MONDAY 15 JULY

08.30 - 19.00  Registration  Hotel Lobby, 1/F
14.30 - 17.30  AsFA Boarding Meeting  Meeting Room 2, 4/F
18.00 - 20.30 Welcome Reception  Taichi Chinese Restaurant, 2/F

TUESDAY 16 JULY

08:30–10:00 CONCURRENT SESSIONS

Session 1. Corporate Finance Theory  Meeting Room 210, 2/F
Chair: Artashes Karapetyan, Central Bank of Norway

Product Market Predatory Threats and Contractual Constraints of Debt
Einar C. Kjenstad, University of Rochester
Xunhua Su, Norwegian School of Economics
Discussant: Artashes Karapetyan, Central Bank of Norway

Does Information Sharing Reduce the Role of Collateral as a Screening Device?
Artashes Karapetyan, Central Bank of Norway
Bogdan Stacescu, Norwegian School of Management BI
Discussant: Xunhua Su, Norwegian School of Economics

TUESDAY 16 JULY

08:30–10:00 CONCURRENT SESSIONS

Session 2. International Finance I  Meeting Room 1, 4/F
Chair: Hong Zhang, INSEAD

Currency Premia and Global Imbalances
Pasquale Della Corte, Imperial College Business School
Steven J. Riddiough, University of Warwick
Lucio Sarno, City University London
Discussant: Nan Shi, Durham Business School

The Dark Side of ETF Investing: A World-Wide Analysis
Si Cheng, National University of Singapore
Massimo Massa, INSEAD
Hong Zhang, INSEAD
Discussant: Ting Li, Skidmore College
Are Investors Compensated for Bearing Market Volatility in a Country?
Samuel Xin Liang, Hong Kong University of Science & Technology
K. C. John Wei, Hong Kong University of Science & Technology
Discussant: Hong Zhang, INSEAD

Causes of Global Imbalances: A Global VAR Analysis
Zhichao Zhang, Durham Business School
Frankie Chau, Durham Business School
Nan Shi, Durham Business School
Discussant: Pasquale Della Corte, Imperial College Business School

TUESDAY 16 JULY
08:30–10:00 CONCURRENT SESSIONS

Session 3. Shiv NaDAR Invited Session
Chair: Sankar De, Indian School of Business

Asset Pricing with Regime-Dependent Preferences and Learning
Tony Berrada, University of Geneva
Jerome Detemple, Boston University
Marcel Rindisbacher, Boston University

Short-Run and Long-Run Consumption Risks, Dividend Processes and Asset Returns
Jun Li, University of Texas at Dallas
Harold H. Zhang, University of Texas at Dallas

Speculation and Leverage
Mark Loewenstein, University of Maryland

TUESDAY 16 JULY
08:30–10:00 CONCURRENT SESSIONS

Session 4. Empirical Asset Pricing I
Chair: Kalok Chan, Hong Kong University of Science & Technology

Behavioural Types and Characteristics of UK Fund Managers’ Cascading and Herding: New Evidence from the Stock Market
Ralph Yang-Cheng Lu, Ming Chuan University
Hao Fang, Hwa Hsia Institute of Technology
Discussant: Ming Gu, Renmin University of China

Distress Risk, Investor Sophistication and Accrual Anomaly
Ming Gu, Renmin University of China
Discussant: Ralph Lu, Ming Chuan University
Is the Asset Growth Effect Mispricing or Efficiency: Evidence from Stock Issuance and Buyback Restrictions
Alan Guoming Huang, University of Waterloo
Kevin Jialin Sun, St. John’s University
Discussant: Jianfeng Hu, City University of New York, CUNY Baruch College

Option Listing and the Probability of Informed Trading in the Stock Market
Jianfeng Hu, City University of New York, CUNY Baruch College
Discussant: Alan Huang, University of Waterloo

TUESDAY 16 JULY
08:30–10:00 CONCURRENT SESSIONS

Session 5. Corporate Finance Empirical: Ownership Structure I
Chair: Zhi Wang, University of Oregon

Are Family Firms Better Performers During the Financial Crisis?
Yanbo Wang, INSEAD
Haoyong Zhou, Keele University
Discussant: Xiaoyan Chen, University of Queensland

Shirkers or Monitors: The Role of Block Institutional Investors in Corporate Cash Valuation
Zhi Jay Wang, University of Oregon
Steven R. Matsunaga, University of Oregon
Jing Huang, University of Oregon
Discussant: Hung Wan Kot, Hong Kong Baptist University

Ultimate Ownership Bank Connections and Collateral in China
Xiaofei Pan, University of Wollongong
Gary Gang Tian, University of Wollongong
Discussant: Chaohong Na, Yunnan University

10.00 - 10.30  Morning tea

TUESDAY 16 JULY
10:30–12:00 CONCURRENT SESSIONS

Session 6. Asset Pricing Theory I
Chair: Harold Zhang, University of Texas at Dallas

Variance Risk Premium: A Consumption-Based Equilibrium Approach
Xinwei Ma, Peking University
Jin E. Zhang, University of Otago
Discussant: Jerome Detemple, Boston University
**View Bias Towards Ambiguity, Expectile CAPM and the Anomalies**  
Wei Hu, Curtin University of Technology  
Zhenlong Zheng, Xiamen University  
**Discussant:** Lei Shi, University of Technology, Sydney

**Asset Pricing with a Financial Sector**  
Kai Li, Hong Kong University of Science & Technology  
**Discussant:** Harold Zhang, University of Texas at Dallas

---

**TUESDAY 16 JULY**  
**10:30–12:00 CONCURRENT SESSIONS**

**Session 7. China’s Financial System: IPO**  
**Chair:** Jian Yang, University of Colorado at Denver  
**Meeting Room 1, 4/F**

**Legal Protection and Underpricing of IPOs: Evidence from China**  
Jianlei Liu, Kyushu University  
Konari Uchida, Kyushu University  
Ruidong Gao, Waseda University  
**Discussant:** Tina Wei Li, Hong Kong Polytechnic University

**The Differential Impact of the Bank-Firm Relationship on IPO Underpricing: Evidence from China**  
Xiangchao Hao, Nankai University  
Jing Shi, Australian National University  
Jian Yang, University of Colorado at Denver  
**Discussant:** Peng Wang, Swedish School of Economics and Business Administration

**Institutional Environment, Firm Ownership and IPO First-Day Returns: Evidence from China**  
Yibiao Chen, Hong Kong Polytechnic University  
Steven Shuye Wang, Hong Kong Polytechnic University  
Wei Li, Hong Kong Polytechnic University  
Wilson H.S. Tong, Hong Kong Polytechnic University  
**Discussant:** Jianlei Liu, Kyushu University

**Pyramid IPOs on the Chinese Growth Enterprise Market**  
Martin Holmen, Göteborg University  
Peng Wang, Swedish School of Economics and Business Administration  
**Discussant:** Jian Yang, University of Colorado at Denver

---

**TUESDAY 16 JULY**  
**10:30–12:00 CONCURRENT SESSIONS**

**Session 8. Behavioral Asset Pricing I**  
**Chair:** Robert W. Faff, University of Queensland  
**Meeting Room 2, 4/F**
The Effects of Managerial Extraversion on Corporate Behavior
Na Young Park, University of Oxford
Discussant: Sung Bin Sohn, Peking University

Investor Attention and the Post Earnings Announcement Drift
Ernest Tan, University of Western Australia
Sirimon Treepongkaruna, University of Western Australia
Marvin Wee, University of Western Australia
Jing Yu, University of Western Australia
Discussant: G. Mujtaba Mian, Hong Kong Polytechnic University

Investors’ Selective Attention and Accruals Anomaly
G. Mujtaba Mian, Hong Kong Polytechnic University
Lixin (Nancy) Su, Hong Kong Polytechnic University
Discussant: Marvin Wee, University of Western Australia

What Does Investor Sentiment Reflect: Animal Spirits or Risks?
Sung Bin Sohn, Peking University
Discussant: Jean Jinghan Chen, University of Surrey

TUESDAY 16 JULY
10:30 – 12:00 CONCURRENT SESSIONS

Session 9. Corporate Social Responsibility I
Meeting Room 3, 4/F
Chair: Renée Adams, Australian School of Business at UNSW

Can Socially Responsible Firms Survive Competition? An Analysis of Corporate Employee Matching Grants
Ning Gong, Melbourne Business School
Bruce D. Grundy, University of Melbourne
Discussant: Ambrus Kecskes, Virginia Polytechnic Institute & State University

The Effect of Mandatory CSR Disclosure on Information Asymmetry: Evidence from a Quasi-Natural Experiment in China
Mingyi Hung, University of Southern California
Jing Shi, Australian National University
Yongxiang Wang, University of Southern California
Discussant: Ning Gong, Melbourne Business School

Can Firms Do Well for Shareholders by Doing Good for Stakeholders? The Importance of Long-Term Investors
Ambrus Kecskes, Virginia Polytechnic Institute & State University
Sattar Mansi, Virginia Polytechnic Institute & State University
Phuong-Anh Nguyen, Virginia Polytechnic Institute & State University
Discussant: Renée Adams, Australian School of Business at UNSW
TUESDAY 16 JULY
10:30–12:00 CONCURRENT SESSIONS

Session 10. Market Microstructure
Chair: Shaojun Zhang, Nanyang Technological University

**Bid-Ask Spreads, Quoted Depths, and Unexpected Duration between Trades**
Tony Ruan, Xiamen University
Tongshu Ma, Binghamton University
**Discussant:** Shaojun Zhang, Hong Kong Polytechnic University

**Trading Restriction, Tick Size and Price Discovery: Evidence from a Natural Experiment in China**
Kalok Chan, Hong Kong University of Science & Technology
Wilson H.S. Tong, Hong Kong Polytechnic University
Shaojun Zhang, Hong Kong Polytechnic University
**Discussant:** Tony Ruan, Xiamen University

**Measuring the Realized Skewness in Noisy Semi-Martingale with Jumps Using High Frequency Data**
Kent Wang, Xiamen University
Junwei Liu, Xiamen University
Zhi Liu, University of Macau
**Discussant:** Tom Smith, University of Queensland

12.00 - 13.00 Lunch (Buffet)  
Taichi Chinese Restaurant, 2/F

13.00 - 14.00 Keynote Address  
Grand Ballroom, 4/F
**Professor Franklin Allen, University of Pennsylvania,**  
“Finance and Growth in China”  
Sponsored by The Australian National University

TUESDAY 16 JULY
14:20–15:50 CONCURRENT SESSIONS

Session 11. Asset Pricing Theory II
Chair: Jerome Detemple, Boston University

**Differences in Opinion and Equilibrium Asset Returns in a Multi-Asset Market**
Xuezhong He, University of Technology, Sydney
Lei Shi, University of Technology, Sydney
**Discussant:** Xinwei Ma, Peking University

**Cointegration of Durable Consumption in Asset Returns**
Guojin Chen, Xiamen University
Zhiwu Hong, Xiamen University
Yu Ren, Xiamen University
**Discussant:** Kai Li, Hong Kong University of Science & Technology
TUESDAY 16 JULY
14:20–15:50 CONCURRENT SESSIONS

Chair: Richard Ottoo, Pace University

**Human Capital, Managerial Overconfidence, and Corporate Valuation**
Richard E. Ottoo, Pace University
Discussant: Yu Ren, Xiamen University

**Human Capital, Household Capital and Asset Returns**
Yu Ren, Xiamen University
Yufei Yuan, Xiamen University
Yang Zhang, Cornell University
Discussant: Richard Ottoo, Pace University

**Too Much Connection Can Harm Your Health: An Analysis of Political Connections and Firm Value**
Carl R. Chen, University of Dayton
Luo Danglun Sr., Sun Yat-Sen University
Ting Zhang, University of Dayton
Discussant: Stefan Zeume, INSEAD

TUESDAY 16 JULY
14:20–15:50 CONCURRENT SESSIONS

Session 13. NTU invited Session
Chair: Chuan-Yang Hwang, Nanyang Technological University

**Making It to the Top: From Female Labor Force Participation to Boardroom Gender Diversity**
Renee B. Adams, Australian School of Business at UNSW
Tom Kirchmaier, University of Manchester

**The Brain Gain of Corporate Boards: A Natural Experiment from China**
Mariassunta Giannetti, Stockholm School of Economics
Guanmin Liao, Central University of Finance and Economics
Xiaoyun Yu, Indiana University Bloomington

**The Effect of Increased Financial Disclosure on Post-Earnings-Announcement Drift: Worldwide Evidence**
Mingyi Hung, University of Southern California
Xi Li, Hong Kong University of Science & Technology
Shiheng Wang, Hong Kong University of Science & Technology

Asian Finance Association Annual Meeting 2013
**Session 14. Empirical Asset Pricing III**  
Chair: Mark Loewenstein, University of Maryland  
Meeting Room 3, 4/F

*Nominal Price Illusion*  
Justin Birru, New York University  
Baolian Wang, Hong Kong University of Science & Technology  
**Discussant:** Bingxin Li, University of Houston

*Depicting the 'Elephant': When All Asset Pricing Models are Blind*  
Qing Zhou, University of Queensland  
**Discussant:** Nicolas Fulli-Lemaire, Amundi Asset Management

*Dynamic Jump Intensities and Risk Premiums in Crude Oil Futures and Options Markets*  
Peter Christoffersen, University of Toronto  
Kris Jacobs, University of Houston  
Bingxin Li, University of Houston  
**Discussant:** Mark Loewenstein, University of Maryland

*Allocating Commodities in Inflation Hedging Portfolios: A Core Driven Global Macro Strategy*  
Nicolas Fulli-Lemaire, Amundi Asset Management  
**Discussant:** Qing Zhou, University of Queensland

---

**Session 15. Financial Institutions I**  
Chair: Bang Nam Jeon, Drexel University  
Meeting Room 5, 4/F

*Asymmetry Information and Diversification Effect on Loan Pricing in Asia Pacific Region 2006-2010*  
Yudi Surya Tanjung, University of Surabaya  
Deddy Marciano, University of Surabaya  
James Bartle, University of New South Wales  
**Discussant:** Bang Nam Jeon, Drexel University

*Shareholder Empowerment and Bank Bailouts*  
Daniel Ferreira, London School of Economics & Political Science  
David Kershaw, London School of Economics  
Tom Kirchmaier, University of Manchester  
Edmund-Philipp Schuster, London School of Economics  
**Discussant:** Rui Shen, Erasmus University Rotterdam
**Labor Protection Laws and Bank Loan Contracting**
Azizjon Alimov, City University of Hong Kong
**Discussant:** Tom Kirchmaier, University of Manchester

15.50 - 16.10  Afternoon tea  Foyer, 4/F

TUESDAY 16 JULY
16:10–17:40 CONCURRENT SESSIONS

**Session 16.** Financial Institutions II  
**Chair:** Tom Kirchmaier, University of Manchester  
**Meeting Room 210, 2/F**

*The Monitoring Incentives of Transactional and Relationship Lenders: Evidence from the Syndicated Loan Market*
Anthony Saunders, New York University  
Pei Shao, University of Lethbridge  
Yutao Li, University of Waterloo  
**Discussant:** Krishnamurthy Subramanian, Indian School of Business (ISB), Hyderabad

*The Role of Bank Regulation in Systemic Banking Crises: Cross-Country Evidence on Bank Risk Taking*
Frank M. Song, University of Hong Kong  
Wensi Xie, University of Hong Kong  
**Discussant:** Dong Xiang, Griffith University

*Fundamental Analysis, Mutual Fund Trading and Fund Performance*
Rui Shen, Erasmus University Rotterdam  
Marno Verbeek, Erasmus University Rotterdam  
Yu Wang, IMC Financial Markets & Asset Management  
**Discussant:** Tom Nohel, Loyola University of Chicago

TUESDAY 16 JULY
16:10–17:40 CONCURRENT SESSIONS

**Session 17.** Corporate Finance Empirical: Product Market  
**Chair:** Mingyi Hung, University of Southern California  
**Meeting Room 1, 4/F**

*Product Market Predation Risk and the Value of Cash Holdings*
Jianxin Daniel Chi, University of Nevada  
Xunhua Su, Norwegian School of Economics  
**Discussant:** Hsien-Hsing Liao, National Taiwan University

*Supplier Immobility, Operating Leverage, and Cost of Equity*
Jin Wang, Wilfrid Laurier University  
Xiaoqiao Wang, Queen’s University  
**Discussant:** Ning Gong, University of Melbourne
Spillover Effects of Earnings Restatements along the Supply Chain
Min Zhu, City University of Hong Kong
Jun-Koo Kang, Nanyang Technological University
Mandy Tham, Nanyang Technological University
Discussant: Mingyi Hung, University of Southern California

TUESDAY 16 JULY
16:10–17:40 CONCURRENT SESSIONS

Session 18. Empirical Asset Pricing: Liquidity I
Chair: Ke Wang, Federal Reserve Board

The Illiquidity Premium: International Evidence
Yakov Amihud, New York University
Allaudeen Hameed, National University of Singapore
Wenjin Kang, Renmin University of China
Huiping Zhang, Shanghai University of Finance and Economics
Discussant: Ping-Wen Sun, Jiangxi University of Finance and Economics

Foreign Investor Heterogeneity and Stock Liquidity Around the World
Lilian K. Ng, University of Wisconsin
Fei Wu, Jiangxi University of Finance and Economics
Jing Yu, University of Western Australia
Bohui Zhang, University of New South Wales
Discussant: Benjamin Junge, Swiss Finance Institute

Liquidity and Price Impact of Financial Distress: Evidence from the Defaulted Bond Market
Song Han, Federal Reserve Board
Ke Wang, Federal Reserve Board
Discussant: Baolian Wang, Hong Kong University of Science & Technology

Identifying Cross-Sided Liquidity Externalities
Johannes Atle Skjeltorp, Central Bank of Norway
Elvira Sojli, Erasmus University Rotterdam
Wing Wah Tham, Erasmus University Rotterdam
Discussant: Bohui Zhang, The University of New South Wales

TUESDAY 16 JULY
16:10–17:40 CONCURRENT SESSIONS

Session 19. Corporate Finance Empirical I
Chair: Ambrus Kecskes, Virginia Polytechnic Institute & State University

CEO Turnover, Financial Distress and Contractual Innovations
John Harry Evans III, University of Pittsburgh
Shuqing Luo, National University of Singapore
Nandu J. Nagarajan, University of Pittsburgh
Discussant: Melanie Buters, Curtin University of Technology
The Invisible Hand of Short-Selling: Does Short-Selling Discipline Earnings Manipulation?
Massimo Massa, INSEAD
Bohui Zhang, University of New South Wales
Hong Zhang, INSEAD
Discussant: Ambrus Kecskes, Virginia Polytechnic Institute & State University

Bribes and Firm Value - Evidence from Anti-Bribery Regulation
Stefan Zeume, INSEAD
Discussant: Luo Danglun, Sun Yat-Sen University

Do Analysts' Preferences Affect Corporate Policies?
Francois Degeorge, University of Lugano
François Derrien, HEC Paris (Groupe HEC)
Ambrus Kecskes, Virginia Polytechnic Institute & State University
Sebastien Michenaud, Rice University
Discussant: Hong Zhang, INSEAD

TUESDAY 16 JULY
16:10–17:40 CONCURRENT SESSIONS

Session 20. China’s Financial System I
Chair: Jingjing Yang, Jiangxi Normal University

Do Higher Value Firms Voluntarily Disclose More Information? Evidence from China
Jean Jinghan Chen, University of Surrey
Youchao Tan, Nankai University
Xinsheng Cheng, Nankai University
Stephen X. Gong, Hong Kong Polytechnic University
Discussant: Tao Huang, Jiangxi University of Finance and Economics

Mutual Fund Flow-Performance Relationship Under Volatile Market Condition
Mingsheng Li, Bowling Green State University
Jing Shi, Australian National University
Jun Xiao, Jiangxi University of Finance and Economics
Discussant: Gang Xiao, Renmin University of China

Mispricing of Chinese Warrants
Eric A. Powers, University of South Carolina
Gang Xiao, Renmin University of China
Hong Yan, University of South Carolina
Discussant: Meifen Qian, Jiangxi University of Finance and Economics

18.00 - 20.30 Dinner (Buffet) Taichi Chinese Restaurant, 2/F

Wednesday 17 JULY
08:30–10:00 CONCURRENT SESSIONS

Session 21. International Finance II
Chair: Hung Wan Kot, Hong Kong Baptist University
What Factors Influence the Reverse Cross-Listing Decision?
Hung Wan Kot, Hong Kong Baptist University
Lewis Tam, University of Macau
Discussant: Tao Huang, Jiangxi University of Finance and Economics

Do Multinational Banks Use Internal Capital Markets and How?: Evidence from Bank-Level Panel Data in Emerging Economies
Bang Nam Jeon, Drexel University
Ji Wu, Penn State University Harrisburg
Discussant: Deddy Marciano, Universitas Surabaya

Labor Market Regulations and Cross-Border Mergers
Azizjon Alimov, City University of Hong Kong
Discussant: Jin Wang, Wilfrid Laurier University

Political Uncertainty and Dividend Policy: Evidence from International Political Crises
Tao Huang, Jiangxi University of Finance and Economics
Fei Wu, Jiangxi University of Finance and Economics
Jin Yu, University of New South Wales
Bohui Zhang, University of New South Wales
Discussant: Hung Wan Kot, Hong Kong Baptist University

Wednesday 17 JULY
08:30–10:00 CONCURRENT SESSIONS

Session 22. Behavioral Asset Pricing III
Meeting Room 1, 4/F
Chair: Tao Shu, University of Texas at Austin

Incorporation of Public Information: Analysts Versus Managers
Qianqian Du, University of Stavanger
Rui Shen, Erasmus University Rotterdam
K. C. John Wei, Hong Kong University of Science & Technology
Discussant: Qiongbing Wu, University of Western Sydney

Do Local Investors Know More? A Direct Examination of Individual Investors’ Information Set
Robert Charles Giannini, BlueCrest Capital Management
Paul J. Irvine, University of Georgia
Tao Shu, University of Texas at Austin
Discussant: Fangjian Fu, Singapore Management University

Informed Trade, Uninformed Trade, and Stock Price Delay
Narelle K. Gordon, Macquarie University
Qiongbing Wu, University of Western Sydney
Discussant: Ping-Wen Sun, Jiangxi University of Finance and Economics
**The Persistence of Long-Run Abnormal Stock Returns: Evidence from Stock Repurchases and Offerings**
Fangjian Fu, Singapore Management University
Sheng Huang, Singapore Management University
Hu Lin, Peking University
**Discussant:** Tao Shu, University of Texas at Austin

---

**Wednesday 17 JULY**
08:30–10:00 CONCURRENT SESSIONS

**Session 23. HKUST invited Session**
Meeting Room 2, 4/F

**Chair:** Kalok Chan, Hong Kong University of Science & Technology

**Liquidity Costs, Return Smoothing, and Investor Flows: Evidence from a Separate Account Platform**
Charles Cao, Pennsylvania State University
Grant V Farnsworth, Pennsylvania State University
Bing Liang, University of Massachusetts at Amherst
Andrew W. Lo, Massachusetts Institute of Technology

**Liquidity Premium in the Eye of the Beholder: An Analysis of the Clientele Effect in the Corporate Bond Market**
Jing-Zhi Huang, Pennsylvania State University
Zhenzhen Sun, Siena College
Tong Yao, University of Iowa
Tong Yu, University of Rhode Island

**Optimal Liquidity Policy**
Jennifer Huang, Cheung Kong Graduate School of Business
Jiang Wang, Massachusetts Institute of Technology

---

**Wednesday 17 JULY**
08:30–10:00 CONCURRENT SESSIONS

**Session 24. Corporate Finance Empirical III**
Meeting Room 3, 4/F

**Chair:** Millicent Chang, University of Western Australia

**The Relation between Corporate Liquidity Holdings and Financial Derivatives Policy**
Jiyoon Lee, University of Illinois at Urbana-Champaign
**Discussant:** Alexander Vadilyev, The University of New South Wales

**Creditor Rights During a Financial Crisis: An Analysis Using Bank Loan Covenants**
Sudip Gupta, New York University
Anurag Singh, Indian School of Business (ISB), Hyderabad
Krishnamurthy Subramanian, Indian School of Business (ISB), Hyderabad
**Discussant:** Peng Xu, Hosei University
Valuation of Private, Innovative Targets: Evidence from Cisco’s Acquisitions
Chandra Sekhar Mangipudi, Indian School of Business (ISB), Hyderabad
Krishnamurthy Subramanian, Indian School of Business (ISB), Hyderabad
Rajkamal Vasu, Indian School of Business (ISB), Hyderabad
Discussant: Millicent Chang, University of Western Australia

What Drives Investment-Cash Flow Sensitivity Around the World?
Fariborz Moshirian, University of New South Wales
Vikram K. Nanda, Georgia Institute of Technology
Alexander A. Vadilyev, University of New South Wales
Bohui Zhang, University of New South Wales
Discussant: Jiyoung Lee, University of Illinois at Urbana-Champaign

WEDNESDAY 17 JULY
08:30–10:00 CONCURRENT SESSIONS

Session 25. China’s Financial System II
Meeting Room 5, 4/F
Chair: Gary Tian, University of Wollongong

Mutual Fund Ownership, Firm Specific Information, and Firm Performance: Evidence from China
Wenhua Sharpe, Deakin University
Gary Gang Tian, University of Wollongong
Hong Feng Zhang, Deakin University
Discussant: Bin Yu, Jiangxi University of Finance and Economics

Are Investors Irrational? - Study on China Warrant Market
Yintian Wang, Tsinghua University
Yingzi Zhu, Tsinghua University
Discussant: Shaojun Zhang, Hong Kong Polytechnic University

IPO Delisting and Underwriter Prestige in China
Chi-Yih Carol Yang, Xi’an Jiaotong-Liverpool University
Xiaoming Ding, Xi’an Jiaotong-Liverpool University
Xinru Ni, University of Bristol
Discussant: Gary Tian, University of Wollongong

Float, Speculation, and Stock Price: Evidence from the Share Structure Reform in China
Chuan-Yang Hwang, Nanyang Technological University
Shaojun Zhang, Hong Kong Polytechnic University
Yanjian Zhu, Zhejiang University
Discussant: Yintian Wang, Tsinghua University

10.00 - 10.30  Morning tea  Foyer, 4/F
Session 26. China's Financial System III  
Chair: Terry O'Neil, Australian National University

Mutual Funds' Holdings and Listed Firms' Dividend Payouts in China  
Jingjing Yang, Jiangxi Normal University  
Jing Chi, Massey University  
Martin R. Young, Massey University  
Discussant: Qiaoqiao Zhu, Australian National University

The Chinese Cash and Stock Dividend Puzzles: Evidence from Joint Earnings and Dividend Announcements  
John G. Powell, Massey University  
Meifen Qian, Jiangxi University of Finance and Economics  
Jing Shi, Australian National University  
Discussant: Xiaoyan Chen, The University of Queensland

The Love for Stock Dividends: Chinese Evidence  
Haozhi Huang, Australian National University  
Rulu Pan, Australian National University  
Qiaoqiao Zhu, Australian National University  
Discussant: Chi-Yih Yang, Xi'an Jiaotong-Liverpool University

Session 27. Empirical Asset Pricing II  
Chair: Xue-Zhong (Tony) He, University of Technology, Sydney

Asset Pricing Under Keeping Up with the Joneses and Heterogeneous Beliefs  
Xuezhong He, University of Technology, Sydney  
Lei Shi, University of Technology, Sydney  
Min Zheng, Central University of Finance and Economics  
Discussant: Sebastian Schroff, University of Hohenheim

Retail Investor Information Demand - Speculating and Investing in Structured Products  
Sebastian Schroff, University of Hohenheim  
Stephan Meyer, Karlsruhe Institute of Technology  
Discussant: Xue-Zhong (Tony) He, University of Technology, Sydney

The Performance of Individual Investors in Structured Financial Products  
Oliver Entrop, Catholic University of Eichstaett  
Michael D. McKenzie, University of Sydney  
Marco Wilkens, University of Goettingen (Gottingen)  
Christoph Winkle, University of Augsburg  
Discussant: Lee Smales, Curtin University of Technology
Time-Varying Relationship of News Sentiment, Implied Volatility and Stock Returns
Lee A. Smales, Curtin University of Technology
Discussant: Christoph Winkler, University of Augsburg

WEDNESDAY 17 JULY
10:30–12:00 CONCURRENT SESSIONS

Session 28. Corporate Finance Empirical II
Chair: Krishnamurthy Subramanian, Indian School of Business
Do Firms Follow Their Rivals to Issue a Special Dividend?
May Hu, Curtin University of Technology
Melanie Buters, Curtin University of Technology
Discussant: Shuqing Luo, National University of Singapore

How Do Insider Trading Policies Affect the Returns to Insider Trades?
Millicent Chang, University of Western Australia
Marvin Wee, University of Western Australia
Discussant: Krishnamurthy Subramanian, Indian School of Business

Employee Inside Debt and Firm Risk-Taking: Evidence from Employee Deposit Program in Japan
Sudipto Dasgupta, Hong Kong University of Science & Technology
Yupeng Lin, National University of Singapore
Takeshi Yamada, University of Adelaide
Zilong Zhang, Hong Kong University of Science & Technology
Discussant: Xiaoyun Yu, Indiana University Bloomington

Shareholder Rights, Managerial Incentives, and Firm Value
Feng Zhang, University of Utah
Discussant: Yunpeng Lin, National University of Singapore

WEDNESDAY 17 JULY
10:30–12:00 CONCURRENT SESSIONS

Session 29. Behavioral Asset Pricing II
Chair: Fangjian Fu, Singapore Management University
The Convergence and Divergence of Investors’ Opinions around Earnings News: Evidence from a Social Network
Robert Charles Giannini, BlueCrest Capital Management
Paul J. Irvine, University of Georgia
Tao Shu, University of Texas at Austin
Discussant: Lei Sun, Shanghai University of Finance and Economics
**How Does Competition Affect Opinion Dispersion?**
Lei Sun, Shanghai University of Finance and Economics
K. C. John Wei, Hong Kong University of Science & Technology
**Discussant**: Tao Shu, University of Georgia

**Media and Google: The Impact of Information Supply and Demand on Stock Returns**
Yanbo Wang, INSEAD
**Discussant**: Hiroyuki Aman, Kwansei Gakuin University

**Mass Media Effects on Stock Market Liquidity: Television Broadcasting Evidence from Japan**
Hiroyuki Aman, Konan University
Norihiro Kasuga, Kinki University
Hiroshi Moriyasu, Nagasaki University
**Discussant**: Yanbo Wang, INSEAD

---

**WEDNESDAY 17 JULY**
**10:30–12:00 CONCURRENT SESSIONS**

**Session 30.** Derivative
**Chair**: Charles Cao, Pennsylvania State University

**Risk Aversion, Fanning Preference, and Volatility Smirk on S&P500 Index Options**
Jian Chen, Xiamen University
Chenghu Ma, Fudan University
**Discussant**: Emily Lin, St. John’s University

**Copula-Based Pairs Trading Strategy**
Wenjun Xie, Nanyang Technological University
Yuan Wu, Nanyang Technological University
**Discussant**: Charles Cao, Pennsylvania State University

**An Alternative Way of Examining the Samuelson Effect in Futures Markets**
Chia-Cheng Ho, National Chung Cheng University
**Discussant**: Wenjun Xie, Nanyang Technological University

**The Effectiveness of Changes in Settlement Procedures**
Emily Lin, St. John’s University
Carl R. Chen, University of Dayton
**Discussant**: Chia-Cheng Ho, National Chung Cheng University
12.00 - 13.00 Lunch (Buffet) Taichi Chinese Restaurant, 2/F

13.00 - 14.00 Keynote Address Grand Ballroom, 4/F
Professor Jiang Wang, Massachusetts Institute of Technology
“Noise as Information for Illiquidity”
Sponsored by Zhongnan University of Economics and Law

14.00 - 14.20 AGM Grand Ballroom, 4/F

Wednesday 17 JULY
14:20–15:50 CONCURRENT SESSIONS

Session 31. Empirical Asset Pricing: Bonds Meeting Room 210, 2/F
Chair: Jing-Zhi Jay Huang, Pennsylvania State University

Forecasting Government Bond Risk Premia Using Technical Indicators
Jeremy Goh, Singapore Management University
Fuwei Jiang, Singapore Management University
Jun Tu, Singapore Management University
Guofu Zhou, Washington University in Saint Louis
Discussant: Elvira Sojli, RSM Erasmus University

Stock Market Illiquidity, Funding Liquidity, and Bond Risk Premia
Kees E. Bouwman, Erasmus University Rotterdam
Elvira Sojli, Erasmus University Rotterdam
Wing Wah Tham, Erasmus University Rotterdam
Discussant: Fuwei Jiang, Singapore Management University

Liquidity Risk in Credit Default Swap Markets
Anders B. Trolle, Ecole Polytechnique Fédérale de Lausanne
Benjamin Junge, Swiss Finance Institute
Discussant: Jing-Zhi Jay Huang, Pennsylvania State University

Suppliers ‘Customers’ Cash Holdings, Sources of Cash Flows, and Firm Bond Yield Spreads
Tsung-Kang Chen, National Taiwan University
Hsien-Hsing Liao, National Taiwan University
Yi-Ting Lin, National Taiwan University
Discussant: Jianxin Chi, University of Nevada, Las Vegas
Wednesday 17 JULY
14:20–15:50 CONCURRENT SESSIONS

Session 32. Corporate Finance Empirical: Capital Structure  
Chair: Ning Gong, Melbourne Business School

**Testing the Pecking Order Theory with Financial Constraints**  
Huili Chang, University of Hong Kong  
Frank M. Song, University of Hong Kong  
**Discussant:** Joye Khoo, Curtin University of Technology

**Leverage Heterogeneity and Asymmetric Speed of Adjustment**  
Joye Khoo, Curtin University of Technology  
Robert B. Durand, Curtin University of Technology  
Subhrendu Rath, Curtin University of Technology  
**Discussant:** Huili Chang, University of Hong Kong

**Audit Quality as a Factor in the Capital and Debt Maturity Structures of Firms with Potential “Going Concern” Problems**  
Yangyang Chen, Monash University - Department of Accounting and Finance  
Ning Gong, Melbourne Business School  
Ferdinand A. Gul, Monash University - Sunway Campus  
Madhu Veeraraghavan, Monash University  
**Discussant:** Krishnamurthy Subramanian, Indian School of Business

Wednesday 17 JULY
14:20–15:50 CONCURRENT SESSIONS

Session 33. Corporate Social Responsibility II  
Chair: Adrian Cheung, Curtin University of Technology

**Corporate Social Responsibility and Dividend Policy**  
Adrian (Wai-kong) Cheung, Curtin University of Technology  
May Hu, Curtin University  
**Discussant:** Hong Wan, State University of New York at Oswego

**Corporate Tradeoff Decisions between Social Goals and Shareholder Value Maximization: The Role of Local Institutional Investors**  
Incheol Kim, University of South Florida  
Hong Wan, State University of New York  
Bin Wang, University of South Florida  
Tina Yang, Villanova University  
**Discussant:** Adrian Cheung, Curtin University
Does Corporate Social Responsibility Matter? Evidence from New Equity Issues
Beng Soon Chong, Nanyang Technological University
Zhenbin Liu, City University of Hong Kong
Discussant: Tom Kirchmaier, University of Manchester

Wednesday 17 JULY
14:20–15:50 CONCURRENT SESSIONS

Session 34. Empirical Asset Pricing: Liquidity II
Chair: Jennifer Huang, Cheung Kong Graduate School of Business

Stock Market Liquidity, Aggregate Analyst Forecast Errors, and the Economy
Ji-Chai Lin, Louisiana State University
Kenneth John Reichelt, Louisiana State University
Ping-Wen Sun, Jiangxi University of Finance and Economics
Discussant: Wing Wah Tham, Erasmus School of Economics

Investor Type and Commonality in Liquidity
Yessy A. Peranginangin, University of Adelaide
Paul Brockman, Lehigh University
Ralf Zurbruegg, University of Adelaide
Akbar Z Ali, University of Adelaide
Discussant: Ke Wang, Federal Reserve Board

Liquidity is Still Priced
Wenjin Kang, Renmin University of China
Nan Li, National University of Singapore
Huiping Zhang, Shanghai University of Finance and Economics
Discussant: Jennifer Huang, Cheung Kong Graduate School of Business

Investor Sentiment and Financial Performance in Malaysia
Fauzias Mat Nor, National University of Malaysia
Izani Ibrahim, National University of Malaysia
Mamunur Rashid, NUBS Malaysia
Discussant: Ping-Wen Sun, Jiangxi University of Finance and Economics

Wednesday 17 JULY
14:20–15:50 CONCURRENT SESSIONS

Session 35. Corporate Finance Empirical: Ownership Structure II
Chair: Abeyratna Gunasekarage, Monash University
Does the Post-Acquisition Performance of Bidding Firms Depend on the Organizational Form of Targets Acquired?
Syed Mohammad Mostofa Shams, Monash University
Abeyratna Gunasekarage, Monash University
Sisira R. N. Colombage, Monash University
Discussant: Kun Wang, Australian National University

Government Ownership and the Cost of Debt for Chinese Listed Corporations
Kun Tracy Wang, Australian National University
Greg Shailer, Australian National University
Dan S. Dhaliwal, University of Arizona
Discussant: Abeyratna Gunasekarage, Monash University

Vertical Interlocks of Executives and Firm Performance of Affiliated SOEs
Jakob Arnoldi, University of Aarhus
Xin Chen, Shanghai Jiao Tong University
Chaohong Na, Yunnan University
Discussant: Gary Tian, University of Wollongong

15.50 - 16.10 Afternoon tea

Wednesday 17 JULY
16:10–17:40 CONCURRENT SESSIONS

Session 36. Financial Institutions III
Chair: Dong Xiang, Griffith University

Does Efficiency Make Bank Different in GFC? An Empirical Analysis on Australian, Canadian and UK Banks
Dong Xiang, Griffith University
Abul Shamsuddin, University of Newcastle (Australia)
Andrew C. Worthington, Griffith University
Discussant: Wensi Xie, University of Hong Kong

Deregulation of Bank Entry and Bank Failures
Krishnamurthy Subramanian, Indian School of Business
Ajay Yadav, Duke University
Discussant: Pei Shao, University of Lethbridge

Leverage Decisions in Portfolio Management
Tom Nohel, Loyola University of Chicago
Steven K. Todd, Loyola University of Chicago
Z. Jay Wang, University of Oregon
Discussant: Azizjon Alimov, City University of Hong Kong

The Effect of Investor Sentiment on Stock Returns: Insight from Emerging Asian Markets
Shangkari V. Anusakumar, Universiti Sains Malaysia
Ruhani Ali, Universiti Sains Malaysia
Chee Wooi Hooy, Universiti Sains Malaysia
Discussant: Dong Xiang, Griffith University
Wednesday 17 JULY
16:10–17:40 CONCURRENT SESSIONS

Session 37. China’s Financial System IV
Chair: Tom Smith, University of Queensland

Renminbi as a Regional Key Currency: Evidences from NDF Markets
Donald D. Lien, University of Texas at San Antonio
Li Yang, University of New South Wales
Chunyang Zhou, Shanghai Jiao Tong University
Glenn Lee, Independent
Discussant: Robin Luo, La Trobe University

Hot Money Flow, Money Supply, Mortgage Credit and Residential Property Prices in China
Sanae Ohno, Musashi University
Peng Xu, Hosei University
Discussant: Tom Smith, University of Queensland

A State-Price Volatility Index for China’s Stock Market
Michael O’Neill, University of Queensland
Kent Wang, Xiamen University
Discussant: Ji (George) Wu, Xiamen University

Is There a Volatility Puzzle in the Hong Kong Stock Market?
Ji (George) Wu, Xiamen University
Gilbert V. Nartea, Lincoln University
Discussant: Kent Wang, Xiamen University

Wednesday 17 JULY
16:10–17:40 CONCURRENT SESSIONS

Session 38. International Finance III
Chair: Bohui Zhang, University of New South Wales

Country-Specific Attention and Security Returns
Mike Qinghao Mao, Erasmus University Rotterdam
K. C. John Wei, Hong Kong University of Science & Technology
Discussant: Ting Li, Skidmore College

Does PIN Affect Equity Prices Around the World?
Sandy Lai, University of Hong Kong
Lilian K. Ng, University of Wisconsin
Bohui Zhang, University of New South Wales
Discussant: Qiongbing Wu, University of Western Sydney
Explaining the Value Premium around the World: Risk or Mispricing?
Andy C.W. Chui, Hong Kong Polytechnic University
K. C. John Wei, Hong Kong University of Science & Technology
Feixue Xie, University of Texas at El Paso
Discussant: Bohui Zhang, The University of New South Wales

Intra-Industry Momentum and Product Market Competition Around the World
Ting Li, Skidmore College
Bohui Zhang, University of New South Wales
Discussant: Mike Qinghao Mao, Erasmus University Rotterdam

Wednesday 17 JULY
16:10–17:40 CONCURRENT SESSIONS

Session 39. Corporate Finance Empirical: CEO
Meeting Room 3, 4/F
Chair: Yisong Tian, York University

State-Stewardship Theory and Executive Compensation
Hao Liang, Tilburg University
Luc Renneboog, Tilburg University - Department of Finance
Sunny Li Sun, University of Missouri at Kansas City
Discussant: Betty Wu, University of Glasgow Adam Smith Business School

Equity Pay and Stock Price Manipulation
Yisong S. Tian, York University
Discussant: Jing Luo, University of Hong Kong

CEO Option Compensation, Risk-Taking and the Financial Crisis: Evidence from the Banking Industry
Jing Luo, University of Hong Kong
Frank M. Song, University of Hong Kong
Discussant: Yisong Tian, York University

Founding Family CEO Pay Incentives and Investment Policy: Evidence from a Structural Model
Mieszko Mazur, Catholic University of Lille
Betty (H.T.) Wu, University of Glasgow
Discussant: Hao Liang, Tilburg University

Wednesday 17 JULY
16:10–17:40 CONCURRENT SESSIONS

Session 40. Corporate Finance Empirical: IPO
Meeting Room 5, 4/F
Chair: Ning Tang, Wilfrid Laurier University

Do Private Equity Investors Conspire with Ultimate Owners in the IPO Process?
Qigui Liu, University of Wollongong
Jinghua Tang, University of Wollongong
Gary Gang Tian, University of Wollongong
Discussant: Brahim Saadouni, University of Manchester
Multiple Lead Underwriter IPOs and Firm Visibility
Jin Q. Jeon, Dongguk University
Cheolwoo Lee, Ferris State University
Tareque Nasser, Kansas State University
M. Tony Via, University of Alabama
Discussant: Ning Tang, Wilfrid Laurier University

Investor Sentiment and the Pricing of IPOs
Cynthia J. Campbell, Iowa State University - Department of Accounting and Finance
Yan Du, Barclays Global Investors
Ghon Rhee, University of Hawaii at Manoa
Ning Tang, Wilfrid Laurier University
Discussant: Jin Jeon, Dongguk University

Warrants in Underwritten IPOs
Arif Khurshed, University of Manchester
Dimitris Kostas, University of Manchester
Brahim Saadouni, University of Manchester
Discussant: Qigui Liu, University of Wollongong

18.30 – 21.30 Awards Ceremony and Conference Dinner
Grand Ballroom, 4/F
Sponsored by AVIC Trust Co. Ltd.
Asymmetry Information and Diversification Effect on Loan Pricing in Asia Pacific Region 2006-2010
Asian Finance Association (AsFA) 2013 Conference

Faculty of Business & Economics, University of Surabaya

Universitas Surabaya - Faculty of Business & Economics

University of New South Wales (UNSW)

Date Written: October 28, 2012

Abstract
Purpose of this study is to test the asymmetry information influence towards lead arranger and participant in syndicated loans. In syndicated loans, lead arranger are responsible in the loan establishment and act as intermediary between borrower and syndicated members. It cause participant to be highly dependent to the lead arranger. The theory predicts that the higher asymmetry information between lead arranger and participant will cause participant to expect a higher loan pricing, and a bigger lead share will reduce this effect. Conversely, a bigger lead share will resulted in a higher monitoring risk and credit risk for the lead arranger, which cause lead arranger to expect a higher loan pricing. Therefore, the establishment of loan pricing are affected by two opposite effect, asymmetry information effect (participant pricing) and diversification effect (lead pricing).

This study uses two stage least squares (2SLS) to determine the existence of asymmetry information effect and diversification effect in loan pricing. This study used a sample of the entire LIBOR-based lending in Asia Pacific region for the period 2006-2010.

This research shown that diversification effect indeed affecting the loan pricing in Asia Pacific, while asymmetry information effect in not proven. This is because Asia Pacific loans have a high average lead share (75%) and most of the loans have more than one lead arranger. The study also found that lenders tend to consider the economy conditions of a nation and previous relationship with the borrower than the financial performance of each borrower.

Keywords: credit risk, reputation, lead share, loan pricing, loan, syndicate

JEL Classification: G21

Suggested Citation
Show Contact Information

Paper statistics

DOWNLOADS

106

RANK
ASYMMETRY INFORMATION AND DIVERSIFICATION EFFECT ON LOAN PRICING IN ASIA PACIFIC REGION 2006-2010

Yudi Surya Tanjung\(^1\)
Deddy Marciano\(^2\)
James Bartle\(^3\)

Abstract

Purpose of this study is to test the asymmetry information influence towards lead arranger and participant in syndicated loans. In syndicated loans, lead arranger are responsible in the loan establishment and act as intermediary between borrower and syndicated members. It cause participant to be highly dependant to the lead arranger. The theory predicts that the higher asymmetry information between lead arranger and participant will cause participant to expect a higher loan pricing, and a bigger lead share will reduce this effect. Conversely, a bigger lead share will resulted in a higher monitoring risk and credit risk for the lead arranger, which cause lead arranger to expect a higher loan pricing. Therefore, the establishment of loan pricing are affected by two opposite effect, asymmetry information effect (participant pricing) and diversification effect (lead pricing).

This study uses two stage least squares (2SLS) to determine the existence of asymmetry information effect and diversification effect in loan pricing. This study used a sample of the entire LIBOR-based lending in Asia Pacific region for the period 2006-2010.

This research shown that diversification lending indeed affecting the loan pricing in Asia Pacific, while asymmetry information effect in not proven. This is because Asia Pacific loans have a high average lead share (75%) and most of the loans have more than one lead arranger. The study also found that lenders tend to consider the economy conditions of a nation and previous relationship with the borrower than the financial performance of each borrower.

Keywords: credit risk, reputation, lead share, loan pricing, loan, syndicate

\(^{1}\) Lecturer in Finance and Capital Market, Faculty of Business & Economics, University of Surabaya
\(^{2}\) Lecturer in Finance and Banking, Faculty of Business & Economics, University of Surabaya
\(^{3}\) Adjunct Professor in Banking, Australian Business School, University of New South Wales
Background

Syndicated loans according to Armstrong (2003), is a type of loan provided by two lenders (or more) to provide funds to a specific borrower. In a syndicated loan, some lenders are acting as a lead arranger, while other lenders acted as participant lenders. Each of these types of lenders has different roles in a syndicated loan (Sufi, 2004). Lead arranger is the one responsible to manage the entire process and monitor the borrower in the syndicated loan. Once the the borrower and lead arranger agreed for a loan contract, lead arranger will offer this syndicated loan to other prospective participant (Dennis and Mullineaux, 1999).

Ivashina (2009) explained that the loan pricing and structure of loan is determined through a bidding process between the lead arranger and the participant. This causes syndicated loan pricing to be affected by two simultaneous and opposite effects of asymmetry information (participant pricing) and diversification (lead pricing). Asymmetry information effect is a bias that arises due to the asymmetry of information between the participants and the lead arranger, where the higher asymmetry information is synonymous with a low lead share thus will encourage the participant to expect a higher loan pricing. Diversification effect is a bias that arises due to the asymmetry of information between the lead arranger and the borrower, where the higher asymmetry information is synonymous with a higher lead share thus the lead arranger will be exposed to a higher credit risk. As a result, lead arranger would expect a higher loan pricing.

Asymmetry information on a loan can be seen from the loan spread value. Ivashina (2009) explained that the increase in lead share can reduce asymmetry information between the lead and the participant. That is because the lead arranger has better information about the loan, while the participant is likely to have limited information and rely heavily on information provided by the lead arranger. The higher the share owned by lead arranger will encourage a lower asymmetry information that will reduce participant’s demand for spread, and vice versa.

On the other side, Pavel and Phillis (1987) and Gorton and Pennacchi (1995) showed that a higher lead share will increase the potency of lead arranger’s credit risk exposure. This causes the lead arranger to expect a higher spread to compensate for the risks covered (Ivashina, 2009). Demsetz (1999) proved that the diversification of credit risk is the reason why the lead arranger trying to minimize the share owned, in order to reduce the spread.

Loan Pricing in Asia Pacific

Figure 1 shows the development of global syndicated loan volume which divided into three areas, America, Asia Pacific, and Europe. It is clearly shown that the development of global syndicated loans were quite rapidly, even during 2008 and 2009 financial crisis where there was a very significant decline in loan volume.
Based on the distribution of syndicated loans in 3 regions, Asia Pacific is a region with the lowest transaction level with the volume of € 0.3 trillion - € 0.5 trillion. But on the other hand, Asia Pacific has the most stable loan growth compared to U.S. and Europe. Asia region still recorded a growth of € 0.1 trillion in 2008-2009 financial crisis compared to 2006-2007 period, while the American and European regions recorded a decline in loan volume to three fold in 2009.

The uniqueness of the Asia Pacific also lies in the structure of the loan. Ivashina (2009) in his research found that the average share of the lead arranger in the U.S. only 27% and 98% loan led by one lead arranger only. This differs from the structure of the loan in Asia Pacific. Godlewski and Weill (2007) reveal that developing countries like Asia have a higher lead share than developed countries like America and Europe. This is because the risk of the Asia Pacific region is higher and the information transparency is lower compared to developed countries. Figure 2 shows that Asia has a higher level of risk and growth than the U.S. over the past decade.

Asia Pacific as a region with a high level of risk is also accompanied by the disclosure of information which is lower than the U.S. or Europe. This causes moral
hazard to be more common in developing countries in Asia because of high level of asymmetry information. Dennis and Mullineaux (2000), suggests that the moral hazard are affecting the loan structure. Leland and Pyle (1977), also supports the statement, that information is an important factor in determining the loan structure. Thus, asymmetry information effect and diversification effect between Asia Pacific and the U.S. can give different results.

The high level and stabil loan growth in Asia Pacific, along with the different condition of loan structure between Asia and U.S., encourage researchers to conduct research on loan pricing establishment as measured by asymmetry information effect and the diversification effect. Ivashina (2009) conducted a study related to the establishment of loan pricing in the U.S. and found that the asymmetry information and diversification has a significant influence. Both of these effects are opposite to each other and lead share is an endogenous variable that may explain the association of these effects on loan pricing.

Previous studies on the syndicated loan market developed in two directions, ie research that leads to the reason for selling loans and research about syndicated loan. The research was carried out by Gorton and Pennacchi (1995); and Dahiya et al (2003) where they studied the loan oricing establishment on the secondary loan market in the U.S.. The results of this study indicate that there is a negative correlation between lead share prices and the spread price asked by the bank that will buy the share. This proves that the lenders are trying to diversify their credit risk. On the other hand, studies done by Simons (1993); Dennis and Mullineaux (2000); Jones, Lang, and Nigro (2000); Lee and Mullineaux (2001); Panyagometh and Roberts (2002); Esty and Megginson (2003); and Sufi (2005) which focused on the establishment of loan structure found that the characteristics of the borrower, the contract characteristics, and availability of public information is an important factor in determining the amount of shares owned by the lead arranger, number of participant and participant share distribution.

Furthermore, information transparency issues discussed by Lee and Mullineaux (2001); Panyagometh and Roberts (2002), and Sufi (2005) showed an evidence of asymmetry information existing between the lead arranger and the participant. Ivashina (2009) explained that the weakness of previous studies lies in the loan spread variable assumed to be exogenous. As a result, loan structure establishment can cause varying interpretations because they can not separate the effect of asymmetry information and diversification effect.

Important point in the modeling study is the existence of instrumental variables that can explain the effect of asymmetry information and diversification appropriately. Ivashina (2009) revealed that the lead arranger credit risk is the instrumental variables to explain the diversification effect. The higher credit risk lead to a higher lead share in loans. That is why the lead arranger will ask a higher price, while the participant demand a lower price because the asymmetry in the loan rate will decrease, and vice versa.

In addition to credit risk, this study also use the lead arranger reputation to capture the existence of adverse selection and moral hazard that occurs in the establishment of loan pricing. Gorton and Pennacchi (1995), Focarelli et al (2008), Ashcraft and Santos (2009), and Ivashina (2009) revealed that differences in the information availability and accuracy about the borrower become evidence of asymmetry information existance. Gopalan et al (2009), Ivashina (2009), and Mora (2010) revealed that the reputation
variables can be variables that can explain the asymmetry of information between the lead arranger and the participant regardless of the information derived from the borrower. The better reputation of the lead arranger will encourage the participant to join that syndicated loan, and lead share will be decrease. Lower rate of lead share will increase the potential for moral hazard and adverse selection, so that participant will increase the expected spread, as lead arranger will lower the price because of lower credit risk, and vice versa.

**Syndicated Loan Structure**

Lead arranger that lend loans in Gadanecz (2004) and Sufi (2004) can be divided into two general categories: lead arrangers / senior syndicate members and participant lenders / junior syndicate members. Lead arranger is generally a bank / other financial institutions that already have a pretty good credibility in the manufacture of syndicated loan contracts. This group can be led by a one lead arranger or more. Role and function of the lead arranger according to Sufi (2004) is to coordinating all administrative activities, seeking potential participant loan lenders, as well as screening and monitoring.

Participant lenders are members of the syndicated loan. Bank will be referred to as participant lenders when the bank is co-funded the loan syndication. Participant lenders are rarely negotiate directly with the borrower, and usually use lead arranger to represent them (Sufi, 2004). Obtained information about the borrower by the participant is generally highly dependent on information provided by the lead arranger (Ivashina, 2009).

**Empirical studies of Syndicated Loan: Asymmetry Information Effects and Diversification Effects**

Asymmetry information problem has been recognized since the first decade of syndicated loan market. Schumpeter (1939) revealed that lenders not only have to know the loan transaction from the financial side, but also must understand the borrower, the nature of its business, its business environment, and borrower conditions that can affect the success of the syndicated loan granted. Therefore, the lead bank has a natural function to monitore the syndicated loan granted (Mora, 2010).

Simons (1993); Preece and Mullineaux (1996); Dennis and Mullineaux (2000); Jones, Lang, and Nigro (2000); Lee and Mullineaux (2004); Panyagometh and Roberts (2002); Esty and Merginson (2003); Sufi (2007); Godlewski and Weill (2007), and Carey and Nini (2007) found that loan structure are affected by the availability of public information about the borrower which is reflected by the characteristics of the loan contract, company's financial performance characteristic, and the macro economic factors that affect performance company.

The different level of borrower information mastery, referred to as asymmetric information. Based on the theory, asymmetric information is a condition in which one party has information that is not owned by another party. Sufi (2004) argued that the party has the advantage of information is the lead arranger and the other party with lack of information is the participant. The type of the information are informations that is not contained in the financial-statement data, such as the assessment of the borrower’s managerial skills, the relationship between the customer with the supplier, or the
adaptation ability of borrower in a changing economic conditions (Dennis and Mullineaux, 2000).

Leland and Pyle (1977) explains that the lead share is an evidence of the lead arranger responsibility in loan monitoring and this will also make the lead arranger more exposed to a credit risk. Ivashina (2009), Mora (2009), and Gopalan et al (2009) reveals that the structure of syndicated loans is reflected in the amount of lead share that will affect the spread. Therefore, the lead share is an endogenous variable that can explain the relationship between the loan characteristic against the establishment of loan pricing.

Figure 3 shows the relationship between spread and lead share. Point A is the equilibrium point between the diversification effect and asymmetry information effect. Ivashina (2009) revealed that the formation of lead share in a syndicated loan is influenced by two opposing effects that influence each other, namely adverse selection / moral hazard effect (asymmetry information effect) and the diversification effect. Adverse selection / moral hazard effect showed a negative correlation between spreads and lead share. Diversification effect showed a positive correlation between the spread and lead share.

Adverse selection problem occurs before the loan was syndicated, where the lead arranger has more complete information than the participant, and this causes the lead arranger to have a better understanding of borrower’s condition, so that the lead arranger can be a better judge evaluate the good and bad of a loan. Moral hazard occurs after the loan is given. Basically, the lead arranger is responsible for monitoring the borrower, but when borrowing occurs, this responsibility will be reduced due to the share distribution among the participant.

Ivashina (2009) revealed that the adverse selection and moral hazard problem can be reduced if the lead arranger has a large proportion of the loan. Leland and Pyle (1977) explained that the lead arranger has a better understanding of the borrower’s condition, therefore a bigger lead share is a positive signal indicating that the loan has a good quality and this will reduce the demand for higher prices from the participant. Bannier (2007),
and Ongena, Alkan, and Westernhagen (2007) adds that the addition of the lead share is an effective indicator to reduce adverse selection and moral hazard problems in syndicated loans, so the data is expected to show a negative relationship between the lead share and spread. At point B (Fig. 3), reduction in lead arranger’s credit risk will transform the required lead spread lines to the left, thus the lead share will be reduced. This reduction indicates a poor loan quality (Leland and Pyle, 1977) and the asymmetry of information between the participant and the lead arranger will be higher, therefore the participant would expect a higher spread. In contrast to point C (Fig. 3), increased credit risk of the lead arranger will transform the required lead spread lines to the right, thus led to a higher lead share. It indicates the loan has a better quality (Leland and Pyle, 1977), and asymmetry of information between the lead arranger and the participant getting lower, so the participant would expect a lower spread.

![Diagram](image)

**Figure 3**

Relationship between Lead Share and Spread (Diversification Effect)

Beside the asymmetry information effect, the loan structure also affected by the diversification effect that has an opposite effect. Pavel and Phillis (1987), and Gorton and Pennacchi (1995) showed that a higher lead share will increase the lead arranger’s credit risk exposure. Point D (figure 4) shows that the lead arranger with good reputation will drive participant to join in the loan, so that the required participant spread lines will be shifted to the left, this leads to a lower lead share and lead arranger’s credit risk will be reduced, so that the lead arranger would expect a lower spread. Point E (Figure 4), lead arranger with bad reputation will make participant has a less interest in the loan offered, so that the required participant spread lines will be shifted to the right and increase the lead share. This increase of lead share will increase lead arranger credit risk, so the lead arranger would expect a higher spread.

Thus, the price formation in the syndicated loan is similar to the demand-supply theory, where the price formation occurs at the equilibrium point of asymmetry information / participant pricing and diversification / lead pricing. Ivashina (2009) and Mora (2010) says that in order to capture the asymmetry information effect, the need for exogenous instrumental variables are transferred from the lead pricing line model in the loan without affecting the relationship between lead banks and participant (reputation).
Exogenous variables that are being transferred here is the lead arranger’s credit risk. Similarly, to capture the diversification effect, the need for exogenous instrumental variables to be diverted from participant pricing line model in the loan pricing without affecting the credit risk of the lead bank. Exogenous variables that are being transferred here is the reputation of the lead arranger.

Methodology

This study was conducted in two phases. The first is the testing of the control variables and instrumental variables relationship to the structure of syndicated loans (lead share) via ordinary least squares regression (OLS). The second is the main test in this study, which is testing the influence of control variable and instrumental variables in loan pricing establishment as measured by lead share. The second test carried out by two stage least square regression (2SLS).

Ivashina (2009) revealed that there are two conditions to obtain a satisfactory result from the use of instrumental variables. First, the variable must be correlated strongly to the lead share as predicting variable. Second, instrument variable should not be correlated with the residual in the 2SLS model. The number of instrument variable should also higher than endogenous variable.

This condition is a requirement to eliminate the bias that can occur in 2SLS. Bound, Jaeger, and Baker (1995) revealed that there are two biases in 2SLS, one is the bias if the instrument variables have low correlation to the endogenous variables and the second is bias in finite sample. Furthermore, their study also explained that the relationship between instrument and endogenous variable is low enough, and it can not be able to eliminate bias in finite samples even if we add more sample.

Based on the discussions that have been presented, the research model can be described as follows:

\[
\text{LEAD SHARE} = \beta_a \text{Control Variable} + \beta_b \text{Instrumental Variable} + \varepsilon \quad (1)
\]

\[
\text{LOAN SPREAD} = \alpha_a \text{Lead Share} + \alpha_b \text{Control Variable} + \varepsilon \quad (2)
\]

Model (1) aims to determine the relationship between control variables and instruments variables against the endogenous variable (lead share). In addition this test is also conducted to determine the significance of instrument variable, so the bias that occurs in the 2SLS can be minimized. Model (2) is the main model of this study, namely 2SLS with the spread as the dependent variable and lead share as an endogenous variable that would explain the effect of asymmetry information and diversification.

**Variable**

| Dependent Variable | |  
|-------------------|----------------  
| ALL IN SPREAD    | the variable that shows the price of a loan granted by the lender to the borrower. Currency used as a reference is U.S. $ and floating interest rates follow changes in LIBOR. |

| Endogenous Variable | |  
|---------------------|----------------  
| LEAD SHARE          | a variable that indicates the percentage of ownership owned by lead arranger. |

**Instrumental Variable (Exogenous Variable) : Credit Risk**
DOMESTIC BANK
a dummy variable indicating whether or not a lead arranger banks derived from local / domestic in the loan. This variable is equal to 1 if the domestic lead arranger is involved, and 0 if there is no domestic lead arranger.

INVESTMENT BANK
a dummy variable indicating whether there is lead arranger with the status of investment banks in the loan. Variable equal to 1 if the lead arranger in a loan has a status of investment bank, and 0 if a given loan is not lead by investment bank. Investment bank is a bank whose primary function is to give a loan for corporation borrower, with purposes of company financial expansion, underwriter, as well as internal funding.

UNIVERSAL BANK
a dummy variable indicating whether there is a lead arranger with the status of universal banks in the loan or not, as well as lead arranger with a combination status of investment, universal and commercial banks (lead arrangers composition in loan establishment in the Asia Pacific tend to have more than one lead arranger and part of the loan are led by a bank with a different status). Variable equal to 1 if the lead arranger is a universal bank or a lead arranger in a loan originated from different types of banks. Variable is 0 if it does not meet those criteria (all of the lead arranger are investment bank or commercial bank entirely).

Instrumental Variable (Exogenous Variable) : Reputation
LEAD TO PARTICIPANT a variable that shows the relationship between the lead arranger with the participant. This variable is measured by total syndicated loan led by the lead arranger for the past three years.
LEAD PROPORTION a variable that indicates how attractive a loan in the eyes of participants. These variables were measured from the ratio of lead arranger and total lender. The lower lead proportion indicated a higher participant’s interest, vice versa.

Contract Characteristic
LOG (AMOUNT) the logarithm of the largest facilities in every loan granted in the same time (per package).
NUMBER OF FACILITY a number of facilities owned in every loan package.
MATUREITY a variable that indicates loan duration in month. The same like amount, maturity value is determined by the largest value in each maturity from the loan that are given in the same time (package).
COLLATERAL a dummy variable with a value of 1 if the loan is given with collateral and 0 if the loan is given without collateral
SENIORITY a dummy variable that will be 1 if the loan is senior and 0 if the loan is not senior.
DISTRIBUTION a dummy variable that will be 1 if the loan is syndicated and 0 if the loan is syndicated.
REFINANCE a dummy variable that will be 1 if the purpose of the loan for refinance and 0 if the purpose of loan is not for refinance (takeovers, mergers / acquisitions, or business development).

Borrower Characteristic
 TICKER a dummy variable that will be 1 if the borrower listed on the stock exchange and 0 if the borrower is not listed on stock exchanges.
PREVIOUS RELATION a dummy variable that will be 1 if the borrower has borrowed to the same lead arranger and will be 0 if the borrower never borrow to the same lead arranger. More specifically the determination of whether or not the relationship existed is based on historical data from the loan made by a borrower for the past 3 years.
RETURN ON ASSETS a variable that indicates the borrower’s level of profitability. Specifically, the data used are the financial reports a year before the loan is given.
DEBT TO ASSETS a variable that indicates the degree of liability of the borrower. Specifically, the data used are the financial reports a year before the loan is given.
**Country Characteristic**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOG (NET INCOME)</td>
<td>a variable that indicates the borrower's annual net income. Specifically, the data used are the financial reports a year before the loan is given.</td>
</tr>
<tr>
<td>LOG (SURPLUS)</td>
<td>a variable that indicates the size of the annual net income of the country in which the borrower resides. Specifically, the data used are the country's financial statements a year before the loan is given.</td>
</tr>
<tr>
<td>LOG (MARKET CAPITAL)</td>
<td>a variable that indicates the size of the capital market as a leading indicator of a country. Specifically, the data used is the capital market data a year before the loan is given.</td>
</tr>
<tr>
<td>COUNTRY RISK</td>
<td>an index measuring the risk of a country that is based on credit risk and political risk. More specifically, the data used is the country risk data a year before the loan is given.</td>
</tr>
<tr>
<td>CORRUPTION INDEX</td>
<td>an index indicating a state corruption perceptions from the businesspeople and analysts point of view. More specifically, data corruption index are based on the previous year data before the loan is given.</td>
</tr>
</tbody>
</table>

**Data**

Data in this study were obtained from the dealscan database and the financial report of each company. Target population for this study is all companies that make corporate loans (borrower) in Asia Pacific from 2006 until 2010 and recorded in the database dealscan. Samples taken throughout the loan is LIBOR-based corporations in 13 countries in Asia Pacific. Listed country for this study are Australia, Cambodia, China, Hong Kong, India, Indonesia, Japan, South Korea, Laos, Malaysia, Philippines, Singapore, Taiwan, Thailand, and Vietnam. Total sample in this study are 1,058 loans and 548 loans for financial performance data.

[insert table 1]

Descriptive data in Table 1 show that the average loan total spread is 148.46 basis points, while the data with the financial performance had an average spread of 121.74 basis points. Loans to companies that have financial information has a lower spread loan with average value of 26.71 basis points. This indicates that the lenders will provide loans with lower spreads on companies that have the financial transparency because in that way they will have a better information about the performance and risk of borrower.

The average percentage of lead share in the Asia Pacific is relatively very high, amounting to 75.84% and this value is not much different from the average loan to companies with financial data availability (75.52%). This loan structure in Asia is different from American who has the average lead share only 27% (Ivashina, 2009). This suggests that the risk and asymmetry information in the Asia Pacific is much larger than the American. Large lead share indicates that the lead arranger requires greater monitoring capabilities towards the borrower because of asymmetry information between borrower and lead arranger and the risks that accompany such loans is very high.

Based on the lead bank characteristic, 55% of the loan led by the lead arranger who has a domestic composition and has no difference for the total sample and the sample of financial performance. The existence of domestic banks that have better information about the borrower may help the lead arranger in monitoring, and as described by Ivashina (2009), better monitoring capabilities can reduce the credit risk of the lead arranger. Judging from the bank functions, only 9% of total loans and loans with financial
data, led by investment banks, 62.5% led by the lead bank or universal bank which is a combination of investment and commercial banks, and the rest are led by commercial bank. The low number of lead bank with investment bank function only, indicates that the lead arranger seeks to reduce its credit risk, because the function of investment banks tend to have lower skills of monitoring than commercial and universal banks.

Based on reputation characteristic, lead arrangers in the Asia Pacific tend to have high reputation, as evidenced by the frequent of lead arranger in charge of a loan. From the total data in the past three years, lead arranger averagely lead 85 loans with 67 loans as median. While based on the financial data, the lead arranger averagely has 92 loans with 84 loans as median. Lead arranger is more often lend to companies with financial data because it will be easier to evaluate a loan so the monitoring cost will be lower. The better the reputation of the lead arranger may also encourage participant to join the loan.

Lead proportion variable showed that the average proportion of lead arranger to total lenders in a loan is 65% for the overall data as well for financial data. This indicates that participants have a high enough interest on the loan in Asia Pacific, because this value is lower than the average lead share of 75%. In addition, participants also tend to have high levels of trust to lead arranger, as evidenced by the absence of proportion differences eventhough the lead arranger has less information about the borrower with no financial transparancy.

**Ordinary Least Square Analysis**

[insert table 2]

Results of OLS in Table 2 are eligible and bias on 2SLS can be minimized. Instrumental variables in this study proved to have a significant effect at 5% and 1% of the endogenous variable. The study also estimates the lead share reduction as undertaken by Ivashina (2009). Estimation results also found that the critical value for F-test proved to have significant value, so the analysis can proceed on 2SLS.

In OLS model 1, it was found that the domestic lead share variable has negative effect on lead share at 1% significance level, it is proved that the existence of domestic banks in the lead arranger composition will results in a better monitoring capabilities of the lead arranger, so the need for monitoring would be reduced and lead arranger will reduce the lead share. The decline of the lead share will lead to lower credit risk exposure for the lead arranger. This finding is consistent with the study of Goldberg, Dages, and Kinney (2000) who explained that foreign banks will have better performance in lending to developing countries if the foreign bank may cooperate with domestic banks located in that country.

Domestic banks have a better information access about the borrower compare to foreign bank. Domestic banks also have better monitoring capabilities than a foreign bank because it come from the same country as the borrower. This cause asymmetry information about the borrower will be reduced thus the lead arranger will not require a high monitoring cost. As a result, the presence of domestic bank will lead to reduced lead share.

Similar results were obtained from model 2 and 3, but the results of statistical tests showed no significant effect. The second and third models use data about company with financial information. Therefore, both models have a lower level of asymmetry
information than model 1. The existence of the company's information led to equally owned information held by domestic and foreign lenders, so that foreign lenders do not require assistance from domestic lenders to obtain information related to borrower, because the asymmetry information related to the borrower has been minimized.

Investment bank variable has a significant positive correlation at 1% for model 1, 2, and 3. This suggests that investment bank has poor monitoring capabilities, so they will increase the lead share to get a better monitoring ability. In contrast, universal banks variable have a significant negative correlation at 1% for models 1 and 2 and 5% in model 3. This negative correlation indicates that the lead arranger with mixed functions (commercial and investment banks) or lead arranger which has commercial bank as the leader in the loan, would have a better monitoring capability so the lead share will be decline and credit risk exposure of the overall lead arranger will be reduced as well. The results of this analysis in accordance with the statement of Drucker and Puri (2003) which revealed that the investment bank has a higher monitoring costs due to weak evaluation capability compare to commercial bank. While Gupta, Singh, and Zebedee (2008) adds that universal banks are more flexible than an investment bank because the bank function are between investment banks and universal banks.

Lead to participant variable had a significant negative correlation at 1% for model 1, 2, and 3. This suggests that if a lead arranger is in charge of loan more often, then it is identical with a better reputation of lead arranger, and participants’ interest to join the loan will be higher. The high interest of participants is reflected in the low level of lead share or in the high level of low participant share. This explanation is also supported by the findings of the lead proportion variable that has positive and significant correlation at 1% for models 1 and 2, as well as significant at 5% for model 3. The greater number of lead arranger demonstrate that the loan has a greater asymmetry information about the borrower, so the loan is not going to attract participants to join, which cause the participant share become lower or lead share become higher. These results are similar with the findings of Mora (2010) which revealed that the better reputation of lead arranger will attract participant to join in the syndicated loan and this is also indicates a high confidence of the lead arranger. In the contrary, a loan that is dominated by the lead arranger will be less attractive to participants because it is considered to have high asymmetry information.

In addition to the findings of instrument variables, this study also discusses the control variables used in the study and the effect in loan structure establishment. Amount variable showed a significant negative correlation at 1% (model 1, 2, and 3). These findings are similar with the findings by Ivashina (2009), where the higher amount of loan would push the lead arranger to reduce its lead share, aims to reduce the effects of credit risk exposure for the lead arranger. Similar results were also indicated by the number of facility, where the greater number of facilities offered will negatively affect the lead share.

Maturity control variable has a negative but not significant correlation for the three models in table 4. This suggests that the longer loan maturity will lead the lead arranger to reduce lead share and vice versa. Negative correlation is consistent with the findings of Diamond (1984), where the longer maturities will encourage higher monitoring cost due to uncertainty and greater risk. Therefore lead arranger will try to reduce the risk borne by reducing the lead share.
Refinance control variable showed a significant negative correlation of 1% for the three OLS models. The findings are consistent with statement by Wittenberg and Moerman (2008) who explained that the lead arranger has a low interest towards a loan with refinance purpose because the degree of uncertainty is very low, so the need to monitor the borrower will be insignificant. Refinance is only carried out for companies that have poor internal financial performance and borrowed funds are solely used for the improvement. This goal is different from the purpose of expansion which tends to attract more lenders, because of the degree of uncertainty (mergers, acquisitions, opening new businesses) can not be predicted with great accuracy and the return obtained is also likely to be high.

Collateral control variable showed positive and significant correlation at 10% for models 1 and 2. This suggests that if there is a guarantee / collateral in the loan, the lead share will increase. This is because the existence of the guarantee indicates the high-risk loans and this pushed the lead arranger to increase its lead share in order to get a better monitoring ability. These findings are similar with result from Berger and Udell (1990) and Ivashina (2009).

Distribution control variable showed a positive correlation but not significant for all three models. Syndicated loan is identical with higher lead share as well. These findings differ from the expected correlation prediction. Dennis and Mullineaux (1999) describe the main reason for a bank to syndicate the loan is the legal limit on the maximum amount of a given loan compared to the bank's equity capital. So syndicated loans is one of bank methods to avoid overlining in lending. In addition, the syndicated decision will bring a diversification revenue for the banks, which is obtained in the form of fee income as a lead arranger or participant lenders, so that the lead share will be reduced. However, by looking at the findings of this study, we can be concluded that the decision to syndicate a loans in Asia Pacific due to lead arranger’s wish to diversified its credit risk with other lenders as expressed in Pavel and Phillis (1987) and Gorton and Pennacchi (1995). Thus the total share of lead arranger will be higher.

Seniority control variable showed a negative and a significant correlation of the lead share at 5% (model 1) and 1% (model 2 and 3). The findings are consistent with research by Godlewski and Weill (2007) which states that the existence of seniority would lead a lower need of lead arranger to monitor the borrower, thus the lead share will be reduced.

Ticker control variable showed a significant negative correlation at 10% for model 1. This shows that when the lender has borrower’s information that is easily accessible by the public, the lead arranger will reduce the lead share, because the lower degrees of asymmetry information will results in a lower level of lead arranger’s responsibility to monitor the borrower. The findings are consistent with the results of Denis and Mulleneaux (2000) which revealed that if the borrower is registered in the capital markets, it may reduce the lead arranger’s monitoring cost. However, when public information is specified in the company’s financial statement information, only the net income variable that has significant negative effect (10%) towards the loan structure establishment. ROA variable gives a negative correlation and D/A provides a positive sign according to preliminary estimation, but not significantly. Overall, the better the financial performance of the company will push the lead arranger to lose its lead share, because good financial performance lead to a lower default risk, so lead arranger may reduce the monitoring cost too.
Previous relationship control variable is negatively correlated with a significance level of 10% for models 1 and 2, and not significant for the model 3. These results indicate that if the lead arranger has a previous history with the same borrower then the lead share will be reduced. This finding is consistent with Sufi (2005) which states that the information transparency related to the borrower can be known from the past history between the lead arranger and borrower. Lead arranger who has a transactional relationship with the borrower in the past will have better information about the borrower’s performance, so that the asymmetry information and monitoring cost can be reduce.

Country’s surplus control variable showed a negative correlation, and only significant at 1% for model 1. The better the surplus of a country shall encourage the lead arranger to reduce its lead share, and vice versa. This is similar to the results obtained from financial performance data. Countries with a better surplus indicate a better economic condition and chance of uncertainty (default risk) of the borrower will also be lower. Capital market variable does not have a significant effect for all three models. This indicates that the stock market capitalization is not a leading indicator for the lender in determining the loan structure because the lender considers that a country capital market conditions may not reflect the country risk and the company's ability to pay its debts.

CPI showed a significant negative correlation of 1% only for model 1, while model 2 and 3 were not significant. This shows that higher corruption index will push the lead arranger to reduce its share, and vice versa (0 shows the most corrupted country and 10 shows the less corrupted country). This finding is similar with the research done by Lasmono and Marciano (2010) which indicates that the lead arranger will choose to syndicate the loan to a borrower that resides in a country with high levels of corruption, or in other words, the lead arranger will try to protect themselves by increasing its monitoring capabilities. When the level of corruption of a country is very high, then the asymmetry information also predicted to be greater, thus the lead arranger will enlarge its share.

Country risk variable shows significant negative correlation of 1% for the three models, and made this variable to be the only country variable which consistently affecting the loan pricing establishment. This suggests that the riskier the country, the lower the lead share (0 means no risk, and 7 implied the highest risk). The findings of country risk is opposite with the results of the CPI, as well as research by Lasmono and Marciano (2010) who found that higher risk of loan will cause lead arranger to require greater monitoring capabilities. But, on the other side, this study is supported by Khrawish, Siam, and Jaradat (2010) research which states that participants will have a greater interest in higher-risk loans (high risk, high return). In other words, the participant’s interest in these loans will push the lead arranger to reduce its share even if this will reduce the lead arranger’s monitoring capabilities. It could also means that the low level of monitoring ability is compensated by the lead arranger by adding seniority, collateral, collaboration with domestic lead arranger, as well as a good track record.

Diversification effects

[ insert table 3 ]
Table 3 shows the results of the loan pricing establishment from the lead arranger side using 2SLS analysis with total sample data. Model 4 is the analysis without using a relationship and country characteristic variable, model 5 is the analysis by adding a relationship variable, and model 6 uses overall variable. All three models showed a positive correlation with a significance level of 1% for lead share which is endogenous variable in this model. The results of this study is similar with findings by Ivashina (2009), which shows that the lead share will have a direct relationship to the loan spread.

Other findings can be seen from a comparison between the model 4, 5, and 6. Lead share coefficient in model 4 at 2.92 with determination coefficient from this model of 13.7%. The coefficient of determination coefficient is increased considerably on the model 5 to 17.4% with lead share coefficient value dropped to 2.15. This suggests that the relationship between the lead arranger for a loan with a borrower in the past can push the lead arranger to provide lower loan pricing to the borrower, and vice versa, loans with no historical relationship between lead arranger and borrower will lead to a higher spread.

The reason for this condition is because when the lead arranger does not know well about borrower’s information, this will increase the potential for asymmetry information between the lead arranger and the borrower, so the lead arranger requires a higher monitoring cost. Therefore, to compensate this, lead arranger will ask for a higher spread. In the contrary, lead arranger who has known the borrower does not require another monitoring cost, so the lead arranger will ask for a lower spread.

In model 6, table 3, it can be found that the lead share coefficient is 5.12 with determination coefficient of 25.46%. This lead share coefficient increased by 2.97 or two-fold greater than the model 5. Model 6 proved that the role of the country characteristic is very high to the lead arranger in setting the loan pricing. An important characteristic of loans in Asia Pacific that sets it apart from the loan in the United States and Europe is the high level of asymmetry information and risks that accompany such loans. The OLS analysis has also proven that the country risk variable is the most influential variable in the formation of the loan structure. The magnitude of risk in the Asia Pacific countries is causing lead arranger to require greater monitoring costs, so the lead arranger would expect higher loan rates.

Table 4 presents the results of diversification effect for data with financial information. The discussion on table 4 will be more focused on the influence of financial performance for the lead arranger in loan pricing establishment. Overall, the models 7, 8, 9, and 10 indicate that the loans in Asia Pacific have diversification effect because the lead share coefficient is significantly positive at 1%. Comparison between the determination coefficient for models 7 to 9 and 8 to 10 show that the relationship and the country characteristics has a very large role in shaping the loan pricing despite the availability of financial information related to borrower. This is because the loans in the Asia Pacific countries and the risk of asymmetry information is greater than the U.S. or Europe, so the lead arranger need to properly understand all the risks that could affect the ability of borrower to repay the loan.

In Table 4, the lead arranger coefficient for model 7 is 3.50, while for model 8 is 3.23. This indicates that the lead arranger with borrower’s financial information will reduce the expected loan spread because they already understand the borrower in better
ways, and monitoring costs can be minimized. In contrast, lead arranger would expect a higher loan spread if this financial information is unknown. Similar results can be found in models 9 and 10, but the effect of financial data in the second model is not as big in the first model. Lead share coefficient in model 9 is 4.32 and lead share coefficient in model 10 is 4.28. The only decline is only for 0.04. These results explained that the financial performance could reduce expected spread from the lead arranger towards the borrower (significant 1%), but the influence from the borrower’s financial information to the lead pricing establishment will not be as great as in the first model.

These findings indicate that the lead arranger in Asia Pacific tend to relay more to the past history than the financial information of the borrower. The reason is because in Asia Pacific the loan risk is higher, and the business conditions are uncertain. Therefore, the lead arranger can not use the company's financial statements only to establish loan pricing. The ability of borrower to repay the loan in the past is also a very important factor for the lead arranger, because the borrower with a good past reputation are expected to have the similar commitment to repay the loan for subsequent loans.

Lead arrangers in Asia Pacific countries also tend to pay more attention to economic condition in which the borrower is located (country risk), because the stability of the country would affecting the company's growth in developing countries. This variable was shown to get more attention from the lead arranger, compared to the company's financial statements. No matter how good the company's financial performance, it will have a high risk if the country condition is unstable.

**Asymmetry information effects**

[insert table 5]

Table 5 shows the full sample test results of asymmetry information effect. Model 11 did not include a relationship and country characteristic variables, model 12 just add relationship variable, and model 13 uses all variables. Lead share coefficient for model 11 and 12 are negative in accordance with the expected effect, but the lead share coefficient for model 13 is positive. Although lead share coefficient results indicate the presence of asymmetry information effect as found by Ivashina (2009), but all three models indicate that there was no significant effect between spread and lead share. This suggests that the asymmetry information between the lead arranger and the participant can not be statistically proven affecting loan pricing request from participants’ side.

Comparison between models 11 and 12 also showed that the influence of the relationship variables is not as big as diversification effect influence. The existence of relationship between the lead arranger and the borrower can lower the expected spread of the participants. Participants will have more confidence in the quality of the loan when the loan was offered to the same borrower because they believe the quality of the borrower to repay the loan so the risk of unpaid loan is also lower. In addition, the lead arranger will not provide loans to a borrower with a bad history.

Model 13 shows that participants tend to raise the expected loan pricing if there is information about the country. In the OLS findings, participants have a high interest in high-risk countries. This suggests that even if participants do not have the right to monitor the borrower, but they understand that provide loans to countries in Asia Pacific has a very big risk and to as a compensation they expect a high return of investment.
From these findings, we can obtained several important aspects about loan opricing establishment by the participants. First, the participant share for loans in Asia Pacific is very low, and largely dominated by the lead arranger (lead arranger share in Asia Pacific is 75%), this is different from a loan in the United States and Europe who have a low lead share. As a result, the spread of all information in Asia Pacific loan will get better as the lead arranger’s share is higher. Therefore, asymmetry information between the participant and lead arranger will become so low or almost non-existent. Second, lead arranger and participants in the Asia Pacific tend to be more than one and already have a similar group (e.g., loan A has Citi group, BNP Paribas, and Hana Bank as the lead arranger and Standard Chartered Bank as participant. On loan B the lead arranger consist of Citi group, Standard Chartered Bank, with Hana Bank and BNP Paribas as participants). This condition indicates that the asymmetry information between participant and lead arranger is very difficult to detect. Participants would expect higher prices because of the relatively high risk loans rather than the asymmetry information between participants with lead arranger.

Test results for the financial data in table 6 also shows a similar result with the full sample test. Although the lead share showed a negative sign in models 14 and 15, but no significant effect between lead share and the spread establishment. The reason of these findings is similar with the explanation on the full sample, which is because the lead share in Asia Pacific that causes the asymmetry information between the borrower and lead arranger is reduce, and lead arranger in Asia Pacific tend to have a relationship that is strong enough. Therefore, participants will tend to have high confidence towards the lead arranger. As a proof, lead to participant variable in the OLS tests are negative which means that the more often lead arranger in charge of a loan, the participants will be more interested.

Comparison of models 14 to 15, and 16 to 17 show that the country information and the relationship tends to increase the expected loan pricing of the participants, proved from the high level of determination coefficient differences between these two models. Explanation of these findings are the same with full sample test, in which the participants considered that the loans in Asia Pacific have a high risk, so to compensate they also expect a higher return.

Comparison of models 14 to 16, and 15 to 17, show that financial information about the companies also tend to reduce the expected spread by participants because of the borrower’s financial information will lead participants to have a better knowledge of the borrower’s conditions so that it is expected to reduce the borrower default risk. Financial information will also reduce the asymmetry information between participants and lead arranger because these data equally owned by both parties.

Comparison of four models in table 6 indicate that the previous relationship and a lot more attention to the country characteristic are determining the loans pricing compared to the financial information company. The explanation for this finding is similar to previous findings, namely the risk of lending in the Asia Pacific is very high, mainly due to the country’s condition in which the borrower resides. Borrower with current good performance does not necessarily indicate that the borrower's risk is low when asymmetry information in the country is very high. Therefore, participants will also consider the
relationship between the lead arranger and the borrower, because the relationship in the past may indicate that the borrower has a good track record in loan payments.

Conclusion

This study found that loan pricing in Asia Pacific during 2005-2010 influenced by diversification effect, and the existence of asymmetry information effect between participant and lead arranger were not proven. The main reason is because the loan structure in Asia Pacific is 75\% established by the lead arranger, so that the lender has fully better information about the borrower. In addition, the relationship between the lead arranger and the participant tends to be very close, and also there is a group of lenders with minor exchange of positions between the lead arranger and the participant, as well as the existence of more than one lead arranger. This is different from the loan structure in the United States which has average lead share for 27\% and has one lead arranger only (Ivashina, 2009).

The 2SLS analysis shows that financial performance has a considerable influence in determining the loan pricing, especially for the lead arranger (diersification effect). However, when the lead arranger has a relationship with the borrower, the effect of financial performance will not be significant. Even by adding country characteristic variables, it can be seen that the lead arranger give more attention to the condition of the country than the borrower's financial condition. This is because the condition of Asia Pacific countries that have a very big risk. Even if a company is performing well, the loan will still be at high risk if economic conditions unstable.

Althought the existence of asymmetry information effect between the lead arranger and participant is not proven, but the previous relationship and country information tends to give an important role for participants during loan pricing establishment. Participants will give a lower loan pricing when they know that the lead arranger has lent a loan to the same borrower, since a repetitive loan shows the quality of borrower's debt payments in the past. In the contrary, country information will encourage participants to increase the loan pricing because participants understand that providing loans in the Asia Pacific region are high risk, and they will request a high return to compensate it. This is the main reason why loan establishment in Asia Pacific region are very attractive in the eyes of participants.

References


Hanafi, M.M. 2009. Manajemen Resiko, edisi 2. UPP STIM YKPN.


20
### Table 1
Descriptive Data

<table>
<thead>
<tr>
<th></th>
<th>full sample observations= 1,058</th>
<th>financial sample observations= 548</th>
<th>differences in</th>
</tr>
</thead>
<tbody>
<tr>
<td>all in spread drawn</td>
<td>mean (A)</td>
<td>median (B)</td>
<td>std. dev</td>
</tr>
<tr>
<td>lead share</td>
<td>148.4588763</td>
<td>106</td>
<td>144.0424633</td>
</tr>
<tr>
<td>contract characteristic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>facility lending amount</td>
<td>212,448,986.66</td>
<td>100,000,000.00</td>
<td>410,193,750.06</td>
</tr>
<tr>
<td>facility lending amount (log)</td>
<td>8.031916561</td>
<td>8</td>
<td>0.503211871</td>
</tr>
<tr>
<td>maturity</td>
<td>54.55524079</td>
<td>42</td>
<td>38.66881725</td>
</tr>
<tr>
<td>number of facility</td>
<td>1.331444759</td>
<td>1</td>
<td>0.932840698</td>
</tr>
<tr>
<td>refinance</td>
<td>0.261567517</td>
<td>0</td>
<td>0.439695932</td>
</tr>
<tr>
<td>collateral</td>
<td>0.155954631</td>
<td>0</td>
<td>0.36298391</td>
</tr>
<tr>
<td>distribution</td>
<td>0.758262512</td>
<td>1</td>
<td>0.428338332</td>
</tr>
<tr>
<td>seniority</td>
<td>0.991501416</td>
<td>1</td>
<td>0.091838565</td>
</tr>
<tr>
<td>borrower characteristic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ticker</td>
<td>0.600566572</td>
<td>1</td>
<td>0.490013367</td>
</tr>
<tr>
<td>previous relationship</td>
<td>0.366383381</td>
<td>0</td>
<td>0.482043586</td>
</tr>
<tr>
<td>borrower’s net income (log)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>return on assets</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>debt to assets</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>country characteristic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>country’s surplus (log)</td>
<td>11.84605273</td>
<td>11.90995756</td>
<td>0.531070271</td>
</tr>
<tr>
<td>market capital (log)</td>
<td>11.82613148</td>
<td>11.91321956</td>
<td>1.159689693</td>
</tr>
<tr>
<td>country risk</td>
<td>1.926345609</td>
<td>2</td>
<td>1.632825771</td>
</tr>
<tr>
<td>corruption index</td>
<td>5.028234183</td>
<td>5</td>
<td>2.12961071</td>
</tr>
<tr>
<td>lead bank characteristic (credit risk)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>domestic lead bank</td>
<td>0.545797923</td>
<td>1</td>
<td>0.498133378</td>
</tr>
<tr>
<td>investment lead bank</td>
<td>0.08687441</td>
<td>0</td>
<td>0.280733838</td>
</tr>
<tr>
<td>universal lead bank</td>
<td>0.625118036</td>
<td>1</td>
<td>0.484321149</td>
</tr>
<tr>
<td>syndicated characteristic (reputation)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>lead to participant</td>
<td>85.25779037</td>
<td>67</td>
<td>63.065593</td>
</tr>
<tr>
<td>lead proportion</td>
<td>0.65999715</td>
<td>0.66666667</td>
<td>0.32967829</td>
</tr>
</tbody>
</table>
## Table 2

**Ordinary Least Square Results**

<table>
<thead>
<tr>
<th>contract characteristic</th>
<th>coeff.</th>
<th>t-stats</th>
<th>coeff.</th>
<th>t-stats</th>
<th>coeff.</th>
<th>t-stats</th>
</tr>
</thead>
<tbody>
<tr>
<td>facility lending amount (log)</td>
<td>-5.95E-09</td>
<td>-2.901154</td>
<td>***</td>
<td>-7.64E-09</td>
<td>-2.937125</td>
<td>***</td>
</tr>
<tr>
<td>Maturity</td>
<td>-0.017891</td>
<td>-1.053139</td>
<td></td>
<td>-0.037013</td>
<td>-1.461244</td>
<td></td>
</tr>
<tr>
<td>number of facility</td>
<td>-2.040741</td>
<td>-3.909441</td>
<td>***</td>
<td>-1.852511</td>
<td>-3.166475</td>
<td>***</td>
</tr>
<tr>
<td>Refinance</td>
<td>-4.501374</td>
<td>-2.765516</td>
<td>***</td>
<td>-6.708475</td>
<td>-3.310077</td>
<td>***</td>
</tr>
<tr>
<td>Collateral</td>
<td>3.948682</td>
<td>1.78207</td>
<td>*</td>
<td>6.534665</td>
<td>1.825438</td>
<td>*</td>
</tr>
<tr>
<td>Distribution</td>
<td>1.333886</td>
<td>0.556908</td>
<td></td>
<td>2.157572</td>
<td>0.643474</td>
<td></td>
</tr>
<tr>
<td>Seniority</td>
<td>-28.74915</td>
<td>-2.423253</td>
<td>**</td>
<td>-47.47731</td>
<td>-4.521181</td>
<td>***</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>borrower characteristic</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ticker</td>
<td>-3.026403</td>
<td>-1.923687</td>
<td>*</td>
<td>-3.026403</td>
<td>-1.923687</td>
<td>*</td>
</tr>
<tr>
<td>previous relationship</td>
<td>-2.919816</td>
<td>-1.807129</td>
<td>*</td>
<td>-2.919816</td>
<td>-1.807129</td>
<td>*</td>
</tr>
<tr>
<td>borrower's net income (log)</td>
<td>-2.040741</td>
<td>-3.909441</td>
<td>***</td>
<td>-2.040741</td>
<td>-3.909441</td>
<td>***</td>
</tr>
<tr>
<td>return on assets</td>
<td>-2.040741</td>
<td>-3.909441</td>
<td>***</td>
<td>-2.040741</td>
<td>-3.909441</td>
<td>***</td>
</tr>
<tr>
<td>debt to assets</td>
<td>-2.040741</td>
<td>-3.909441</td>
<td>***</td>
<td>-2.040741</td>
<td>-3.909441</td>
<td>***</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>country characteristic</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>country's surplus (log)</td>
<td>-4.867524</td>
<td>-2.935075</td>
<td>***</td>
<td>-4.867524</td>
<td>-2.935075</td>
<td>***</td>
</tr>
<tr>
<td>market capital (log)</td>
<td>0.62608</td>
<td>1.196314</td>
<td></td>
<td>0.62608</td>
<td>1.196314</td>
<td></td>
</tr>
<tr>
<td>country risk</td>
<td>-3.614486</td>
<td>-5.830013</td>
<td>***</td>
<td>-3.614486</td>
<td>-5.830013</td>
<td>***</td>
</tr>
<tr>
<td>corruption index</td>
<td>-1.26377</td>
<td>-2.645967</td>
<td>***</td>
<td>-1.26377</td>
<td>-2.645967</td>
<td>***</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>lead bank characteristic (credit risk)</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>domestic lead bank (z1)</td>
<td>-6.853607</td>
<td>-4.422132</td>
<td>***</td>
<td>-6.853607</td>
<td>-4.422132</td>
<td>***</td>
</tr>
<tr>
<td>investment lead bank (z2)</td>
<td>23.15872</td>
<td>6.721043</td>
<td>***</td>
<td>23.15872</td>
<td>6.721043</td>
<td>***</td>
</tr>
<tr>
<td>universal lead bank (z3)</td>
<td>-12.01077</td>
<td>-5.929177</td>
<td>***</td>
<td>-12.01077</td>
<td>-5.929177</td>
<td>***</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>syndicated characteristic (reputation)</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>lead to participant (z4)</td>
<td>-0.056443</td>
<td>-3.842478</td>
<td>***</td>
<td>-0.056443</td>
<td>-3.842478</td>
<td>***</td>
</tr>
<tr>
<td>lead proportion (z5)</td>
<td>21.76488</td>
<td>7.368137</td>
<td>***</td>
<td>21.76488</td>
<td>7.368137</td>
<td>***</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Instruments</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>z1 = z2 = z3 = z4 = z5 = 0</td>
<td></td>
<td></td>
<td></td>
<td>60.56908</td>
<td>31.39515</td>
<td></td>
</tr>
<tr>
<td>z1 = z2 = z3 = 0</td>
<td>56.08026</td>
<td>27.3857</td>
<td>***</td>
<td>56.08026</td>
<td>27.3857</td>
<td>***</td>
</tr>
<tr>
<td>z4 = z5 = 0</td>
<td>38.83498</td>
<td>24.46584</td>
<td>***</td>
<td>38.83498</td>
<td>24.46584</td>
<td>***</td>
</tr>
</tbody>
</table>

Adjusted R²: 0.344568 0.387439 0.389744

total observation: 1058 548 548

---

23
<table>
<thead>
<tr>
<th></th>
<th>Model 4</th>
<th></th>
<th>Model 5</th>
<th></th>
<th>Model 6</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>coeff.</td>
<td>t-stats</td>
<td>coeff.</td>
<td>t-stats</td>
<td>coeff.</td>
<td>t-stats</td>
</tr>
<tr>
<td><strong>loan structure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>lead share</td>
<td>2.922742</td>
<td>5.50838</td>
<td>2.148645</td>
<td>3.981636</td>
<td>5.116629</td>
<td>8.023321</td>
</tr>
<tr>
<td><strong>contract characteristic</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>facility lending amount (log)</td>
<td>7.26E-09</td>
<td>0.835125</td>
<td>4.62E-09</td>
<td>0.509359</td>
<td>2.50E-08</td>
<td>3.122129</td>
</tr>
<tr>
<td>Maturity</td>
<td>0.063592</td>
<td>0.473373</td>
<td>0.026712</td>
<td>0.203985</td>
<td>0.046207</td>
<td>0.368383</td>
</tr>
<tr>
<td>number of facility</td>
<td>7.107156</td>
<td>1.963482</td>
<td>7.690526</td>
<td>2.218015</td>
<td>13.86349</td>
<td>4.162673</td>
</tr>
<tr>
<td>Refinance</td>
<td>31.11711</td>
<td>3.303541</td>
<td>34.33066</td>
<td>3.733169</td>
<td>44.37802</td>
<td>5.254799</td>
</tr>
<tr>
<td>Collateral</td>
<td>27.45032</td>
<td>2.095299</td>
<td>20.46765</td>
<td>1.5825</td>
<td>-2.72971</td>
<td>-0.2116</td>
</tr>
<tr>
<td>Distribution</td>
<td>33.97015</td>
<td>2.895599</td>
<td>23.07088</td>
<td>1.983567</td>
<td>34.23731</td>
<td>3.162533</td>
</tr>
<tr>
<td>Seniority</td>
<td>23.71772</td>
<td>0.343822</td>
<td>13.1661</td>
<td>0.193167</td>
<td>106.932</td>
<td>1.569472</td>
</tr>
<tr>
<td><strong>borrower characteristic</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>country characteristic</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>country's surplus (log)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>21.35951</td>
<td>2.142756</td>
</tr>
<tr>
<td>market capital (log)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-10.5426</td>
<td>-2.27109</td>
</tr>
<tr>
<td>country risk</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>34.56226</td>
<td>8.067824</td>
</tr>
<tr>
<td>corruption index</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7.931224</td>
<td>2.836852</td>
</tr>
<tr>
<td><strong>lead bank characteristic</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>domestic lead bank</td>
<td>23.12499</td>
<td>2.745399</td>
<td>14.51404</td>
<td>1.746245</td>
<td>44.06063</td>
<td>5.030551</td>
</tr>
<tr>
<td>investment lead bank</td>
<td>8.208194</td>
<td>0.361558</td>
<td>23.34789</td>
<td>1.043706</td>
<td>-56.7041</td>
<td>-2.5208</td>
</tr>
<tr>
<td>universal lead bank</td>
<td>25.86484</td>
<td>1.989463</td>
<td>19.88205</td>
<td>1.54312</td>
<td>50.41446</td>
<td>3.584417</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>0.137092</td>
<td></td>
<td>0.174443</td>
<td></td>
<td>0.254623</td>
<td></td>
</tr>
<tr>
<td>total observation</td>
<td>1058</td>
<td></td>
<td>1058</td>
<td></td>
<td>1058</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Model 7</td>
<td></td>
<td>Model 8 (finance)</td>
<td></td>
<td>Model 9</td>
<td></td>
</tr>
<tr>
<td>----------------------</td>
<td>---------</td>
<td>----------</td>
<td>-------------------</td>
<td>----------</td>
<td>---------</td>
<td>----------</td>
</tr>
<tr>
<td></td>
<td>coeff.</td>
<td>t-stats</td>
<td>coeff.</td>
<td>t-stats</td>
<td>coeff.</td>
<td>t-stats</td>
</tr>
<tr>
<td><strong>loan structure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>lead share</td>
<td>3.498088</td>
<td>7.230433</td>
<td>3.234438</td>
<td>7.013668</td>
<td>4.321262</td>
<td>7.754428</td>
</tr>
<tr>
<td><strong>contract characteristic</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>facility lending amount (log)</td>
<td>2.30E-08</td>
<td>2.013281</td>
<td>2.89E-08</td>
<td>2.013281</td>
<td>3.65E-08</td>
<td>3.406615</td>
</tr>
<tr>
<td>maturity</td>
<td>0.039376</td>
<td>0.322669</td>
<td>0.011205</td>
<td>0.095676</td>
<td>-0.00149</td>
<td>-0.01384</td>
</tr>
<tr>
<td>refinance</td>
<td>48.9276</td>
<td>3.817304</td>
<td>44.83142</td>
<td>3.586991</td>
<td>52.31281</td>
<td>4.480531</td>
</tr>
<tr>
<td>seniority</td>
<td>146.8929</td>
<td>5.719439</td>
<td>137.3137</td>
<td>6.248993</td>
<td>228.8154</td>
<td>8.277257</td>
</tr>
<tr>
<td><strong>borrower characteristic</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>previous relationship</td>
<td>-21.6287</td>
<td>-4.53001</td>
<td>***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>borrower's net income (log)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-4.71813</td>
<td>-0.962</td>
</tr>
<tr>
<td>return on assets</td>
<td>63.74318</td>
<td>1.65584</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>debt to assets</td>
<td>-11.1151</td>
<td>-3.30838</td>
<td>***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>country characteristic</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>country's surplus (log)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6.874863</td>
<td>0.371781</td>
</tr>
<tr>
<td>market capital (log)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-26.0793</td>
<td>-1.31008</td>
</tr>
<tr>
<td>country risk</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>25.36964</td>
<td>6.321913</td>
</tr>
<tr>
<td>corruption index</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5.217319</td>
<td>1.384882</td>
</tr>
<tr>
<td><strong>lead bank characteristic (credit risk)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>investment lead bank</td>
<td>-61.34859</td>
<td>-2.36815</td>
<td>**</td>
<td>-43.5993</td>
<td>-1.72887</td>
<td>-90.784</td>
</tr>
<tr>
<td>universal lead bank</td>
<td>17.90011</td>
<td>1.536448</td>
<td>25.50145</td>
<td>2.145454</td>
<td>24.40595</td>
<td>2.240564</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.146303</td>
<td></td>
<td>0.189211</td>
<td></td>
<td>0.282924</td>
<td></td>
</tr>
<tr>
<td>total observation</td>
<td>548</td>
<td></td>
<td>548</td>
<td></td>
<td>548</td>
<td></td>
</tr>
</tbody>
</table>
Table 5  
Participant Pricing: Full Sample

<table>
<thead>
<tr>
<th></th>
<th>Model 11</th>
<th>Model 12</th>
<th>Model 13</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>coeff.</td>
<td>t-stats</td>
<td>coeff.</td>
</tr>
<tr>
<td><strong>loan structure</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>lead share</td>
<td>-0.204744</td>
<td>-0.496302</td>
<td>-0.31073</td>
</tr>
<tr>
<td><strong>contract characteristic</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>facility lending amount (log)</td>
<td>1.29E-09</td>
<td>0.155068</td>
<td>1.42E-09</td>
</tr>
<tr>
<td>maturity</td>
<td>-0.075876</td>
<td>-0.595566</td>
<td>-0.095141</td>
</tr>
<tr>
<td>number of facility</td>
<td>0.333806</td>
<td>0.104841</td>
<td>1.45144</td>
</tr>
<tr>
<td>refinance</td>
<td>9.720492</td>
<td>1.116759</td>
<td>14.2039</td>
</tr>
<tr>
<td>collateral</td>
<td>25.4111</td>
<td>2.064147</td>
<td>**</td>
</tr>
<tr>
<td>distribution</td>
<td>20.10252</td>
<td>1.723899</td>
<td>*</td>
</tr>
<tr>
<td>seniority</td>
<td>-58.02238</td>
<td>-0.871128</td>
<td>-52.85531</td>
</tr>
<tr>
<td><strong>borrower characteristic</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>previous relationship</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>country characteristic</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>country's surplus (log)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>market capital (log)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>country risk</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>corruption index</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>syndicated characteristic (reputation)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>lead to participant</td>
<td>-1.02046</td>
<td>-13.76911</td>
<td>***</td>
</tr>
<tr>
<td>lead proportion</td>
<td>53.57616</td>
<td>3.013015</td>
<td>***</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.270242</td>
<td></td>
<td>0.286256</td>
</tr>
<tr>
<td>total observation</td>
<td>1058</td>
<td></td>
<td>1058</td>
</tr>
</tbody>
</table>
## Table 6
### Participant Pricing: Financial Sample

<table>
<thead>
<tr>
<th></th>
<th>Model 14</th>
<th>Model 15 (finance)</th>
<th>Model 16</th>
<th>Model 17 (finance)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>coeff.</td>
<td>t-stats</td>
<td>coeff.</td>
<td>t-stats</td>
</tr>
<tr>
<td><strong>loan structure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>lead share</td>
<td>-0.359514</td>
<td>-0.780797</td>
<td>-0.25734</td>
<td>-0.57903</td>
</tr>
<tr>
<td><strong>contract characteristic</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>facility lending amount (log)</td>
<td>7.35E-10</td>
<td>0.063328</td>
<td>8.65E-09</td>
<td>0.702075</td>
</tr>
<tr>
<td>maturity</td>
<td>-0.104011</td>
<td>-0.904166</td>
<td>-0.11918</td>
<td>-1.04718</td>
</tr>
<tr>
<td>number of facility</td>
<td>2.347885</td>
<td>0.801852</td>
<td>2.505982</td>
<td>0.893754</td>
</tr>
<tr>
<td>refinance</td>
<td>17.63968</td>
<td>1.458605</td>
<td>17.0075</td>
<td>1.404599</td>
</tr>
<tr>
<td>collateral</td>
<td>42.12302</td>
<td>2.496844</td>
<td>**31.77604</td>
<td>1.896141</td>
</tr>
<tr>
<td>distribution</td>
<td>11.36688</td>
<td>0.906229</td>
<td>7.542987</td>
<td>0.614109</td>
</tr>
<tr>
<td>seniority</td>
<td>15.90708</td>
<td>0.395502</td>
<td>19.99053</td>
<td>0.492693</td>
</tr>
<tr>
<td><strong>borrower characteristic</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>previous relationship</td>
<td></td>
<td></td>
<td>-26.1192</td>
<td>-3.37136</td>
</tr>
<tr>
<td>borrower's net income (log)</td>
<td>-17.4784</td>
<td>-4.09689</td>
<td>***-3.59138</td>
<td>0.902701</td>
</tr>
<tr>
<td>return on assets</td>
<td></td>
<td></td>
<td>-3.05861</td>
<td>-1.13313</td>
</tr>
<tr>
<td>debt to assets</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>country characteristic</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>country's surplus (log)</td>
<td></td>
<td></td>
<td>17.60549</td>
<td>4.366415</td>
</tr>
<tr>
<td>market capital (log)</td>
<td></td>
<td></td>
<td>4.058694</td>
<td>1.131193</td>
</tr>
<tr>
<td>country risk</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>corruption index</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>syndicated characteristic</strong> (reputation)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>lead to participant</td>
<td>-0.92555</td>
<td>-12.63053</td>
<td>***-0.85365</td>
<td>-11.7711</td>
</tr>
<tr>
<td>lead proportion</td>
<td>52.99574</td>
<td>2.756724</td>
<td>**53.20334</td>
<td>2.861847</td>
</tr>
<tr>
<td><strong>Adjusted R²</strong></td>
<td>0.30511</td>
<td></td>
<td>0.32398</td>
<td></td>
</tr>
<tr>
<td>total observation</td>
<td>543</td>
<td></td>
<td>543</td>
<td></td>
</tr>
</tbody>
</table>