incorporated information on real estate and credit variables) does appear to signal downside risks to economic growth well.

SESSION 18: INVESTMENT (C)

ROOM NUMBER: Room 305

Chairperson: Yi-Hou Huang, National Chiao Tung University, Taiwan

1. Mispricing and Momentum Crashes

Yi-Hou Huang, National Chiao Tung University, Taiwan

Abstract: This paper documents asymmetric mispricing for loser stocks across business cycle. In time of normal market conditions, we find strong interactions among key factors in determining momentum strength, and they are subject to significant investor attention. During periods of poor market conditions, on the other hand, many of these interactions are not observed; suggesting that mispricing errors for loser stocks are generally weaker due to the lack of investor confidence and funding liquidity issue in the overall market condition. A cross-sectional sample selection based on overpricing mechanism of loser stocks indicates that the damaged from momentum crashes can be eased and momentum profits can be significantly enhanced.

Discussant: Hong-Yi Chen, National Chengchi University, Taiwan

2. Predictability of Financial Markets in ASEAN Countries using Machine Learning Techniques

Dulani Jayasuriya Daluwathumullagamage, University of Auckland, New Zealand

Abstract: This paper develops several efficient machine learning models and compare their performance in forecasting the value and direction of stock prices and indices from the ASEAN countries. Although all models adequately forecast the stock indices ranging from 40% to 95% accuracy and outperform traditional regression models, ANN models outperform all other models. This study identifies several important variables as important predictors. Finally, this study concludes that the emerging economies of the ASEAN countries are indeed predictable with more than 95% accuracy.

Discussant: Fangquan Shi, University of Macau, China

3. High-Dimensional Index Tracking based on the Adaptive Elastic Net

Fangquan Shi and Lianjie Shu, University of Macau, China

Abstract: To avoid small and illiquid positions and large transaction costs, it is desired to have a sparse tracking portfolio with only a small number of assets in practice. The cardinality constraint approach by directly restricting the number of assets held in the tracking portfolio is a natural idea. However, it requires the pre-specification of the maximum number of assets selected, which is rarely in practice. Moreover, it is computationally extensive and could make the resulting optimization problem NP-hard when the problem size is large. Motivated by this, this paper employs a regularization approach based on the adaptive elastic net model for high-dimensional index tracking. The proposed method represents a family of convex regularization

methods, which nests the traditional Lasso, adaptive Lasso, and elastic net methods as special cases. To make the formulation problem more practical and general, we also take the full investment condition and/or turnover restrictions (or transaction cost) into account. An efficient coordinate-descent-based algorithm with closed-form updates is derived to tackle the resulting optimization problem. Empirical results show that the proposed method has better out-of-sample performance than the traditional cardinality constraint and regularization methods, especially in high-dimensional settings.

Discussant: Dulani Jayasuriya Daluwathumullagamage, University of Auckland, New Zealand

SESSION 19: ASSET PRICING & RETURN PREDICTABILITY

ROOM NUMBER: Room 306

Chairperson: Yehning Chen, National Taiwan University, Taiwan

1. Iterated Combination Forecast and Treasury Bond Predictability

Hai Lin, Victoria University of Wellington, USA

Wenrang Liu, National Yunlin University of Science and Technology and Center for Research in Econometric Theory and Applications, National Taiwan University, Taiwan

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

Guofu Zhou, Washington University in St. Louis, USA

Abstract: Using a large number of predictors and based on an extended iterated combination approach of Lin, Wu, and Zhou (2017), we document both statistical and economic significance of Treasury bond return predictability. Macroeconomic and aggregate liquidity variables contain predictive information for bond returns and combining them with term structure and Ludvigson-Ng macro factors significantly improve out-of-sample forecast gains. We also find that variance forecasts can be substantially improved with our approach, yielding significant gains in asset allocation decision. Our results show that information from a large number of predictors collectively contributes to the time-varying Treasury bond premia, and this is robust to different return measures, horizons and sample periods.

Discussant: Bo Wang, City University of Hong Kong, Hong Kong

2. CDS Net Positions and Predictability of Bond Prices

Li-Ting Chiu, State University of New York at Buffalo, USA

Abstract: Using CDS net position data, this research studies whether CDS trades are driven by informed traders and which direction of information does they contain. CDS positions may contain information through informed lenders and its ability to mitigate frictions. The prevailing short-sale constraint suggests that CDS position contain more negative news. The result supports these hypotheses that CDS net positions contain important information and it predict corporate bond return, and there is a positive relationship between CDS net positions and future bond yields.

Discussant: Wenrang Liu, National Yunlin University of Science and Technology and Center for Research in Econometric Theory and Applications, National Taiwan University, Taiwan

3.Turnover Premia in China's Stock Markets

Bing Zhang, Nanjing University, China

Wei Chen, Nanjing University, China

Chung-Ying Yeh, National Chung Hsing University, Taiwan

Abstract: The paper explores turnover premia in China's stock markets. There is a negative cross-sectional relation between turnovers and average realized returns. Turnover premia, which is the return on buying low turnover stocks and shorting high turnover stocks, can reach 34% per annum. In effect, turnover in China's stock markets can be explained by both liquidity risk and firm-specific uncertainty. Turnover premia is more pronounced for rms with option-like equity and this regularity becomes stronger when rms have greater cash-ow risk.

Discussant: Li-Ting Chiu, State University of New York at Buffalo, USA

4. Economic Policy Uncertainty in the Corporate Bond Returns and Long-term Volatility

Bo Wang, City University of Hong Kong, Hong Kong
Junbo Wang, City University of Hong Kong, Hong Kong
Chunchi Wu, State University of New York (SUNY) at Buffalo, Taiwan

Abstract: This paper examines the pricing of economic policy uncertainty in cross-sectional corporate bond returns from 2002 to 2017. The empirical evidence shows that bonds with high economic policy uncertainty betas tend to have low expected returns, indicating that investors require additional reward to hold bonds with negative economic policy uncertainty beta. The negative relationship between expected corporate bond returns and economic policy uncertainty beta appears in all segments of corporate bonds and is robust to conventional risk factors, bond characteristics and different model specifications. Moreover, economic policy uncertainty has a significantly positive effect on the long-term volatility of corporate bonds.

Discussant: Chung-Ying Yeh, National Chung Hsing University, Taiwan

SESSION 20: FINANCIAL ACCOUNTING (C)

ROOM NUMBER: Room 307

Chairperson: Wen-Hsin Hsu, National Taiwan University, Taiwan

1. **The Effect of the Fair Value Reporting Model on Analyst Forecast Properties: Evidence from Real Estate Firms**

Linhui Yu, National Taiwan University, Taiwan

Abstract: Using a sample of US and UK real estate firms reporting their net operating assets at historical cost and fair value, respectively, and exploiting UK firms experiencing IFRS adoption in 2005, we examine how the two reporting models-the fair value and the historical cost models-affect the properties of analyst forecasts. We find that analysts have less differential opinions for UK firms reporting fair value estimates than for US firms reporting historical costs. We further document that a change from the partial fair value reporting model (UK domestic standards) to the full fair value reporting model (IFRS) temporarily increases forecast dispersion; however, this increase disappears several years after adoption. We also find that it takes more time for analysts to issue forecast reports for firms reporting under the fair value model than under the historical cost model. We find that when both the income statement and the balance sheet are reported under the full fair value model, financial statements become more straightforward, reducing analysts' forecast revision response time. Finally, we find that the increase in forecast error exhibits a decreasing trend in the post-IFRS period. Overall, we document that the change in accounting standards has a time-varying effect on analyst behavior.

Discussant: Wen-Hsin Hsu, National Taiwan University, Taiwan

2. **Do Academic Directors Care More about Reputation? Evidence on Corporate Social Responsibility Reporting**

Chih-hsien Liao, National Taiwan University, Taiwan
Cheng-Hsun Lee, National Cheng Kung University, Taiwan
Hsin-Yi Huang, Feng Chia University, Taiwan

Abstract: This study explores the regulatory setting in Taiwan and examines the association between academic directors and corporate social responsibility (CSR) reporting. We find that firms with academic directors on the board are more likely to issue a stand-alone CSR report and obtain third-party assurance on their CSR reports. We also find a positive association between CSR reporting and academic directors with industry expertise as well as accounting expertise. Further cross-sectional analyses indicate that the positive relation between academic directors (and their expertise) and CSR reporting is stronger for low-growth firms and for firms with better corporate governance. Given the increasing awareness of CSR among the society, our findings that directors from academia are beneficial to more disclosures of CSR-related information have important implications to corporations as well as the policy makers.

Discussant: Hsuan-Chu Lin, National Cheng Kung University, Taiwan

3.The Effect of Book-tax Conformity on Debt Contracting

Cheng-Few Lee, Rutgers University, USA
Sophia Liu, National Taiwan University, Taiwan

Abstract: We investigate the effect of required book-tax conformity on bank loan contracting. It has been extensively debated among accounting academia and policymakers on eliminating differences between book and taxable income and conforming into one measure while only limited investigation is on how book-tax conformity affects information environment from the creditors' perspective. Using international data across 24 countries, we examine how book-tax conformity of a country affects loan price and non-price terms. Results indicate that increased conformity is associated with lower loan spreads and more prevalence of financial covenants. Besides, we find the negative (positive) association between country-level book-tax conformity and loan spreads (prevalence of financial covenants) is mitigated among firms with larger book-tax differences. The negative interaction effect suggests that conformity may fail to curtail managerial opportunism as it is proposed to. The firm-level book-tax differences play a more significant role in determining loan contract terms than the country-level book-tax conformity. Overall, this study suggests that countries with required higher conformity have relatively more favorable information environment to loan contracting while the contracting terms are driven by the firm-specific book-tax differences.

Discussant: Nan-Ting Kuo, Nankai University, China

SESSION 21: FINANCIAL STATISTICS & RISK ANALYSIS

ROOM NUMBER: Room 404

Chairperson: Hwai-Chung Ho, Academia Sinica, Taiwan

1. Stock Market Trend Prediction Using Functional Time Series Approach

Mei-Hui Guo, National Sun Yat-sen University, Taiwan

Abstract: Thanks to advanced technologies, ultra-high frequency limit order book (LOB) data are now available to data analysts. An LOB contains comprehensive information on all transactions in a market. We use LOB data to investigate the high frequency dynamics of market supply and demand (S-D) and inspect their impacts on intra-daily market trends. The intra-daily S-D curves are fitted with B-spline basis functions. Technique of multiresolution is introduced to capture inhomogeneous curvature of the S-D curves and a lasso-type criterion is employed to select a common basis set. Based on empirical evidence, we model the time varying coefficients in the B-spline interpolation by vector autoregressive models of order p(1). The Xgboost algorithm is employed to extract information from the areas under the S-D curves to predict the intra-daily market trends. In the empirical study, we analyze the LOB data from LOBSTER (https://lobsterdata.com/). The results show that the proposed approach is able to recover the S-D curves and has satisfactory performance on both curve and market trend predictions.

Discussant: Kuang-Chieh Yen, Soochow University, Taiwan

2. A Semiparametric Estimation of Value-at-Risk and its Applications

Shih-Feng Huang, David K. Wang, and Yi-Ting Fang, National Kaohsiung University, Taiwan

Abstract: A semiparametric approach consisting of GARCH-type models and a generalized nearly-isotonic regression (GNIR) is proposed for Value-at-Risk (VaR) estimation. The GNIR is capable of depicting the up/down fluctuation of data automatically. An algorithm for the GNIR is proposed and its convergence property is derived. The proposed VaR estimator, denoted by NVaR, is shown to have fewer fluctuations than the VaR estimators obtained from GARCH-type methods. It also has better timely responses to market risks than the VaR estimators obtained from extreme value theory (EVT). We apply the NVaR to compute capital requirements and employ the daily indices of 13 global financial markets from 2003 to 2017 for our empirical investigation. The numerical results reveal that the NVaR is capable of satisfying the backtesting, reflecting market risks in time, and reducing the fluctuations of the VaR sequence and capital requirements simultaneously.

Discussant: Daniel WC Miao, National Taiwan University of Science and Technology, Taiwan

3. Automated Estimation of Heavy-Tailed Vector Error Correction Models

Shiqing Ling, Hong Kong University of Science and Technology, Hong Kong

Abstract: It has been a challenging problem to determine the co-integrating rank in the vector error correction (VEC) model when its noise is a heavy-tailed random vector. This paper proposes an automated approach via adaptive shrinkage techniques to determine the co-integrating rank and estimate parameters simultaneously in the VEC model with unknown order p when its noises are i.i.d. heavy-tailed random vectors with tail index$\alpha \in$ (0:2). It is showed that the estimated co-integrating rank and order p equal to the true rank and the true order p0, respectively, with probability trending to 1 as the sample size $n \to \infty$, while other estimated parameters achieve the oracle property, that is, they have the same rate of convergence and the same limiting distribution as those of estimated parameters when the co-integrating rank and the true order p0 are known. This paper also proposes a data-driven procedure of selecting the tuning parameters. Simulation studies are carried to evaluate the performance of this procedure in finite samples. Our techniques are applied to explore the long-run and short-run behavior of prices of wheat, corn and wheat in USA. Our results may provide a new insight to the Lasso approach for both stationary and non-stationary heavy-tailed time series.

Discussant: Jin-Lung Lin, National Dong Hwa University, Taiwan

SESSION 22: CORPORATE FINANCE (E)

ROOM NUMBER: Room 301

Chairperson: Hsuan-Chu Lin, National Cheng Kung University, Taiwan

1. Corporate Leverage, Investments and Cost of Capital - An Alternative Approach

David Sun, Kainan University, Taiwan
Chun-Da Chen, Lamar University, USA

Abstract: Expected leverage has been found to significantly influence corporate credit spreads on which investors constantly update forecasts. While Welch (2004) showed that expected stock return forecasts leverage dynamics in a predominant way, Huang and Ritter (2009) suggested that cost of equity significantly affects debt ratio. We apply their concepts to examine how the cost of capital affects leverage as well as credit spreads, by utilizing an ex-ante measure of stock return, the Implied Cost of Capital (ICC). ICC has gained more attention than ever as an alternative to CAPM in estimating the cost of equity. However, most works on ICC report annual estimates only, and firm-level ICC estimates have been produced relying on cross-sectional industry regressions which makes it incomparable internationally. This study employs a Bayesian approach to provide monthly estimates of ICC while incorporating industry- and market-wide co-movements among firm performances. The firm-level estimates are comparable across G7 countries while better forecasting leverages and earnings growth. Our method also produces more stable systematic risk measures over time and helps to verify, contrary to CAPM, the negative relationship between the cost of equity and corporate investments.

Discussant: Junhong Yang, the University of Sheffield, UK

2. The Impact of Social Capital on Firm Performance during the Financial Crisis The Insurance Value of Corporate Social Responsibility in Taiwan

Shao-Huai Liang, Yu-Ting Hsieh, Hsuan-Chu Lin and Yen-Ting Chou, National Cheng Kung University, Taiwan

Abstract: This study examines the impact of social capital on corporate financial performance by using 514 listed companies in Taiwan as sample during the 2008 financial crisis period. To measure the CSR performance, this study refers to the independently international CSR valuation institution to compile CSR indicators for individual firms in Taiwan. The empirical evidence shows that the social capital cumulated by CSR investment before crisis is associated with positive stock returns during the 2008 financial crisis; in addition, after examining the in-crisis and post-crisis periods, this study finds that CSR indeed has an insurance value for firm's stock performance during the crisis period. The empirical evidence generally reaches the conclusion that CSR indeed plays a protective role for firms when market encountering with a widespread trust crisis. Additionally, it highlights the importance for firms to take wider adoptions of CSR practices, not only for its reputation but also the insurance value which will pay off during unexpected negative trust events.

Discussant: David Sun, Kainan University, Taiwan

3. Does Social Capital Matter? Evidence from Peer-to-Peer Lending

Nourhan Eid and Junhong Yang, The University of Sheffield, UK

Abstract: We study whether social capital matters for individuals in peer-to-peer lending. We find that social capital benefit borrowers in peer-to-peer lending as they obtain lower interest rates. This finding is robust to using alternative measures of social capital and implementing an instrumental variable approach. Furthermore, we find that the effect of social capital is stronger for borrowers who are more susceptible to moral hazard. This implies that social capital is effective at mitigating market frictions. Our results also show that social capital constrains opportunistic behavior. An increase in a region's social capital is associated with a lower likelihood of default. Our paper provides new insights into the real effects of social capital in the online marketplace context.

Discussant: Hsuan-Chu Lin, National Cheng Kung University, Taiwan

SESSION 23: INVESTMENT (D)

ROOM NUMBER: Room 302

Chairperson: Han-Hsing Lee, National Chiao Tung University, Taiwan

1. Shorting Costs and Profitability of Long-Short Strategies

Dongcheol Kim and Byeung-Joo Lee, Korea University, Korea

Abstract: We examine how profitability of long-short arbitrage strategies is affected after adjustment for two shorting costs: the implicit cost due to unavailability of the stocks in the short-leg to sell short the explicit cost actually paid to stock lenders. We find that after adjustment for the combined shorting cost, the net long-short arbitrage return is reduced to almost 60 percent of the gross long-short profit before adjustment. That is, shorting costs correspond to 40 percent of the gross long-short profit. If other trade-related transaction costs are considered, the net long-short arbitrage profit would be even smaller. We also find that after adjustment for shorting costs, profits from the long-leg and short-leg portfolios are similar in magnitude. This result supports the assertion that short sale constraints are attributable to arbitrage asymmetry.

Discussant: Tatsuyoshi Miyakoshi, Hosei University, Japan

2. Understanding the Systematic and Nonsystematic Liquidity Risk in Taiwanese Financial Subsectors

Shih-Kuo Yeh, National Chung Hsing University, Taiwan
Wan-Ru Yang, National University of Kaohsiung, Taiwan

Abstract: This paper explores the characteristics of liquidity risks in the Taiwanese financial subsectors, including the domestic banks, financial holding, insurance, and securities companies. We use the Amihud illiquidity index to measure liquidity risk of each individual financial stocks listed in the Taiwan Stock Exchange. The evidence shows that the liquidity risk in the financial holding companies is lower than those in other financial subsectors. The insurance and securities subsectors have highly volatile liquidity risks. We employ the principal component analysis to extract the systematic component of liquidity risks among the financial components. The result suggests that systematic component of liquidity risks in the financial market is highly correlated with the liquidity risks of domestic bank and financial holding subsectors. Furthermore, the factors significantly influencing the systematic liquidity risks among the financial institutions include stock market volatility, yield spread, short-term interest rate, call-loan rate, and consumer confidence. Finally, by adopting the Granger causality test and variance decomposition analysis, we find that the nonsystematic liquidity risks among the financial subsectors are highly interconnected. The insurance and securities subsectors play a critical role in transmitting nonsystematic liquidity risks among the financial institutions.

Discussant: Dongcheol Kim, Korea University, Korea

3. Assessments of LCY Asian Government Bond Market: Network Analysis

Tatsuyoshi Miyakoshi, Hosei University, Japan
Junji Shimada, Aoyama Gakuin University, Japan

Abstract: The purpose of this paper is to assess of LCY Asian government bond market by using network analysis during two decades 2001-2017: (i) assesses how the network is connected (integrated); (ii) assesses how the LCY Asian government bond markets diverge by risk shocks and converge; (iii) what recovers convergence.

Discussant: Wan-Ru Yang, National University of Kaohsiung, Taiwan

SESSION 24: INVESTMENT (E)

ROOM NUMBER: Room 305

Chairperson: Hong-Yi Chen, National Chengchi University, Taiwan

1. Strategic Mutual Fund Starts and Spillover Effect

Hong-Yi Chen, National Chengchi University, Taiwan
Hsuan-Chi Chen, National Chengchi University, Taiwan
Cheng-Few Lee, Rutgers University, USA

Abstract: This study investigates how a star fund family utilizes the new fund issuance to obtain more spillover effects. We find the spillover effect is stronger when the fund family has more affiliated star funds. In addition, the star fund family will take advantage of the star phenomenon by issuing new funds. The newly issued fund in a star family will obtain more spillover fund flows than existing non-star funds in the same star family. The total fund flows in a star family conducting a new fund issuance can be enhanced though new funds and existing funds compete fund ows to each other. However, the spillover fund flows to newly issued funds affiliated with star families cannot predict better future fund performance.

Discussant: Zhenjiang Qin, University of Macau, Macau

2. Brand Visibility, Cash Flow Stability, and Idiosyncratic Risk

Donald Lien, University of Texas at San Antonio, USA
Hsiang-Hsi Liu, National Taipei University, Taiwan
Pi-Hsia Hung, National Chi Nan University, Taiwan
Ching-Yang Chen, Mega International Commercial Bank, Taiwan

Abstract: Using the best global brands (BGBs) as the benchmark, this paper examines the relationships among brand visibility, cash flow stability, and idiosyncratic risk. Specifically, we first analyze whether brand visibility affects the cash flow stability of firms and then evaluate the relationships between brand visibility and risk-adjusted returns as well as idiosyncratic risk. Firms chosen as BGBs have higher stability of operating cash flows and lower idiosyncratic risk. The brand rank order has a significant but weaker effect on idiosyncratic risk as well. Lastly, the relationship between brand visibility and idiosyncratic risk mainly appears in European and North American companies.

Discussant: Hong-Yi Chen, National Chengchi University, Taiwan

3. Maintaining Cost and Ruin Probability

Andreas Karathanasopoulos, University of Dubai, UAE
Chia Chun Lo, Prince Mohammad Bin Salman College, Kingdom of Saudi Arabia
Xiaorong Ma, University of Macau, Macau
Zhenjiang Qin, University of Macau, Macau

Abstract: Unlike usual investment funds, specialized funds such as charitable trusts do not value consumption greatly, instead, they pursue to maintain a minimum level of spending and avoid ruin with to achieve their managerial goals. This paper proposes an objective function tailored for studying ruin probability of a specialized fund, and analytically shows that even if the fund only invests in a risky asset and faces maintaining cost, there may still exist a positive probability for the fund to maintain operability permanently. Since if the stock is profitable enough, the wealth process has a large positive drift to offset effects of the fixed cost and downside risk. We extend the benchmark model to a case allowing portfolio rebalance between risky assets, and still obtain analytical expressions for optimal portfolio choices and ruin probability. We find that portfolio selection potentially improves survival probability, depending on the alternative investment opportunities.

Discussant: Pi-Hsia Hung, National Chi Nan University, Taiwan

SESSION 25: SPECIAL SESSION IN FINANCE & ACCOUNTING

ROOM NUMBER: Room 306

Chairperson: Rong-Ruey Duh, National Taiwan University, Taiwan

1. Effect of Audit Firm Membership in Alliances, Associations and Networks on Tax Avoidance-International Evidence

C.S. Agnes Cheng, The Hong Kong Polytechnic University, Hong Kong
Chih-Chieh Hsieh, The Hong Kong Polytechnic University, Hong Kong
Xiao Li, Central University of Finance and Economics, China

Abstract: We provide archival evidences on how membership in an accounting firm alliances, associations or networks (collectively referred to "an association") influence corporate tax aggressiveness. Using hand-collected international data on audit firms' membership in accounting firm alliances, association, and networks, we find that corporates that are audited by association member firms exhibit lower level of tax aggressiveness, where level of corporate tax aggressiveness is proxied by the reduction of explicit tax paid by each firm. In our further analysis, we find firms who are audited by auditors connected with high tax avoidance auditors through association also exhibit higher tax avoidance behaviour. This finding suggest that global resources and technical and industry expertise shared through membership in accounting firm association adds values to their clients by helping them devising efficient tax strategy. This relation is more pronounced in countries with less investor protection, and better audit environment.

Discussant: Bharat Sarath, Rutgers University, USA

2. Labor Protection, Ownership Concentration, and Cost of Equity Capital: International Evidence

Teresa Chu, University of Macau, Macau
In-Mu Haw, Texas Christian University, USA
Simon S.M. Ho, Hang Seng University of Hong Kong, Hong Kong
Xu Zhang, University of Macau, Macau

Abstract: In this study, we investigate how labor protection institutions and the presence of controlling shareholders interact to determine a firm's cost of equity capital in an international setting. Our firm- and country-level analyses reveal that firms in countries with greater labor rights have a higher cost of equity, over and above the differences explained by investor protection environments and firm- and country-level risk factors. We find that operating leverage and information asymmetry serve as channels through which labor protection increases the cost of equity capital. More interestingly, the detrimental effect of labor protection on the cost of equity is mitigated in the presence of controlling shareholders, especially in the case of a family controlling owner, indicating the effectiveness of controlling owners at coping with difficult labor relations. The economic significance of this advantage is non-trivial: a one-unit increase in the labor market regulation index increases the annual cost of equity by 0.776%

in widely held firms, whereas it increases by only 0.415% in firms with controlling shareholders. Our study identifies better labor relations as a potential channel through which concentered ownership affects the interaction of labor power and the cost of equity capital.

Discussant: Yi-Cheng Shih, National Taipei University, Taiwan

SESSION 26: VERTICAL COMPETITION, CORPORATE INVESTMENT, & GLOBAL RISK

ROOM NUMBER: Room 307

Chairperson: John K. C. Wei, Hong Kong Polytechnic University, Hong Kong

1. Global Risks in the Currency Market and the U.S. Dollar

George Panayotov, Hong Kong University of Science and Technology, Hong Kong

Abstract: A change in a single U.S.-related parameter allows the model of Lustig, Roussanov, and Verdelhan (2014) to reproduce a salient asymmetry across periods with relatively high and low U.S. interest rates in (i) the returns of a U.S. dollar factor, and (ii) the correlation between the average returns of various carry trades and their dollar betas, that we document in the data. This asymmetry is exploited to design a general test for global risk factors, which accounts for the possible relation between candidate risk factors and the U.S. dollar. Among a large set of previously suggested variables, only those that represent equity market risks are not rejected by the test, supporting the role of standard risk factors in the currency market, unlike prior studies that have emphasized the global role of various measures of uncertainty. Our results are consistent with theories that highlight the different risks taken by U.S investors in global markets.

Discussant: Te-feng Chen, Hong Kong Polytechnic University, Hong Kong

2. Vertical Competition, Systematic Risk, and the Cost of Equity Capital

Guoman She, Hong Kong University of Science and Technology, Hong Kong
K.C. John Wei, Hong Kong Polytechnic University, Hong Kong
Haifeng You, Hong Kong University of Science and Technology, Hong Kong

Abstract: When firms experience adverse economic shocks, they often have incentives to transfer them to their upstream or downstream counterparts to minimize the impact. Their ability to do so is affected by the competition landscape of their upstream and downstream industries. We predict that firms with more competitive upstream or downstream industries have greater ability to pass on adverse shocks along the supply chain and therefore have lower risk exposures. Our empirical results support this prediction, showing that firms with more competitive upstream or downstream industries have significantly lower capital market and fundamental risks, as well as lower costs of equity capital. The results remain intact after controlling for endogeneity bias. Overall, our results highlight the importance of vertical competition in determining firms' systematic risk and cost of equity capital.

Discussant: Chung-Ying Yeh, National Chung Hsing University, Taiwan

3. Illiquidity Shocks and Asymmetric Stock Market Reactions around the World: Is Underreaction or Illiquidity Spiral the Culprit

Te-feng Chen, Hong Kong Polytechnic University, Hong Kong
K.C. John Wei, Hong Kong Polytechnic University, Hong Kong

Abstract: Illiquidity shocks are negatively associated with future returns. There are two potential explanations: underreaction and illiquidity spiral. We find that negative illiquidity shocks generate upward price continuation, but positive illiquidity shocks lead to initial downward price continuation quickly followed by price reversal. The latter price pattern determines the duration of the total effect of illiquidity shocks. Further analysis shows that the underreaction channel proxied by institutional ownership works well only in stocks with negative illiquidity shocks. In contrast, the illiquidity spiral channel proxied by short-term versus long-term institutional ownerships is strongly supported in stocks with positive illiquidity shocks. Moreover, our results continue to hold even after controlling for the pricing effects of the two components in illiquidity shocks, suggesting the irreplaceable nature of illiquidity shocks by either volatility shocks or volume shocks.

Discussant: George Panayotov, Hong Kong University of Science and Technology, Hong Kong

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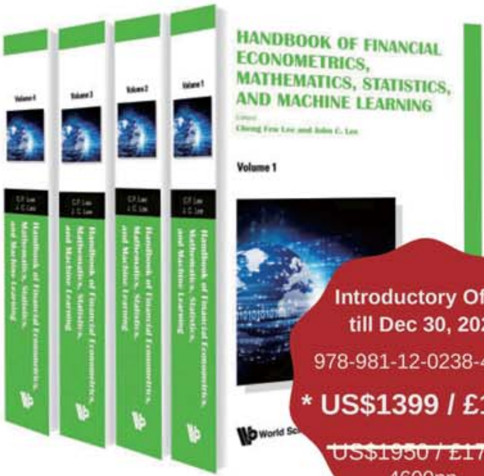

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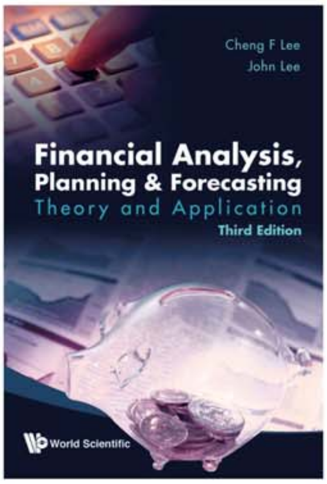

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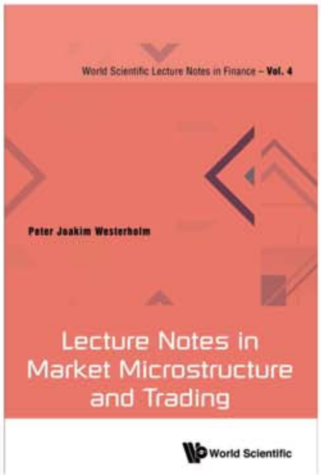

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