# Collected Papers of the 15th Annual Conference on Pacific Basin Finance, Economics, Accounting, and Management

EDITED BY

Cheng F. Lee

Rutgers University, U.S.A.

Foundation of Pacific Basin Financial Research and Development, Taiwan

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Ho Chi Minh City University of Technology, Vietnam

**Friday, July 20 & Saturday, July 21, 2007**

**The Equatorial Hotel in Ho Chi Minh City, Vietnam**

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# The 15th annual Conference on Pacific Basin Finance, Economics, Accounting and Management

## The Equatorial Hotel

## in Ho Chi Minh City, Vietnam

## July 20 & July 21, 2007

# The 15th annual Conference on Pacific Basin Finance, Economics, Accounting and Management

**Conference Organizers :**

Rutgers University, U.S.A.

Ho Chi Minh City University of Technology, Vietnam

Foundation of Pacific Basin Financial Research and Development, Taiwan

**Program Director:**

Cheng-Few Lee, Rutgers University, U.S.A. and National Chiao Tung University, Taiwan
Editor of RQFA and RPBFMP

**Program Coordinator:**

Cao Hao Thi, Dean of School of Industrial Management,
Ho Chi Minh City University of Technology, Vietnam

**Program Committee Members：**

Hendrik (Hank) Bessembinder, University of Utah, USA

Stephen J. Brown, New York University, USA

Hong-Chang Chang, Fubon Financial Holding Co., Ltd., Taiwan

Carl Chen, University of Dayton, USA

Mei-Ling Chen, Da-Yeh University, Taiwan

Huimin Chung, National Chiao Tung University, Taiwan

J. David Cummins, Wharton School of the University of Pennsylvania, USA

Rolf Dubs, Switzerland Development Cooperation (SDC) Consultant,
and Former Rector of the University of St.Gallen, Switzerland

Yasuo Hoshino, Aichi University, Japan

Frank Jen, SUNY at Buffalo, USA

Prasit Kanchanasakdichai, National Institute of Development and Administration,
Thailand

An-Peng Kao, Kainan University, Taiwan

Alice C. Lee, San Francisco State University, USA

Tran Du Lich, President of Institute for Economic Research-Ho Chi Minh City, Vietnam

William T. Lin, Tamkang University, Taiwan

Hsin-Ling Liu, PricewaterhouseCooper's, Taiwan

Kuo-Ann Lyou, Polaris Financial Group, Taiwan

Chien-Chung Nieh, Tamkang University, Taiwan

Chieh-Yu Pai, Polaris Financial Group, Taiwan

I. M. Pandey, Dean of School of Management, Asian Institute of Technology, Thailand

Pham Phu, Member of National Education Council of Vietnam, and Founder of School of Industrial Management at Ho Chi Minh City University of Technology, Vietnam

Khee Giap Tan, Nanyang Business School, Singapore

Lee J. Yao, Loyola University New Orleans, USA

Gillian Yeo, Nanyang Technological University, Singapore

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Vietnam National University Ho Chi Minh City, Vietnam

National Kaohsiung University of Applied Sciences, Taiwan

Financial Engineering Association of Taiwan, Taiwan

Kainan University, Taiwan

Mega Financial Holding Company, Taiwan

The Ministry of Foreign Affairs of the Republic of China (Taiwan)

**History of the Conference:**

| Year | Venue/Country | Host Organizer |
|---|---|---|
| 1993 | U.S.A. | Rutgers University, New Jersey |
| 1994 | Hong Kong | Hong Kong Chinese University, Hong Kong |
| 1995 | Taiwan | Taiwan Institute of Economic Research, Taipei |
| 1996 | U.S.A. | Rutgers University, New Jersey |
| 1997 | Singapore | Nanyang Technological University, Singapore |
| 1998 | Hong Kong | Hong Kong Polytechnic University, Hong Kong |
| 1999 | Taiwan | National Taiwan University, Taipei |
| 2000 | Thailand | Chulalongkorn University, Bangkok |
| 2001 | U.S.A. | Rutgers University, New Jersey |
| 2002 | Singapore | Nanyang Technological University, Singapore |
| 2003 | Taiwan | National Chiao Tung University, Hsinchu |
| 2004 | Thailand | The Consortium of Thai Universities, Bangkok |
| 2005 | U.S.A. | Rutgers University, New Jersey |
| 2006 | Taiwan | Foundation of Pacific Basin Financial Research and Development |
| 2007 | Vietnam | Ho Chi Minh City University of Technology, Ho Chi Minh City, Vietnam |

# The 15th annual Conference on Pacific Basin Finance, Economics, Accounting and Management

## Friday, July 20, 2007

**8:30 a.m. – 9: 00 a.m.** **Registration**

**9:00 a.m. – 9: 10 a.m.** **Welcome Remarks**

**Speaker 1: Cao Hao Thi**, Dean of School of Industrial Management, Ho Chi Minh City University of Technology, Vietnam

**Speaker 2: Cheng Few Lee**, Distinguished Professor of Finance and Economics, Rutgers University, USA and National Chiao Tung University, Taiwan

**(Grand Ballroom)**

**9:10 a.m. – 9:40 a.m.** **Opening Remarks**

**Speaker:** Phan Thanh Binh, President of Vietnam National University - Ho Chi Minh City, Vietnam

**Chairperson:** Cao Hao Thi, Ho Chi Minh City University of Technology, Vietnam **(Grand Ballroom)**

**9:40 a.m. – 10:20 a.m.** **Keynote Speech I**

**Speaker:** Cheng Few Lee, Rutgers University, USA and National Chiao Tung University, Taiwan

**Title:** Determinants of Capital Structure Choice: A Structural Equation Modeling Approach

**Chairperson:** Cao Hao Thi, Ho Chi Minh City University of Technology, Vietnam **(Grand Ballroom)**

**10:20 a.m. – 11:00 a.m.** **Coffee Break** **(Hotel Lounge)**

**11:00 a.m. – 12:30 p.m.** **Concurrent Sessions:**

**Panel Session A. Economic Cooperation and Development among China, Taiwan, and Vietnam and it's Implication Toward ASEAN-A Veteran Journalist's Ruminations** **(Ballroom 1)**

**Panel Session B. Management Education: Are We Meeting the Challenge?** **(Ballroom 2)**

**Academic Session I. Risk Management (A)** **(Ballroom 3)**

**Academic Session II. Asian Stock Market (A)** **(Ballroom 4)**

**Academic Session III. Inside Trading and Corporate Governance** **(Function room 1)**

**Academic Session IV. Accounting (A)** **(Function room 2)**

**Academic Session V. Corporate Finance (A)** **(Function room 3)**

**12:30 p.m. – 14:15 p.m.** **Lunch & Luncheon Speech:**

**Speaker:** Vu Thanh Tu Anh, Research Director of Fulbright Economic Teaching Program in Vietnam, Vietnam

**Title:** An Overview of Vietnam's Economy: Opportunities and Challenge

**Chairperson：** Le Nguyen Hau, Vice Dean of School of Industrial Management, Ho Chi Minh City University of Technology, Vietnam **(Hotel Restaurant)**

**14:15 p.m. – 15:45 p.m. Concurrent Sessions:**

**Panel Session C. Asian Economic Development and Performance of Pacific Basin Countries (Ballroom 1)**

**Panel Session D. How to Establish a B-to-B Brand With Oligopoly Strategy and a B-to-C Brand With Limited Resources (Ballroom 2)**

**Academic Session VI. Options and Futures (A) (Ballroom 3)**

**Academic Session VII. Risk Management (B) (Ballroom 4)**

**Academic Session VIII. Corporate Finance (B) (Function room 1)**

**Academic Session IX. Corporate Finance (C) (Function room 2)**

**Academic Session X. Mutual Funds (Function room 3)**

**15:45p.m. – 16:00 p.m. Coffee Break (Hotel Lounge)**

**16:00 p.m. – 17:30 p.m. Concurrent Sessions:**

**Panel Session E. Asian Financial Reform and Economic Development (Ballroom 1)**

**Panel Session F. Asian Financial Market and Credit Risk Management (Ballroom 2)**

**Academic Session XI. Corporate Finance (D) (Ballroom 3)**

**Academic Session XII. Banking Management and Performance (Ballroom 4)**

**Academic Session XIII. Foreign Exchange and International Investment (Function room 1)**

**Academic Session XIV. Market Efficiency: Theory and Evidence (Function room 2)**

**Academic Session XV. Insurance and Health Economics (Function room 3)**

**19:00 p.m. – 21:00 p.m. Dinner (Sponsored by Polaris Financial Group)**

☆ **Welcome remarks (19:00~19: 05)**

Speaker: Prof. Cheng F. Lee

☆ **Opening remarks (19:05~19:30)**

1. Sponsor: C Y Huang, Polaris Financial Group, Taiwan
2. Vietnams' official representative
3. Taiwan's official representative
4. Taiwan Businessmen's representative

☆ **Dinner Speech (19:30~20:00)**

**Speaker:** Vuong Duc Hoang Quan, Investment Department, Ho Chi Minh City Investment Fund for Urban Development (HIFU), Vietnam

**Title:** Financing Urban Infrastructure Development: HIFU's Practical Experience

**Chairperson**：Cao Hao Thi, Ho Chi Minh City University of Technology, Vietnam

**(Grand Ballroom)**

# Saturday, July 21, 2007

**8:30 a.m. – 9: 00 a.m.** **Registration**

**9:00 a.m. – 9:40 a.m.** **Keynote Speech II**

**Speaker:** Hendrik Bessembinder, University of Utah, USA

**Title:** Designated Market Makers, Affirmative Obligations, and Market Quality

**Chairperson:** Cheng Few Lee, Rutgers University, USA and National Chiao Tung University, Taiwan

**(Grand Ballroom)**

**9:40 a.m. – 10:20 a.m.** **Keynote Speech III**

**Speaker:** Rolf. Dubs, Switzerland Development Cooperation (SDC) Consultant, and Former Rector of the University of St.Gallen, Switzerland

**Title:** Corporate Governance: The Strategic Responsibility of the Board. Results of an Empirical Study in Switzerland

**Chairperson:** Pham Phu, Member of National Education Council of Vietnam, and Founder of School of Industrial Management, HoChiMinh University of Technology-Vietnam National University, Vietnam

**(Grand Ballroom)**

**10:20 a.m. – 11:00 a.m.** **Coffee Break** **(Hotel Lounge)**

**11:00 a.m. – 12:30 p.m.** **Concurrent Sessions:**

**Panel Session G. Overview of Vietnam Stock Exchange** **(Ballroom 1)**
**Academic Session XVI. Accounting (B)** **(Ballroom 2)**
**Academic Session XVII. Applied Economics (A)** **(Ballroom 3)**
**Academic Session XVIII. Corporate Governance and Dividend Policy** **(Function room 1)**
**Academic Session XIX. Financial Econometrics** **(Function room 2)**
**Academic Session XX. Management** **(Function room 3)**

**12:30 p.m. – 14:15 p.m.** **Luncheon Speech：**

**Speaker**：Du Phuoc Tan, Head of External Cooperation Department of Institute for Economic Research - Ho Chi Minh City, Vietnam

**Title**：Ho Chi Minh City Economic Overview and Potential for Development

**Chairperson**：Le Nguyen Hau, Vice Dean of School of Industrial Management, Ho Chi Minh City University of Technology, Vietnam **(Hotel Restaurant)**

**14:15 p.m. – 15:45 p.m.** **Concurrent Sessions:**

**Panel Session H. How to Publish Papers in High Quality Journals** **(Ballroom 1)**
**Academic Session XXI. Asian Bond and Stock Market** **(Ballroom 2)**
**Academic Session XXII. Microstructure** **(Ballroom 3)**
**Academic Session XXIII. Applied Economics (B)** **(Function room 1)**

**Academic Session XXIV. Asian Stock Market (B)** **(Function room 2)**
**Academic Session XXV. Options and Futures (B)** **(Function room 3)**

**15:45 p.m. – 16:00 p.m. Coffee Break** **(Hotel Lounge)**

**16:00 p.m. – 17:30 p.m. Concurrent Sessions:**
**Panel Session I. Active & Passive Management of Taiwan's Funds Market** **(Ballroom 1)**
**Academic Session XXVI. Behavior Finance** **(Ballroom 2)**
**Academic Session XXVII. Macro Policy** **(Ballroom 3)**
**Academic Session XXVIII. Banking and Mutual Funds Management** **(Function room 1)**
**Academic Session XXIX. Risk Management (C)** **(Function room 2)**
**Academic Session XXX. Accounting (C)** **(Function room 3)**

# Friday, July 20, 2007

**July 20 8:30 a.m. – 9: 00 a.m. Registration**

**July 20 9:00 a.m. – 9: 10 a.m. Welcome Remarks**

**Speaker 1: Cao Hao Thi**, Dean of School of Industrial Management, Ho Chi Minh City University of Technology, Vietnam

**Speaker 2: Cheng Few Lee**, Distinguished Professor of Finance and Economics, Rutgers University, USA and National Chiao Tung University, Taiwan

**July 20 9:10 a.m. – 9:40 a.m. Opening Remarks**

**Speaker:** Phan Thanh Binh, President of Vietnam National University—Ho Chi Minh City, Vietnam

**Chairperson:** Cao Hao Thi, Ho Chi Minh City University of Technology, Vietnam

**July 20 9:40 a.m. – 10:20 a.m. Keynote Speech I**

**Speaker:** Cheng Few Lee, Rutgers University, USA and National Chiao Tung University, Taiwan

**Title:** Determinants of Capital Structure Choice: A Structural Equation Modeling Approach

**Chairperson:** Cao Hao Thi, Ho Chi Minh City University of Technology, Vietnam

**July 20 10:20 a.m. – 11:00 a.m. Coffee Break**

**July 20 11:00 a.m. – 12:30 p.m. Concurrent Sessions:**

**July 20 11:00 a.m. – 12:30 p.m.**

**Panel Session A. Economic Cooperation and Development among China, Taiwan, and Vietnam and it's Implication Toward ASEAN-A Veteran Journalist's Ruminations**

**Chairperson:** Chien-Chung Nieh, Tamkang University, Taiwan

**Speaker:** Chao-Sung Huang, China Times Media Group, Taiwan

**Panelist:** Chew Soon Beng , Nanyang Technological University , Singapore

## Panel Session B. Management Education: Are We Meeting the Challenge?

- Are we in the business of education or training
- Can critical thinking be taught?
- Should/can we teach ethics?
- Continuing education - MBA for life?
- international perspective – impact of different cultures on management education.

**Chairperson:** Dan Palmon, Rutgers University, USA

**Panelists :** Rolf. Dubs, Switzerland Development Cooperation (SDC) Consultant, and Former Rector of the University of St.Gallen, Switzerland
Hong-Chang Chang, Fubon Financial Holding Co., Ltd., and Former Dean of School of Management, National Taiwan University, Taiwan
Kashi R. Balachandran, New York University, USA

## July 20 11:00 a.m. – 12:30 p.m.
## Academic Session I. Risk Management (A)

**Chairperson:** Thai Huu Hong Pham, University of Birmingham, UK

1. Deposit Insurance in the Wake of the Asian Financial Crisis
   David K. Walker, Canada Deposit Insurance Corporation, Canada
2. Keiretsu and Risk: An Examination of the Risk Exposure of Keiretsu Banks in Japan
   Rungrudee Suetorsak, State University of New York-Fredonia, USA
3. Bank Lending & Firm Financing in Transition Economies-Evidence From Listed Firm in Vietnam
   Thai Huu Hong Pham, University of Birmingham, UK
4. Analyzing Yield, Duration and Convexity of Mortgage Loans under Prepayment and Default Risks
   Szu-Lang Liao, National Chengchi University and National University of Kaohsiung, Taiwan
   Ming-Shann Tsai, National Chi-Nan University, Taiwan
   Shu-Lin Chiang, National Chengchi University, Taiwan

## July 20 11:00 a.m. – 12:30 p.m.
## Academic Session II. Asian Stock Market (A)

**Chairperson:** Charles J. Corrado, Massey University, New Zealand

1. Conducting Event Studies With Asia-Pacific Stock Market Data
   Charles J. Corrado, Massey University, New Zealand
   Cameron Truong, University of Auckland, New Zealand

2. Price Discovery and Arbitrage between Futures and Cash Markets -A Case study on National Stock Exchange of India (NSE)
   Hiren M Maniar, Bhavnagar University, India
   Rajesh Bhatt, Bhavnagar University, India
   Dharmesh M Maniyar, Aston University, Birmingham, UK
3. Persistence of Size and Value Premia and the Robustness of the Fama-French Three Factor Model: Evidence from the Hong Stock Market
   Gilbert V. Nartea, Lincoln University, New Zealand
   Christopher Gan, Lincoln University, New Zealand
   Ji Wu, Lincoln University, New Zealand

## July 20 11:00 a.m. – 12:30 p.m.
## Academic Session III. Inside Trading and Corporate Governance

**Chairperson:** Chaoshin Chiao, National Dong Hwa University, Taiwan

1. The Information Content of Directors' Trades: Empirical analysis of the Australian Market
   Harminder Singh, Deakin University, Australia
   Lisa Hotson, Deakin University, Australia
2. The Balanced Scorecard as a corporate governance tool: A French inquiry
   Grégory Wegmann, University of Burgundy, France
3. Institutional Herding, Positive Feedback Trading and Opening Price Behavior in Taiwan
   Chaoshin Chiao, National Dong Hwa University, Taiwan
   Weifeng Hung, Da-Yeh University, Taiwan
   Cheng F. Lee, Rutgers University, USA

## July 20 11:00 a.m. – 12:30 p.m.
## Academic Session IV. Accounting (A)

**Chairperson:** Leonard Goodman, Rutgers University, USA

1. The Role of Accruals as A Signal in Earnings and Dividend Announcements: NZ Evidence
   Hardjo Koerniadi, Auckland University of Technology, New Zealand
   Alireza Tourani-Rad, Auckland University of Technology, New Zealand
2. Impact of Restatement of Earnings on Trading Metrics
   Duong Nguyen, University of Massachusetts Dartmouth, USA
   Shahid S. Hamid, Florida International University, USA
   Suchi Mishra, Florida International University, USA
   Arun Prakash, Florida International University, USA
3. Practical Training and Audit Expectation Gap: The Case of Accounting

Undergraduates of Universiti Utara Malaysia
Azham Md. Ali, Universiti Utara Malaysia, Malaysia
Nor Zalina Mohamad Yusof, Universiti Utara Malaysia, Malaysia
Rosli Mohamad, Universiti Utara Malaysia, Malaysia
Teck Heang Lee, Universiti Tunku Abdul Rahman, Malaysia

## July 20 11:00 a.m. – 12:30 p.m.
## Academic Session V. Corporate Finance (A)

**Chairperson:** Keshab Shrestha, Nanyang Technological University, Singapore

1. Corporate Bond Spread Decomposition and Diversification: A Pooled Estimation on Heterogeneous Panels
   William T. Lin, Tamkang University, Taiwan
   David Sun, Tamkang University, Taiwan
   Kuang-Ping Ku, Tamkang University, Taiwan
2. Diversification and Firm Value in New Zealand
   André J. Bate, New Zealand Exchange Limited (NZX), New Zealand
   Gurmeet S. Bhabra, University of Otago, New Zealand
3. Dividend Policy in the Absence of Taxes
   Khamis Al-Yahyaee, University of New South Wales, Australia
   Toan Pham, University of New South Wales, Australia
   Terry Walter, University of New South Wales, Australia
4. Optimal Revenue Sharing Contracts with Externalities and Dual Agency
   Timothy J. Riddiough, University of Wisconsin-Madison, USA
   Joseph T. Williams, Professors Capital, USA
5. A New Study On The Impacts Of Stock Split
   Zeng Lei, Nanyang Technological University, Singapore
   Keshab Shrestha, Nanyang Technological University, Singapore

## July 20 12:30 p.m. – 14:15 p.m. Lunch & Luncheon Speech:

**Speaker:** Vu Thanh Tu Anh, Research Director of Fulbright Economic Teaching Program in Vietnam, Vietnam

**Title:** An Overview of Vietnam's Economy: Opportunities and Challenge

**Chairperson：** Le Nguyen Hau, Vice Dean of School of Industrial Management, Ho Chi Minh City University of Technology, Vietnam

## July 20 14:15 p.m. – 15:45 p.m. Concurrent Sessions:
## July 20 14:15 p.m. – 15:45 p.m.
## Panel Session C. Asian Economic Development and Performance of Pacific Basin Countries

**Chairperson:** Chin-Chen Chien, National Cheng Kung University, Taiwan

1. The People’s Republic of China: Recent Economic Performance and Development

Challenges
Frank P.C. Fang, Taiwan Commercial Press, Inc., Taiwan

2. Transaction Cost and Economic Modernization in Asia: A Political Economy Approach
Khairy Tourk, Illinois Institute of Technology, USA

## July 20 14:15 p.m. – 15:45 p.m.
## Panel Session D. How to Establish a B-to-B Brand With Oligopoly Strategy and a B-to-C Brand With Limited Resources

**Chairperson:** Cheng-Few Lee, Rutgers University, U.S.A. and National Chiao Tung University, Taiwan

**Speaker1:** How to Establish a B-to-B Brand With Oligopoly Strategy – A Study of Wintek Corporation Hyley Huang, Wintek Corporation and National Chiao Tung University, Taiwan
Jen-Hung Huang, National Chiao Tung University, Taiwan

**Speaker 2:** How to Establish a B-to-C Brand With Limited Resources– A Case Study of Aiptek International Marketing and Branding Strategy
Cheng-Tien Chen, CEO of Aiptek Inc., Taiwan

## July 20 14:15 p.m. – 15:45 p.m.
## Academic Session VI. Options and Futures (A)

**Chairperson:** Ghulam Sorwar, Nottingham University, United Kingdom

1. Expiration Hour Effect of Futures and Options Markets on Stock Market"- A Case Study on NSE (National Stock Exchange of India)
   Hiren M Maniar, Bhavnagar University, India
   Rajesh Bhatt, Bhavnagar University, India
   Dharmesh M Maniyar, Aston University, Birmingham, UK
2. Valuing Cash-financed Takeover Offers: An Option Pricing Approach
   Sudi Sudarsanam, Cranfield University, United Kingdom
   Ghulam Sorwar, Nottingham University, United Kingdom
3. A fuzzy real option valuation approach to capital budgeting under uncertainty
   Shin-Yun Wang, National Dong Hwa University, Taiwan
   Cheng-Few Lee, Rutgers University, USA

## July 20 14:15 p.m. – 15:45 p.m.
## Academic Session VII. Risk Management (B)

**Chairperson:** Kehluh Wang, National Chiao Tung University, Taiwan

1. Crises, Contagion and Cross-Listings
   Nandini Chandar, Drexel University, USA
   Dilip K. Patro, Risk Analysis Division Office of the Comptroller of the Currency, USA

Ari Yezegel, Rutgers University, USA

2. Risk and Returns in Asia Pacific Markets
   Yanhui Wu, The University of Queensland, Australia
   Bin LI, The University of Queensland, Australia
3. Value-at-Risk Performance of Stochastic and ARCH Type Volatility Models: New Evidence
   Binh Do, Monash University, Australia
4. Default correlation at the sovereign level: Evidence from Latin American markets
   Yi-Hsuan Chen, Chung Hua University, Taiwan
   Kehluh Wang, National Chiao Tung University, Taiwan
   Anthony H. Tu, National Chengchi University, Taiwan

## July 20 14:15 p.m. – 15:45 p.m.
## Academic Session VIII. Corporate Finance (B)

**Chairperson:** Martin Young, Massey University, New Zealand

1. Private Placement and Share Price Reaction: Evidence from the Australian Biotechnology and Health Care Sector
   Frank Lin, Deakin University, Australia
   Gerard Gannon, Deakin University, Australia
2. Ownership concentration, agency conflicts, and dividend policy in Japan
   Kimie Harada, Chuo University, Japan
   Pascal Nguyen, The University of New South Wales, Australia
3. The Long-run Out-performance of the Chinese IPOs
   Jing Chi, Massey University, New Zealand
   Chunping Wang, Massey University, New Zealand
   Martin Young, Massey University, New Zealand
4. Study on Capital Structures & Operating Performances of Credit Cooperatives in Taiwan—Application of Panel Threshold Method
   Kuei-Chiu Lee, Feng Chia University, Taiwan
   Chia-Hao Lee, National Chung Hsing University, Taiwan

## July 20 14:15 p.m. – 15:45 p.m.
## Academic Session IX. Corporate Finance (C)

**Chairperson:** Nguyen Trong Hoai, HoChiMinh City University of Economics, Vietnam

1. The Impact of Economic Development on Capital Structure Taking into Account Financial Flexibility, Macroeconomic Conditions and Tax Integration: Evidence from Taiwan
   Hsien-Hung Yeh, National Pingtung University of Science and Technology, Taiwan
   Eduardo Roca, Griffith University, Australia
2. Relations among Dividend Yields, Price Earning Ratio and the Expected Stock Returns Based on Multivariate Causal Estimates: The Case of Malaysia
   Wan Mansor Wan Mahmood, Universiti Teknologi MARA Terengganu, Malaysia

Faizatul Syuhada Abdul Fatah, Universiti Teknologi MARA Terengganu, Malaysia

3. Ultimate Owners, Financial Constraints, and Capital Structure: Evidence from Thailand
   J. Thomas Connelly, Chulalongkorn University, Thailand
4. Announcement Effect on the Credit Spreads of US Dollar Malaysian Bonds
   Chee Jin Yap, Deakin University, Australia
   Gerard Gannon, Deakin University, Australia
5. Panel Threshold Effect of Debt Ratio on Firm Value in Taiwanese Listed Companies
   Feng-Li Lin, Chaoyang University of Technology, Taiwan

## July 20 14:15 p.m. – 15:45 p.m.
## Academic Session X. Mutual Funds

**Chairperson:** Michael E. Drew, Queensland University of Technology, Australia

1. On the Use of Data Envelopment Analysis in Hedge Fund Performance Appraisal
   Huyen Nguyen-Thi-Thanh, LEO, Universit´e d'Orl´eans, France
2. Investment Style of Mutual Funds: How Is It Related to Economic Indicators
   Wee-Yeap Lau, University of Malaya, Malaysia
3. Portfolio Size and Lifecycle Asset Allocation in Pension Funds
   Anup K. Basu, Queensland University of Technology, Australia
   Michael E. Drew, Queensland University of Technology, Australia

## July 20 15:45p.m. – 16:00 p.m. Coffee Break

## July 20 16:00 p.m. – 17:30 p.m. Concurrent Sessions:
## July 20 16:00 p.m. – 17:30 p.m.
## Panel Session E. Asian Financial Reform and Economic Development

**Chairperson:** Hong-Chang Chang, Fubon Financial Holding Co., Ltd., Taiwan

1. Annual Competitiveness Rankings, Financial Reforms and Liberalization Progress of ASEAN 10 + 5 Economies (i.e. Mainland China, Hong Kong, Japan, Korea & Taiwan)
   Tan Khee Giap, Nanyang Technological University, Singapore
2. Recent Economic Development of Vietnam
   Nguyen Xuan Trinh, Central Institute For Economic Management, Vietnam
3. The Role of Gold in the Financial Development of Vietnam
   Huynh Trung Khanah, World Gold Council (Far East), Vietnam

## July 20 16:00 p.m. – 17:30 p.m.

## Panel Session F. Asian Financial Market and Credit Risk Management

**Chairperson:** Heh-Song Wang, Kainan University and Fu-Jen Catholic University, Taiwan

1. Ten Years After The Asian Financial Crisis
   Heh-Song Wang, Kainan University and Fu-Jen Catholic University, Taiwan
2. Development of Financial Markets in HCMC: Still finding a way in obscurity
   Vu Ngoc Anh, HCMC Institute of Economic Research, Vietnam
3. Credit Risk Management: Theory and Empirical Experiences
   Simon Dzeng, Mega Financial Holding Company, Taiwan

## July 20 16:00 p.m. – 17:30 p.m.
## Academic Session XI. Corporate Finance (D)

**Chairperson:** Lee J. Yao, Loyola University New Orleans, USA

1. Consolidation, Market Structure and Competition in the Malaysian Banking Industry: Empirical Evidence from Malaysia
   Muhamed-Zulkhibri Abdul Majid, Central Bank of Malaysia, Malaysia
   Fadzlan Sufian, Bumiputra-Commerce Bank Berhad and University of Malaya, Malaysia
   Mohd Norfian Alifiah, University Technology Malaysia, Malaysia
2. Using debt-related events as explanatory factor of audit failures
   Lee J. Yao, Loyola University New Orleans, USA
   Siew H. Chan, Washington State University, USA
   Jia Wu, University of Massachusetts at Dartmouth, USA
3. Can Size Effect Be Explained by the Survivorship Bias and Bankruptcy Risk?
   Chin-Chen Chien, National Cheng Kung University, Taiwan
   Tsung-Cheng Chen, Tainan University of Technology, Taiwan
4. Should All Competitors Cooperate Together? A Coopetition Contest Model
   Duc-De Ngo, LEO, Universit´e d’Orl´eans, France
5. Testing Static Tradeoff against Pecking Order Models of Capital Structure in Japanese Firms
   Rongrong Zhang, Tohoku University, Japan
   Yoshio Kanazaki, Tohoku University, Japan

## July 20 16:00 p.m. – 17:30 p.m.
## Academic Session XII. Banking Management and Performance

**Chairperson:** Eduardo Roca, Griffith University, Australia

1. The Performance of Pakistani Islamic Bank During 1999-2006: An Exploratory Study
   Hassan Rashid, Mohammad Ali Jinnah University, Pakistan
2. Global Integration of the Banking Industry: Evidence from a Renowned International Financial Centre Based on Markov Regime Switching Approach
   Malar Mavanna, Griffith University, Australia

Eduardo Roca, Griffith University, Australia
Victor Wong, Griffith University, Australia
3. Evaluating the Efficiency of Vietnam Commercial Banks—an Application of -System Mode, DEA Approach
Chuang-Min Chao, National Taipei University of Technology, Taiwan
Nguyen Thi Thu Thuy, National Taipei University of Technology, Taiwan

**July 20 16:00 p.m. – 17:30 p.m.**

**Academic Session XIII. Foreign Exchange and International Investment**

**Chairperson:** Amir N. Licht, Interdisciplinary Center Herzliya, Israel

1. Policy Coordination and Risk Premium in Foreign Exchange Markets for Major EU Currencies
Chanwit Phengpis, California State University, USA
Vanthuan Nguyen, Morgan State University, USA
2. Foreign Exchange Exposures, Financial and Operational Hedge Strategies of Taiwan Firms
Yi-Chein Chiang, Feng Chia University, Taiwan
Hui-Ju Lin, Feng Chia University, Taiwan
3. Are Capital Controls Effective in the Foreign Exchange Market?
Roald J. Versteeg, Maastricht University, Netherlands
Stefan T.M. Straetmans, Maastricht University, Netherlands
Christian C.P Wolff, Maastricht University and CEPR, Netherlands
4. Egalitarianism and International Investment
Jordan I. Siegel, Harvard Business School, USA
Amir N. Licht, Interdisciplinary Center Herzliya, Israel
Shalom H. Schwartz, Hebrew University in Jerusalem, Israel

**July 20 16:00 p.m. – 17:30 p.m.**

**Academic Session XIV. Market Efficiency: Theory and Evidence**

**Chairperson:** Gili Yen, Nai Kai Institute of Technology, Taiwan

1. Efficient Market Hypothesis: A Focused Survey of the Empirical Literature
Gili Yen, Nai Kai Institute of Technology, Taiwan
Cheng-Few Lee, Rutgers University, USA
2. Comparison of relative market efficiency in different trading system: Open-outcry and electronic trading system for Nikkei 225 Futures in Singapore Exchange Derivatives Trading
Masayuki Susai, Nagasaki University, Japan

Hiroshi Moriyasu, Nagasaki University, Japan

3. Asymmetric Causal Relationship between Stock and Exchange Rate—Evidence from Japan and Taiwan
   Chien-Chung Nieh, Tamkang University, Taiwan
   De-Piao Tang, National Taiwan University, Taiwan
   Ya-Yi Chan, Tamkang University, Taiwan
4. The Declining Trend in Idiosyncratic Volatility: Post Decimalization Evidence
   Chandrasekhar Krishnamurti, Monash University, Australia
   Tiong Yang Thong, UNSW Asia, Singapore

## July 20 16:00 p.m. – 17:30 p.m.
## Academic Session XV. Insurance and Health Economics

**Chairperson:** David Shyu, National Sun Yat-sen University, Taiwan

1. The Pricing of Securitization of Life Insurance under Mortality Dependence
   David Shyu, National Sun Yat-sen University, Taiwan
   Chia-Chien Chang, National Sun Yat-sen University, Taiwan
2. Insurance and construction project risks: a review and research agenda
   Junying Liu, Tianjin University, China
   Bingguang Li, Shenandoah University, USA
   Jiong Zhang, Heath Lambert Group, United Kingdom
3. The Role Of Private Sector In Developing Health System In A Mountainous Area: The Case Of Binhphuoc Province In Vietnam
   Nguyen Trong Hoai, University of Economics, Vietnam

## July 20 19:00 p.m. – 21:30 p.m. Dinner (Sponsored by Polaris)

☆ **Welcome remarks (19:00~19:05)**

Speaker: Prof. Cheng F. Lee

☆ **Opening remarks (19:05~19:30)**

1. Sponsor: C Y Huang, Polaris Financial Group, Taiwan
2. Vietnams' official representative
3. Taiwan's official representative
4. Taiwan Businessmen's representative

☆ **Dinner Speech (19:30~20:00)**

**Speaker:** Vuong Duc Hoang Quan, Investment Department, Ho Chi Minh City Investment Fund for Urban Development (HIFU), Vietnam

**Title:** Financing Urban Infrastructure Development: HIFU's Practical Experience

**Chairperson**：Cao Hao Thi, Ho Chi Minh City University of Technology, Vietnam

# Saturday, July 21, 2007

### July 21 8:30 a.m. – 9: 00 a.m. Registration

### July 21 9:00 a.m. – 9:40 a.m. Keynote Speech II

**Speaker:** Hendrik Bessembinder, University of Utah, USA
**Title:** Designated Market Makers, Affirmative Obligations, and Market Quality
Chairperson: **Cheng Few Lee,** Rutgers University, USA and National Chiao Tung University, Taiwan

### July 21 9:40 a.m. – 10:20 a.m. Keynote Speech III

**Speaker:** Rolf. Dubs, Switzerland Development Cooperation (SDC) Consultant, and Former Rector of the University of St. Gallen, Switzerland
**Title:** Corporate Governance: The Strategic Responsibility of the Board. Results of an Empirical Study in Switzerland
**Chairperson:** Pham Phu, Member of National Education Council of Vietnam, and Founder of School of Industrial Management, HoChiMinh University of Technology-Vietnam National University, Vietnam

### July 21 10:20 a.m. – 11:00 a.m. Coffee Break

### July 21 11:00 a.m. – 12:30 p.m. Concurrent Sessions:

### July 21 11:00 a.m. – 12:30 p.m.

### Panel Session G. Overview of Vietnam Stock Exchange

**Chairperson:** Cao Hao Thi, Ho Chi Minh City University of Technology, Vietnam
**Speaker:** Tran Dac Sinh, Hochiminh City Stock Exchange, Vietnam

### July 21 11:00 a.m. – 12:30 p.m.

### Academic Session XVI. Accounting (B)

**Chairperson:** Robert Luther, University of the West of England, United Kingdom

1. The Impact of the SEC on the First 100 Statements of the FASB
   Dan Palmon, Rutgers University, USA
2. An Evidence-Based Taxonomy of Intellectual Capital
   Ching Choo Huang, Universiti Teknologi Mara, Malaysia
   Robert Luther, University of the West of England, United Kingdom

Michael Tayles, University of Hull, United Kingdom

3. Do auditors' opinions, industry factors and macroeconomic factors signal financial distress? Evidence from Taiwan
   Chengfew Lee, Rutgers University, USA
   Lili Sun, Rutgers University, USA
   Bi-Huei Tsai, National Chiao Tung University, Taiwan
4. An Empirical Study on Issues in Taiwanese Employee Bonuses Plans
   Po-Sheng Ko, National Kaohsiung University of Applied Sciences, Taiwan
   Wen-Shain Lin, I-Shou University, Taiwan
   Wen-Chih Lee, National Kaohsiung University of Applied Sciences, Taiwan

## July 21 11:00 a.m. – 12:30 p.m.
## Academic Session XVII. Applied Economics (A)

**Chairperson:** Chien-Fu Jeff Lin, National Taiwan University, Taiwan

1. A Comparative Evaluation of The Bose-Einstein Entropy, Spatial Equilibrium and The Linear Programming Transportation Models of The Appalachian Steam Coal Market
   Cindy Hsiao-Ping Peng, Yu Da College of Business, Taiwan
   L. S.Chen, Shu-Te University, Taiwan
   Pao- Yuan Chen, Nanhua University, Taiwan
2. A study of Causal Relationship among Economic Freedom, Economic Growth, and Corruption: Empirical Evidence from Panel Data
   Tsangyao Chang, Feng Chia University, Taiwan
   Wen-Chi Liu, Da Yeh University and Feng Chia University, Taiwan
   Yu-Chen Shih, Tamkang University, Taiwan
3. Financial Disintermediation in the 1990s: Implications on Monetary Policy for Malaysia
   Anthony C.K. Tan, University of Malaya, Malaysia
   Kim-Leng Goh, University of Malaya, Malaysia
4. Do Mergers and Acquisitions Create Shareholder Wealth In The Pharmaceutical Industry?
   Dilip K. Patro, Office of the Comptroller of Currency, USA
   Howard Tuckman, Fordham University, USA
   Xiaoli Wang, Bear Sterns, USA
   Mahmud Hassan, Rutgers University, USA

## July 21 11:00 a.m. – 12:30 p.m.
## Academic Session XVIII. Corporate Governance and Dividend Policy

**Chairperson:** Hans Stoessel, Swiss Development Cooperation (SDC) Consultant, and former Director of Swiss-AIT-Vietnam (SAV) Management Development Programme

1. Structure of Board of Directors and Financial Reporting Fraud

Yijiang Zhao, University of Alaska Fairbanks, USA
Kung H. Chen, University of Nebraska-Lincoln, USA

2. Executive Pay Dispersion, Corporate Governance and Firm Performance
   Kin Wai Lee, Nanyang Technological University, Singapore
   Baruch Lev, New York University, USA
   Gillian Hian Heng Yeo, Nanyang Technological University, Singapore
3. Effectiveness of Dividend Policy Under the Capital Asset Pricing Model: A Dynamic Analysis
   Manak C. Gupta, Temple University, USA
   Alice C. Lee, San Francisco State University, USA
   Cheng-Few Lee, Rutgers University, USA
4. Side-by-Side Management of Hedge Funds and Mutual Funds
   Tom Nohel, Loyola University, USA
   Z. Jay Wang, University of Illinois, USA
   Lu Zheng, University of California, Irvine, USA

## July 21 11:00 a.m. – 12:30 p.m.
## Academic Session XIX. Financial Econometrics

**Chairperson:** Duong Nguyen, University of Massachusetts Dartmouth, USA

1. The Relationship between Stock Prices and Dividends: Evidence Based on Taiwan Panel Data Investigation
   Chi-Wei Su, Providence University, Taiwan
   Hsuling Chang, Lin Tung University, Taiwan
   Chien-Chun Wei, Providence University, Taiwan
   Ruo-Yi Lai, Tamkang University, Taiwan
2. Higher Order Systematic Co-Moments and Asset-Pricing: New Evidence
   Duong Nguyen, University of Massachusetts Dartmouth, USA
   Tribhuvan N. Puri, University of Massachusetts Dartmouth, USA
3. The intraday price behavior of Australian exchange traded options and warrants
   William J. Bertin, Bond University, Australia
   David Michayluk, University of Technology, Sydney, Australia
   Laurie Prather, Bond University, Australia
4. The determinants of stock market integration: A panel data investigation
   Chee-Wooi Hooy, University of Malaya, Malaysia
   Kim-Leng Goh, University of Malaya, Malaysia
5. A Panel Unit Root and Panel Cointegration Test of The Modeling International Tourism Demand in India
   Parsert Chaitip, Chiang Mai University, Thailand
   N. Rangaswamy, Bangalore University, India
   Chukiat Chaiboonsri, Bangalore University, India

## July 21 11:00 a.m. – 12:30 p.m.
## Academic Session XX. Management

**Chairperson:** Ken Hung, National Dong Hwa University, Taiwan

1. An Ordered Probit Model for Understanding Student Performance in Operations Management
   Tony R. Johns, Clarion University, USA
   Chin W. Yang, Clarion University, USA
   Paul Y. Kim, Clarion University, USA
   Ken Hung, National Dong Hwa University, Taiwan
2. What Does a Concept Attract? The Case of Gaming in Macau
   Rose Neng Lai, University of Macau, China
   Raymond W. So, Chinese University of Hong Kong, Hong Kong
   Ricardo Chi Sen Siu, University of Macau, China
3. How Much are College Presidents Paid?
   Carl R. Chen, University of Dayton, USA
   Ying Huang, Manhattan College, USA
4. An Empirical Study on the Relationship between Intellectual Capital and Knowledge Creation
   Yi-Chun Huang, National Kaohsiung University of Applied Sciences, Taiwan
   Jih-Jen Liou, National Kaohsiung University of Applied Sciences, Taiwan

## July 21 12:30 p.m. – 14:15 p.m. Luncheon Speech：

**Speaker**：Du Phuoc Tan, External Cooperation Department of Institute for Economic Research - Ho Chi Minh City, Vietnam

**Title**：Ho Chi Minh City Economic Overview and Potential for Development

**Chairperson**：Le Nguyen Hau, Ho Chi Minh City University of Technology, Vietnam

## July 21 14:15 p.m. – 15:45 p.m. Concurrent Sessions:

## July 21 14:15 p.m. – 15:45 p.m.

## Panel Session H. How to Publish Papers in High Quality Journals

**Chairperson:** Cheng Few Lee, Rutgers University, USA and National Chiao Tung University, Taiwan

**Panelists:** Hendrik Bessembinder, University of Utah, USA
Carl Chen, University of Dayton, USA
Kashi R. Balachandran, New York University, USA

## July 21 14:15 p.m. – 15:45 p.m.

## Academic Session XXI. Asian Bond and Stock Market

**Chairperson:** Jianxin Wang, University of New South Wales, Australia

1. An Empirical Study of Taiwan Bond Market Based on Nonlinear Dynamic Model
   Tsangyao Chang, Feng Chia University, Taiwan

Shu-Chen Kang, Feng Chia University, Taiwan

2. Stock manipulation and its impact on market quality
   Yu Chuan Huang, National Kaohsiung First University of Science and Technology, Taiwan
   Roger C.Y. Chen, National Kaohsiung First University of Science and Technology, Taiwan
   Yao Jen Cheng, National Kaohsiung First University of Science and Technology, Taiwan
3. The Causal Relationship between Foreign Ownership and Stock Volatility in Indonesia
   Jianxin Wang, University of New South Wales, Australia
4. The Forecasting Performance of Model Free Implied Volatility: Evidence from an Emerging Market
   Mei-Maun Hseu, Chihlee Institute of Technology, Taiwan
   Wei-Peng Chen, National Chiao Tung University, Taiwan
   Huimin Chung, National Chiao Tung University, Taiwan

## July 21 14:15 p.m. – 15:45 p.m.
## Academic Session XXII. Microstructure

**Chairperson:** Karen, H.Y. Wong, The Open University of Hong Kong, Hong Kong

1. Dynamics of Event-Induced Liquidity Changes In the Aftermarket
   Alexander Molchanov, Massey University, New Zealand
2. Delayed Price Discovery and Momentum Strategies: Evidence from Vietnam
   Cameron Truong, The University of Auckland, New Zealand
   Madhu Veeraraghavan, Monash University, Australia
   Mai Truc Thi Nguyen, Ho Chi Minh City Securities Trading Center, Vietnam
3. Premium-Discount Patterns in Exchange-Traded Funds (ETFs): Evidence from the Tracker Fund of Hong Kong (TraHK)
   Karen, H.Y. Wong, The Open University of Hong Kong, Hong Kong
   Gordon, Y.N. Tang, Hong Kong Baptist University, Hong Kong
4. The Impact of Surprise Offer-Share Adjustments on Offer-Day Returns: Evidence from Seasoned Equity Offers
   Hoje Jo, Santa Clara University, USA
   Yongtae Kim, Santa Clara University, USA
   Myung Seok Park, Virginia Commonwealth University, USA

## July 21 14:15 p.m. – 15:45 p.m.
## Academic Session XXIII. Applied Economics (B)

**Chairperson:** Nobuhiro Takahashi, Osaka City University, Japan

1. Value capturing: a realistic funding source for urban transportation in Ho Chi Minh City?
   Nguyen Thien Phu, Ho Chi Minh City University of Technology, Vietnam

2. An Empirical Test of a Resources Deployment Portfolio (RDP) Approach to Business Group ROE Decomposition
   David M. Chen, Fu Jen Catholic University, Taiwan
   Li-Ling, Yang, Fu Jen Catholic University, Taiwan
3. Financial Constraints and the Effects of Alternative Financial System Design
   Solomon Tadesse, University of Michigan, USA
4. Offshoring of Software Development from Japan to China
   Nobuhiro Takahashi, Osaka City University, Japan
   Mita Li, Kyoto University, Japan

## July 21 14:15 p.m. – 15:45 p.m.
## Academic Session XXIV. Asian Stock Market (B)

**Chairperson:** Victor S.H. Wong, Griffith University, Australia

1. Are large returns followed by predictable patterns? Evidence across Asia-Pacific Markets
   Pham Vu Thang Long, Osaka University, Australia
   Do Quoc Tho Nguyen, University of New South Wales, Australia
   Thuy-Duong Tô, University of Adelaide, Australia
2. Socially Responsible Investments: Do They Make A Difference to the Systematic Risk of Australian Superannuation Funds?
   Victor S.H. Wong, Griffith University, Australia
   Eduardo D. Roca, Griffith University, Australia
   Anand G. Tularam, Griffith University, Australia
3. Investment Behavior of Foreign Investors in Taiwan: Momentum vs. Contrarian Strategies
   Mei-Ling Chen, Da-Yeh University, Taiwan
   Mei-Chin Hung, Da-Yeh University, Taiwan
   Fu-Lai Lin, Da-Yeh University, Taiwan
   Weifang Hung, Da-Yeh University, Taiwan
4. The Order Submission Behaviors surrounding Open-Market Repurchase Announcements: The Examination of a Missing Link Embedded in the Signaling Hypothesis
   Chaoshin Chiao, National Dong Hwa University, Taiwan
   Hsiang-Hsuan Chih, National Dong Hwa University, Taiwan
   Zi-May Wang, National Dong Hwa University, Taiwan
   Ya-Rou Hsu, Shin Kong Bank, Taiwan

## July 21 14:15 p.m. – 15:45 p.m.
## Academic Session XXV. Options and Futures (B)

**Chairperson:** Mei-Ling Chen, Da-Yeh University, Taiwan

1. Difference of linkage between spot and futures markets in Nikkei225 stock index and DJIA index

Takanori Usui, University of Tsukuba, Japan
Isao Shoji, University of Tsukuba, Japan

2. Alternative Methods for Estimating Hedge Ratio: Review, Integration and Empirical Evidence
   Cheng-Few Lee, Rutgers University, USA
   Fu-Lai Lin, Da-Yeh University, Taiwan
   Hui-Chuan Tu, Chungchou Institute of Technology, Taiwan
   Mei-Ling Chen, Da-Yeh University, Taiwan
3. A Mortgage Backed Securities Pricing Model and Its Implication of Trading Strategy
   Winson Hung, National Taiwan University, Taiwan
   Chien-fu Jeff Lin, National Taiwan University, Taiwan

**July 21 15:45 p.m. – 16:00 p.m. Coffee Break**

**July 21 16:00 p.m. – 17:30 p.m. Concurrent Sessions:**

**July 21 16:00 p.m. – 17:30 p.m.**

**Panel Session I. Active & Passive Management of Taiwan's Funds Market**

**Chairperson:** Chaoshin Chiao, National Dong Hwa University, Taiwan

**Speaker:** Tsung Sheng Liu, Polaris Financial Group, Taiwan

**Academic Session XXVI. Behavior Finance**

**Chairperson:** Wei Li, The Hong Kong Polytechnic University, Hong Kong

1. Herd Behavior towards the Market Index: Evidence from 21 Financial Markets
   Daxue Wang, IESE Business School, Spain
   Miguel Canela, University of Barcelona, Spain
2. In Search of Liquidity: An Analysis of Order Submission Strategies in Automated Markets
   Hendrik Bessembinder, University of Utah, USA
3. Formulation of a Herd Measure for Detecting Monthly Herding Behaviour in an Equity Market
   Yoke-Chen Wong, Sunway University College, Malaysia
   Ah-Hin Pooi, University of Malaya, Malaysia
   Kim-Lian Kok, Stamford College, Malaysia
4. What Make Chinese Institutional and Individual Investors Trade Excessively?
   Steven Shuye Wang, The Hong Kong Polytechnic University, Hong Kong
   Wei Li, The Hong Kong Polytechnic University, Hong Kong
   Ping He, Zhuhai Campus of Beijing Normal University and Hong Kong Baptist University, China

**July 21 16:00 p.m. – 17:30 p.m.**

**Academic Session XXVII. Macro Policy**

**Chairperson:** Kai-Li Wang, Tunghai University, Taiwan

1. Vietnam's Banking Sector Reform For WTO Accession
   Phan Van Sam, Mekong University, Vietnam
2. Macroeconomic volatility and stock returns: Evidence from Mediterranean markets
   Ahmed Hachicha, Tunisian University of Management and Economics Sciences, Tunisia
   Fatma Hachicha, Tunisian University of Management and Economics Sciences, Tunisia
3. Aggregation of Forecasts, Data and Model
   Meng-Feng Yen, National Cheng Kung University, Taiwan
   Kai-Li Wang, Tunghai University, Taiwan
   Ming-Yuan Li, National Cheng Kung University, Taiwan
4. The Determinants of Earnings in Singapore
   Nic Groenewold, The University of Western Australia, Australia
   Chew Soon Beng, Nanyang Technological University, Singapore
   Rosalind Chew, Nanyang Technological University, Singapore

## July 21 16:00 p.m. – 17:30 p.m.
## Academic Session XXVIII. Banking and Mutual Funds Management

**Chairperson:** Beng Soon Chong, Nanyang Technological University, Singapore

1. Bank lending and interest rate channels in Egypt: An empirical investigation based on SVAR models
   Ahmed Hachicha, Tunisian University of Management and Economics Sciences, Tunisia
   Abdelkader Chaabane, Tunisian University of Management and Economics Sciences, Tunisia
2. Banking Fragility and Disclosure: International Evidence
   Solomon Tadesse, University of Michigan, USA
3. Islamic Banking: Interest-Free or Interest-Based?
   Beng Soon Chong, Nanyang Technological University, Singapore
4. Fuzzy Multi-Criteria Decision Making to Select Mutual Funds Investment Style
   Shin-Yun Wang, National Dong Hwa University, Taiwan
   Cheng-Few Lee, Rutgers University, USA

## July 21 16:00 p.m. – 17:30 p.m.
## Academic Session XXIX. Risk Management (C)

**Chairperson:** Kehluh Wang, National Chiao Tung University, Taiwan

1. Considerations on Risk of A Securities Portfolio
   Dang Dinh Cung, Ho Chi Minh City University of Technology, Vietnam
2. Examining Financially Distressed Company in Australia: The Application of Survival Analysis
   Nongnit Chancharat, University of Wollongong, Australia
   Pamela Davy, University of Wollongong, Australia

Michael McCrae, University of Wollongong, Australia

3. Credit Rating Forecasting Using Combining Technique: The Case in Taiwan
   Cheng-Few Lee, National Chiao Tung University, Taiwan
   Kehluh Wang, National Chiao Tung University, Taiwan
   Chan-Chien Lien, National Chiao Tung University, Taiwan

## July 21 16:00 p.m. – 17:30 p.m.

## Academic Session XXX. Accounting (C)

**Chairperson:** Po-Sheng Ko, National Kaohsiung University of Applied Sciences, Taiwan

1. Management Forecasts and Information Asymmetry: An Examination of Adverse Selection Cost around Earnings Announcements
   H. Young Baek, Nova Southeastern University, USA
   Dong-Kyoon Kim, Montclair State University, USA
   Joung W. Kim, Nova Southeastern University, USA
2. Analysis The Revenue And Expense On Economic Growth, Poverty, And Unemployment
   Ardi Hamzah, Trunojoyo University, Indonesia
3. Does Stock Market Appreciate the Implication of Order Backlog for Future Earnings? A Re-examination
   Shu-hua Lee, National Taipei University, Taiwan
   Po-Sheng Ko, National Kaohsiung University of Applied Sciences, Taiwan
   Wen-chih Lee, National Kaohsiung University of Applied Sciences, Taiwan
   Yann-Ching Tsai, National Taiwan University, Taiwan
4. The Role of Transfer Pricing Schemes in Coordinated Supply Chains
   Kashi R. Balachandran, New York University, USA
   Shu-Hsing Li, National Taiwan University, Taiwan
   Taychang Wang, National Taiwan University, Taiwan
   Hsiao-Wen Wang, National Changhua University of Education, Taiwan

# Determinants of Capital Structure Choice: A Structural Equation Modeling Approach

**Cheng F. Lee**

**Distinguished Professor of Finance**
**Rutgers, The State University of New Jersey**

**Editor of Review of Quantitative Finance and Accounting and Review of Pacific Basin Financial Markets and Policies**

The 15th Annual Conference on PBFEAM at Ho Chi Minh City, Vietnam

# OUTLINE

- **I. Introduction**
- **II. Measures and Determinants of Capital Structure**
- **III. Sample**
- **IV. Methodology**
- **V. Empirical Results**
- **IV. Conclusion**

# I. Introduction

A. History of Finance

B. Theoretical Framework of Finance

- a. Classical Theory
- b. New classical theory
- c. CAPM and APT
- d. Options and Futures Theory

C. Policy Framework of Finance

- a. Investment Policy
- b. Financial Policy
- c. Dividend Policy
- d. Production Policy

D. Accounting Approach to Determine Capital Structure

- a. Static Ratio Analysis
- b. Dynamic Ratio Analysis

E. Finance Approach to Determine Capital Structure

- a. Traditional Approach
- b. Option Approach

# II. Measures and Determinants of Capital Structure

A. Growth

B. Uniqueness

C. Non-Debt Tax Shields

D. Collateral Value of Assets

E. Profitability

F. Volatility

G. Industry Classification

# III. Sample

Table 1

Descriptive Statistics for the Pooled Sample during

1988-2003

**Table 1**
**Descriptive Statistics for the Pooled Sample during 1988-2003**

RD/S is the ratio of R&D to sales. CE/TA is the ratio of capital expenditure to total assets. GTA is the percentage change in total assets. MBA is the ratio of market-to-book assets. MBE is the ratio of market-to-book equity. RD/TA is the ratio of R&D to total assets. RD/S is the ratio of R&D to sales.NDT/TA is the ratio of non-debt tax shields to total assets. ITC/TA is the ratio of investment tax credit to total assets. DEP/TA is the ratio of depreciation to total assets. IGP/TA is the ratio of the sum of inventory and gross plant and equipment to total assets. OI/TA is the ratio of operating income to total assets. OI/S is the ratio of operating income to sales. STDGOI is the standard deviation of the percentage change in operating income. CV(ROA) is the coefficient of variation of ROA. CV(ROE) is the coefficient of variation of ROE. CV(OITA) is the coefficient of variation of operating income divided by total assets. IND is the

| Variable | N | Minimum | Lower Quartile | Mean | Median | Upper Quartile | Std Dev | Maximum |
|---|---|---|---|---|---|---|---|---|
| LT/MVE | 13,887 | 0.00 | 0.00 | 0.44 | 0.08 | 0.35 | 1.94 | 84.99 |
| ST/MVE | 13,887 | 0.00 | 0.00 | 0.19 | 0.02 | 0.08 | 1.38 | 69.18 |
| C/MVE | 13,887 | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.40 | 33.61 |
| RD/S | 13,887 | 0.00 | 0.00 | 0.16 | 0.02 | 0.08 | 1.38 | 54.79 |
| CE/TA | 13,887 | 0.00 | 0.02 | 0.06 | 0.04 | 0.07 | 0.06 | 1.32 |
| GTA | 13,887 | -0.94 | -0.04 | 0.15 | 0.06 | 0.19 | 0.71 | 32.45 |
| MBA | 13,887 | 0.08 | 1.03 | 1.92 | 1.37 | 2.10 | 1.97 | 43.19 |
| MBE | 13,887 | 0.01 | 1.07 | 3.03 | 1.81 | 3.19 | 5.02 | 98.68 |
| RD/TA | 13,887 | 0.00 | 0.00 | 0.06 | 0.02 | 0.08 | 0.10 | 3.69 |
| NDT/TA | 13,887 | 0.00 | 0.04 | 0.41 | 0.06 | 0.13 | 2.02 | 70.13 |
| ITC/TA | 13,887 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.06 | 6.40 |
| DEP/TA | 13,887 | 0.00 | 0.03 | 0.05 | 0.04 | 0.06 | 0.04 | 1.61 |
| IGP/TA | 13,887 | 0.00 | 0.25 | 0.43 | 0.44 | 0.60 | 0.24 | 1.00 |
| OI/TA | 13,887 | -4.21 | 0.02 | 0.04 | 0.08 | 0.14 | 0.22 | 1.40 |
| OI/S | 13,887 | -81.64 | 0.01 | -0.18 | 0.07 | 0.12 | 2.55 | 9.12 |
| STDGOI | 13,887 | 0.00 | 0.20 | 2.07 | 0.52 | 1.53 | 6.18 | 93.21 |
| CV(ROA) | 13,887 | 0.00 | 0.19 | 1.73 | 0.49 | 1.29 | 5.46 | 98.05 |
| CV(ROE) | 13,887 | 0.00 | 0.19 | 1.72 | 0.51 | 1.42 | 5.07 | 97.28 |
| CV(OITA) | 13,887 | 0.00 | 0.14 | 1.19 | 0.32 | 0.79 | 4.19 | 92.43 |
| IND | 13,887 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.11 | 1.00 |

# Table 2 Pearson Correlation Coefficients for the Pooled Sample during 1988-2003, N = 13,387

**Table 2**

**Pearson Correlation Coefficients for the Pooled Sample during 1988-2003, N = 13,387**

| | LT/MVE | ST/MVE | C/MVE | RD/S | CE/TA | GTA | MBA | MBE | RD/TA | NDT/TA | ITC/TA | DEP/TA | IGP/TA | OI/TA | OI/S | CV(ROA) | CV(ROE) | CV(OITA) | STDGOI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LT/MVE | 1 | 0.158 | 0.160 | -0.020 | -0.033 | -0.028 | -0.099 | -0.066 | -0.091 | -0.022 | -0.004 | -0.026 | 0.036 | -0.002 | 0.022 | -0.002 | 0.038 | 0.034 | -0.005 |
| | | <.0001 | <.0001 | 0.0165 | 0.0001 | 0.0011 | <.0001 | <.0001 | <.0001 | 0.0102 | 0.6501 | 0.0021 | <.0001 | 0.8181 | 0.0089 | 0.7878 | <.000 | <.0001 | 0.5487 |
| ST/MVE | | 1 | 0.390 | -0.012 | -0.035 | -0.020 | -0.062 | -0.041 | -0.044 | 0.004 | -0.003 | -0.016 | 0.035 | -0.036 | 0.005 | 0.003 | 0.016 | 0.014 | 0.021 |
| | | | <.0001 | 0.1728 | <.0001 | 0.0212 | <.0001 | <.0001 | <.0001 | 0.6753 | 0.7389 | 0.0581 | <.0001 | <.0001 | 0.5913 | 0.7248 | 0.0541 | 0.1097 | 0.0126 |
| C/MVE | | | 1 | 0.001 | -0.023 | -0.018 | -0.047 | -0.022 | -0.014 | 0.022 | -0.001 | 0.019 | 0.024 | -0.044 | -0.004 | 0.023 | 0.009 | 0.013 | 0.021 |
| | | | | 0.9122 | 0.0067 | 0.0329 | <.0001 | 0.0102 | 0.1016 | 0.0087 | 0.8706 | 0.0268 | 0.0056 | <.0001 | 0.5976 | 0.0071 | 0.3162 | 0.13 | 0.0136 |
| RD/S | | | | 1 | -0.043 | 0.043 | 0.124 | 0.093 | 0.319 | 0.152 | 0.034 | 0.007 | -0.113 | -0.236 | -0.799 | 0.000 | -0.011 | -0.007 | -0.004 |
| | | | | | <.0001 | <.0001 | <.0001 | <.0001 | <.0001 | <.0001 | <.0001 | 0.3862 | <.0001 | <.0001 | <.0001 | 0.9927 | 0.1985 | 0.3789 | 0.6216 |
| CE/TA | | | | | 1 | 0.027 | 0.074 | 0.038 | -0.042 | -0.056 | -0.008 | 0.277 | 0.406 | 0.097 | 0.030 | -0.049 | -0.044 | -0.052 | -0.057 |
| | | | | | | 0.0014 | <.0001 | <.0001 | <.0001 | <.0001 | 0.3758 | <.0001 | <.0001 | <.0001 | 0.0003 | <.0001 | <.0001 | <.0001 | <.0001 |
| GTA | | | | | | 1 | 0.146 | 0.090 | -0.036 | -0.044 | -0.002 | -0.120 | -0.089 | 0.086 | -0.021 | 0.006 | 0.000 | 0.004 | 0.002 |
| | | | | | | | <.0001 | <.0001 | <.0001 | <.0001 | 0.8475 | <.0001 | <.0001 | <.0001 | 0.0125 | 0.4861 | 0.9883 | 0.652 | 0.7889 |
| MBA | | | | | | | 1 | 0.679 | 0.258 | 0.197 | 0.024 | 0.023 | -0.174 | -0.063 | -0.138 | -0.005 | -0.046 | -0.037 | -0.031 |
| | | | | | | | | <.0001 | <.0001 | <.0001 | 0.0046 | 0.0058 | <.0001 | <.0001 | <.0001 | 0.5571 | <.0001 | <.0001 | 0.0002 |
| MBE | | | | | | | | 1 | 0.215 | 0.210 | 0.008 | 0.077 | -0.116 | -0.151 | -0.112 | 0.018 | -0.034 | -0.021 | -0.021 |
| | | | | | | | | | <.0001 | <.0001 | 0.3268 | <.0001 | <.0001 | <.0001 | <.0001 | 0.0371 | <.0001 | 0.0125 | 0.0138 |
| RD/TA | | | | | | | | | 1 | 0.377 | 0.035 | 0.242 | -0.258 | -0.481 | -0.212 | 0.076 | 0.026 | 0.031 | 0.064 |
| | | | | | | | | | | <.0001 | <.0001 | <.0001 | <.0001 | <.0001 | <.0001 | <.0001 | 0.0022 | 0.3 | <.0001 |
| NDT/TA | | | | | | | | | | 1 | 0.036 | 0.261 | -0.131 | -0.559 | -0.225 | 0.032 | -0.009 | 0.000 | 0.006 |
| | | | | | | | | | | | <.0001 | <.0001 | <.0001 | <.0001 | <.0001 | 0.0002 | 0.2664 | 0.987 | 0.4947 |
| ITC/TA | | | | | | | | | | | 1 | -0.003 | -0.011 | -0.025 | -0.027 | 0.001 | -0.003 | -0.002 | -0.002 |
| | | | | | | | | | | | | 0.6927 | 0.1995 | 0.0027 | 0.0015 | 0.9383 | 0.7634 | 0.8167 | 0.8319 |
| DEP/TA | | | | | | | | | | | | 1 | 0.172 | -0.356 | -0.057 | 0.034 | 0.012 | 0.021 | 0.070 |
| | | | | | | | | | | | | | <.0001 | <.0001 | <.0001 | <.0001 | 0.1477 | 0.0148 | <.0001 |
| IGP/TA | | | | | | | | | | | | | 1 | 0.147 | 0.089 | -0.086 | -0.026 | -0.037 | -0.049 |
| | | | | | | | | | | | | | | <.0001 | <.0001 | <.0001 | 0.0023 | <.0001 | <.0001 |
| OI/TA | | | | | | | | | | | | | | 1 | 0.353 | -0.101 | -0.046 | -0.072 | -0.086 |
| | | | | | | | | | | | | | | | <.0001 | <.0001 | <.0001 | <.000 | <.0001 |
| OI/S | | | | | | | | | | | | | | | 1 | -0.0076 | 0.00883 | -0.00692 | -0.0002 |
| | | | | | | | | | | | | | | | | 0.3703 | 0.2983 | 0.4147 | 0.9862 |
| CV(ROA) | | | | | | | | | | | | | | | | 1 | 0.07523 | 0.07477 | 0.09366 |
| | | | | | | | | | | | | | | | | | <.0001 | <.0001 | <.0001 |
| CV(ROE) | | | | | | | | | | | | | | | | | 1 | 0.53098 | 0.18257 |
| | | | | | | | | | | | | | | | | | | <.0001 | <.0001 |
| CV(OITA) | | | | | | | | | | | | | | | | | | 1 | 0.15952 |
| | | | | | | | | | | | | | | | | | | | <.0001 |
| STDGOI | | | | | | | | | | | | | | | | | | | 1 |

# IV. Methodology

A. MIMIC Model

B. Estimation Criterion

C. Model Fit Evaluation

## Table 3

## Constructs and Indicators in Titman and Wessels (1988) Model

**Table 3**
**Constructs and Indicators in Titman and Wessels (1988) Model**

Six measures used to indicate capital structure in Titman and Wessels (1988) are long-term, short-term, and convertible debt divided by market and book values of equity and denoted as LT/MVE, ST/MVE, C/MVE, LT/BVE, ST/BVE, and C/BVE, respectively. The determinants of capital structure include growth, uniqueness, non-debt tax shield, collateral value, size, profitability, volatility, and industry.

| Constructs | Indicators | Definition of Indicators |
|---|---|---|
| (A). Capital Structure | (Effects) | |
| | LT/MVE | Long-Term Debt / Market Value of Equity |
| | ST/MVE | Short-Term Debt / Market Value of Equity |
| | C/MVE | Convertible Debt / Market Value of Equity |
| | LT/BVE | Long-Term Debt / Book Value of Equity |
| | ST/BVE | Short-Term Debt / Book Value of Equity |
| | C/BVE | Convertible Debt / Book Value of Equity |
| (B). Determinants of Capital Structure (Causes) | | |
| Growth | RD/S | Research & Development / Sales |
| | CE/TA | Capital Expenditure / Total Assets |
| | GTA | Percentage Change of Total Assets |
| Uniqueness | RD/S | Research & Development / Sales |
| | QR | Quit Rates |
| | SE/S | Selling Expenses / Sales |
| Non-Debt Tax Shields | NDT/TA | Non-Debt Tax Shields / Total Assets |
| | ITC/TA | Investment Tax Credit / Total Assets |
| | D/TA | Depreciation / Total Assets |
| Collateral Value | INT/TA | Intangible Assets / Total Assets |
| | IGP/TA | (Inventory + Gross Plant and Equipment) / Total Assets |
| Size | LnS | ln(Sales) |
| | QR | Quit Rates |
| Profitability | OI/TA | Operating Income / Total Assets |
| | OI/S | Operating Income / Sales |
| Volatility | SIGOI | Standard Deviation of the Percentage Change in Operating Income |
| Industry | IDUM | Industrial Classification Dummy Variables |

## A. MIMIC Model

## Figure 1. Path Diagram of a Simplified MIMIC

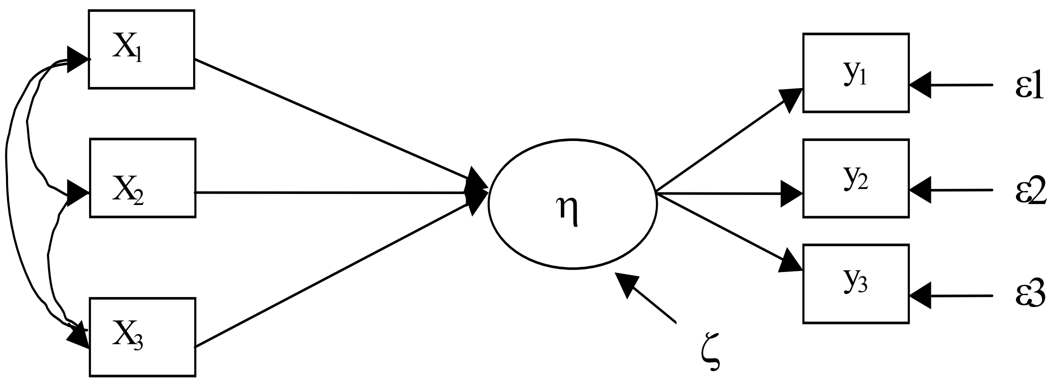



Figure 1. Path Diagram of a Simplified MIMIC

$$(1) \quad \eta = B\,\eta + \Gamma\,\xi + \zeta$$

$$Y = \Lambda_y\,\eta + \varepsilon$$

$$(2) \quad X = \Lambda_x\,\xi + \delta,$$

Let $B=0$, $X \equiv \xi$, $\Lambda_x = I$, and $\delta = 0$, the full structural equation model becomes a MIMIC model

$$\eta = \Gamma\,X + \zeta$$

$$Y = \Lambda_y\,\eta + \varepsilon,$$

where

$\eta$ is a (m x 1) vector of endogenous variables with zeros on the diagonal;

$\xi$ is a (n x 1) vector of exogenous variables;

$\zeta$ is a (m x 1) vector of errors in equation.

The latent variable $\eta$ is linearly determined by a set of observable exogenous causes, $X = (X_1, X_2, \ldots, X_q)'$, and a disturbance $\zeta$.

In matrix form

$$\eta = \Gamma X + \zeta$$

or in equation form

$$\eta = \gamma' X + \zeta = \gamma_1 X_1 + \gamma_2 X_2 + \ldots + \gamma_q X_q + \zeta.$$

The latent variable, in turn, linearly determines a set of observable endogenous indicators, $Y = (Y_1, Y_2, \ldots, Y_p)'$ and a corresponding set of disturbance, $\varepsilon = (\varepsilon_1, \varepsilon_2, \ldots, \varepsilon_p)'$.

In matrix form

$$Y = \Lambda_y \eta + \varepsilon.$$

In equation form

$$Y_1 = \lambda_1 \eta + \varepsilon_1$$
$$Y_2 = \lambda_2 \eta + \varepsilon_2$$
$$\ldots$$
$$Y_p = \lambda_p \eta + \varepsilon_p.$$

The disturbances are mutually independent due to the fact that correlations of Y's are already accounted for by their common factor or so-called latent variable, $\eta$. For convenience, all variables are taken to have expectation zero. That is, the mean value of each variable is subtracted from each variable value. Thus,

$$E(\zeta\, \varepsilon') = 0',\ E(\varepsilon^2) = \psi,\ E(\varepsilon\varepsilon') = \Theta_{\varepsilon},$$

where

**$\Theta$ is a (p x p) diagonal matrix with the vector of variances of the $\varepsilon$'s, $\theta$, displayed on the diagonal.**

The equations can be combined to yield a reduced form

$$Y = \Lambda_y\, \eta + \varepsilon = \Lambda_y\, (\gamma' X + \zeta) + \varepsilon$$

$$= (\Lambda_y\, \gamma')\, X + \Lambda_y\, \zeta + \varepsilon = \Pi'\, X + (\Lambda_y\, \zeta + \varepsilon)$$

$$= \Pi'\, X + z,$$

where

$\Pi = \Lambda_y\, \gamma'$ is the reduced form coefficient matrix;

$z = \Lambda_y\, \zeta + \varepsilon$ is the reduced form disturbance vector.

The disturbance vector has covariance matrix

$$\mathrm{Cov}(z) = \Omega = E(zz') = E[(\Lambda_y \zeta + \varepsilon)(\Lambda_y \zeta + \varepsilon)']$$

$$= \Lambda_y \Lambda_y' \psi + \Theta_\varepsilon$$

Where

$\psi = \mathrm{Var}(\zeta)$ and $\Theta\varepsilon$ is diagonal covariance matrix of $\varepsilon$.

B. Estimation Criterion

$$F = \log \|\Sigma\| + \mathrm{tr}(S\Sigma^{-1}) - \log\|S\| - (p + q),$$

Where

$\Sigma$ is the population covariance matrix;

S is the model-implied covariance matrix;

p is the number of exogenous observable variables;

q is the number of endogenous observable variables.

# V. Empirical Result

## Table 4 Constructs, Causes and Effects in MIMIC Model

**Table 4**
**Constructs, Causes and Effects in MIMIC Model**

In MIMIC model, long-term (LT/MVE), short-term (ST/MVE), and convertible (C/MVE) debt divided by market value of equity are indicators of the latent construct -- capital structure. The determinants of capital structure include ratio of R&D to sales (RD/S), the ratio of capital expenditure to total assets (CE/TA), the percentage change in total assets (GTA), the ratio of market-to-book assets (MBA), the ratio of market-to-book equity (MBE), the ratio of R&D to total assets (RD/TA), the ratio of R&D to sales (RD/S), the ratio of non-debt tax shields to total assets (NDT/TA), the ratio of investment tax credit to total assets (ITC/TA), the ratio of depreciation to total assets (DEP/TA), the ratio of the sum of inventory and gross plant and equipment to total assets (IGP/TA), the ratio of operating income to total assets (OI/TA), the ratio of operating income to sales (OI/S), the standard deviation of the percentage change in operating income (STDGOI), the coefficient of variation of ROA (CV(ROA)), the coefficient of variation of ROE (CV(ROE)), the coefficient of variation of operating income divided by total assets (CV(OITA)), and the dichotomous industry classification (IND). In the model, firm characteristics include growth, uniqueness, non-debt tax shields, collateral value, profitability, and volatility, and they are modeled as implicit constructs that are not shown in the model but only implicitly represented by cause variables.

| Constructs | Causes/Effects | Definition of Indicators |
|---|---|---|
| A. Capital Structure | (Effects) | |
| | LT/MVE | Long-Term Debt / Market Value of Equity |
| | ST/MVE | Short-Term Debt / Market Value of Equity |
| | C/MVE | Convertible Debt / Market Value of Equity |
| B. Implicit Construct | (Causes)* | |
| Growth | RD/S | Research & Development / Sales |
| | CE/TA | Capital Expenditure / Total Assets |
| | GTA | Percentage Change in Total Assets |
| | MBA | Market-to-Book Assets |
| | MBE | Market-to-Book Equity |
| | RD/TA | R&D-to-Assets Ratio |
| Uniqueness | RD/S | Research & Development / Sales |
| Non-Debt Tax Shields | NDT/TA | Non-Debt Tax Shields / Total Assets |
| | ITC/TA | Investment Tax Credit / Total Assets |
| | DEP/TA | Depreciation / Total Assets |
| Collateral Value | IGP/TA | (Inventory + Gross Plant and Equipment) / Total Assets |
| Profitability | OI/TA | Operating Income / Total Assets |
| | OI/S | Operating Income / Sales |
| Volatility | STDGOI | Standard Deviation of the Percentage Change in Operating Income |
| | CV(ROA) | Coefficient of Variation of ROA |
| | CV(ROE) | Coefficient of Variation of ROE |
| | CV(OITA) | Coefficient of Variation of OI Divided by Total Assets |
| Industry | IND | Two-Category Dummy Variable |

## Table 5

## Goodness-of-Fit Measures

**Table 5**

**Goodness-of-Fit Measures**

Two types of goodness-of-fit indices, absolute fit indices and incremental fit indices, are presented in this table. The former includes RMSEA and SRMR while the latter includesNNFI, CFI, and IFI. RMSEA is recommended by Browne and Cudeck (1993),Hu and Be

| | (A) Absolute Fit Indices | | (B) Incremental Fit Indices | | |
|---|---|---|---|---|---|
| Year | RMSEA | SRMR | NNFI | CFI | IFI |
| 1988 | 0.02 | 0.04 | 0.99 | 0.99 | 0.99 |
| 1989 | 0.00 | 0.03 | 1.00 | 1.00 | 1.00 |
| 1990 | 0.00 | 0.03 | 1.00 | 1.00 | 1.00 |
| 1991 | 0.00 | 0.03 | 1.00 | 1.00 | 1.00 |
| 1992 | 0.00 | 0.03 | 1.00 | 1.00 | 1.00 |
| 1993 | 0.00 | 0.03 | 1.01 | 1.00 | 1.01 |
| 1994 | 0.00 | 0.03 | 1.01 | 1.00 | 1.01 |
| 1995 | 0.01 | 0.03 | 0.99 | 1.00 | 1.00 |
| 1996 | 0.00 | 0.03 | 1.00 | 1.00 | 1.00 |
| 1997 | 0.02 | 0.04 | 0.99 | 0.99 | 0.99 |
| 1998 | 0.01 | 0.04 | 1.00 | 1.00 | 1.00 |
| 1999 | 0.01 | 0.03 | 1.00 | 1.00 | 1.00 |
| 2000 | 0.02 | 0.04 | 1.00 | 1.00 | 1.00 |
| 2001 | 0.02 | 0.04 | 0.99 | 0.99 | 0.99 |
| 2002 | 0.01 | 0.03 | 1.00 | 1.00 | 1.00 |
| 2003 | 0.00 | 0.03 | 1.00 | 1.00 | 1.00 |
| 1988-2003 | 0.03 | 0.04 | 0.99 | 0.99 | 0.99 |

## Table 6

## Completely Standardized Loadings

**Table 6**

**Completely Standardized Loadings**

A completely standardized solution is computed by standardizing both observed and latent constructs before performing parameters estimation.

| | LEVERAGE | | | | | | |
|---|---|---|---|---|---|---|---|
| | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
| Panel A: Indicators of Leverage | | | | | | | |
| LT/MVE | 0.97 | 0.94 | 0.83 | 0.86 | 0.88 | 0.80 | 0.90 |
| ST/MVE | 0.52 | 0.58 | 0.64 | 0.68 | 0.63 | 0.71 | 0.64 |
| C/MVE | 0.37 | 0.33 | 0.36 | 0.36 | 0.36 | 0.34 | 0.39 |
| Panel B: Determinants of Leverage | | | | | | | |
| RD/S | -0.17 | -0.21 | -0.12 | 0.02 | -0.02 | 0.05 | 0.03 |
| CE/TA | 0.04 | -0.03 | -0.13 | -0.10 | -0.18 | -0.08 | -0.19 |
| GTA | 0.12 | 0.09 | 0.07 | -0.04 | 0.08 | 0.11 | 0.18 |
| MBA | -0.76 | -0.59 | 0.38 | -0.14 | -0.46 | -1.01 | -0.70 |
| MBE | 0.50 | 0.34 | -0.56 | -0.12 | 0.21 | 0.65 | 0.46 |
| RD/TA | -0.09 | -0.01 | -0.05 | -0.14 | -0.10 | -0.14 | -0.21 |
| NDT/TA | 0.11 | 0.19 | 0.17 | 0.07 | 0.05 | 0.03 | 0.08 |
| ITC/TA | 0.03 | -0.03 | -0.09 | -0.06 | -0.08 | -0.05 | 0.00 |
| DEP/TA | -0.07 | -0.09 | -0.04 | 0.08 | 0.09 | 0.04 | 0.14 |
| IGP/TA | 0.14 | 0.22 | 0.25 | 0.32 | 0.36 | 0.31 | 0.26 |
| OI/TA | -0.31 | -0.41 | -0.41 | -0.22 | -0.17 | -0.07 | -0.11 |
| OI/S | 0.18 | 0.31 | 0.28 | 0.13 | 0.16 | 0.06 | 0.05 |
| STDGOI | 0.00 | 0.04 | -0.01 | 0.01 | -0.08 | -0.14 | -0.18 |
| CV(ROA) | 0.24 | 0.09 | 0.38 | 0.38 | 0.15 | 0.15 | 0.18 |
| CV(ROE) | -0.02 | 0.08 | -0.05 | -0.01 | 0.20 | 0.09 | 0.19 |
| CV(OITA) | -0.27 | -0.24 | -0.29 | -0.39 | -0.26 | -0.07 | -0.18 |
| IND | -0.06 | 0.09 | 0.05 | 0.06 | 0.02 | 0.04 | 0.02 |

# Table 6 (Cont'd)

# Completely Standardized Loadings

**Table 6 (cont'd)**

**Completely Standardized Loadings**

A completely standardized solution is computed by standardizing both observed and latent constructs before performing parameters estimation.

| | LEVERAGE | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | '88-2003 |
| Panel A: Indicators of Leverage | | | | | | | | | | |
| LT/MVE | 0.91 | 0.85 | 0.84 | 0.87 | 0.84 | 0.83 | 0.9 | 0.96 | 0.87 | 0.87 |
| ST/MVE | 0.62 | 0.66 | 0.62 | 0.59 | 0.64 | 0.64 | 0.58 | 0.57 | 0.64 | 0.64 |
| C/MVE | 0.34 | 0.31 | 0.27 | 0.27 | 0.23 | 0.29 | 0.26 | 0.33 | 0.29 | 0.31 |
| Panel B: Determinants of Leverage | | | | | | | | | | |
| RD/S | -0.13 | 0.15 | 0.15 | -0.01 | -0.18 | -0.03 | 0.17 | -0.01 | 0.16 | -0.07 |
| CE/TA | -0.17 | -0.14 | -0.02 | -0.1 | -0.08 | -0.03 | -0.05 | 0.04 | -0.08 | -0.05 |
| GTA | 0.16 | 0.12 | 0.15 | 0.21 | 0.15 | 0.01 | 0.08 | -0.03 | 0.13 | 0.1 |
| MBA | -0.34 | -0.7 | -1.13 | -0.97 | -0.79 | -0.33 | -0.76 | -0.42 | -1.2 | -0.7 |
| MBE | 0.2 | 0.45 | 0.83 | 0.67 | 0.41 | 0.11 | 0.53 | 0.24 | 0.83 | 0.4 |
| RD/TA | -0.09 | -0.37 | -0.27 | -0.19 | -0.02 | -0.29 | -0.43 | -0.25 | -0.31 | -0.12 |
| NDT/TA | 0.02 | 0.09 | 0.1 | 0.08 | 0.12 | 0.04 | 0.07 | 0.13 | 0.23 | 0.08 |
| ITC/TA | -0.05 | -0.03 | -0.04 | -0.07 | -0.02 | -0.07 | -0.01 | 0.01 | -0.01 | -0.02 |
| DEP/TA | 0.12 | 0.08 | -0.01 | 0.07 | 0.01 | 0.01 | 0.09 | -0.04 | 0.05 | 0.04 |
| IGP/TA | 0.36 | 0.33 | 0.33 | 0.25 | 0.23 | 0.19 | 0.15 | 0.21 | 0.23 | 0.28 |
| OI/TA | -0.2 | -0.23 | -0.3 | -0.44 | -0.4 | -0.45 | -0.39 | -0.35 | -0.32 | -0.31 |
| OI/S | 0.12 | 0.25 | 0.31 | 0.4 | 0.36 | 0.36 | 0.39 | 0.44 | 0.48 | 0.3 |
| STDGOI | -0.02 | -0.09 | -0.06 | -0.09 | -0.13 | -0.1 | -0.1 | -0.08 | -0.08 | -0.06 |
| CV(ROA) | 0.1 | 0.29 | 0.12 | 0.17 | 0.25 | 0.15 | 0.1 | 0.22 | 0.25 | 0.22 |
| CV(ROE) | 0.22 | -0.04 | 0.03 | 0.05 | -0.02 | 0.12 | 0.17 | -0.01 | -0.1 | 0.03 |
| CV(OITA) | -0.21 | -0.12 | -0.1 | -0.14 | -0.17 | -0.19 | -0.22 | -0.14 | -0.19 | -0.2 |
| IND | -0.17 | 0.01 | 0.11 | 0.02 | 0.07 | -0.03 | -0.08 | 0.05 | 0.13 | 0.05 |

# Table 7 Significance of Unstandardized Total Effect of Determinants of Capital Structure

**Table 7**

**Significance of Unstandardized Total Effect of Determinants of Capital Structure**

| | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 1988-2003 | Frequency of paremeters significant at α=.05 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RD/S | | | | | | | | | | | | * | | * | | * | *** | 0 |
| CE/TA | | | *** | ** | *** | | *** | *** | *** | | *** | ** | | | | * | *** | 8 |
| GTA | *** | ** | | | * | *** | *** | *** | *** | *** | *** | *** | | ** | | *** | *** | 11 |
| MBA | *** | *** | *** | | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | 15 |
| MBE | *** | *** | *** | | ** | *** | *** | *** | *** | *** | *** | *** | | *** | ** | *** | *** | 14 |
| RD/TA | | | | | | | | *** | *** | *** | * | | *** | *** | ** | *** | *** | 8 |
| NDT/TA | ** | *** | *** | | | ** | | | * | *** | ** | *** | | * | *** | *** | *** | 9 |
| ITC/TA | | | ** | | ** | | | | | * | *** | | ** | | | | ** | 4 |
| DEP/TA | | | | | | | ** | ** | | | * | | | ** | | | *** | 3 |
| IGP/TA | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | 16 |
| OI/TA | *** | *** | *** | *** | *** | | | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | 14 |
| OI/S | *** | *** | *** | ** | *** | | | ** | *** | *** | *** | *** | *** | *** | *** | *** | *** | 14 |
| STDGOI | | | | | | *** | *** | | * | | ** | *** | ** | *** | * | ** | *** | 7 |
| CV(ROA) | *** | | *** | *** | | | | | *** | * | *** | *** | ** | | *** | *** | *** | 10 |
| CV(ROE) | | | | | ** | | | *** | | | | | * | *** | | | | 3 |
| CV(OITA) | *** | *** | *** | *** | *** | | *** | *** | * | ** | *** | *** | *** | *** | *** | *** | *** | 15 |
| IND | | ** | | * | | | | *** | | *** | | ** | | ** | | *** | *** | 6 |

*Significant at .10 level; **significant at .05 level; ***significant at .01 level.

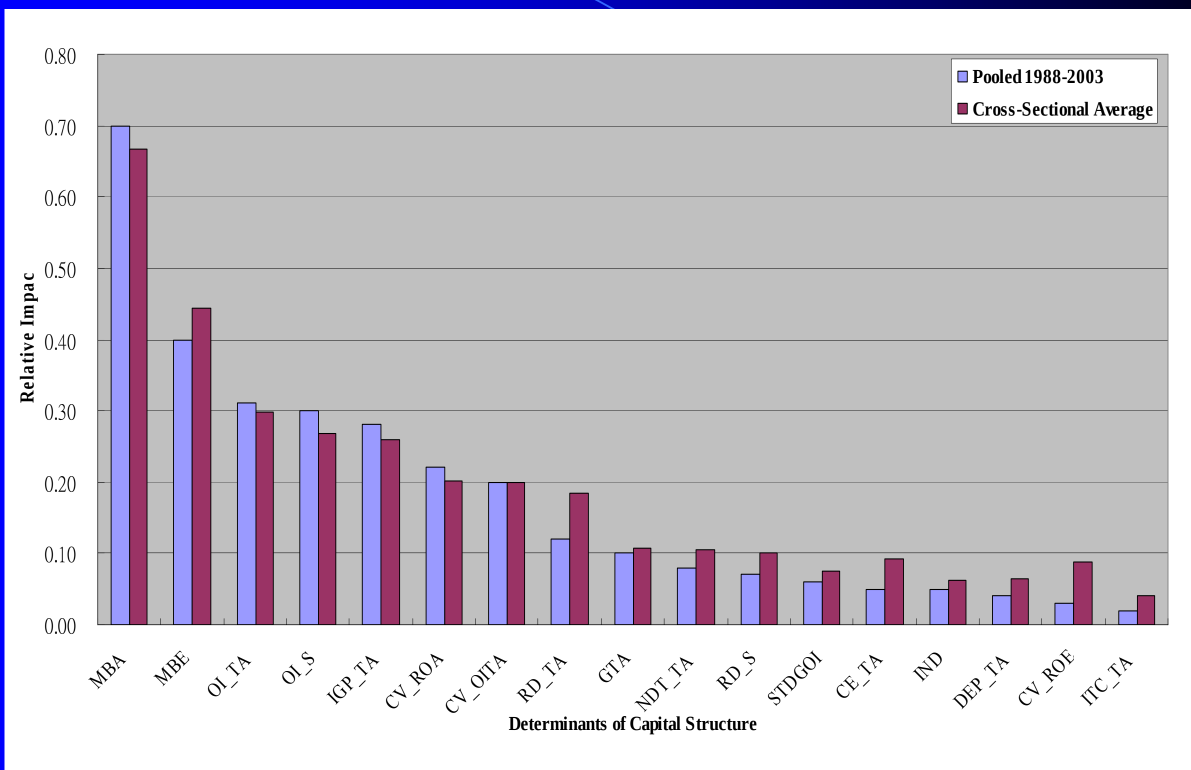
## Table 8 Signs of Total Effect of Determinants of Capital Structure

**Table 8**

**Signs of Total Effect of Determinants of Capital Structure**

| | | | | | | | | | | | | | | | | | Frequency | | | 1988- |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | - | + | Mode | 2003 |
| RD/S | - | - | - | + | - | + | + | - | + | + | - | - | - | + | - | + | 9 | 7 | - | - |
| CE/TA | + | - | - | - | - | - | - | - | - | - | - | - | - | - | + | - | 14 | 2 | - | - |
| GTA | + | + | + | - | + | + | + | + | + | + | + | + | + | + | - | + | 2 | 14 | + | + |
| MBA | - | - | + | - | - | - | - | - | - | - | - | - | - | - | - | - | 15 | 1 | - | - |
| MBE | + | + | - | - | + | + | + | + | + | + | + | + | + | + | + | + | 2 | 14 | + | + |
| RD/TA | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 16 | 0 | - | - |
| NDT/TA | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 0 | 16 | + | + |
| ITC/TA | + | - | - | - | - | - | + | - | - | - | - | - | - | - | + | - | 13 | 3 | - | - |
| DEP/TA | - | - | - | + | + | + | + | + | + | - | + | + | + | + | - | + | 5 | 11 | + | + |
| IGP/TA | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 0 | 16 | + | + |
| OI/TA | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 16 | 0 | - | - |
| OI/S | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 0 | 16 | + | + |
| STDGOI | + | + | - | + | - | - | - | - | - | - | - | - | - | - | - | - | 13 | 3 | - | - |
| CV(ROA) | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 0 | 16 | + | + |
| CV(ROE) | - | + | - | - | + | + | + | + | - | + | + | - | + | + | - | - | 7 | 9 | + | + |
| CV(OITA) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 16 | 0 | - | - |
| IND | - | + | + | + | + | + | + | - | + | + | + | + | - | - | + | + | 4 | 12 | + | + |

## Figure 2
## Relative Impact of Determinants of Capital Structure



## Table 9

## Squared Multiple Correlations

**Table 9**
**Squared Multiple Correlations**

| Sample Year(s) | Leverage | Indicators of Leverage | | |
|---|---|---|---|---|
| | | LT/MVE | ST/MVE | C/MVE |
| 1988 | 0.33 | 0.94 | 0.27 | 0.14 |
| 1989 | 0.36 | 0.87 | 0.34 | 0.11 |
| 1990 | 0.38 | 0.69 | 0.41 | 0.13 |
| 1991 | 0.43 | 0.74 | 0.46 | 0.13 |
| 1992 | 0.37 | 0.78 | 0.40 | 0.13 |
| 1993 | 0.48 | 0.64 | 0.51 | 0.11 |
| 1994 | 0.41 | 0.81 | 0.41 | 0.15 |
| 1995 | 0.37 | 0.83 | 0.39 | 0.11 |
| 1996 | 0.53 | 0.73 | 0.43 | 0.10 |
| 1997 | 0.61 | 0.71 | 0.38 | 0.07 |
| 1998 | 0.49 | 0.75 | 0.35 | 0.07 |
| 1999 | 0.48 | 0.71 | 0.41 | 0.05 |
| 2000 | 0.40 | 0.70 | 0.41 | 0.08 |
| 2001 | 0.37 | 0.81 | 0.34 | 0.07 |
| 2002 | 0.26 | 0.93 | 0.32 | 0.11 |
| 2003 | 0.58 | 0.75 | 0.41 | 0.08 |
| 1988-2003 | 0.40 | 0.76 | 0.41 | 0.10 |

## Table 10

## Comparison of the Empirical Results

**Table 10**
**Comparison of the Empirical Results**

The asterisks indicate the empirical results which are consistent with finance theory. This study employs MIMIC model to investigate the determinants of capital structure and obtains the results more consistent with finance theory than Titman and Wessels (1988). This study excludes size attribute based on goodness-of-fit model selection criteria. Except for industry construct, the other 6 determinants of capital structure are all significant in our model

| | Growth | Unique-Ness | Non-Debt Tax Shields | Collateral Values | Size | Profitability | Volatility | IND |
|---|---|---|---|---|---|---|---|---|
| Panel A: MIMIC Model | | | | | | | | |
| LT/MVE | * | * | * | * | (excluded) | * | * | |
| ST/MVE | * | * | * | * | (excluded) | * | * | |
| C/MVE | * | * | * | * | (excluded) | * | * | |
| Panel B: Titman and Wessels (1988) | | | | | | | | |
| LT/MVE | | * | | | | * | | * |
| ST/MVE | | * | | | * | * | | |
| C/MVE | | | | | | | | |

# VI. Conclusion

A. The Results Obtained from MIMIC Model Performed Better than those from LISREL Model

B. Growth, Uniqueness, Non-Debt Tax Shields, Collateral Value of Assets, Profitability, Volatility, and Classification are the Six Important Characteristics for Determining the Capital Structure of a Firm

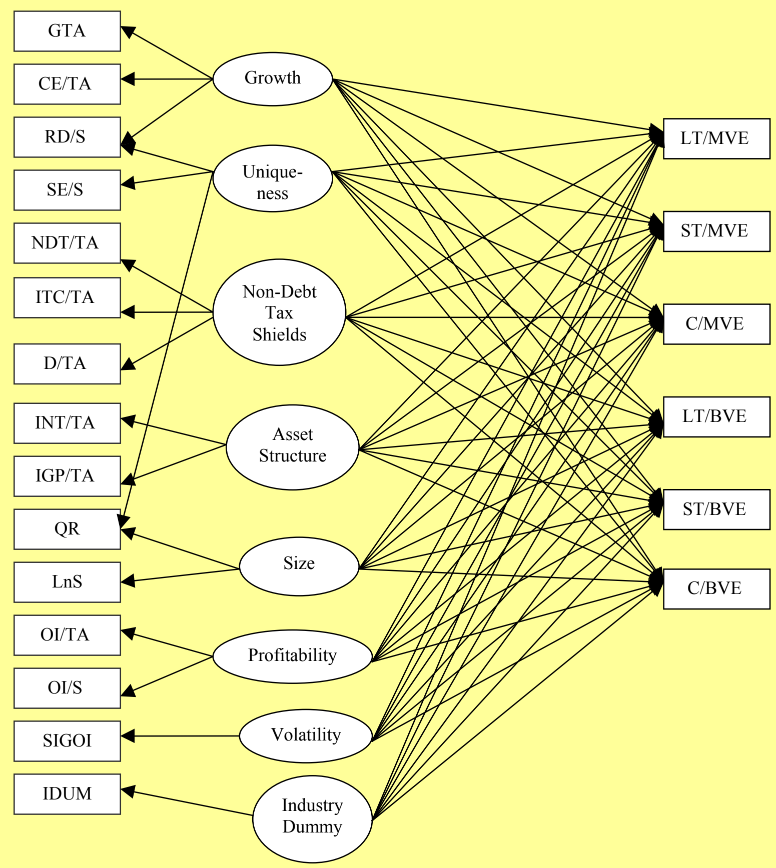
C. In Practice, Capital Structure Information can be used to Estimate Financial Z-score, Cost of Capital Estimation. In addition, Capital Structure is Important for Performing Credit Risk Analysis.

D. Capital Structure Theories can also be used to do Macro-Finance and Economic Policy Research

E. Investment, Financing, and Dividend and Production Policies are Important in Corporate Governance Research.

## Appendix A.

Path Diagram Implied in Titman and Wessels (1988) Model




**Path Diagram Implied in Titman and Wessels (1988) Model**

# Appendix B:
# Completely Standardized Total Effect of Determinants of Capital Structure

| | 1988 | | | 1989 | | | 1990 | | |
|---|---|---|---|---|---|---|---|---|---|
| Determinants of Leverage | LT/MVE | ST/MVE | C/MVE | LT/MVE | ST/MVE | C/MVE | LT/MVE | ST/MVE | C/MVE |
| RD/S | -0.16 | -0.09 | -0.06 | -0.20 | -0.12 | -0.07 | -0.10 | -0.08 | -0.05 |
| CE/TA | 0.04 | 0.02 | 0.01 | -0.03 | -0.02 | -0.01 | -0.11 | -0.09 | -0.05 |
| GTA | 0.11 | 0.06 | 0.04 | 0.09 | 0.05 | 0.03 | 0.06 | 0.05 | 0.03 |
| MBA | -0.74 | -0.40 | -0.28 | -0.55 | -0.34 | -0.20 | 0.32 | 0.24 | 0.14 |
| MBE | 0.48 | 0.26 | 0.18 | 0.32 | 0.20 | 0.11 | -0.47 | -0.36 | -0.20 |
| RD/TA | -0.08 | -0.05 | -0.03 | -0.01 | -0.01 | 0.00 | -0.04 | -0.03 | -0.02 |
| NDT/TA | 0.11 | 0.06 | 0.04 | 0.18 | 0.11 | 0.06 | 0.14 | 0.11 | 0.06 |
| ITC/TA | 0.02 | 0.01 | 0.01 | -0.03 | -0.02 | -0.01 | -0.07 | -0.06 | -0.03 |
| DEP/TA | -0.07 | -0.04 | -0.03 | -0.09 | -0.05 | -0.03 | -0.03 | -0.02 | -0.01 |
| IGP/TA | 0.13 | 0.07 | 0.05 | 0.21 | 0.13 | 0.07 | 0.21 | 0.16 | 0.09 |
| OI/TA | -0.30 | -0.16 | -0.12 | -0.38 | -0.24 | -0.14 | -0.34 | -0.26 | -0.15 |
| OI/S | 0.17 | 0.09 | 0.07 | 0.29 | 0.18 | 0.10 | 0.23 | 0.18 | 0.10 |
| STDGOI | 0.00 | 0.00 | 0.00 | 0.04 | 0.02 | 0.01 | -0.01 | -0.01 | -0.01 |
| CV(ROA) | 0.24 | 0.13 | 0.09 | 0.08 | 0.05 | 0.03 | 0.32 | 0.24 | 0.14 |
| CV(ROE) | -0.02 | -0.01 | -0.01 | 0.08 | 0.05 | 0.03 | -0.04 | -0.03 | -0.02 |
| CV(OITA) | -0.26 | -0.14 | -0.10 | -0.22 | -0.14 | -0.08 | -0.24 | -0.18 | -0.10 |
| IND | -0.06 | -0.03 | -0.02 | 0.08 | 0.05 | 0.03 | 0.04 | 0.03 | 0.02 |

# Appendix B:
# Completely Standardized Total Effect of Determinants of Capital Structure

| | 1991 | | | 1992 | | | 1993 | | |
|---|---|---|---|---|---|---|---|---|---|
| Determinants of Leverage | LT/MVE | ST/MVE | C/MVE | LT/MVE | ST/MVE | C/MVE | LT/MVE | ST/MVE | C/MVE |
| RD/S | 0.02 | 0.01 | 0.01 | -0.01 | -0.01 | -0.01 | 0.04 | 0.03 | 0.02 |
| CE/TA | -0.08 | -0.07 | -0.03 | -0.16 | -0.11 | -0.06 | -0.06 | -0.06 | -0.03 |
| GTA | -0.03 | -0.03 | -0.01 | 0.07 | 0.05 | 0.03 | 0.09 | 0.08 | 0.04 |
| MBA | -0.12 | -0.09 | -0.05 | -0.40 | -0.29 | -0.16 | -0.80 | -0.72 | -0.34 |
| MBE | -0.10 | -0.08 | -0.04 | 0.18 | 0.13 | 0.07 | 0.52 | 0.46 | 0.22 |
| RD/TA | -0.12 | -0.10 | -0.05 | -0.09 | -0.06 | -0.04 | -0.11 | -0.10 | -0.05 |
| NDT/TA | 0.06 | 0.05 | 0.03 | 0.05 | 0.03 | 0.02 | 0.11 | 0.10 | 0.05 |
| ITC/TA | -0.05 | -0.04 | -0.02 | -0.07 | -0.05 | -0.03 | -0.04 | -0.04 | -0.02 |
| DEP/TA | 0.07 | 0.06 | 0.03 | 0.08 | 0.05 | 0.03 | 0.04 | 0.03 | 0.01 |
| IGP/TA | 0.28 | 0.22 | 0.12 | 0.32 | 0.23 | 0.13 | 0.25 | 0.22 | 0.10 |
| OI/TA | -0.18 | -0.15 | -0.08 | -0.15 | -0.11 | -0.06 | -0.06 | -0.05 | -0.02 |
| OI/S | 0.11 | 0.09 | 0.05 | 0.14 | 0.10 | 0.06 | 0.05 | 0.04 | 0.02 |
| STDGOI | 0.01 | 0.01 | 0.01 | -0.07 | -0.05 | -0.03 | -0.11 | -0.10 | -0.05 |
| CV(ROA) | 0.33 | 0.26 | 0.14 | 0.13 | 0.09 | 0.05 | 0.12 | 0.11 | 0.05 |
| CV(ROE) | -0.01 | -0.01 | 0.00 | 0.18 | 0.13 | 0.07 | 0.07 | 0.07 | 0.03 |
| CV(OITA) | -0.33 | -0.26 | -0.14 | -0.23 | -0.17 | -0.09 | -0.06 | -0.05 | -0.03 |
| IND | 0.05 | 0.04 | 0.02 | 0.02 | 0.01 | 0.01 | 0.03 | 0.03 | 0.01 |

# Appendix B: Completely Standardized Total Effect of Determinants of Capital Structure

| Determinants of Leverage | 1994 LT/MVE | 1994 ST/MVE | 1994 C/MVE | 1995 LT/MVE | 1995 ST/MVE | 1995 C/MVE | 1996 LT/MVE | 1996 ST/MVE | 1996 C/MVE |
|---|---|---|---|---|---|---|---|---|---|
| RD/S | 0.02 | 0.02 | 0.01 | -0.12 | -0.08 | -0.05 | 0.13 | 0.10 | 0.05 |
| CE/TA | -0.18 | -0.12 | -0.08 | -0.15 | -0.11 | -0.06 | -0.12 | -0.09 | -0.04 |
| GTA | 0.16 | 0.12 | 0.07 | 0.14 | 0.10 | 0.05 | 0.10 | 0.08 | 0.04 |
| MBA | -0.63 | -0.45 | -0.27 | -0.31 | -0.21 | -0.12 | -0.60 | -0.46 | -0.22 |
| MBE | 0.41 | 0.29 | 0.18 | 0.18 | 0.12 | 0.07 | 0.39 | 0.30 | 0.14 |
| RD/TA | -0.19 | -0.14 | -0.08 | -0.08 | -0.05 | -0.03 | -0.31 | -0.24 | -0.11 |
| NDT/TA | 0.07 | 0.05 | 0.03 | 0.02 | 0.01 | 0.01 | 0.08 | 0.06 | 0.03 |
| ITC/TA | 0.00 | 0.00 | 0.00 | -0.04 | -0.03 | -0.02 | -0.02 | -0.02 | -0.01 |
| DEP/TA | 0.12 | 0.09 | 0.05 | 0.11 | 0.08 | 0.04 | 0.07 | 0.05 | 0.03 |
| IGP/TA | 0.23 | 0.17 | 0.07 | 0.33 | 0.23 | 0.12 | 0.28 | 0.22 | 0.10 |
| OI/TA | -0.10 | -0.07 | -0.05 | -0.19 | -0.13 | -0.07 | -0.20 | -0.15 | -0.07 |
| OI/S | 0.04 | 0.03 | 0.02 | 0.11 | 0.08 | 0.04 | 0.21 | 0.16 | 0.08 |
| STDGOI | -0.16 | -0.11 | -0.07 | -0.02 | -0.01 | -0.01 | -0.07 | -0.06 | -0.03 |
| CV(ROA) | 0.17 | 0.12 | 0.07 | 0.09 | 0.06 | 0.03 | 0.25 | 0.19 | 0.05 |
| CV(ROE) | 0.17 | 0.12 | 0.07 | 0.20 | 0.14 | 0.08 | -0.04 | -0.03 | -0.01 |
| CV(OITA) | -0.17 | -0.12 | -0.07 | -0.19 | -0.13 | -0.07 | -0.10 | -0.08 | -0.04 |
| IND | 0.02 | 0.01 | 0.01 | -0.15 | -0.10 | -0.06 | 0.01 | 0.01 | 0.00 |

# Appendix B: Completely Standardized Total Effect of Determinants of Capital Structure

| Determinants of Leverage | 1997 LT/MVE | 1997 ST/MVE | 1997 C/MVE | 1998 LT/MVE | 1998 ST/MVE | 1998 C/MVE | 1999 LT/MVE | 1999 ST/MVE | 1999 C/MVE |
|---|---|---|---|---|---|---|---|---|---|
| RD/S | 0.12 | 0.09 | 0.04 | -0.01 | -0.01 | 0.00 | -0.15 | -0.12 | -0.04 |
| CE/TA | -0.02 | -0.01 | -0.01 | -0.08 | -0.06 | -0.03 | -0.07 | -0.05 | -0.02 |
| GTA | 0.13 | 0.09 | 0.04 | 0.18 | 0.12 | 0.06 | 0.12 | 0.09 | 0.03 |
| MBA | -0.96 | -0.70 | -0.30 | -0.84 | -0.57 | -0.26 | -0.66 | -0.51 | -0.18 |
| MBE | 0.70 | 0.51 | 0.22 | 0.58 | 0.40 | 0.18 | 0.35 | 0.27 | 0.10 |
| RD/TA | -0.23 | -0.17 | -0.07 | -0.16 | -0.11 | -0.05 | -0.02 | -0.01 | 0.00 |
| NDT/TA | 0.08 | 0.06 | 0.03 | 0.07 | 0.05 | 0.02 | 0.10 | 0.08 | 0.03 |
| ITC/TA | -0.03 | -0.02 | -0.01 | -0.06 | -0.04 | -0.02 | -0.02 | -0.02 | -0.01 |
| DEP/TA | -0.01 | -0.01 | 0.00 | 0.06 | 0.04 | 0.02 | 0.01 | 0.01 | 0.00 |
| IGP/TA | 0.28 | 0.21 | 0.09 | 0.22 | 0.15 | 0.07 | 0.19 | 0.15 | 0.05 |
| OI/TA | -0.26 | -0.19 | -0.08 | -0.39 | -0.26 | -0.12 | -0.34 | -0.26 | -0.09 |
| OI/S | 0.26 | 0.19 | 0.08 | 0.35 | 0.24 | 0.11 | 0.31 | 0.23 | 0.08 |
| STDGOI | -0.05 | -0.04 | -0.02 | -0.08 | -0.05 | -0.02 | -0.11 | -0.08 | -0.03 |
| CV(ROA) | 0.10 | 0.08 | 0.03 | 0.15 | 0.10 | 0.05 | 0.26 | 0.16 | 0.06 |
| CV(ROE) | 0.02 | 0.02 | 0.01 | 0.04 | 0.03 | 0.01 | -0.02 | -0.01 | -0.01 |
| CV(OITA) | -0.09 | -0.06 | -0.03 | -0.12 | -0.08 | -0.04 | -0.15 | -0.11 | -0.04 |
| IND | 0.09 | 0.07 | 0.03 | 0.02 | 0.01 | 0 | 0.06 | 0.05 | 0.02 |

# Appendix B: Completely Standardized Total Effect of Determinants of Capital Structure

| Determinants of Leverage | 2000 LT/MVE | 2000 ST/MVE | 2000 C/MVE | 2001 LT/MVE | 2001 ST/MVE | 2001 C/MVE | 2002 LT/MVE | 2002 ST/MVE | 2002 C/MVE |
|---|---|---|---|---|---|---|---|---|---|
| RD/S | -0.03 | -0.02 | -0.01 | 0.15 | 0.10 | 0.05 | -0.01 | 0.00 | 0.00 |
| CE/TA | -0.03 | -0.02 | -0.01 | -0.04 | -0.03 | -0.01 | 0.04 | 0.03 | 0.01 |
| GTA | 0.01 | 0.00 | 0.00 | 0.07 | 0.05 | 0.02 | -0.02 | -0.01 | -0.01 |
| MBA | -0.28 | -0.21 | -0.10 | -0.68 | -0.44 | -0.20 | -0.41 | -0.24 | -0.14 |
| MBE | 0.09 | 0.07 | 0.03 | 0.48 | 0.31 | 0.14 | 0.23 | 0.14 | 0.08 |
| RD/TA | -0.24 | -0.18 | -0.08 | -0.38 | -0.25 | -0.11 | -0.24 | -0.14 | -0.08 |
| NDT/TA | 0.04 | 0.03 | 0.01 | 0.07 | 0.04 | 0.02 | 0.13 | 0.07 | 0.04 |
| ITC/TA | -0.06 | -0.04 | -0.02 | -0.01 | -0.01 | 0.00 | 0.01 | 0.01 | 0.00 |
| DEP/TA | 0.01 | 0.01 | 0.00 | 0.08 | 0.05 | 0.02 | -0.04 | -0.02 | -0.01 |
| IGP/TA | 0.16 | 0.12 | 0.06 | 0.13 | 0.09 | 0.04 | 0.20 | 0.12 | 0.07 |
| OI/TA | -0.38 | -0.29 | -0.13 | -0.35 | -0.23 | -0.10 | -0.34 | -0.20 | -0.12 |
| OI/S | 0.30 | 0.23 | 0.10 | 0.35 | 0.23 | 0.10 | 0.43 | 0.25 | 0.02 |
| STDGOI | -0.08 | -0.06 | -0.03 | -0.09 | -0.06 | -0.03 | -0.08 | -0.04 | -0.03 |
| CV(ROA) | 0.12 | 0.09 | 0.04 | 0.09 | 0.06 | 0.03 | 0.22 | 0.13 | 0.07 |
| CV(ROE) | 0.10 | 0.08 | 0.04 | 0.15 | 0.10 | 0.04 | -0.01 | -0.01 | 0.00 |
| CV(OITA) | -0.16 | -0.12 | -0.06 | -0.20 | -0.13 | -0.06 | -0.13 | -0.08 | -0.05 |
| IND | -0.03 | -0.02 | -0.01 | 0.15 | 0.10 | 0.05 | -0.01 | 0.00 | 0.00 |

# Appendix B: Completely Standardized Total Effect of Determinants of Capital Structure

| Determinants of Leverage | 2003 LT/MVE | 2003 ST/MVE | 2003 C/MVE | 1988-2003 LT/MVE | 1988-2003 ST/MVE | 1988-2003 C/MVE |
|---|---|---|---|---|---|---|
| RD/S | 0.14 | 0.10 | 0.05 | -0.06 | -0.04 | -0.02 |
| CE/TA | -0.07 | -0.05 | -0.02 | -0.04 | -0.03 | -0.01 |
| GTA | 0.12 | 0.09 | 0.04 | 0.09 | 0.06 | 0.03 |
| MBA | -1.04 | -0.77 | -0.34 | -0.64 | -0.45 | -0.22 |
| MBE | 0.72 | 0.53 | 0.24 | 0.35 | 0.25 | 0.12 |
| RD/TA | -0.27 | -0.20 | -0.09 | -0.11 | -0.08 | -0.04 |
| NDT/TA | 0.20 | 0.15 | 0.07 | 0.07 | 0.05 | 0.03 |
| ITC/TA | -0.01 | -0.01 | 0.00 | -0.02 | -0.01 | -0.01 |
| DEP/TA | 0.04 | 0.03 | 0.01 | 0.03 | 0.02 | 0.01 |
| IGP/TA | 0.20 | 0.15 | 0.07 | 0.24 | 0.18 | 0.09 |
| OI/TA | -0.28 | -0.21 | -0.09 | -0.27 | -0.20 | -0.10 |
| OI/S | 0.41 | 0.31 | 0.14 | 0.26 | 0.19 | 0.06 |
| STDGOI | -0.07 | -0.05 | -0.02 | -0.05 | 0.04 | -0.02 |
| CV(ROA) | 0.21 | 0.16 | 0.07 | 0.19 | 0.14 | 0.07 |
| CV(ROE) | -0.08 | -0.06 | -0.03 | 0.02 | 0.02 | 0.01 |
| CV(OITA) | -0.16 | -0.12 | -0.05 | -0.17 | -0.13 | -0.06 |
| IND | 0.11 | 0.08 | 0.04 | 0.04 | 0.03 | 0.01 |

# VIETNAM'S ECONOMY
# A SWOT ANALYSIS

The 15th Annual Conference on Pacific Basin Finance, Economics, Accounting and Management

Vu Thanh Tu Anh
Fulbright Economics Teaching Program
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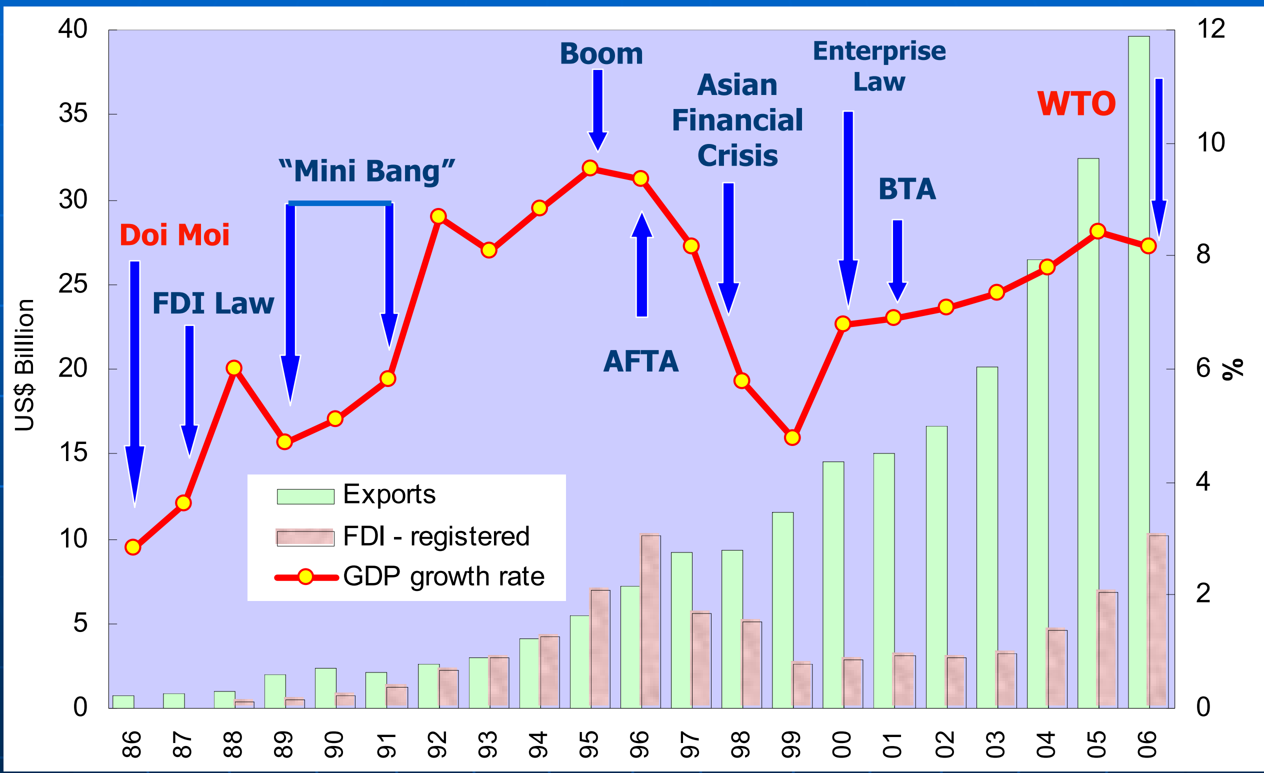
# SUMMARY

- Vietnam is a small, developing, transition, and integrated economy in a fast changing world
- Vietnam's growth in the last 2 decade is impressive but relies mostly on quantitative expansion
- The competitiveness of the nation and the firm is relatively weak compared to major competitors
- Biggest opportunities emerge from integration
- Biggest challenges come from competition
- Biggest threat is backwardness

# GDP, Exports, and FDI

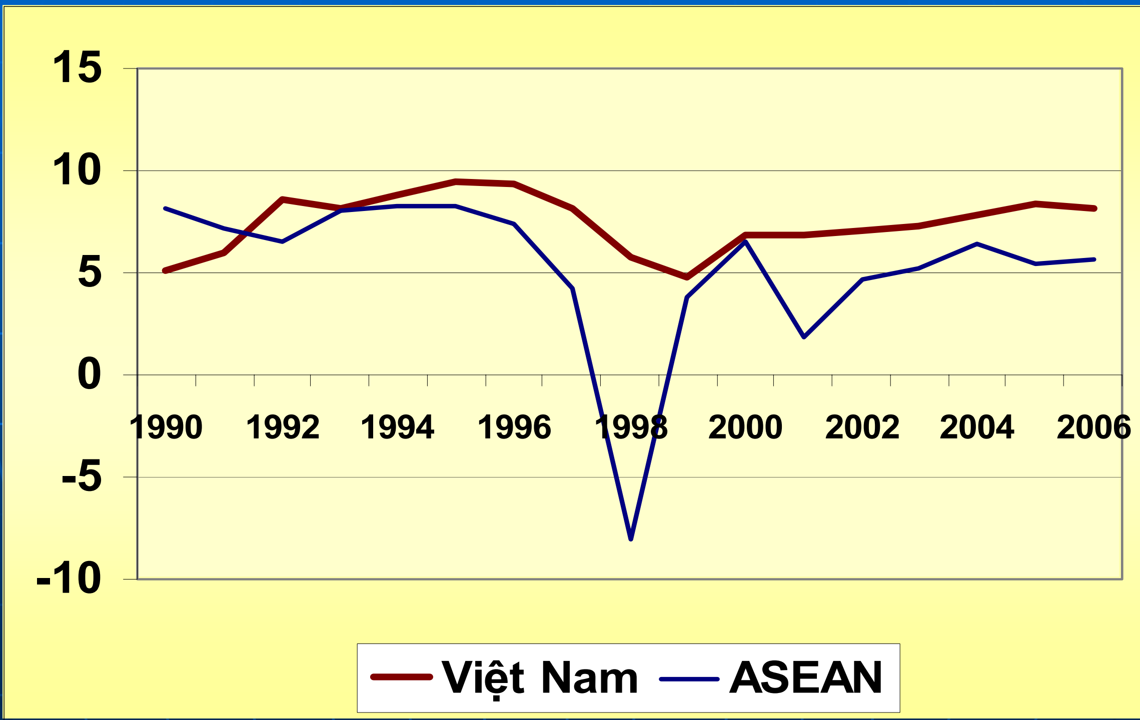



Source: General Statistical Office, Vietnam Statistical Yearbook, various years,

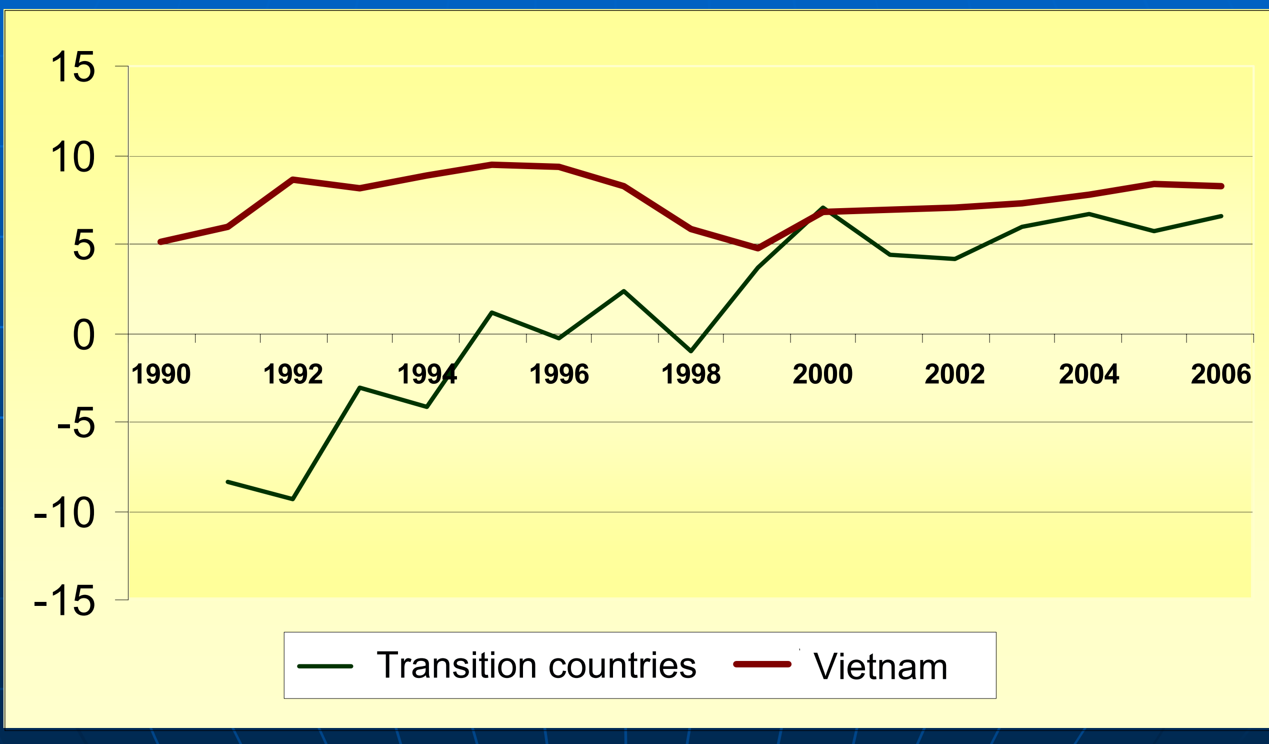
# Strengths of the Economy

- Economic, political, and social stability
- Stable and fast growing economy
  - High export growth
  - Large inflows of foreign capital
  - Dynamic domestic private sector
  - Abundant and young labor force
  - Widening domestic market size

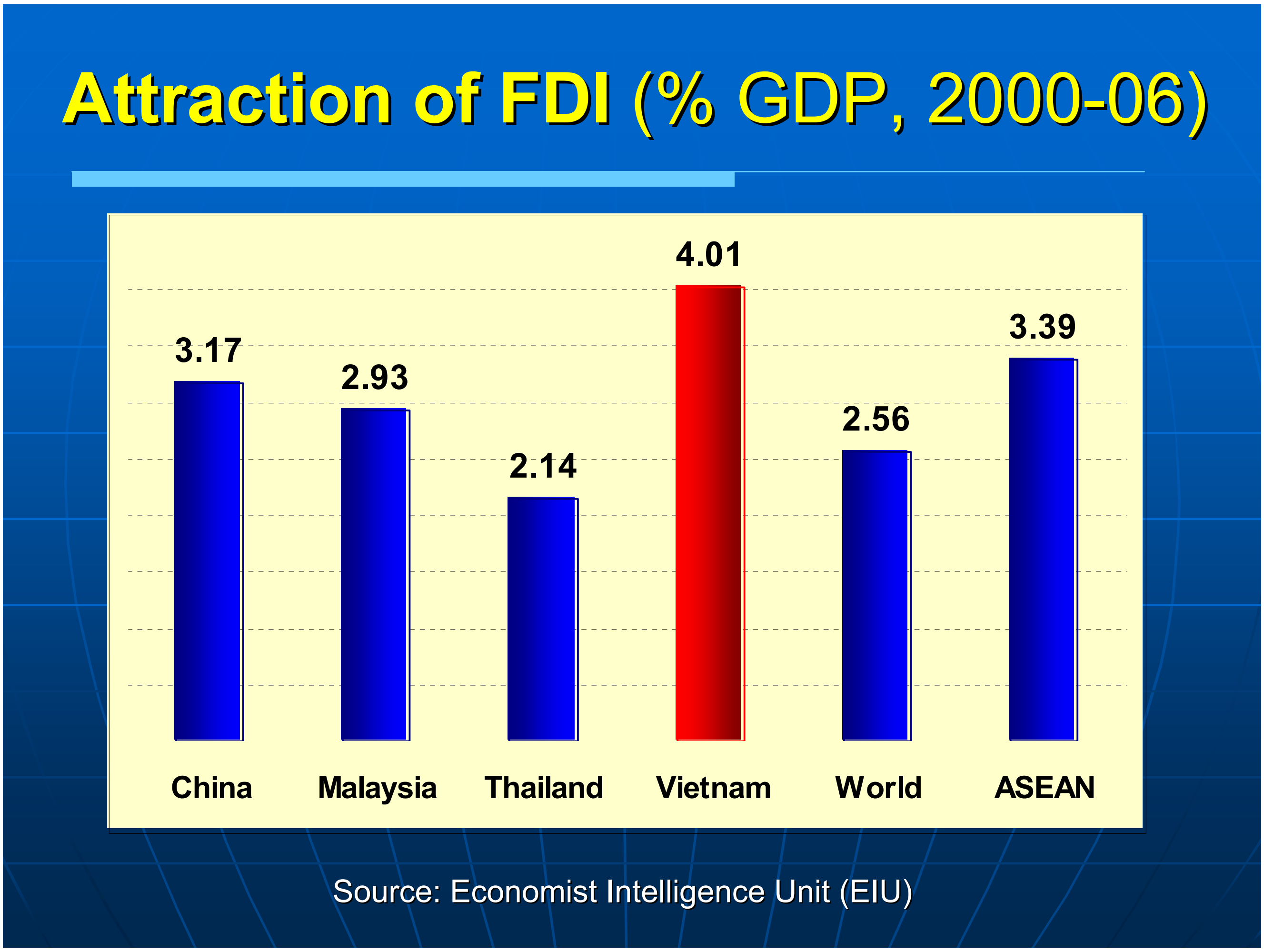
# GDP growth (%)



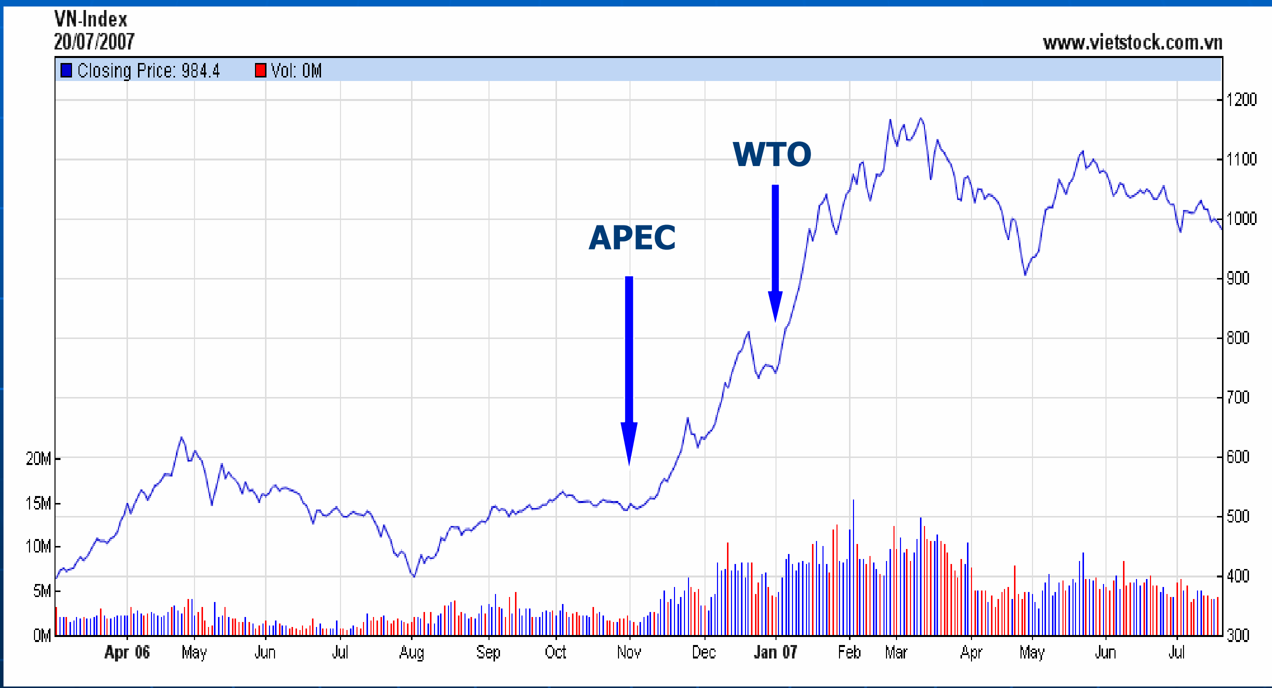

# GDP growth (cont)



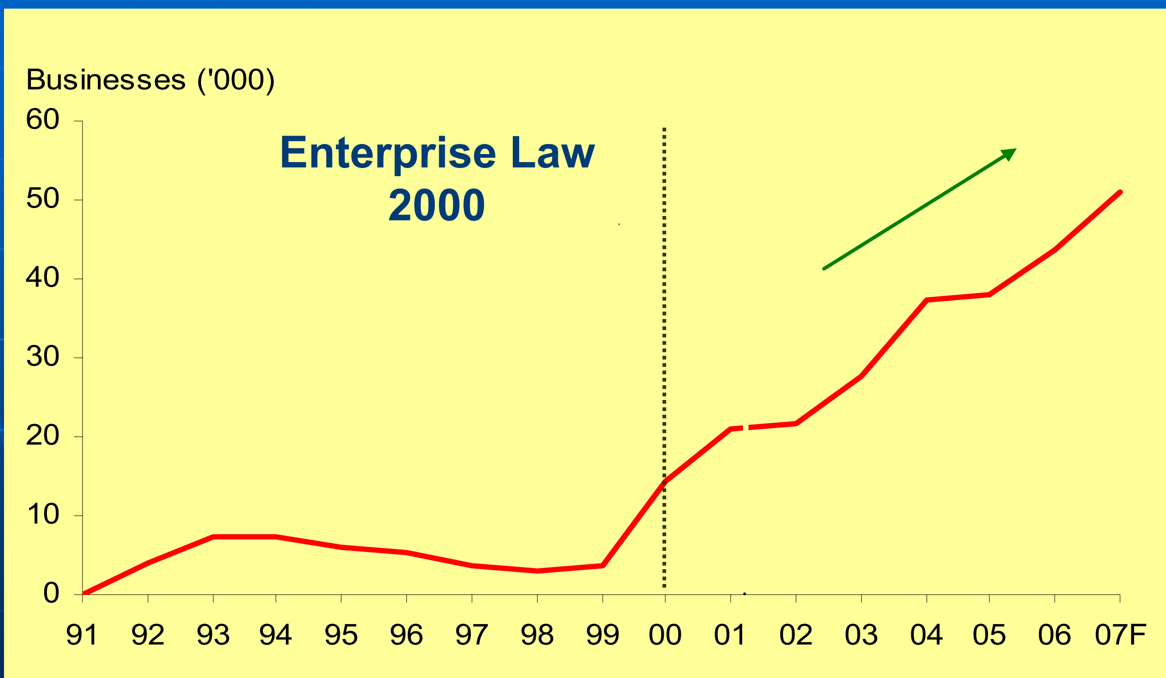

Export Growth (2000-06)
18.84%
17.84%
7.60%
China
Vietnam
ASEAN
Source: Economist Intelligence Unit (EIU)


Attraction of FDI (% GDP, 2000-06)
3.17
2.93
2.14
4.01
2.56
3.39
China
Malaysia
Thailand
Vietnam
World
ASEAN
Source: Economist Intelligence Unit (EIU)

# VN-Index (2006-2007)

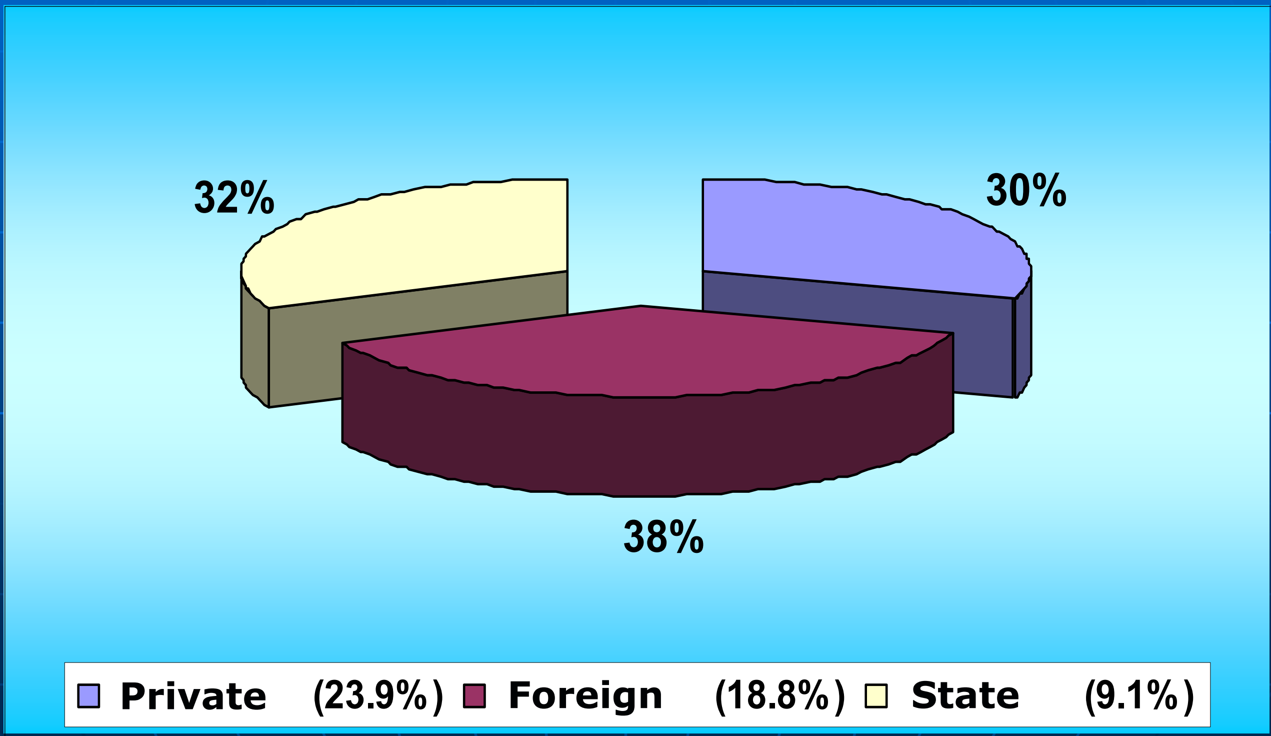



# New business registration

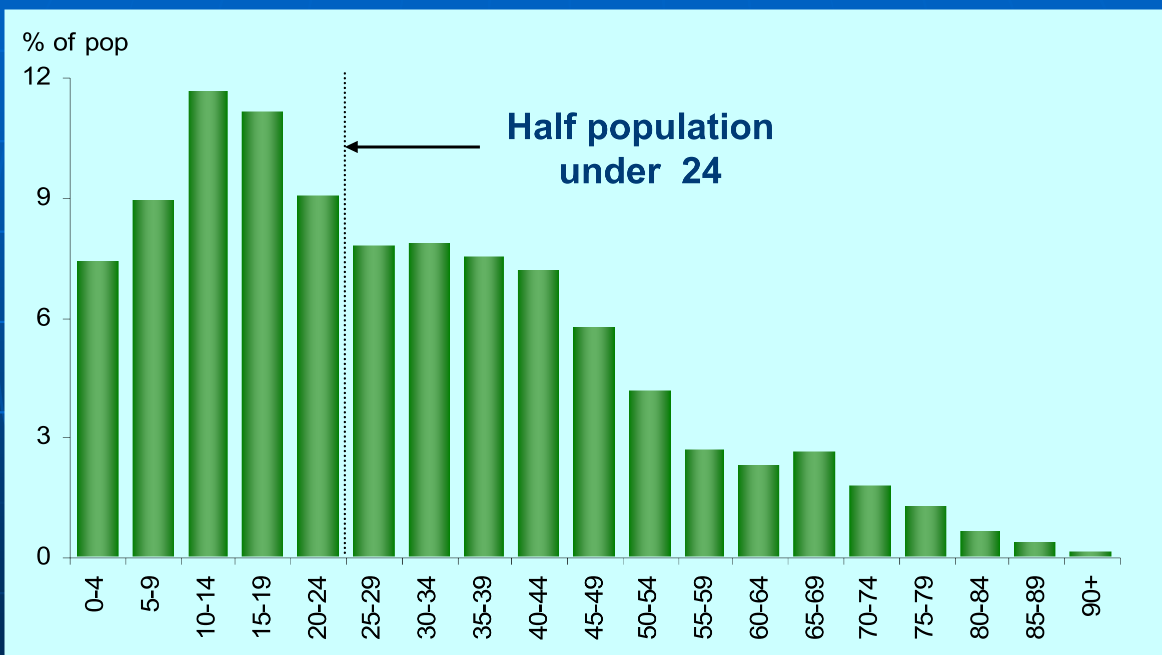



Source: Vietnam Chamber of Commerce and Industry, Ministry of Planning & Investment

# Industrial output by sector (2006)

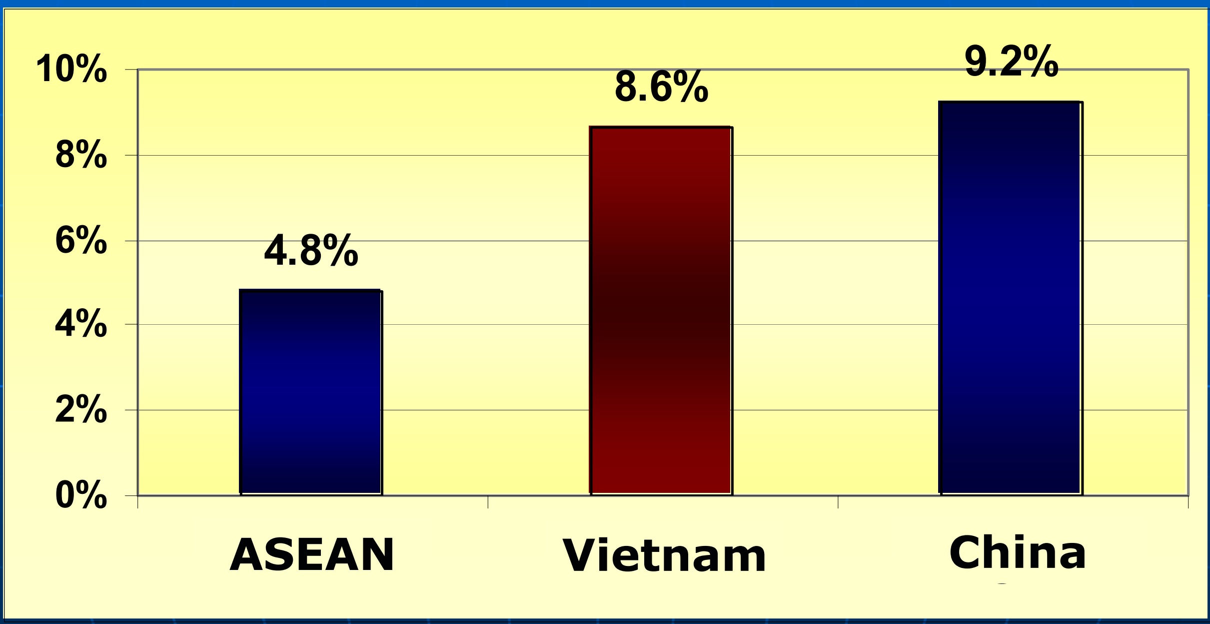



# Abundant and young labor force




Source: General Statistical Office

# Real demand growth (%, 2001-06)




Source: Economist Intelligence Unit (EIU)

# Weaknesses of the economy

- Poor infrastructure
- Incomplete market institutions
- Inefficient administration
- Weak business environment
- Inadequate education and training
- Inefficient use of capital
- **Weak competitiveness**

# Inefficient use of capital

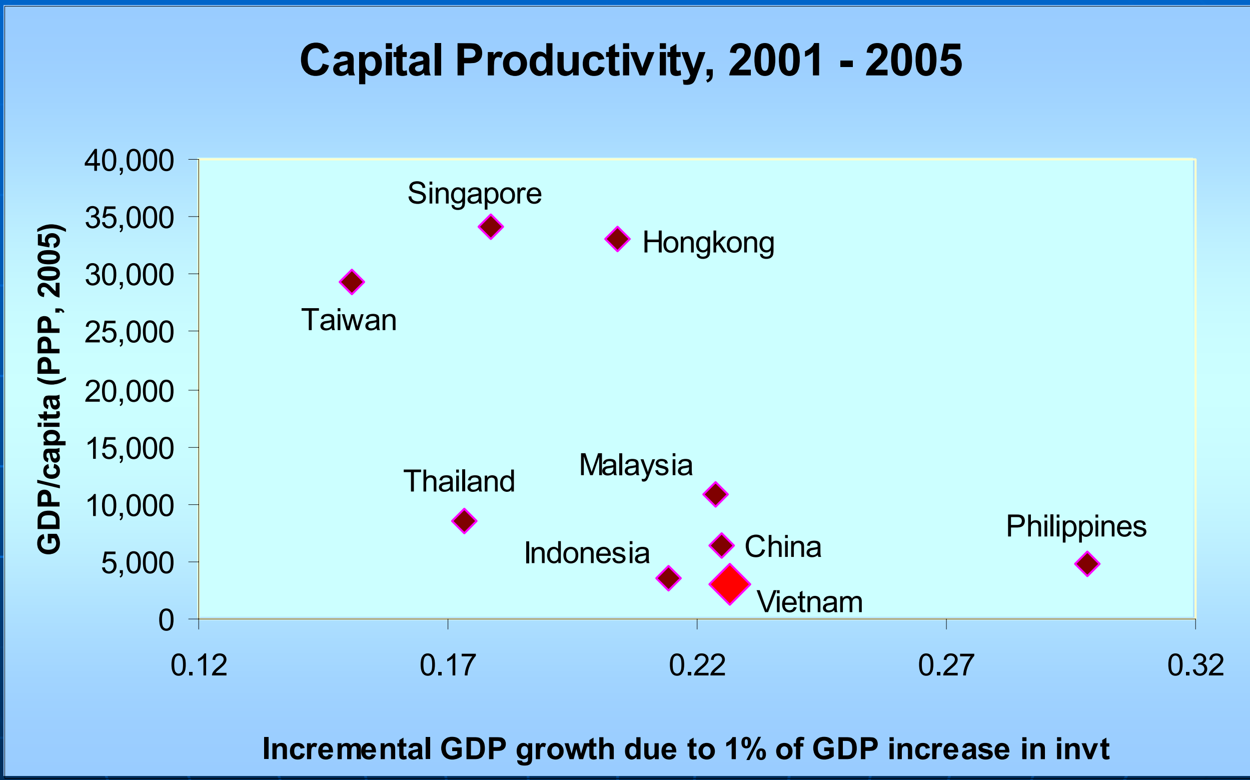
| Countries | Investment | GDP Growth | ICOR |
|---|---|---|---|
| | (%GDP) | (%) | |
| Vietnam ('00-'06) | 38.3 | 7.5 | **5.1** |
| China ('91-'03) | 39.1 | 9.5 | **4.1** |
| Taiwan ('81-'90) | 21.9 | 8.0 | **2.7** |
| South Korea ('81-'90) | 29.6 | 9.2 | **3.2** |
| Japan ('61-'70) | 32.6 | 10.2 | **3.2** |

# Ease of Doing Business (2007)

# Low quality of education and training

| Countries | Education and Human Capital Index | English Proficiency Index | High-tech Proficiency Index |
|---|---|---|---|
| Singapore | 6.81 | 8.33 | 7.83 |
| China | 5.73 | 3.62 | 4.37 |
| Malaysia | 5.59 | 4.00 | 5.50 |
| Philiphine | 4.53 | 5.40 | 5.00 |
| Thailand | 4.04 | 2.82 | 3.27 |
| Vietnam | 3.79 | 2.62 | 2.50 |
| Indonesia | 3.44 | 3.00 | 2.50 |


Source: Economist Intelligence Unit (EIU)




Source: Economist Intelligence Unit (EIU)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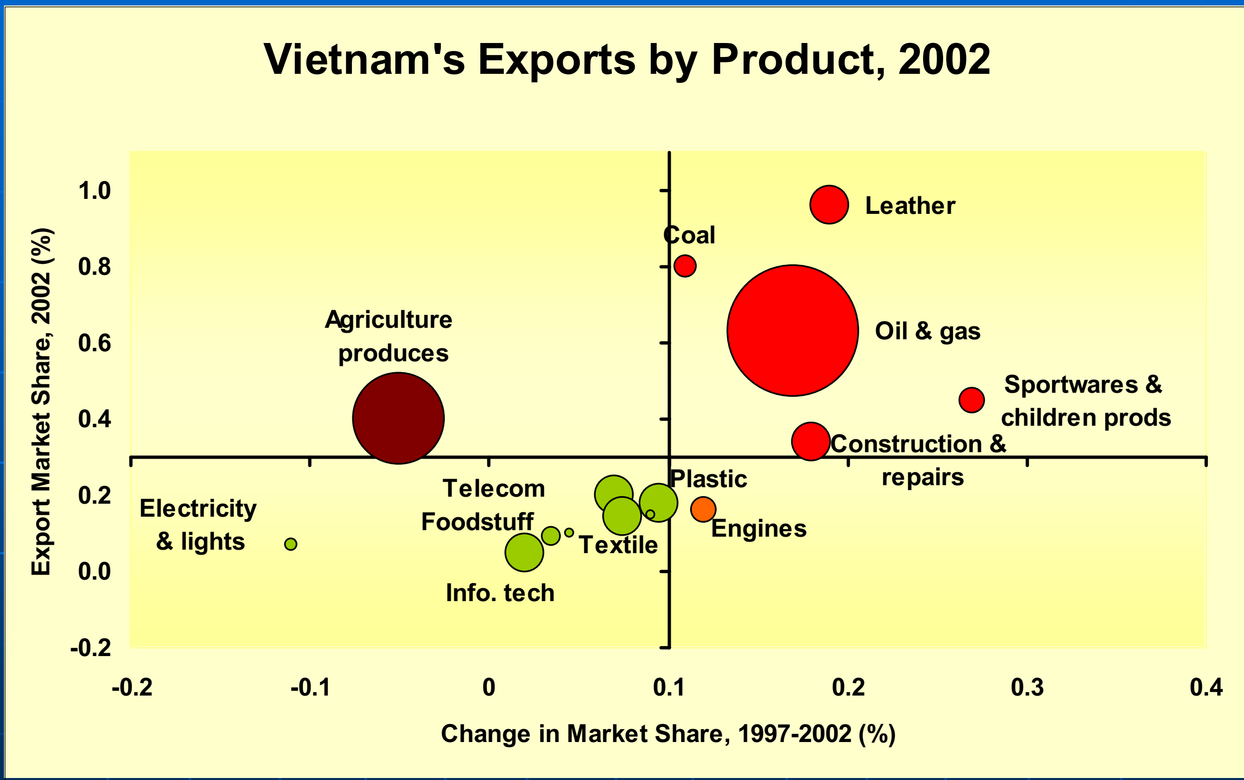



Source: Michael Porter, 2005

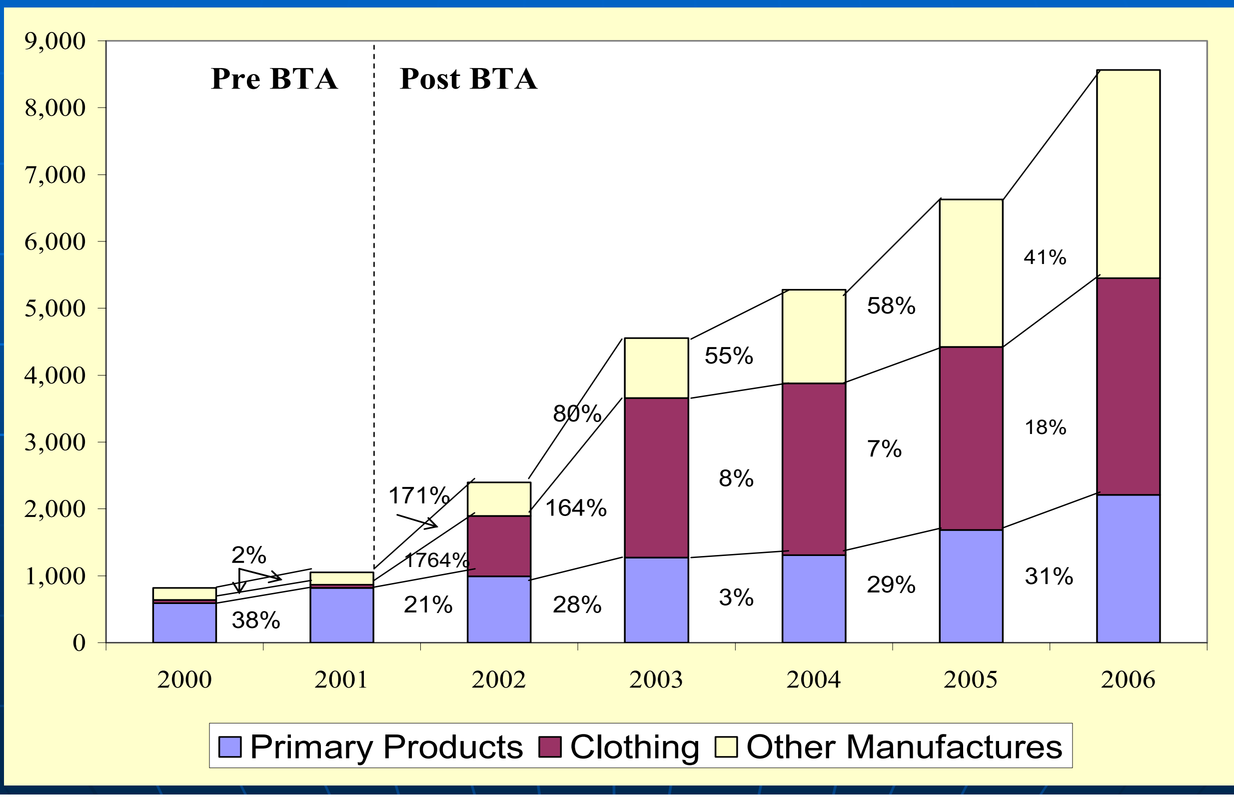
# Business Competitiveness ('01-06)

| | 2002 | 2003 | 2004 | 2005 | 2006 | GDP 2005 (PPP) |
|---|---|---|---|---|---|---|
| Singapore | 10 | 6 | 12 | 6 | 11 | 28.100 |
| Malaysia | 25 | 24 | 23 | 23 | 20 | 11.201 |
| Indonesia | 66 | 50 | 53 | 59 | 35 | 4.458 |
| Thailand | 33 | 33 | 35 | 35 | 37 | 8.319 |
| China | 39 | 46 | 48 | 54 | 64 | 7.204 |
| Philippines | 64 | 72 | 71 | 66 | 72 | 4.923 |
| **Vietnam** | **61** | **56** | **78** | **77** | **82** | **3.025** |
| Cambodia | — | — | — | 107 | 107 | 2.399 |
| **No. of countries** | 79 | 97 | 100 | 113 | 121 | |

# New opportunities

- New opportunities come mainly from the deeper integration
  - MFN, fairer treatment
  - Access to and better allocation of resources
  - Domestic private sector development
  - Economic reform promotion

# Exports to the US



# Some Challenges

- More competition
- More vulnerable to external shocks
- "Transaction costs" of policy and institutional changes
- Unequal distribution of costs and benefits of integration

**Thank you for your attention!**

**BON APETIT !**

# Financing Urban Infrastructure Development: HIFU's Practical Experiences

*Speech by* Dr. Vuong Duc Hoang Quan

Director of Investment Department

Ho Chi Minh Investment Fund for Urban Development

(HIFU)

## *Hochiminh City Investment Fund for Urban Development - HIFU*

- HIFU is the 1st Local Development Investment Fund in Vietnam – established by the decision of Vietnam's Prime Minister in June 1996 and under the direct control of the Ho Chi Minh City's People Committee
- *Mission*: Increase the effectiveness in mobilizing and utilizing funds from various sources, including private funding, for the ultimate purpose of promoting the development of the socio- and physical infrastructure of the City.

## *HIFU Main activities*

- Direct Investment
- Lending
- Entrusted Capital Management
- Securities Market Participation
- Municipal Bond Issuance Agency

## *Fund-mobilization methods used by HIFU*

- *Trusted management of state fund*
- *Loan syndication with banks*
- *Municipal bond issuance*
- *Foundation of joint – stock companies investing in infrastructure*

## *1. Trusted management of state fund*

- Before1990s, **pay-back "free" mechanism** to finance investment projects
- Upon HIFU's establishment, loans already made by the Ho Chi Minh City Department of Finance were transferred
- HIFU is responsible for **disbursing** loans made out of budget funds, **monitoring** the use of capital deployed as well as **collecting** on these loans.

## *Trusted management of state fund (cont)*

- This mechanism has been mostly applied in financing projects relating to **land clearance, and environmental improvement.**
- The application of this approach was found to improve the efficiency in using the national-budget originated funds through **enhancing the project owner's accountability** when getting financed.

## Trusted management of state fund (cont)

- HIFU has been trusted and assigned to manage some other funds:
  - Pollution Minimization Fund of Ho Chi Minh City (USD 1 million)
  - Revolving Fund (USD 2.5 million) for cleaner production program
  - ADB’s loan of USD 43.3 million for environmental improvement of Ho Chi Minh City.

## Trusted management of state fund (cont)

- Trust Fund loans of HIFU have grown more than double over the last six year from VND 532.6 billion to VND 1,332.85 billion (equivalent to USD 83.30 million). The majority of the outstanding balance of Trust Fund loans at HIFU paid no interest and, on these, there were management fees payable.

## 2. Loan syndication with banks

- Loan syndication is not a newly-invented approach to rise funding
- Advantages:
  - Ability of pooling many financial institutions' capital to get access to large amount of fund for long – term projects, whose size could not be funded by any single bank
  - Risks can be shared among banks and the controlling of project implementation will be increased owing to many participating lenders

## Loan syndication with banks (cont)

- HIFU has applied this approach successfully to finance big infrastructure development projects in the City:
  - Water treatment plants (about USD 101.59 million)
  - Thu Thiem New Town project (USD 50.79 million)
  - Transportation development (USD 31.75 million)
  - Projects of repair, upgrading and equipping facilities for hospitals, infirmaries, schools with total investment of over USD 45.70 million

## *Loan syndication with banks (cont)*

- In implemented projects, with the role as a syndication leader, capital proportion HIFU has participated accounts for **about 20%**
- Through the role HIFU has played, local government has been successful in mobilizing remaining **80% from other sources** of different economic sectors for investment

## *3. Municipal bond issuance*

- First municipal bond issues ever in Viet Nam were done by the City's government and by HIFU in 2003 to raise fund for Ho Chi Minh City's government with total amount issued of USD 127 million
- Bonds issues by Ho Chi Minh City:
  - "Plain vanilla" general obligations by the City
  - Semi-annual debt service
  - Principle and interest payment are made out of the City's budget resources.
  - Proceedings from municipal bond issues have contributed to balancing capital resources needed for the City's urban infrastructure projects.

## *Municipal bond issuance (cont)*

- Successful municipal bond issuances in Ho Chi Minh City opened up a new fund raising channel with advantages of **longer term and stable financing, reasonable cost of financing** suitable to infrastructure projects, not only for Ho Chi Minh City but for other provinces in Viet Nam as well.
- This financing has contributed to capital mobilization for infrastructure development and overcome drawbacks of commercial lending from banks.
- From 2003 to, HIFU has issued 2'000 VND (equivalent to approximately USD 120 million) of municipal bond each year for the City.

## *4. Foundation of joint – stock companies investing in infrastructure*

- Direct fund mobilization from the public through capital contribution in setting up joint stock companies operating in project investment.
- Typical model of **public – private partnership**.
- Investment responsibility and risks previously on the state's side can be partly transferred to private sector.
- **Better management** due to private participation with average but stable profitability is a noteworthy feature of this model, attracting public to invest.

## *Foundation of joint – stock companies investing in infrastructure*

- When establishing these joint stock companies, HIFU clearly identifies the types as well as the objectives of these Public-Private Partnership projects.
- The projects should be those **in accordance with the Master Development Plan of the City**. They are urgently essential for the development of the City, and revenue-backed.
- By establishing joint stock companies, HIFU has actually not only succeeded in **raising funds needed to make the projects feasible** but also **bring over investment opportunities to investors**, either state-owned or private, to directly involve in the development of City infrastructures

## HCMC Infrastructure Investment Co. (CII)

- Founded in 2001, USD 20 million capital (HIFU 15%)
- Listed May 2006
- Current Market Cap: USD 175 million
- Functions:
  - Concession contracts of operating transportation projects
  - Investing in revenue – backed infrastructure projects under various forms of BT, BOT, etc.
- Projects:
  - Hung Vuong and Dien Bien Phu roads
  - Phu My Bridge BOT Joint - Stock Company - USD 101.60 million (Cofounder)
  - Thu Duc Water Treatment Plant Project - USD 101.60 million (Cofounder)

# Thank you!

**HO CHI MINH CITY INVESTMENT FUND FOR URBAN DEVELOPMENT**

**1997 - 2007**

# Why Designate Market Makers? Affirmative Obligations and Market Quality

Hank Bessembinder
University of Utah

Conference on Pacific Basin
Finance, Economics, Accounting, and Management
July 21, 2007

## How Should Financial Markets Be Organized?

- Human-Intermediated or Computerized?
- Anonymous or Identities Revealed?
- Transparent or Opaque?
- With or without a Discrete Price Grid?
- What rules to govern execution order?
- With or without a "Designated Market Maker"?
  - I focus today on the last question.

# A Designated Market Maker (DMM)

- Generally agrees to some specific responsibilities to provide liquidity for customers.
- Liquidity is the ability to buy or sell quickly at low cost.
  - Responsibility referred to as "affirmative obligation".
- In exchange for some special rights, or for other compensation.

# The NYSE "Specialist"

- Is probably the best-known DMM.
- But is *not* typical.
  - Obligation is to "maintain fair and orderly markets".
  - Attributable to regulation by U.S. SEC.
  - Is compensated by a "last mover advantage".

# More Typical

- A Designated Market Maker whose main obligation is to keep the "bid-ask spread" narrow.

Bid-Ask spread =
the lowest price asked for customer purchases –
the highest price bid for customer sales.

# DMMs with a "Maximum Spread Rule" are Observed on Many Markets

- Stock Markets:
  - NYSE/Arca,
  - Toronto Stock Exchange,
  - London Stock Exchange,
  - Deutsche Bourse,
  - Euronext,
  - Stockholm Stock Exchange,
  - Spain, Italy, Greece, Denmark, Austria, Finland, Norway, and Switzerland, many others.
- Derivative Markets:
  - CBOE, Montreal Bourse, Australian Exchange Options, others.
- Notably, these markets appear to have voluntarily adopted DMMs in the absence of any government requirement.

# Example: Stockholm Exchange Contracts

## (described by Anand, Tanggaard, Weaver (2006))

| Company Name | Liquidity Provider | Start Date | Avg. % Spread | Contract Max % Spread |
|---|---|---|---|---|
| A-Com AB | Kaupthing Bank | 22-Oct-03 | 7.51% | 4.00% |
| Addtech AB | REMIUM | 30-Jun-03 | 3.31% | 2.00% |
| Ångpanneföreningen, AB | Öhman | 31-Oct-03 | 1.89% | 4.00% |
| Beijer AB, G & L | Öhman | 11-Jun-03 | 2.51% | 4.00% |
| Beijer Alma AB, ser B | REMIUM | 17-Nov-03 | 3.72% | 2.50% |
| Beijer Electronics AB | Öhman | 13-May-03 | 1.37% | 2.00% |
| Berg & Co, AB, C F | Svenska Handelsbanken | 12-May-03 | 6.53% | 4.00% |
| Borås Wäfveri AB, ser B | REMIUM | 15-Dec-03 | 5.65% | 3.00% |
| BTS Group AB | REMIUM | 8-May-03 | 3.86% | 4.00% |
| Capona AB | Carnegie | 17-Jun-03 | 1.53% | 2.00% |
| Cherryföretagen AB | REMIUM | 1-Oct-03 | 7.47% | 4.00% |
| Consilium AB | Öhman | 24-Sep-03 | 5.56% | 2.00% |
| Daydream Software AB | REMIUM | 2-Jan-04 | 2.98% | 2.50% |
| Diamyd Medical AB | REMIUM | 22-May-03 | 11.42% | 3.00% |
| Digital Vision AB | Kaupthing Bank | 9-Mar-04 | 3.77% | 4.00% |
| Frango AB | Svenska Handelsbanken | 11-Jun-03 | 5.79% | 4.00% |
| HQ Fonder AB | H & Q Fondkommission AB | 21-Jul-03 | 3.50% | 2.00% |
| ITAB Industri AB | REMIUM | 22-May-03 | 7.41% | 2.50% |

# Why A Maximum Spread Rule?

- My coauthors, Mike Lemmon and Jia Hao, and I:
- Develop a theory of why a DMM constrained by a maximum spread rule can be economically efficient.
  - (Distinct from the electronic vs. human-intermediated issue.)
  - (The answer cannot simply be "because liquidity is valuable" – so are BMW's)
- Illustrate the reasoning by simulating the Glosten-Milgrom sequential trade model.

# Financial Market Efficiency

- We assess the effect of a maximum spread rule on:
- (1) Allocative Efficiency.
  - How well does the market facilitate movement of assets from those who value them less highly to those who value them more highly?
- (2) Speed of "Price Discovery"
  - How rapidly do market prices converge to underlying value?

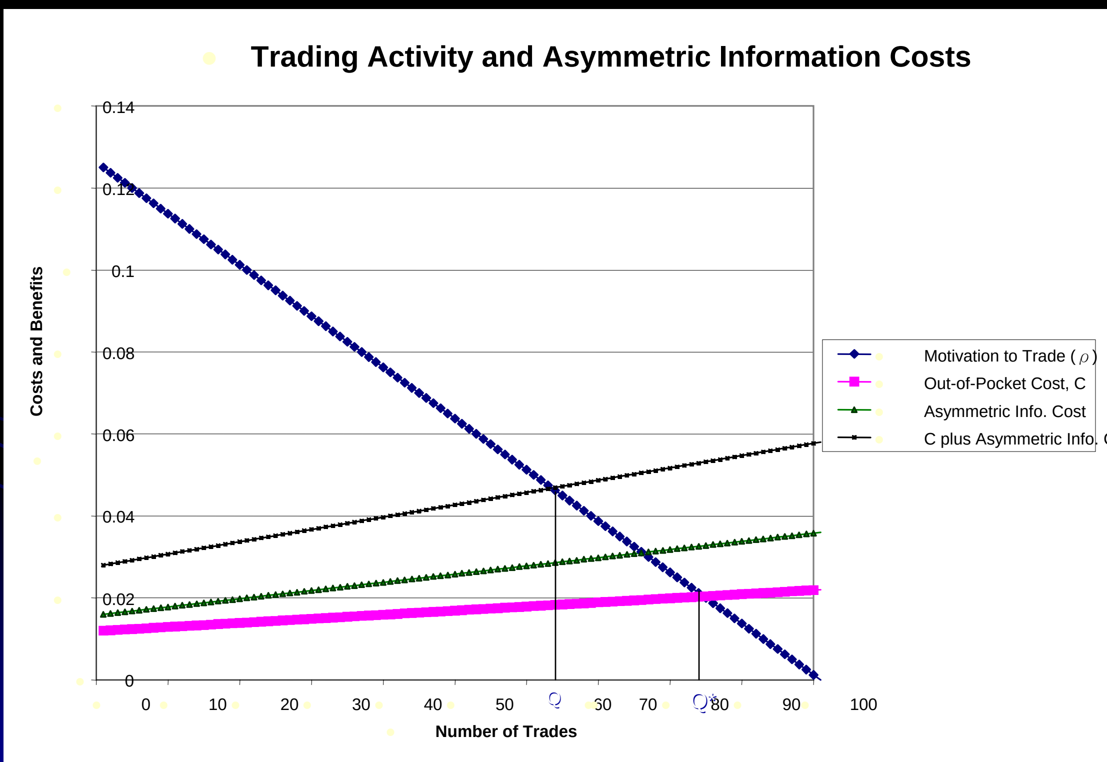
# We Show:

- A maximum spread rule improves allocative efficiency.
  - Improves social welfare.
- A maximum spread rule speeds price discovery
  - By encouraging more traders to become informed.
  - Can increase or decrease social welfare.

# How is Allocative Efficiency Improved?

- In a competitive market, liquidity suppliers must recover their costs, which include:
  - (1) Order processing and inventory costs.
    - These are also costs to society as a whole.
    - Referred to by Stoll (2000) as “real frictions”.
  - (2) Losses to better-informed traders.
    - These are not costs to society as a whole, just a transfer across parties.
    - Referred to by Stoll (2000) as “informational frictions”
    - Creates an “externality” argument.

# Trading and Allocative Efficiency



# Market Maker Losses

- When binding, a maximum spread rule will tend to impose trading losses on the designated market maker.
- We consider two scenarios:
  - If market making is competitive, the DMM must be compensated by a side payment.
    - (Observed in Sweden and France --Anand, Tanggaard, and Weaver, 2007, Venkataraman and Waisburd (2007))
  - If the DMM has some market power, spreads can be constrained at times, while still allowing the DMM to break even intertemporally.

# Related Literature:

- **Endogenous liquidity provision**
  Demsetz (1968), Ho & Stoll (1980), Dutta & Madhavan (1997)
  Kandel & Marx (1997), Rock (1996), Seppi (1997) , Glosten (1989)
- **Obligations to supply liquidity.**
  - Venkataraman & Waisburd (2006)
  - Dutta & Madhavan (1995)
- **Empirical work regarding affirmative obligations**
  - Anand & Weaver (2006) -- CBOE
  - Venkataraman & Waisburd (2006) – Euronext Paris
  - Anand, Tanggaard & Weaver (2006) – Stockholm Stock Exchange
  - Panayides (2007) – NYSE.

## To Address these issues, We Simulate Versions of The Glosten-Milgrom Sequential Trade Model

- Risk neutral traders arrive sequentially, in random order.
- Each trader either buys one unit, sells one unit, or does not trade.
  - Depends on their subjective valuations (i.e., consumption versus saving motive).
- A known proportion of the traders knows the asset's economic value exactly.
  - We endogenize this proportion
  - The bid-ask spread arises as an informational phenomenon.
- The rest of the traders and the market maker form rational expectations of asset value conditional on the obligation in place.
  - With Bayesian updating upon observing trades
- Price discovery is not instantaneous.
  - Instead, we have semi-strong form efficiency, with eventual convergence.

## Limitations and Features of the GM Model

- Limitations:
  - Cannot capture any effects through trade size or trade timing.
  - Only market orders, no limit orders (cannot capture "aggressiveness")
- Requires noise trading.
  - A trader's private valuation of the asset is $E(V) + \rho_i$
    - $\rho_i$ is a parameter of the individual trader's utility function.
    - It represents any motive for trade *except* knowledge of non-public information regarding asset value.
    - E.g., the personal preference for current vs. future consumption
- Market makers have $\rho = 0$, incur out-of-pocket cost, c, to complete trades.

## Allocative Efficiency: Cumulative Gains from Trade

After N traders have arrived, with $N_B$ choosing to buy and $N_s$ choosing to sell, the ex-post cumulative gain across all agents is:

Trading Gain to Society (TGS)

$$TGS = \sum_{i=1}^{N_B} \rho_i - \sum_{j=1}^{Ns} \rho_j - (N_S + N_B)\ c$$

## Maximum Allocative Efficiency

- Note that allocative efficiency is maximized if all those with
  - $\rho_i > c$ purchase an additional unit of the asset
  - $\rho_i < -c$ sell their endowed unit of the asset
  - $|\rho_i| < c$ do not trade
- If c= 0, it is welfare maximizing for every trader to transact
  - We assume c=0 for our analysis
  - For a given distribution of $\rho_i$, maximized gains from trade is: $\sum_{i=1}^{N} |\rho_i|$

# Price Discovery

- In the GM framework, some traders know true value, V.
- Market values are the conditional expected values of V, based on public information, including the trade history.
- We measure |E(V) – V| by trading round.
  - Smaller average values indicate faster price discovery.

# Trading in a GM Framework

- Does not provide the maximum possible allocative efficiency.
- Gives semi-strong form, but not strong-form efficiency.
  - (1) A spread wider than the social cost of completing trades dissuades efficient trading.
    - The information asymmetry component of the spread.
    - Any market power that leads to wider spreads.
  - (2) Price does not equal fundamental value until a sufficient number of informed have traded.
    - Informed traders will sometimes transact in the “wrong” direction.
- We assess how the maximum spread rule can mitigate these effects.

## Points of Comparison

(1) Competitive market making.

(expected profit conditional on a trade is zero – the actual GM setting).

(2) Profit maximizing monopolist market making.

We impose a maximum spread rule in each setting, and assess:

- Whether allocative efficiency is improved.
- Whether price discovery is affected.

## Simulation of the GM market

- Each simulation consists of 50 potential traders
- Informed traders – know the true V
- Uninformed traders; V = 1 or V = 2 with equal initial probability, with Bayesian updating.
- Early rounds -- a market in the wake of an information event
- Later rounds -- a market in more tranquil conditions
- Repeated 10,000 times, and average outcomes recorded
- The subjective preference parameter $\rho_i$ is normally distributed with zero mean and $\sigma_\rho = 0.2$
- The proportion of informed traders is determined endogenously
  - marginal informed trader just expects to recover the fixed cost of becoming informed (10% of E(V))

# Main Results of the Simulations

- (1) Allocative Efficiency is improved by a maximum spread rule.
- (2) The speed of price discovery is increased, but only when we allow more traders to choose to become informed.
- (3) Imposing the rule in an otherwise competitive market imposes losses on the DMM, and will require a side payment.
- (4) Imposing the rule on a monopolist market maker also improves efficiency, and the outcome can dominate competitive market making.

## Why are these results important?

(1) Testable Implication: A designated market maker with a maximum spread constraint is most effective when:

- the information asymmetry cost of market making is large.
- not, per se, for illiquid stocks with high marginal social cost of providing liquidity.

(2) The maximum spread rule is an example of a market solution to a market imperfection.

(3) Having a designated market maker with market power (and constrained by a spread rule) can be an efficient market design (e.g., NYSE).

# Extensions

- Microstructure settings other than Glosten-Milgrom.
- Optimal form of affirmative obligations.
- Optimal Compensation Structures.

HCMC INSTITUTE FOR ECONOMIC RESEARCH

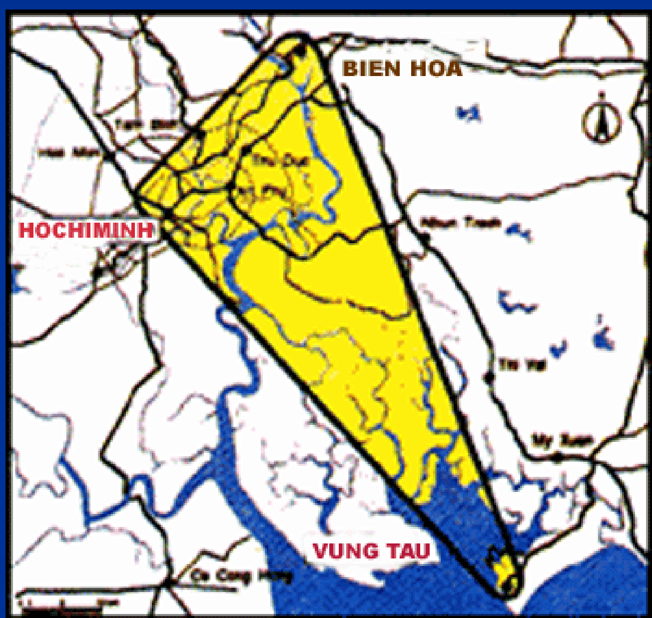
# HO CHI MINH CITY ECONOMIC OVERVIEW AND POTENTIAL FOR DEVELOPMENT

Du Phuoc Tan (M.Sc.)
Head of External Cooperation Department of IER
20 June 2007

## ROLE OF HO CHI MINH CITY IN THE COUNTRY

**HCMC is an Economic, Scientific, Educational and Cultural Hu**

The Largest and Most Dynamic Economic Centre of the Country

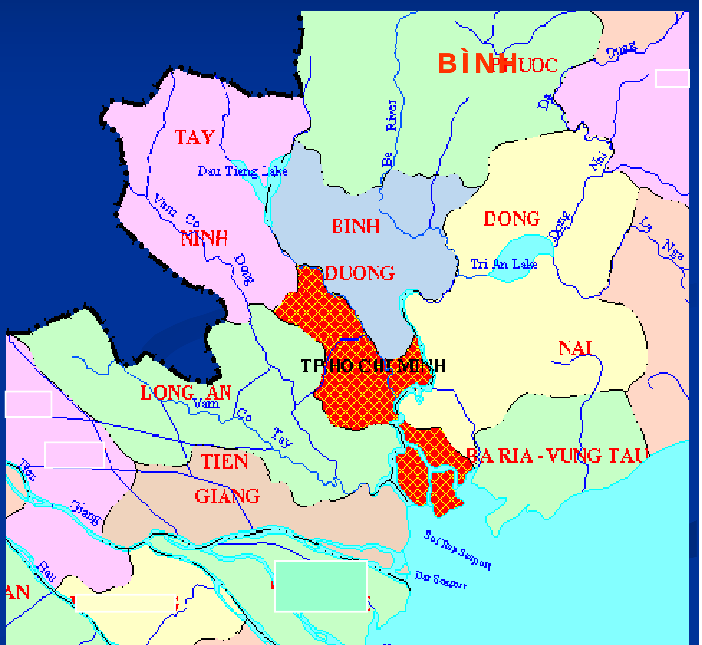
## ROLE OF HO CHI MINH CITY IN THE COUNTRY

- Population in Ho Chi Minh City **6.42 million persons** in 2006 (whole country 84 million persons)

  + Accounting for only 7.6% population and over 6% of labor force in the country, HCMC accounts for:
  - **+ 21-22% of national GDP**
  - + 30% of national industrial output value
  - + 25.1% of national value of goods and services
  - + 36.7% of national export turnover
  - + 21.0% of total investment.

## ROLE OF HO CHI MINH CITY IN THE SOUTHERN FOCAL ECONOMIC ZONE (SFEZ)

**+** HCMC accounted for over **80% value added of service** of the whole region (in 2005);
**+** 55.3% export turnover of the whole region; 65.4% import turnover of the whole region;
**+** 46.9% value added of industrial value of the whole region

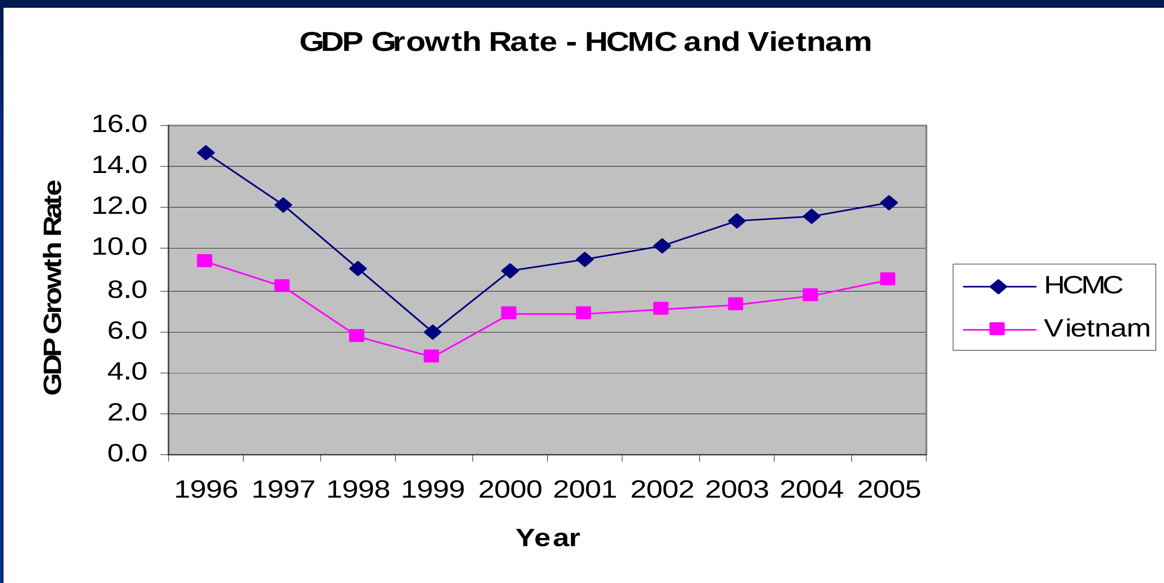



**(This is a dynamic region)**

## SOME DEVELOPMENT TARGETS – GDP GROWTH RATE (%)

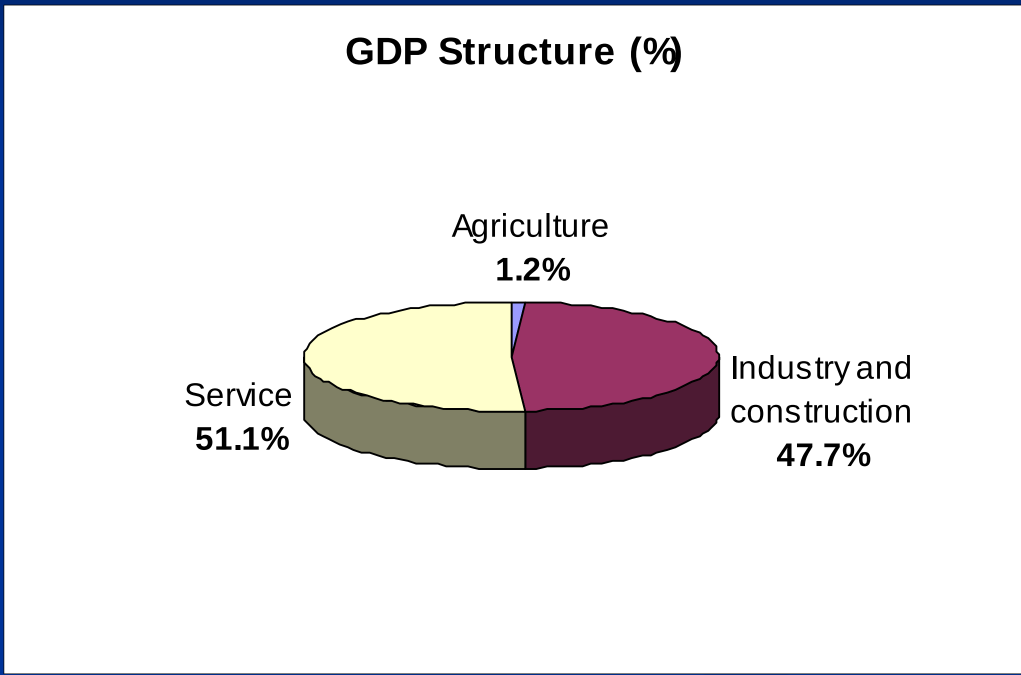
- Area: 2,095 km2
- Population: 6.4 million
  - *Of which: Migrants 1.85 million (30%)*
- GDP: 12.0 billion USD
- GDP growth rate: 12.2% per year
- GDP per capita in 2005: 1,970 USD
- Unemployment rate: 5.82 %
- FDI inflow in 2006: 2.28 billion USD
- Export: 13.7 billion USD
- More than 76 Universities & Colleges with more than 380,000 students

## SOME DEVELOPMENT TARGETS – GDP GROWTH RATE (%)




- GDP growth rate during 1996-2005:
  - HCMC: 10.5%
  - VN: 7.2%
- GDP share of HCMC to the country keeps increasing

## SOME DEVELOPMENT TARGETS – GDP STRUCTURE (%)




## INVESTMENT CAPITAL MOBILIZED – INVESTMENT CAPITAL STRUCTURE (%)

Proportion of remaining budget for HCMC: 26% and only responding to 25-30% investment of the city.

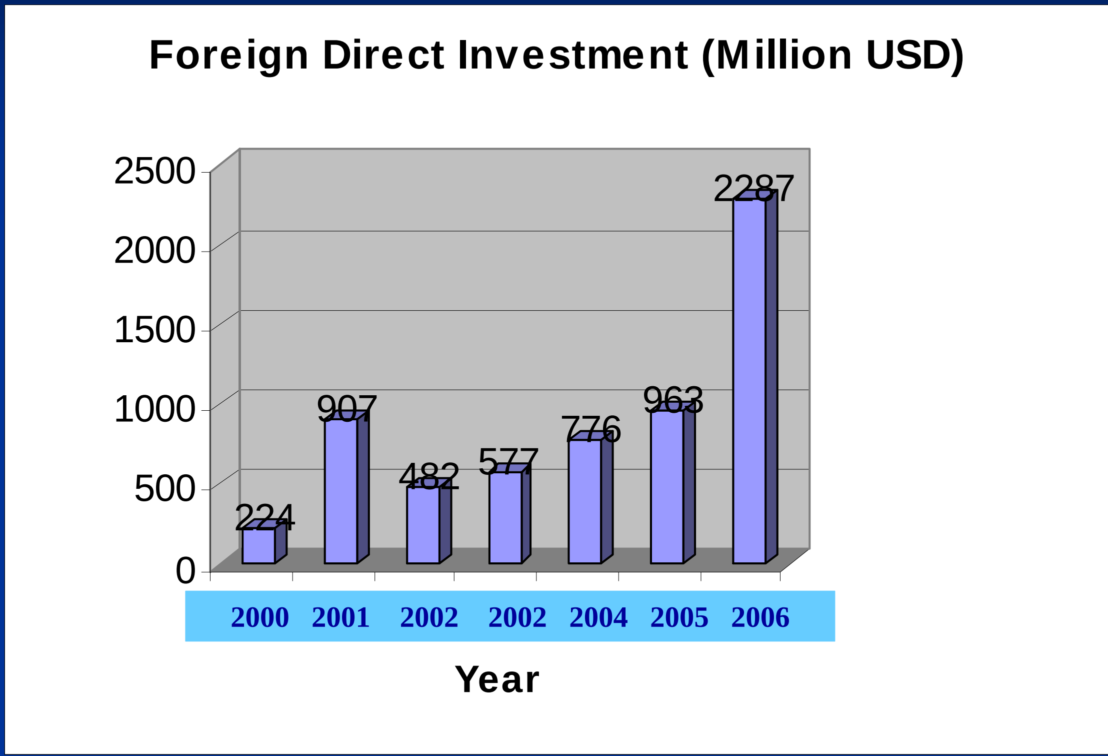
HCMC mobilized many investment sources:

- HIFU (HCMC Investment Fund for Urban Development)
- Urban Bond issued
- BT (land area exchanged to build infrastructure)
- Extra-fees (water, electricity)
- Equitization

Structure of investment capital (2001-2006):

+ State = 33,3% (Whole country 57,6%)
+ Private = 48,3% (Whole country 26%)
+ FDI = 18,4% (Whole country 16,4%)

# Foreign direct investment - capital




*Source: HCMC Statistical Office*

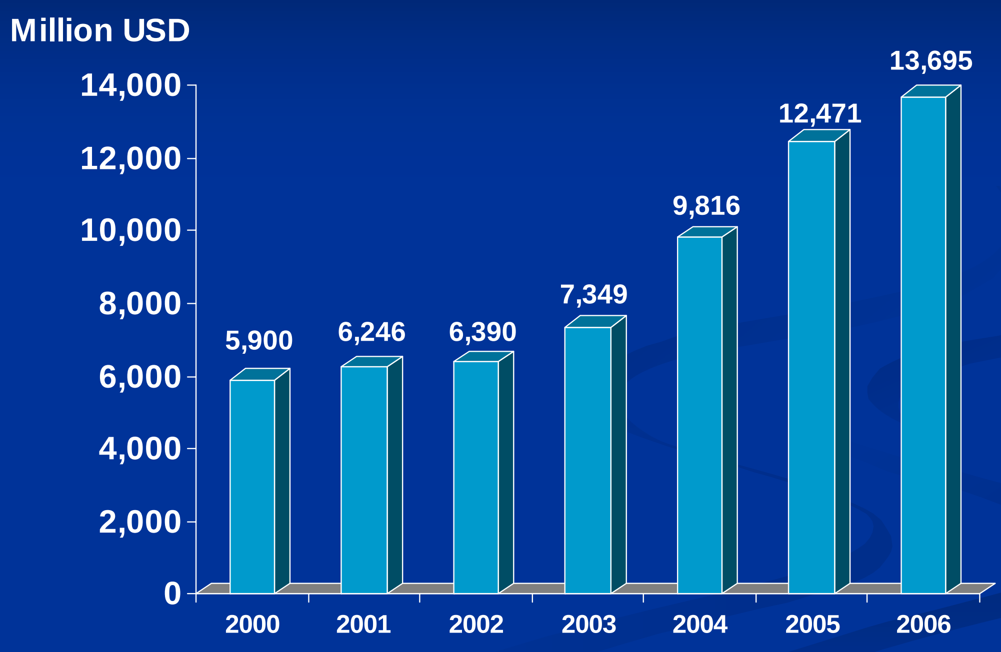
# Foreign direct investment - Ranked

**In 2006**

| Country | Projects | Capital *(million $)* |
|---|---|---|
| Hong Kong | 148 | 3,387 |
| Taiwan | 402 | 1,873 |
| Singapore | 207 | 1,575 |
| South Korea | 416 | 1,298 |
| Japan | 242 | 1,147 |
| USA. | 134 | 670 |
| B.V. Island | 87 | 630 |

*Source: HCMC Statistical Office*

# EXPORT




*Source: HCMC Statistical Office*

# POTENTIAL FOR DEVELOPMENT
## Vietnam accesses to WTO

- Incentives for reform of laws and regulations (Investment Environment)
- Public administration reform (transparency and publicity improvement)
- Technical and social infrastructure investment (supported by government to enterprises)
- Export market expansion *(150 WTO members accounting for over 95% total trade turnover in the worlds)*

## POTENTIAL FOR DEVELOPMENT

### HCMC main development targets to the year 2010

- City GDP growth rate (2006-2010): **12% per year.**
- For economic sector:
  - Agriculture: 5.0%
  - Industry and construction: 12.0%
  - Service: 12.0%
- For economic structure:
  - Agriculture sector (0.9%),
  - Industry and construction (48.7%)
  - Service (50.4%).

## POTENTIAL FOR DEVELOPMENT

### HCMC main development targets to the year 2010

| | |
|---|---|
| Population: | 7.5 million (*) |
| GDP growth rate: | 12.2% per year |
| GDP per capita in 2010: | 3,000 USD |
| Unemployment rate: | <5.0 % |
| Skilled labors: | 60% |
| Public transport (Bus): | 10% demand |
| Housing area: | 14 m2/person |
| For health care: | 10 doctors/10,000 pers |

- Completing educational compulsory of senior secondary school to the year 2008.

## POTENTIAL FOR DEVELOPMENT

### 9 groups of service development

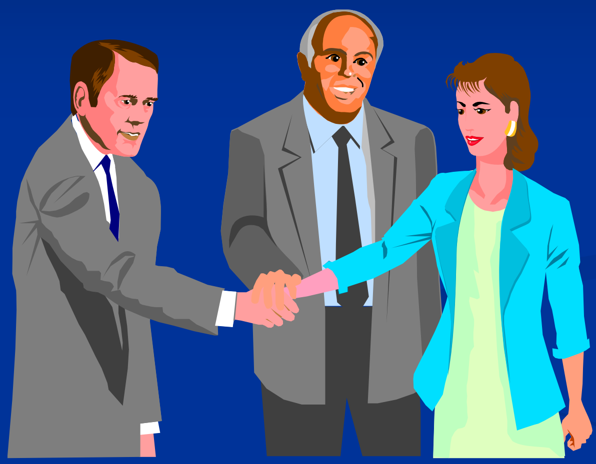
1. Financial, banking and insurance
2. Trade
3. Transportation and logistics
4. Telecommunications
5. Real estate
6. Consultant, scientific & technological research
7. Tourist
8. Healthcare
9. Education and training

## POTENTIAL FOR DEVELOPMENT

### Solutions for risks reduction

1. **Infrastructure Development**
2. **Education and Training system Reform**
3. **Public administration reform**
   **(Addressing bureaucracy)**

In general, the stable politics and government consistency of reform are good environment to invest to HCMC



Thank you for your attention

# PANEL DISCUSSION

## MANAGEMENT EDUCATION: ARE WE MEETING THE CHALLENGE?

Kashi R. Balachandran

- Are we in the business of education or training?
- Can critical thinking be taught?
- Should/can we teach ethics?
- Continuing education- MBA for life?
- International perspective- impact of different cultures on management education.

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Business is evolving rapidly

- Entrance of China and India as major players
- Growing importance of other countries such as Vietnam
- Outsourcing phenomena of manufacturing and services have brought all firms: small, medium or large into the global business arena.
- When I first went from India to U.S. as a student in the 60's I had to change 4 or 5 airplanes, all propeller driven, to travel. One plane could not do all the distance. Now one plane does it all and that too nonstop flights from US cities to Indian cities have become common. It is not just the technological progress alone. Current international business demands such fast travel as well.
- Many years ago, people from one country went to another for business and after some time, perhaps, took over and occupied the country and stayed till they had to leave! Now, the relationships are different. They become permanent and trades are to mutual benefit. Learning the cultural moorings of each other has become important.
- A friend of mine told me, in the 60's, that when he was stationed in the Philippines in the US army, young local children used to call all of them "Joe". I asked him why? He said, because they could not tell one American from the other. In fact, I had some initial difficulty in that arena as well! TIMES HAVE CHANGED. In the current business environment, one may well have to tell one Indian from Chennai from another from Punjab; one Chinese from the other and one Vietnamese from the other.

WHAT DO ALL THESE SUM UP TO?

- Management education cannot be just tools training. It has to be a full fledged education of individuals who must learn other cultures, respect and operate in other countries. This education has to start early in the undergraduate years. It is important that students learn at a young age the importance of respect and tolerance and develop an avid interest to participate in various cultures. Tools can be taught to people who have strong human values; but human values cannot be taught to people who have learned only tools.
- There is no question that critical thinking is important for management personnel. It is not a question of whether it can be taught. It is a must and the education program must develop such skills. In any business enterprise, analyses of critical success factors are vital. Performance measurement systems are built around an evaluation of critical success factors. These are business specific. Employee incentive structures differ over countries and cultures. Ownership structures differ. Ownership of public companies may be concentrated and this may affect their strategies. Political and religious considerations differ across countries as well. To understand all these and operate effectively, critical

thinking is very important. These have to be developed in management education programs.

- In the 70's we started thinking about total quality management and then about six sigma programs. Now all the outsourcing, supply chain, just in time manufacturing, supplier communication and data warehousing issues. Business practices evolve and change continuously. Management education has to be dynamic as well. M.B.A. 's cannot stop learning any more than doctors can or lawyers can or tax accountants can. Management development programs are important in current day global changing environment.
- Despite all the business scandals of recent past, I do believe that a large proportion of businesses act responsibly. Few rotten apples spoil the entire population. Ethics have to be recognized and taught to make sure. How to teach is another issue. It has to be taught and inculcated. Human values have to be ingrained in early education. Ethics education should be built on strong human value foundation. Ethics education cannot be just hoisted on top of loose foundation. Mutual respect, tolerance and more importantly appreciation for diversity should be developed in all. Then ethical practices will be taken seriously.
- Given all that I have been talking about can there be any doubt that I value an international perspective given to management education?

Before we can answer the main question: whether we have met the challenge
We have to ask: what are the targets?

- Targets are not yet defined. Are we even attempting to define them?
- What is the ultimate target in management education?
- What should we be our goal to reach for next year? Next 3 years? Next 5 years?
- \how far have we progressed?
- How fast can we reach our progress?
- How do we measure our progression towards our targets? Both short term and long term.

I do not see strong and serious discussion on targets to be met- either long term or short term. Piece meal approaches are taken. For example, MBA students at several schools take a few week trips to other countries. What do they do actually to understand the local cultures and business and how far did they progress towards achieving the final target and more importantly what are the final targets for management education are left unsaid. We should begin serious discussion on setting targets for management education, deciding on critical success factors that will help reach these targets, performance measurement systems to measure progress and compare the performances of cohorts.

The People's Republic of China: Recent Economic Performance
And Development Challenges

By Dr. Frank P.C. Fang

I. Recent Economic Performance

(I) GDP Growth

Driven by strong investment, the People's Republic of China (PRC) registered a high economic growth rate exceeding 10 % in the passed four years. According to "Asian Development Outlook, 2007" issued in May 2007 by the Asian Development Bank, the PRC reached an impressionable economic growth achievement in 2006 and the first half year of 2007.

First, let us review the economic performance of the PRC in 2006 from the supply side as follows:

1. GDP grew by 10.7%.
2. Industry contributed 7.0% points, or 65% of total GDP growth.
3. Services contributed 3.2% points, or 30% of total GDP growth.
4. Agriculture contributed 0.5% points, or 5% of total GDP growth.

(II) Factors Contributing to Growth

1. Investment growth

Growth was promoted by economic reforms that led labor and capital more productive. And a favorable economic environment attracted investment from home and abroad.

On the demand side, the China's economy was driven by strong investment that contributed 4.4% points (or 41% of GDP growth). Net exports contribution declined 2.1% points (or 21% of GDP) in 2006, while total consumption edged up 4.2% points (or 38% of GDP).

Foreign direct investment for the year 2006 totaled US $69.5 billion, compared to US$ 72.4 billion in 2005.

As a result of accelerating urbanization, drive of local government, and excess liquidity, investment surged in the first half of 2006. Concerned about overheated economy, the PRC government imposed restrictions on investments on some sectors to cool the economy. Consequently, the growth of fixed asset investment slowed from about 30% in the first half of 2006 to 21% in the second half. The investment slowed sharply in industries that have built excess production capacity, such as textiles, coal mining, and electricity.

To understand the acceleration of economic growth in China, the relationship between investment and industry is the key. The reinvestment of large profits into new industrial activity was perhaps the most important driver. Higher investment led to more capital deepening, labor productivity gains, and GDP growth.

2. Trade growth

Total exports rose from US$ 76.2 billion in 2005 to US$ 96.9 billion in 2006, an increase of 27.2%; total imports increased from US$ 66 billion to US$ 79.2 billion during the same period, an increase of 19.9%. Faster growth in exports than imports boosted the trade surplus by US$ 75 billion to US$ 177 billion in 2006.

The trade surplus came largely from bilateral trades with the United States and European Union (EU) , while trade deficit with the rest of Asia continue to widen.

Processing trade, which involves the assembly and export of imported intermediate items with most inputs exempted from customs tariffs, is the hugest contributor to the trade surplus.

3. Official Reserve Accumulation

The surge in the trade surplus, companied with higher tourism receipts and interest incomes on the large official foreign reserves, boosted the current account surplus to around US$ 227 billion, equivalent to 8.6% of GDP.

In addition, there was a large inflows of foreign direct investment and sharp increase in short-term capital flows into property and stock markets. As a result, the foreign exchange reserves reached US$1.07 trillion by year-end, surpassing that of Japan and becoming the world's largest official reserves holding.

(III) Macroeconomic Management

Inflation slowed to 1.5% in 2006, as a result of the excess production capacity in some industries and strong competition in manufactured products. Food prices rose fast, reflecting the sharp rise in global grain prices. Housing prices in some big cities increased rapidly because of excessive liquidity, speculation, and some structural imbalances in housing supply.

Concerned about overheating in some sectors, the government took several measures to limit credit expansion and to slow investment. The People's Bank of China tightened credit eight times, increasing commercial bank's reserve-requirement ratio, beginning in mid-2006 and continuing to June 2007, from 7.5% to 11.5%; and five hikes in the benchmark 1-year lending rate through May 2007, from 5.58% to 6.57%. These measures are expected to moderate investment growth and cool the economy.

The overall fiscal deficit was narrowed to an estimated 0.4% of GDP in 2006. Revenues rose by 24.3%, helped by gains in incomes and rising corporate profits. Expenditures also rose rapidly, by 18.5%.

Given buoyant private investment, the government reduced its issuance of special treasury bonds used to finance public investment, from the equivalent of about US$10 billion in 2005 to US$7.4 billion in 2006.

In a move to liberalize the capital account, the government allowed PRC residents to purchase foreign securities through the Qualified Domestic Institutional Investors plan.

To decrease the pressure on the CNY (Yuan), the government allowed a slightly faster appreciation of the currency. The trading band of exchange rate fluctuation has been widened from 0.03% to 0.06% daily. As of June 29, 2007, the exchange rate of the Chinese Yuan was 7.6155 Yuan per US Dollar, showing an appreciation of 2.5% over the end of 2005. The Chinese Yuan is projected to appreciate further in the second half of 2007. A total of 5% appreciation is projected in 2007.

Stock market also expanded significantly in 2006. Major domestic banks and companies began to sell their shares to the public. Underpinned by strong economic expansion, the stock market in China is going to the high fever period. As of June 29, 2007, the stock index of Share B in the Shanghai Stock Exchange jumped to 254.981, representing an increase of 96% over the end of 2006.

## II. Economic Outlook for 2007 and 2008

### (I) GDP Growth

The 11$^{th}$ Five-year Program (2006-2010) set the average annual GDP growth rate at 7.5%, but the first year of the program in 2006 registered a rapid GDP growth of 10.7%. Economic growth is projected at 10.8 % and 9.8 % in 2007 and 2008, respectively, higher than the plan targets.

The overheated investment and economy would require the tightening of the overall macroeconomic policy in 2007. The authorities would keep the fiscal deficit below 1.0 % of GDP. And the People's Bank of China will continue its tight monetary policy.

### (II) Investment Growth

With the rising profit growth and ample liquidity in the system, investment will continue to grow at a fast rate that will remain the main driver of growth. Responding to various restrictions, especially those targeted at energy use and pollution, and others curbing property speculation, fixed investment growth is projected to moderate to 20 % in 2007.

(III) Industrial, Trade and Agricultural growth

As a result of tightening measures in investment, and easing export growth caused by softer external markets, industrial growth is forecast to slow to 11.0 % in 2007 and 10.8 % in 2008, compared to 12.5 % in 2006.

Agriculture is expected to benefit from a new policy on rural development. If no serious weather problems, agricultural production would increase by 5.2-5.4 % in the next two years, compared to 5% in 2006.

Services are expected to grow by 10.4- 10.5 % in the next two years, compared to 10.3 % in 2006, supported by government efforts to promote consumptions and expenditures associated with the Olympic games in 2008.

Because of the softening in export markets and a reduction in PRC tax rebates for exports in July 2007, the growth of merchandise exports is projected to decline from 26 % in 2006 to 18 % in 2007 and 16% in 2008. And import growth will decrease to 18 % in 2007 from 22 % in 2006.

The trade surplus in goods will increase to US$ 229 billion in 2007 and US $257 billion in 2008.

(IV) Prices and Inflation

The acceleration in food prices, particularly pork continued in the first half of 2007. In addition, the expected rises in labor costs and higher prices of water, electricity, and fuel will push consumer prices to increase by 3.2% in 2007, compared to 1.5% in 2006.

(V) Macroeconomic Management

Since there is a high starting of GDP growth rate in 2006, higher than the indicative average annual growth of 7.5 % in the 11$^{th}$ Five-Year Program, the government will tighten overall macroeconomic policy in 2007, and take administrative matures to curb overheat investment, and slow the economic growth in the next two years..

The authorities decide to keep the fiscal deficit below 1 % of GDP, and the central bank will continue to use interest rates, reserve ratio, and open-market operations to keep its current monetary policy stance.

In the meantime, reforms will be implemented that may have an influence on the structure of the economy in the medium to long term.

Public investment will increase in priority areas including agriculture, education, and health. Rural areas will get a larger share of infrastructure spending. School fees will be eliminated up to the junior high school. Health care spending will increase by 87% in 2007. These measures should support rural development and stimulate services, leading to increase in urban and rural incomes and private consumption.

### (VI) Medium-Term Prospects

Over the medium-term (2007-2011), GDP growth is expected to average about 9%. During this period, inflation will be higher than it is now, probably about 3 % on average.

Several factors that will affect future growth include domestic investment, inflows of foreign direct investment, export expansion, industrialization, urbanization, monetary and fiscal policies, among others.

Domestic investment is projected to grow to support rapid economic growth. Inflows of foreign direct investment and other capital will finance high investment. Industrialization and urbanization will continue. However, the wide gaps in incomes and in development between urban and rural areas would require government action.

Moreover, large numbers of unemployed and underemployed people would maintain a pressure to the government for many years to generate jobs.

The administrative measures take by the government, including financial reforms, encouraging private sector participation in rural finance, active management of foreign exchange reserves, unification of corporate tax rates, etc., will have a pronounced impact on the development of a market-based economy in China.

## III. Development Challenges

The PRC government had set a target of “five balances” since 2004 to build their “harmonious society.” The “five balances” are going to resolve the imbalances between rural and urban development, interior and coastal development, economic and social development, people and nature, and domestic and international development.

China had a wonderful record of four year of double-digit growth, rising government revenues, low inflation, and a manageable public deficit since 2002. But the authorities believe that a number of corrections are necessary to achieve the "five balances."

To achieve "five balances" is the most important development challenge for the PRC in the coming years. They are briefly discussed as follows:

### (I) Imbalance between Rural and Urban Development

According to the official statistics, per capita income of urban households grew to CNY 10,493 (about US$ 1,300) in 2005, while that of rural households increased to CNY 3,255 (about US$ 407) only. Income inequalities continued to enlarge in 2006. The per capita incomes of urban and rural households were CNY 11,759 and CNY 3,587 respectively in 2006. The ratio between urban and rural nominal per capita incomes increased from 2.9: 1 in 2001 to 3.3: 1 in 2006.

Real per capita household income rose by 7.4% in rural areas in 2006, while 10.4% in urban areas.

The increasing income inequality impedes the growth of private consumption and increases social tensions. Therefore, unemployment and underemployment have become a social problem and attracted serious concerns for policy makers.

### (II) Imbalance between Interior and Coastal Development

Although China had enjoyed high economic growth for several years, different growth rates existed in the interior and coastal areas.

According to "China Statistical Yearbook 2006," the per capita income of Shanghai residents was estimated at CNY 51,486 (about US$ 6,380) in 2005, while that of Beijing was CNY 44,774 (about US$ 5,548), in Sichuan was CNY 8,993 (about US$ 1,114).

The government began a "Go West" campaign in the 1990s by offering lower business tax and investment incentives with an aim to balance development between interior and coastal areas.

The authorities also will take measures in next few years to reform economic development and social security system, for example, establishing a minimum living standard in the interior or rural areas and narrowing down the income gap between interior and coastal areas. However, it will take time to reach their objective to balance the development in the different regions.

## (III) Imbalance between Economic and Social Development

The government views economic rebalancing as not just an economic goal, but as part of an overall strategy to reach “social justice.” The leader of the country decided in 2004 to change the growth pattern from investment-and-export-led to more consumption-led growth. But it seems still getting an overheated economy in recent years. The policy makers reiterated that improving the quality of economic growth and rebalancing the economy would be a priority in the medium- and long-term.

Measures taken by the government included raising minimum wages, reducing income taxes, increasing public spending, and steps needed to contain investment and private consumption.

The government will spend more on rural area and less-developed regions in order to eradicate absolute poverty. The government increased salaries for civil servants in late 2006 to lift their purchasing power.

The government also set a plan for the state-owned enterprises to pay dividends to the state. This would provide financial resources to the government for development of social infrastructure and the social safety net, which is likely to lead to gradually increased consumption spending.

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## (IV) Imbalance between People and Nature

The government tried to induce local governments and enterprises to improve energy efficiency, reduce energy consumption, and cut pollution. In 2006, a decline of 1.2% in energy consumption per unit of GDP was realized, but which was far form the target of 4%.

Furthermore, the government wanted to change industry-led growth to service-led growth. Actually the share of services in total GDP fell from 41.7% in 2002 to 39.5% in 2006. The services contribution to GDP growth fell from 38.7 % in 2001 to 28.7 % in 2006, while the contribution of industry rose from 56.3% to 65.2%. The industry-led growth would requires more energy and natural resources and put a heavy burden on the environment, it may not be sustainable in the longer term.

Restrictive measures of energy consumption, the environment, and land use are going to have a greater impact in 2007 and 2008. The Ministry of Land and Resources plans to stop the use of arable land for construction of buildings, especially for luxury housing and golf courses.

The State Environmental Protection Administration (SEPA) had canceled more than 80 construction projects in the first 2 months of 2007, and decided to suspend project approvals for any region, sector, or large enterprises if the project violates the

SEPA’s standards on energy consumption and pollution.

### (V) Imbalance between Domestic and International Development

China has adopted export-oriented development strategy in the past decades and is now the world’s third largest trading country, next to the United States and Germany. China has become the world’s factory, producing and exporting a variety of products to almost every market around the world. Foreign trade has grown annually at an average rate of more than 20 %. External trade as a proportion of GDP rose from 42 % in 2002 to 66 % in 2006. Large trade surpluses have sparked trade friction with the United States and European Union, and resulted in rapid accumulation of foreign exchange reserves.

As China’s dependence on external trade for growth is high, there is a need to rebalance the economy by reducing the emphasis on exports, and give priority to promote private consumption and services, with ab aim to balance domestic and international development.

## IV. External Economic Relations

China is one of the most open and trade-oriented nations in the world. The country is now the world’s factory and a growing market for the world. It has enjoyed an increasing trade surplus since 1990. China’s trade surplus with the United States hit a record high of US$ 232.5 billion in 2006. Large bilateral trade surplus has sparked trade friction between the US and China.

The rapid growth of China has attracted substantial inflows of foreign direct investment (FDI), accounting to US$ 69.5 billion in 2006. FDI inflows have mainly come from Hong Kong, Taiwan, Japan, Korea and the US. In addition, there have been greater inflows of short-term capital, attracted by the expectation of the Yuan’s appreciation against the US dollar over the past two years.

China’s accession to the World Trade Organization (WTO) in December 2001 has important impact on its economy and its trade competitors and partners. Under the China’s commitments with the WTO, the Government abolished its formal trade plans, decentralized the conduct of trade, lowered import tariffs, removed foreign exchange control for current account transactions, and undertook necessary structural adjustments. In addition, the monetary authorities also lifted their geographic and consumer restrictions on foreign banks by the end of 2006. Today, a total of 177 foreign banks have set up branch offices and are doing business in China.

In view of the ever increasing trade surplus and rapid accumulation of foreign exchange reserves, as well as the pressure from the US and European Union, the People's Bank of China on July 21, 2005 announced that it would no longer peg the Yuan to the US dollar but would manage its exchange rate based on market supply and demand with reference to a basket of foreign currencies, dominated by the US dollar, euro, yen and won. The Central Bank also revalued the Yuan by 2.1% to CNY 8.11 to US$ 1. The Chinese Yuan is expected to appreciate further in the second half of 2007 and 2008.

The continuing appreciation of the Chinese Yuan will help reducing global imbalances. A moderating impact on China's exports and investment in export industries are also expected. The growth of merchandise exports is projected to reduce from 26 % in 2006 to 18 % this year. However, Chinese products remain competitive in the world market.

During the 11th Five-Year Program period (2006-2010), the Government plans to further integrate its economy into the world economy by raising the level of openness to the outside world, developing foreign trade, bringing about a basic balance of imports and exports, promoting efficient use of foreign capital, and encouraging qualified enterprises to go abroad. It is expected that control and restrictions on capital account transactions will be liberalized by phase, the money and capital markets will be developed further, and the financial sector will be liberalized and globalization.

## V. Concluding Remarks

In conclusion, China, as an important importer of primary commodities and raw materials as well as a major exporter of manufactured goods, will have a very important role to play in the world economy. While the Chinese economy is projected to continue to grow rapidly in the coming years, its capacity to sustain future economic development is being challenged by a number of imbalances. Major risks include: the weakness of the banking system, shortage of energy, large unemployment and underemployment, imbalances in industrial structures, rural poverty, among others.

The challenge in the PRC is to diversify growth and spread its benefits more widely. However, there are constraints that will require a variety of institutional and policy adjustments in economic, financial and fiscal areas. In my view, China will maintain a high rate of growth in the medium-term. It will become one of the largest economies and major economic power in the world, and hold out a number of substantial benefits for developing Asian countries and the rest of the world.

Thank you.

Table 1 PRC: Key Economic and Financial Indicators

| Item | Unit | 2005 | 2006 | 2007* | 2008* |
|---|---|---|---|---|---|
| Nominal GDP | CYN billion | 18.39 | 20.94 | -- | -- |
| Nominal GDP | US$ billion | 2.24 | 2.63 | -- | -- |
| Real GDP | % change | 10.4 | 10.7 | 10.8 | 9.8 |
| Per Capital GDP | US$ | 1,716 | 1,997 | -- | -- |
| Gross Domestic Investment | % change | 43.3 | 44.9 | -- | -- |
| Industrial Production | % change | 16.4 | 16.6 | -- | -- |
| Consumer Prices | % change | 1.8 | 1.5 | 3.2 | 1.7 |
| Exports | US$ billion | 76.2 | 96.9 | -- | -- |
| Imports | US$ billion | 66 | 79.2 | -- | -- |
| Trade Surplus | US$ billion | 10.2 | 17.7 | 22.9 | 25.7 |
| Foreign Direct Investment | US$ billion | 72.4 | 69.5 | -- | -- |
| Gross Official Reserves | US$ billion | 818.9 | 1066 | 1356 | -- |
| Exchange Rate (end-period) | CYN/US$ | 8.0702 | 7.8087 | 7.6155** | -- |

Notes:

* forecast ** As of June 29.2007.

-- = not available

Sources:

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# How to Establish a B-to-B Brand With Oligopoly Strategy – A Study of Wintek Corporation

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and

Jen-Hung Huang

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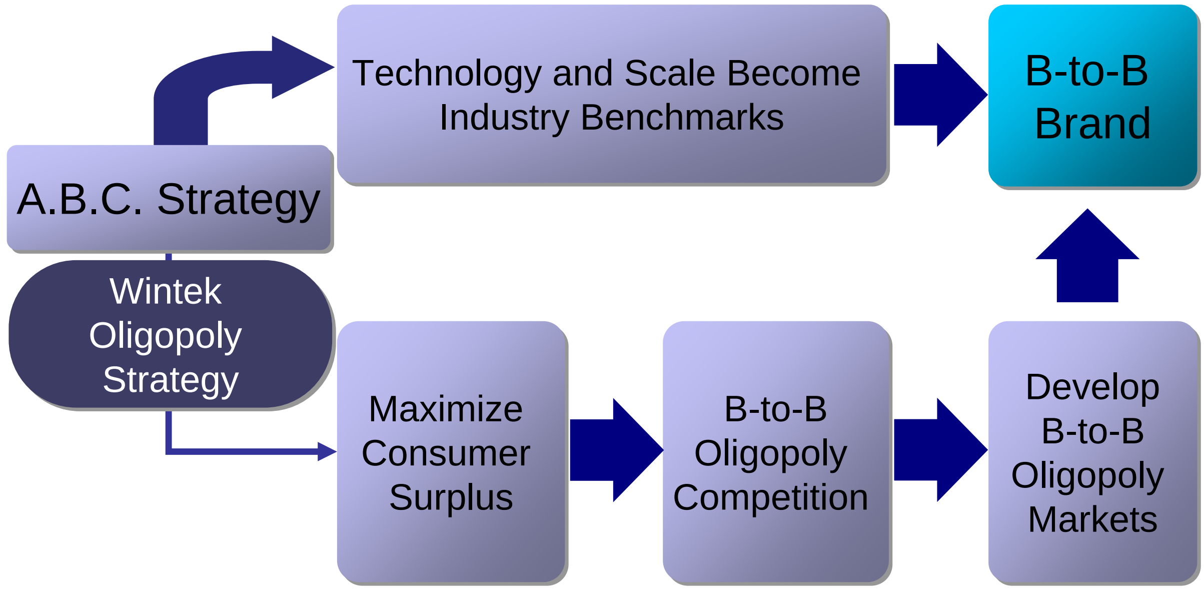
The 15th annual Conference on
Pacific Basin Finance, Economics, Accounting and Management

## Introduction

**Technology is borderless. Fueled by the 150 billion dollar market for personal computers and 100 billion dollar market for mobile phones, technology brands are becoming a new force in the world. The rise of the global economy and Internet over the past twenty years has made brands more influential than any time in history. It is undeniable that technology has had a major hand in the growth of the global society over the past twenty years. Amidst this wave of change, technology companies are now occupying a different market position than they have in the past. Oligopoly strategy encourages companies to throw off the chains of competition and shift their focus away from their competitors, By moving outside of the price cutting red ocean, companies enter high value added and high profit niche markets. Oligopoly strategy is the best strategy for building brands. From another perspective, successful brand strategy can also create oligopoly markets and realize the oligopoly strategy.**

※ **B-to-B Mainly Offers Customer Competitiveness**

※ **From Oligopoly Strategy to B-to-B Brand**






# How to Establish a B-to-B Brand

**Technology and Scale are Industry Benchmarks:**

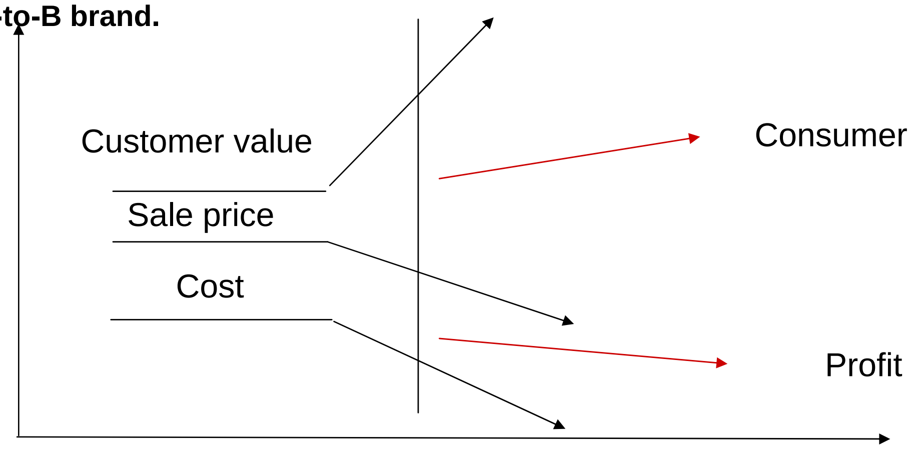
**A B-to-B company can share technology field with company brand by developing technology and scale to industry benchmark levels and this also brings brand value to the company.**

**For example, Intel usually comes to mind when thinking of CPUs. When one thinks of small to medium mobile phone display suppliers, one thinks of suppliers such as Epson, Samsung, Sharp and Wintek. Wintek Corporation is a leading company in the small to medium STN and CSTN mobile phone panel field. In fact, the name "Wintek" has become the representative brand in the industry.**

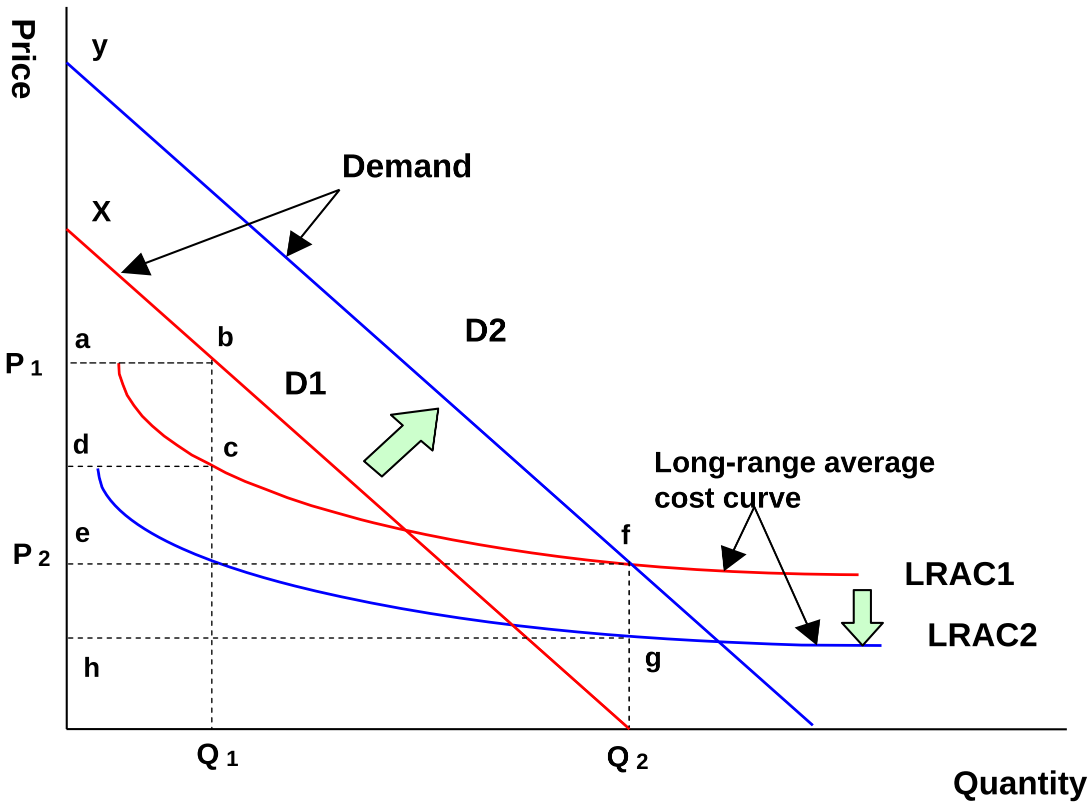
# How to Establish a B-to-B Brand

## Maximize consumer surplus:

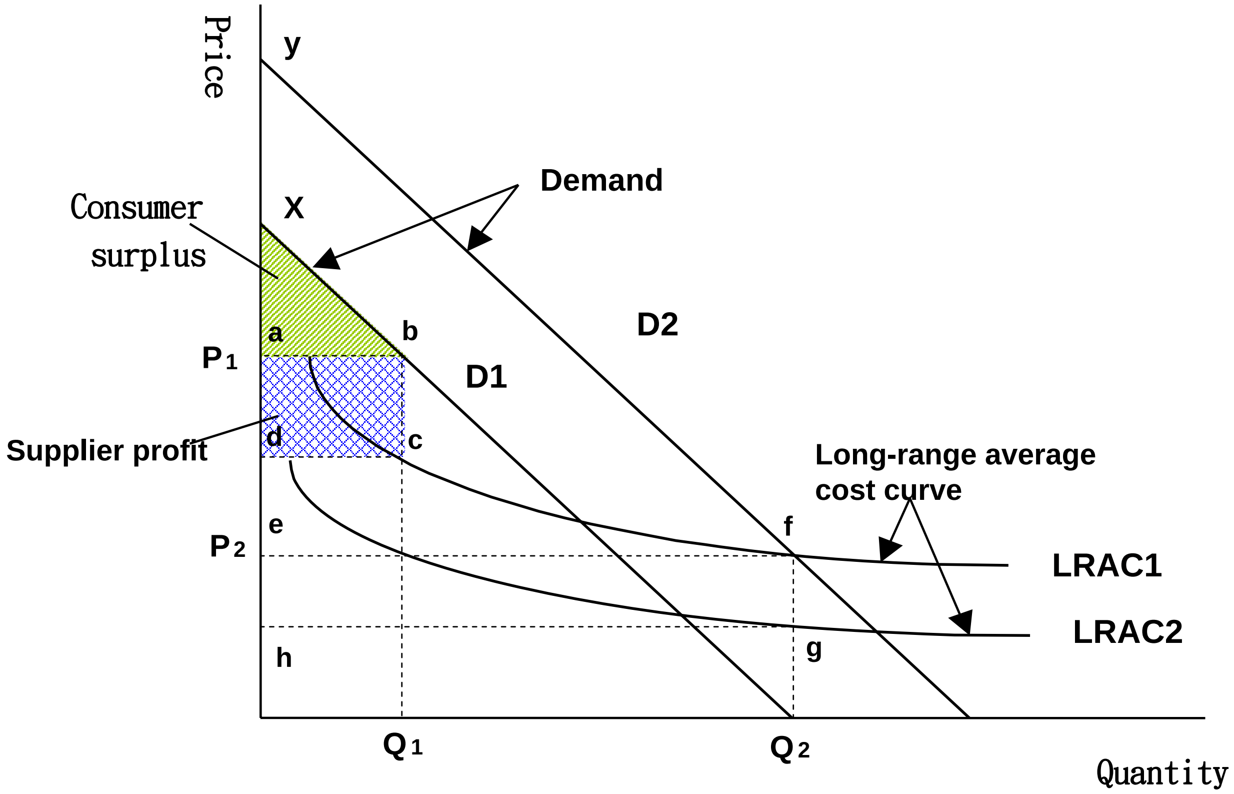
- B-to-B oligopoly definition – Selected qualified suppliers of dominant company.
- When the consumer surplus reaches the industry benchmark, the company easily becomes selected qualified supplier of dominant companies. Once the company becomes one of these few suppliers, the company can then develop B-to-B oligopoly markets and build a B-to-B brand.






資料來源：藍海策略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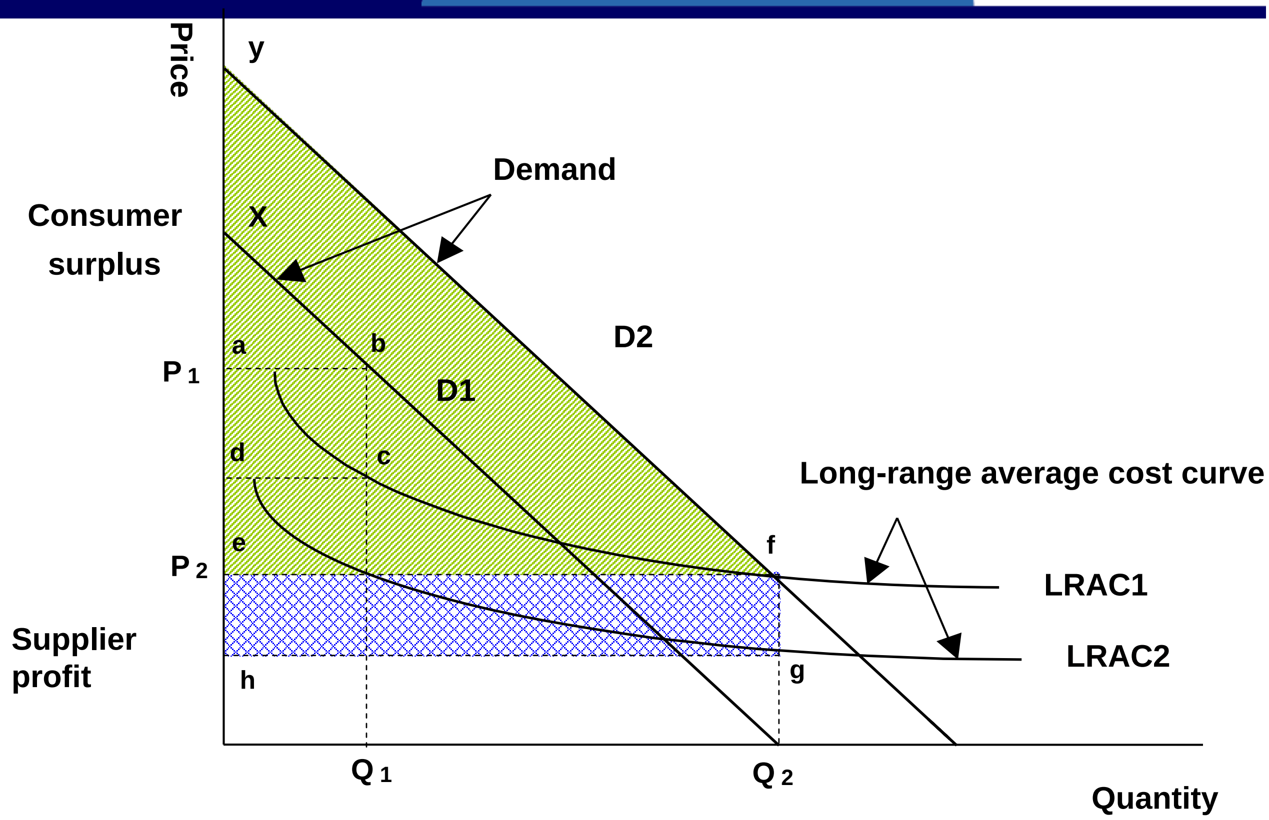
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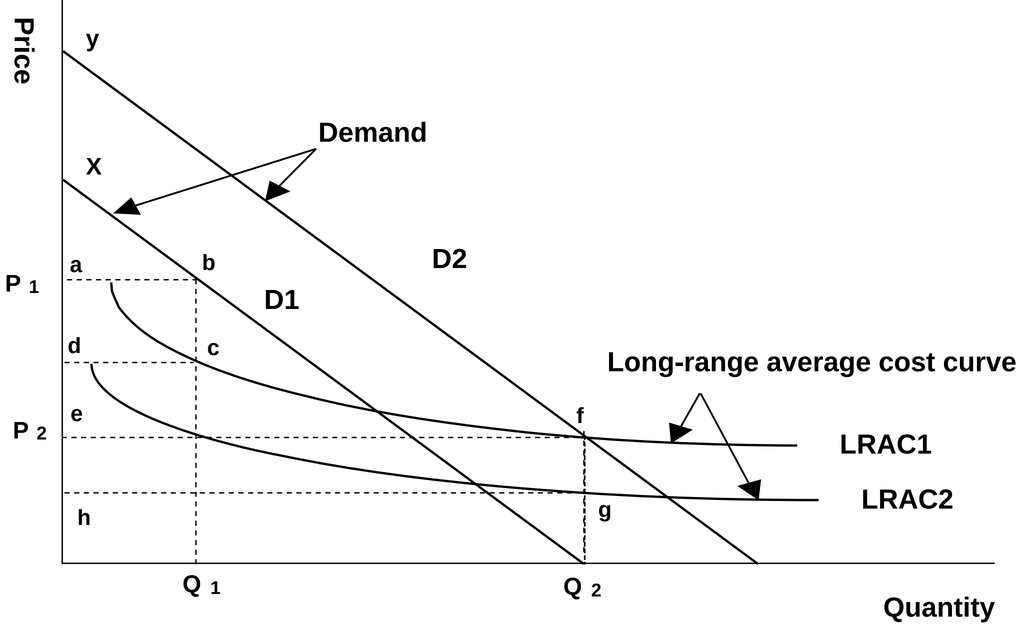



- **D1 ⟶ D2**
- **LRAC1 ⟶ LRAC2**
- **P1 ⟶ P2**
- **Q1 ⟶ Q2**
- **Profit abcd ⟶ efgh**
- **Consumer surplus Xab ⟶ yef**

資料來源：朱博湧整理



# Wintek oligopoly Strategy

1.Establishing core competency through knowledge management

– For sales, technology, product, service, system, management, finance and assets.

➔ Increase customer value, reduce cost

2.Core vertical integration

➔ Increase customer value, reduce cost

3.Dominant products

➔ Increase customer value, reduce cost

## Establishing core competency through knowledge management



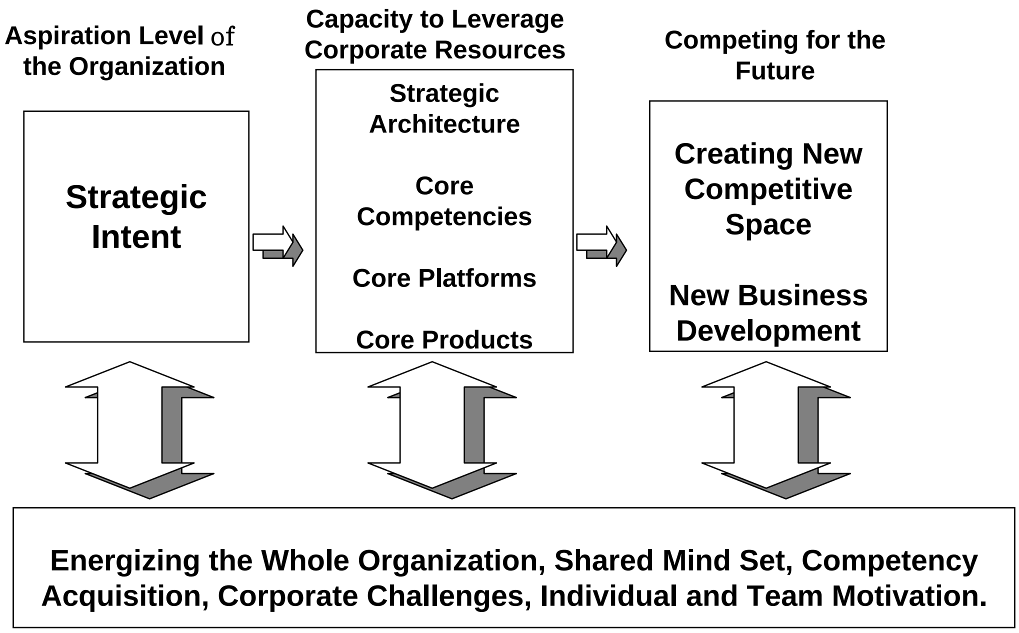
## Strategic Architecture Concept

Using the strategic architecture process, companies can reconceptualize the marketplace and redirect future business development by determining what core competencies are needed to establish a blueprint for future development.

When the strategic architecture is put into place, all personnel in the organization clearly understand how various resources are allocated to create shared goals for everyone in the organization.

Strategic architecture processes allow the company to overcome the technical barriers in building or acquiring core competencies. The critical technology, which can be obtained through attracting talent, independent development, licensing or business alliances, is then integrated into a core competency that is capable of creating value for the customer.

## CORE COMPETENCY MANAGEMENT




(Hamel & Prahalad 1989, Hamel & Prahalad 1990)



# Core Competency Business Concepts

## Prahalad and Hamel core competency business thinking

Core competency of an organization is “organization-wide knowledge especially technology that organizes different product skills and integrates different trends.”

Core competency is comprised of the skills and knowledge from various departments in the organization. It is cross-functional work that involves personnel and functions from many departments and levels of the organization.

Companies should first develop core competencies and then expand the range of products (business units) that employ these core competencies.

# Five Characteristics of Core Competency

*Core competency is group learning in an organization.*

*Core competency organizes different skills and integrates related technology throughout the organization.*

*Core competency is communication, participation and dedication across department lines (organizational levels).*

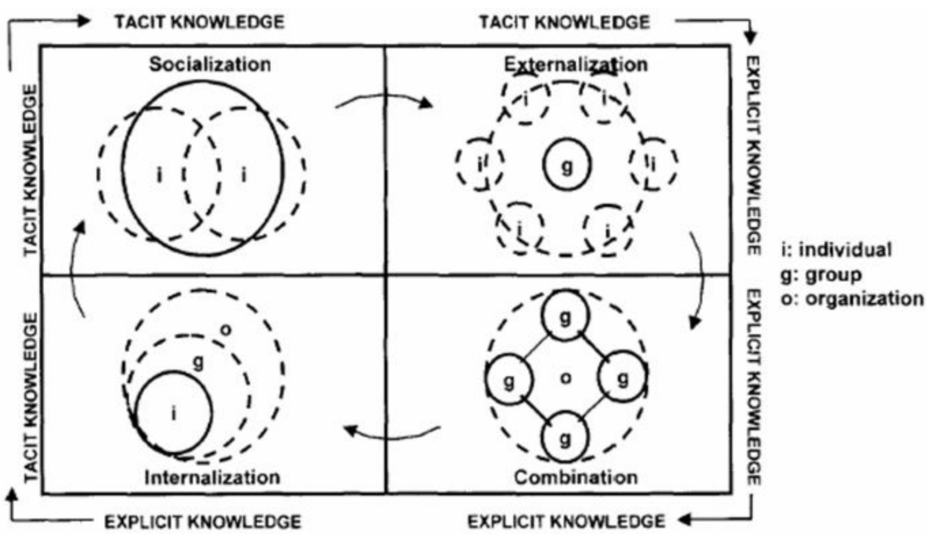
*Core competency is not used up like a tangible asset. Core competency focuses on application and sharing or customer requirements.*

*Core competency acts as an adhesive between business units and a driving force for future new businesses and should be combined with business strategy.*



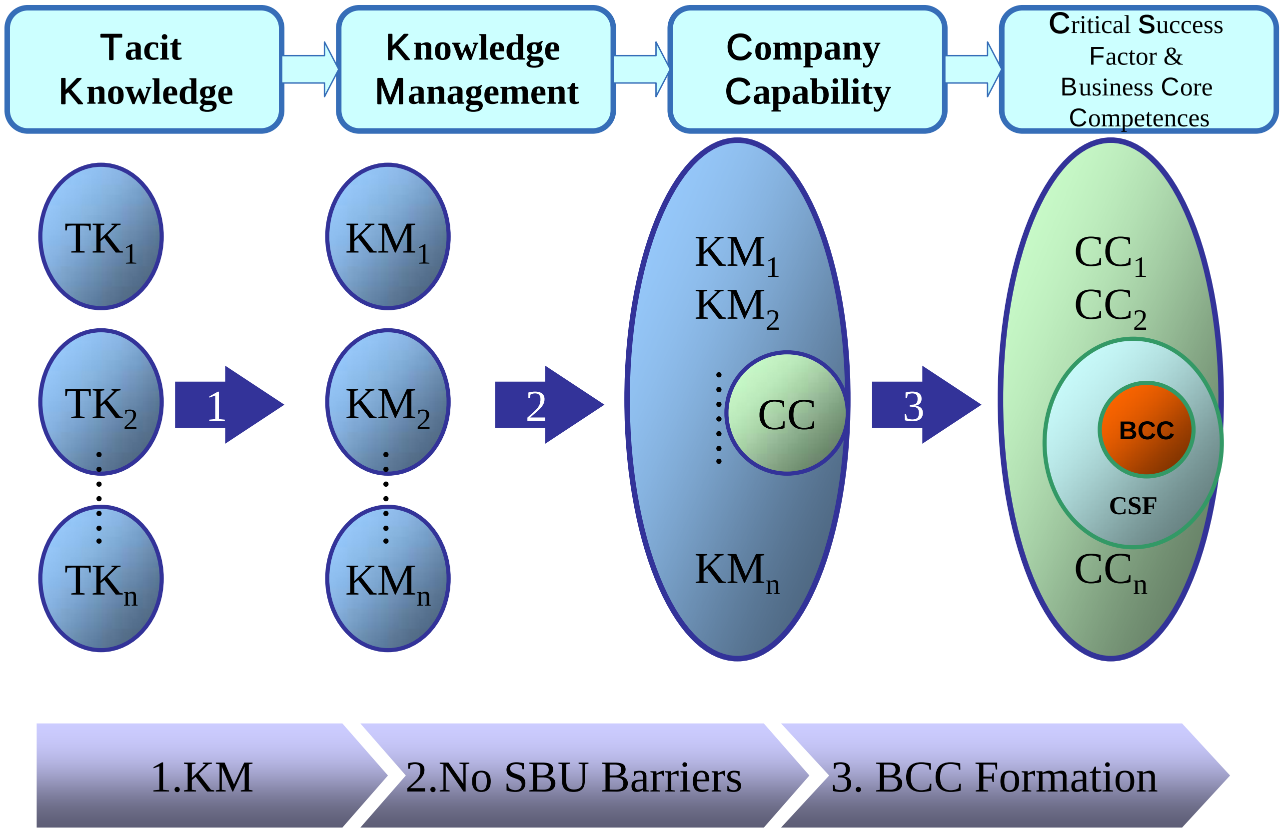
**Knowledge management**

**-Knowledge spiral**



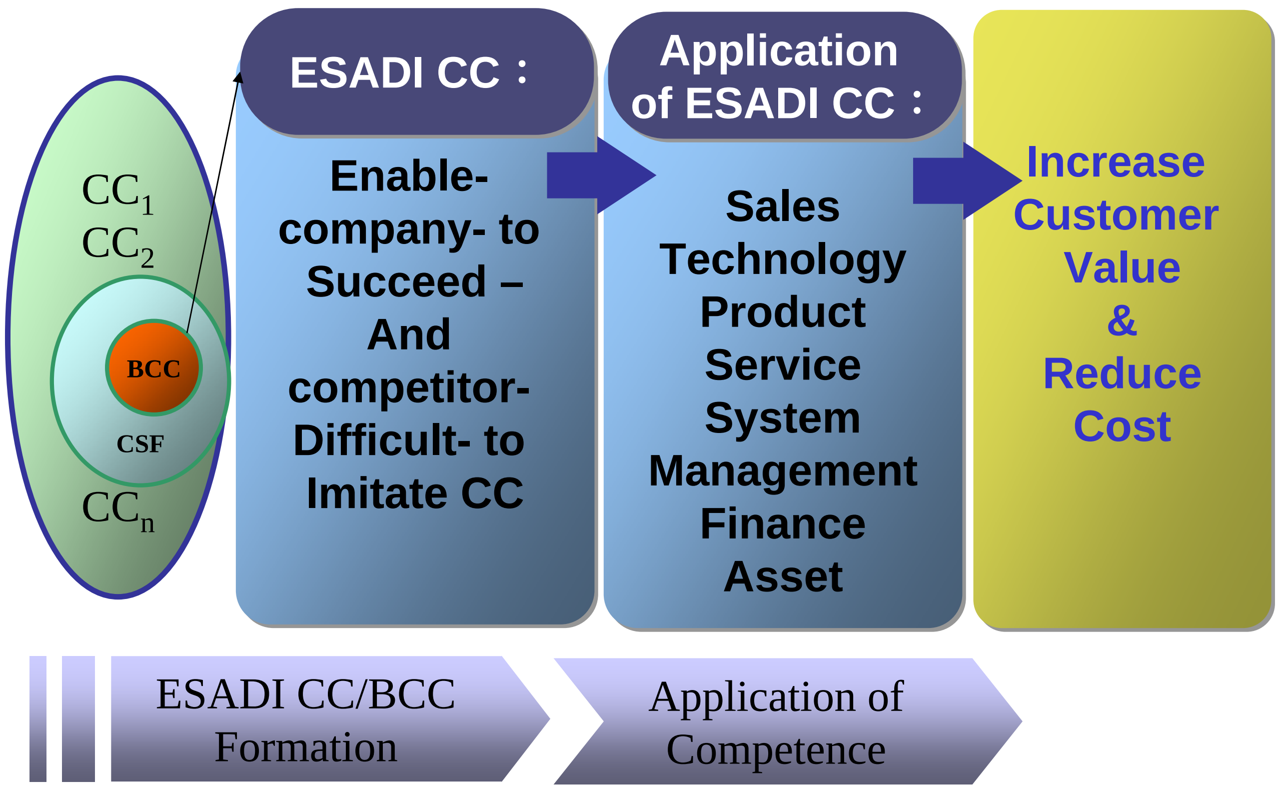

(Nonaka, 1991, 1995)

## The Process of Business Core Competences





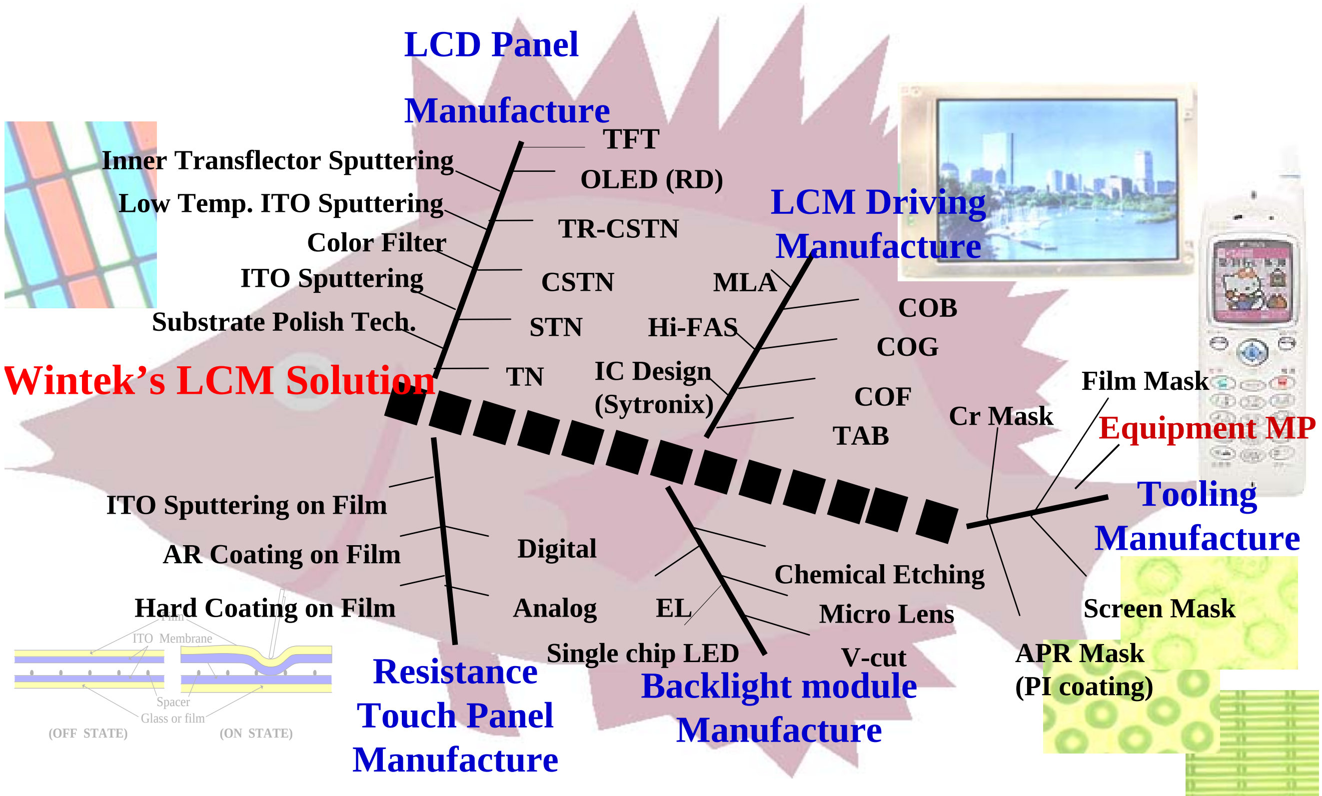

## Application of ESADI CC



# Core Vertical Integration



# Vertical Integration - Total Solution for Customers

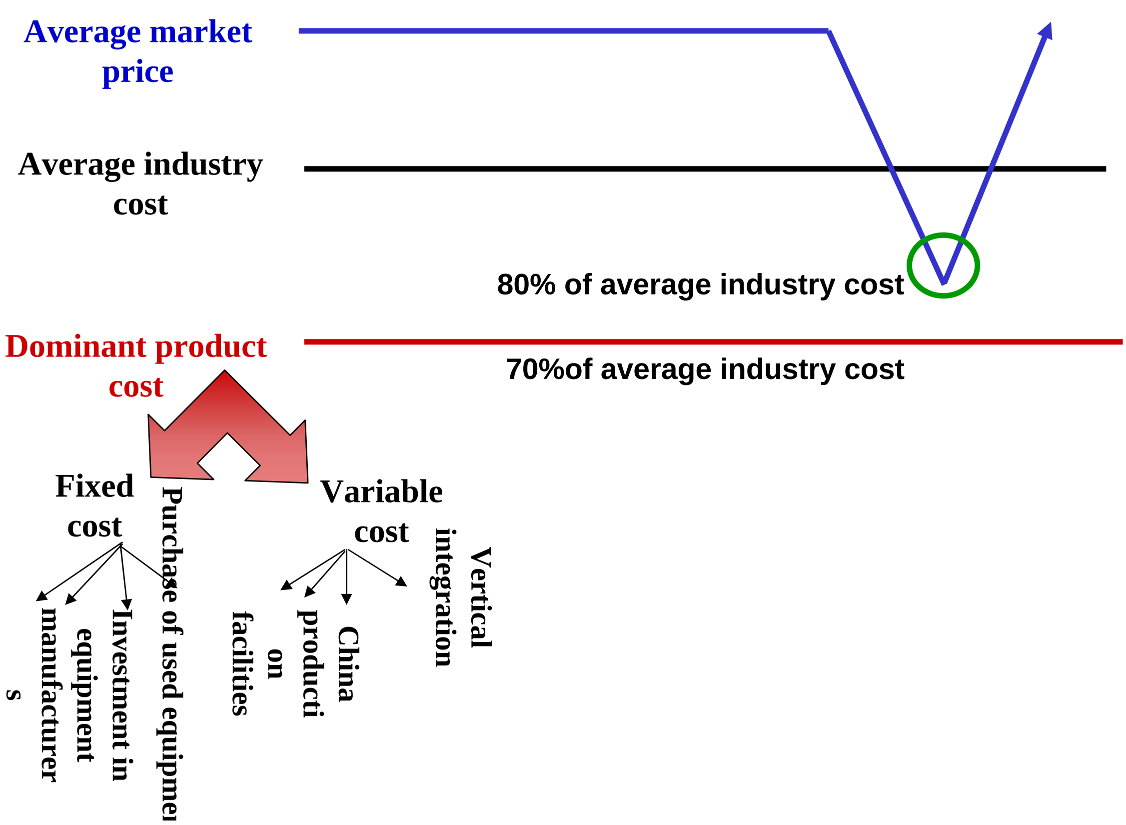



**Total solution for customers**

# Dominant products, dominant strategy

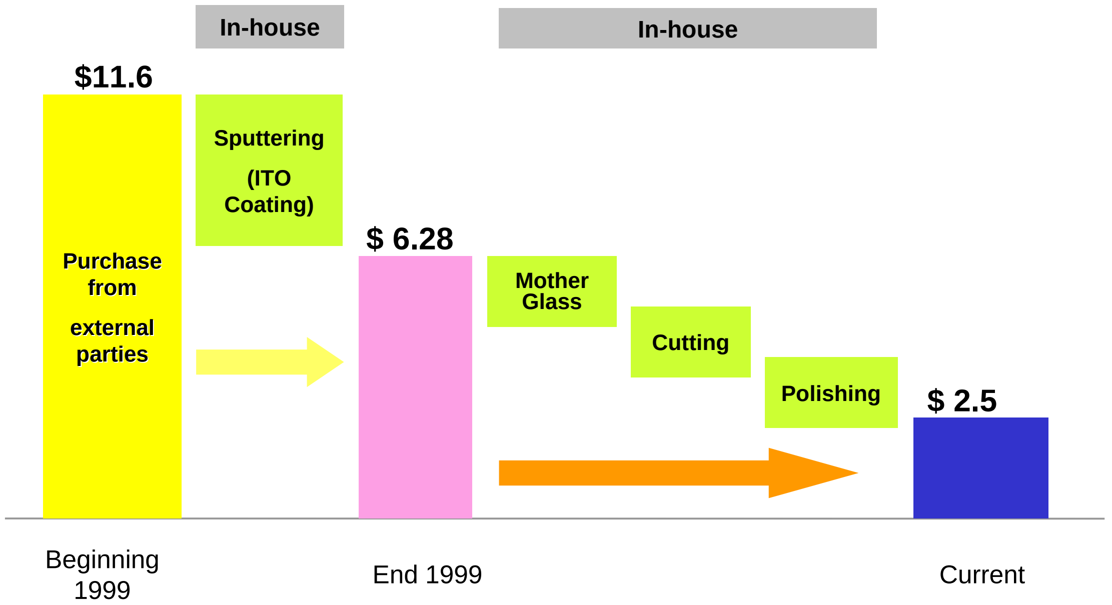
# Imbalance advantage





## Background Information – Vertical Integration

### Savings from in-house 0.5mm (300mm*350mm) ITO glass production (in USD)

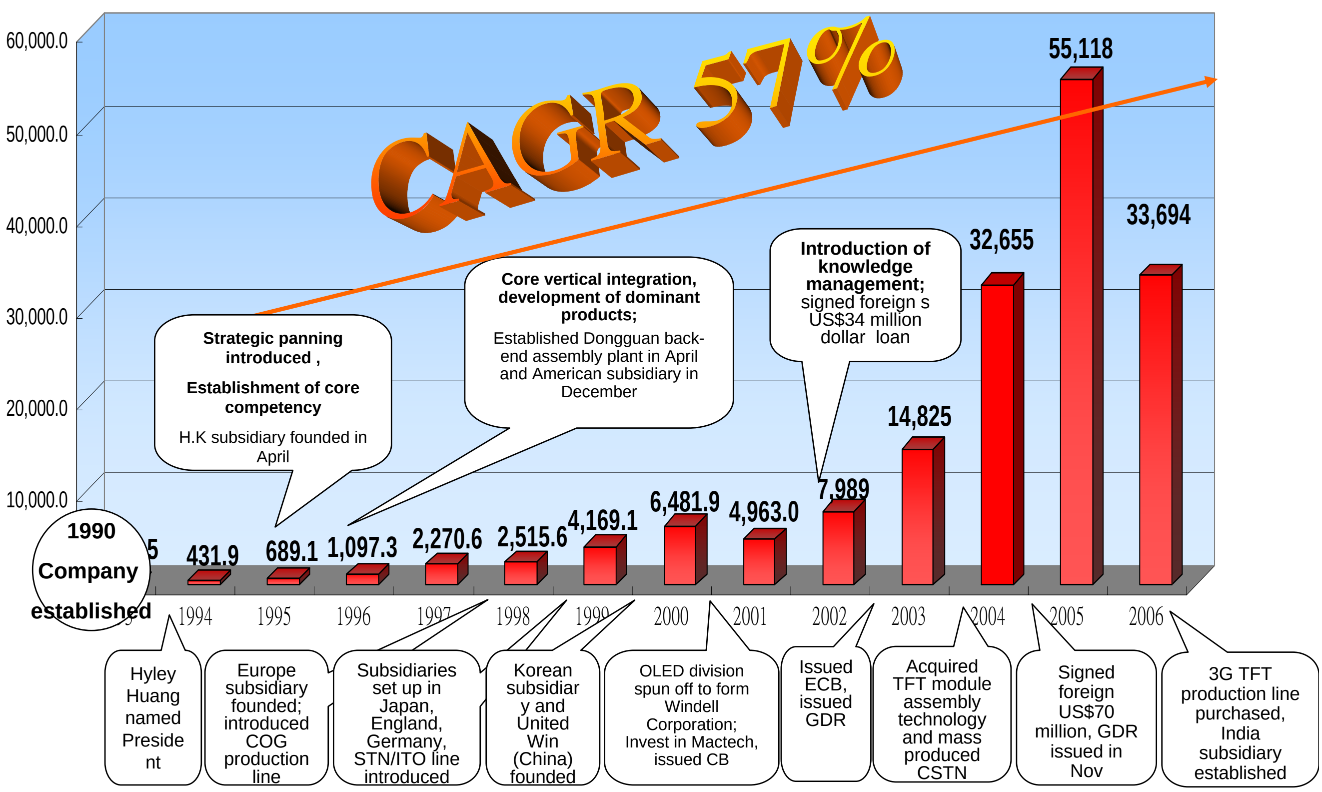



Note: Current conditions: Externally purchased ITO conductive glass costs US$7. Cost of self-manufactured ITO conductive glass is US$2.5.



## *Net Sales and Major Investment Milestone*

Unit:$Million



# Conclusion

Wintek's oligopoly strategy increases customer value, reduces cost, raises entry barriers of price and cost for other competitors, and has made Wintek into one of the selected qualified suppliers of dominant company.

Wintek continuously creates oligopoly strategy for an improved future has also made Wintek's technology and scale into a benchmark of the industry which in turn BUILDS WINTEK'S B-TO-B BRAND.



# The End

# *How To Establish a Global B-To-C Brand With Limited Resources*

*--- A Case Study of Aiptek Int'l Marketing & Branding Strategy*

Peter Chen

CEO of Aiptek Inc.

PhD. Candidate of NCTU. Taiwan

July 20th, 2007

AIPTEK

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I Four Alternatives To Establish a Global Brand

II Introduction of AIPTEK

III The Disruptive Marketing & Branding Strategy

IV Generation Change

*---- The Exceptional Opportunity for New Brand*

V. The Global Economic Mega Cycle

*---- The Exceptional Opportunity for Asia Pacific*

AIPTEK

## I. Four Alternatives to Establish a Global Brand

| | USD$ 3B | USD$300M |
|---|---|---|
| 30 Years | I. Deep Pocket | III.. Disruptive Innovation+BRIC/ASEAN |
| | *SONY*<br>*Kodak*<br>*Coca Cola* | AIPTEK Way |
| 3 Years | II. Fast But Risky | IV. Internet Cyber-World |
| | M & A | ⊕ Disruption Service / Business Model<br>-- *Google / Amazom / YouTube…* |

(Data Source: Peter Chen, 2007)

AIPTEK

## I Introduction To Aiptek

Established in 1997

IPO Date: Jan 14 , 2003(#6225)

Capital : NT$ 2.3B

Main Business ：

--- 手寫數位板(Tablet)

--- 數位相機(DSC)

--- 數位攝影機 (DV)

Human Resources：

--- 220 人(HQ) / 1200人(GROUP)

H.Q. – Science Park, HsinChu ,Taiwan

Subsidiaries – US(CA), Europe (Germay), China(WuJiang/Shanghai)

ISO 9001 ：2000 Certificated By TUV

AIPTEK

# Product Portfolio


AIPTEK

# III. The Disruptive Marketing & Branding Strategy

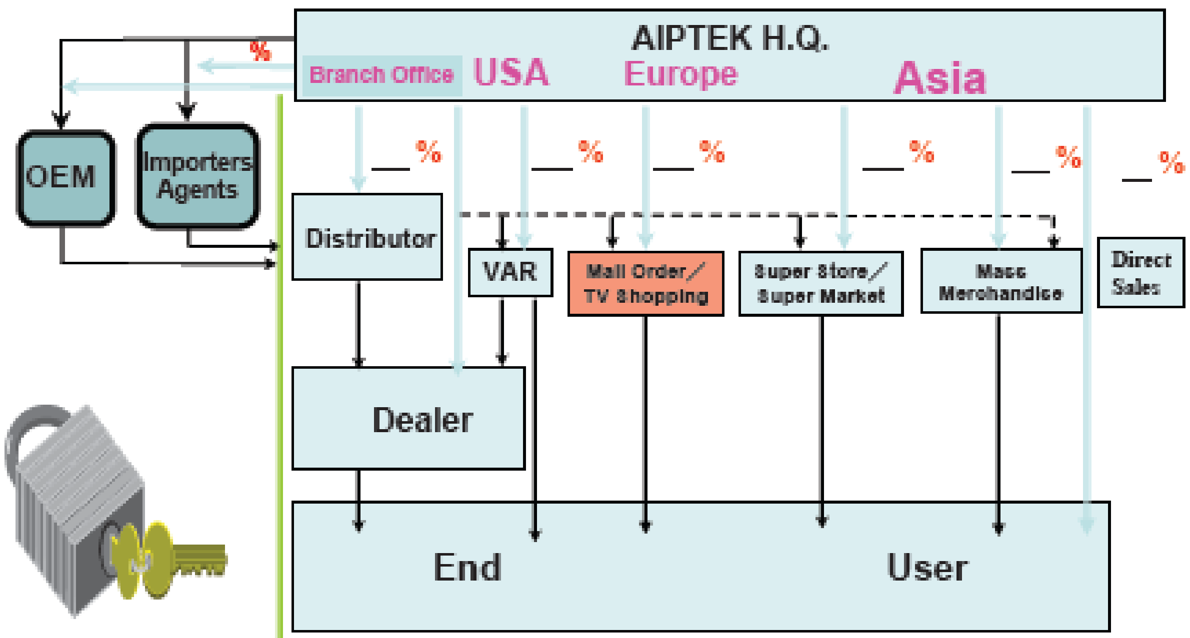
AIPTEK

# AIPTEK —NO#1 Pocket DV Brand

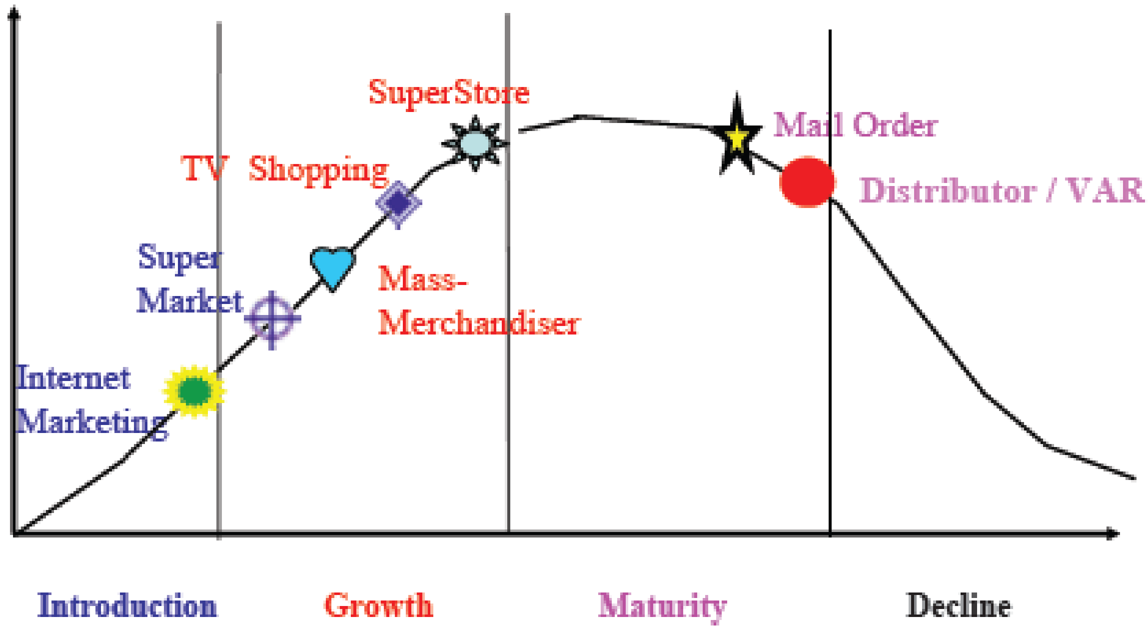
"King of Market Segment "

| | |
|---|---|
| ⊙ Main Frame | --IBM |
| ⊙ Super Computer | --Cray |
| ⊙ Mini Computer | --DEC |
| ⊙ Workstation | --SUN |
| ⊙ Desktop PC | --Compaq / Dell |
| ⊙ NB | -- **Dell** |
| ⊙ PDA | --Palm |
| ● MobilPhone | --Nokia |
| ● PDA+MobilPhone | -- HTC |
| ● **Laser Printer** | --HP |
| ● Color Printer | -- Epson |
| ● Scanner | -- **HP** |
| ● DSC /DV | --Canon/Sony |
| ● **Pocket DV** (DSC+DV) | --**AIPTEK** |

# 通路策略（Channel Strategy）



## CE Product Channel Life Cycle




AIPTEK

## AIPTEK Business Partners

--World Major Retailers(50,000 Outlets)--

| OBM | OEM/Private Label |
|---|---|
| 1. 全球第一大百貨連鎖店(Walmart) & US NO#2 Superstore- Target | 1. 德國第一大電子產品進口商 |
| 2. 美國第一大電腦連鎖店(CompUSA) | 2. 歐洲前三大電腦週邊進口商 |
| 3. 美國第一大3C連鎖店(BestBuy) | 3. 美國前三大相機公司 |
| 4. 美國第一大相機連鎖店(Ritz) | 4. 美國前三大望遠鏡專業廠商 |
| 5. 全球第一大ISP(AOL) | 5. 美國前五大PC廠商 |
| 6. 全球第一大網路書店(Amazon) | 6. 大陸第一大PC廠商 |
| 7. 美國第一大3C產品電視購道(HSN) | 7. 大陸第一大Scanner公司 |
| 8. 德國第一大電子郵購目錄(Conrad) | 8. 大陸第一大排版系統公司 |
| 9. 歐洲前三大百貨連鎖店(LIDL) | 9. 大陸第一大手寫板公司 |
| 10. 德國第一CERetailer(MediaMkt/Saturn) | 10. 港台第一大中文辨識公司 |

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## AIPTEK PocketDV -- Live Demo *in 1600 Target Stores*

-- Q4, 2006


AIPTEK

## Circuit City – *USA NO#2 CE Chain Store*


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# Best Buy – *USA NO#1 CE Chain store*


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# Walgreen --V33F → V3T

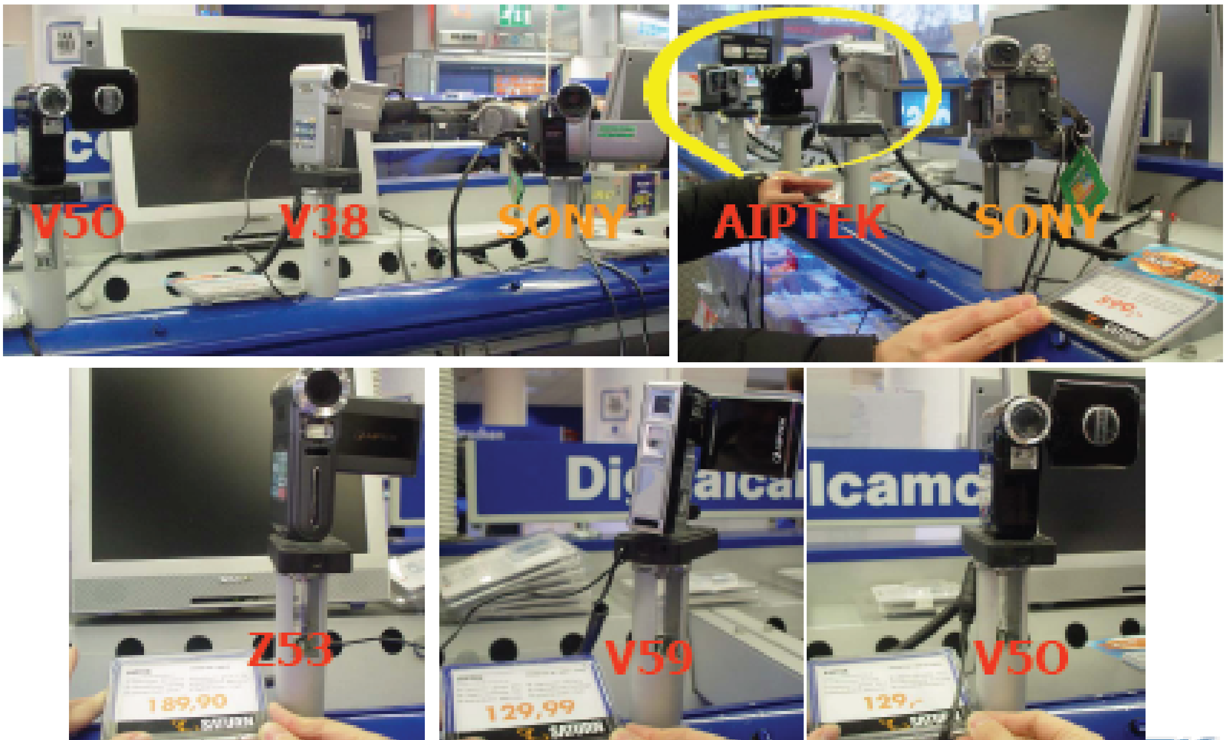

AIPTEK

# Cebit 2006


AIPTEK

SATURN GEIZ IST GEIL!

(Germany Major Retailer)

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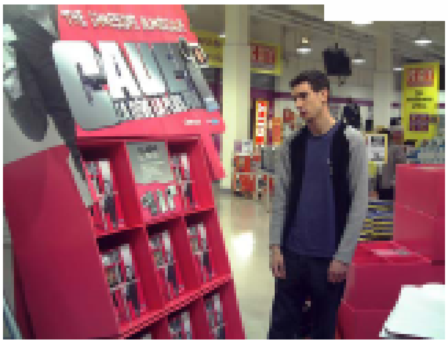
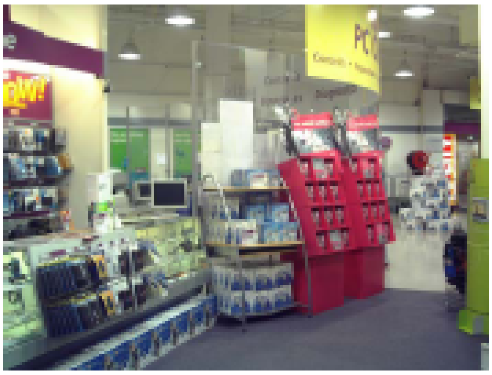
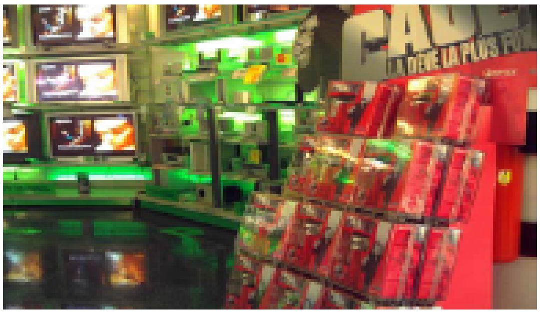
**AIPTEK PocketDV** **(France)**

Carrefour



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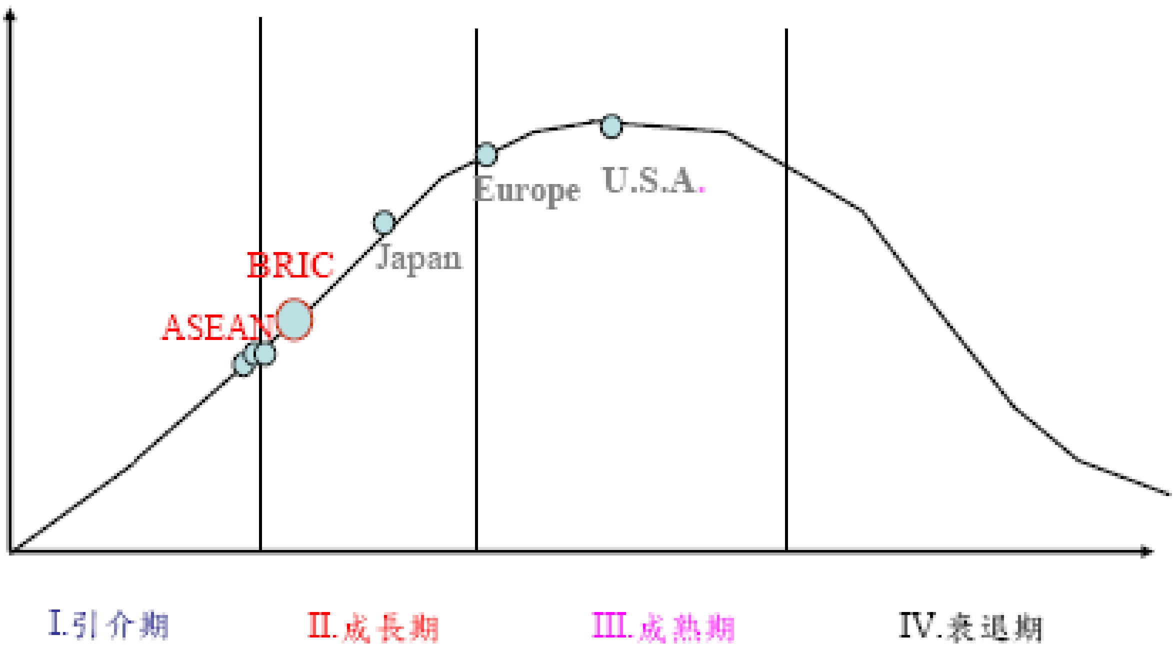
## Market Life Cycle (MLC)

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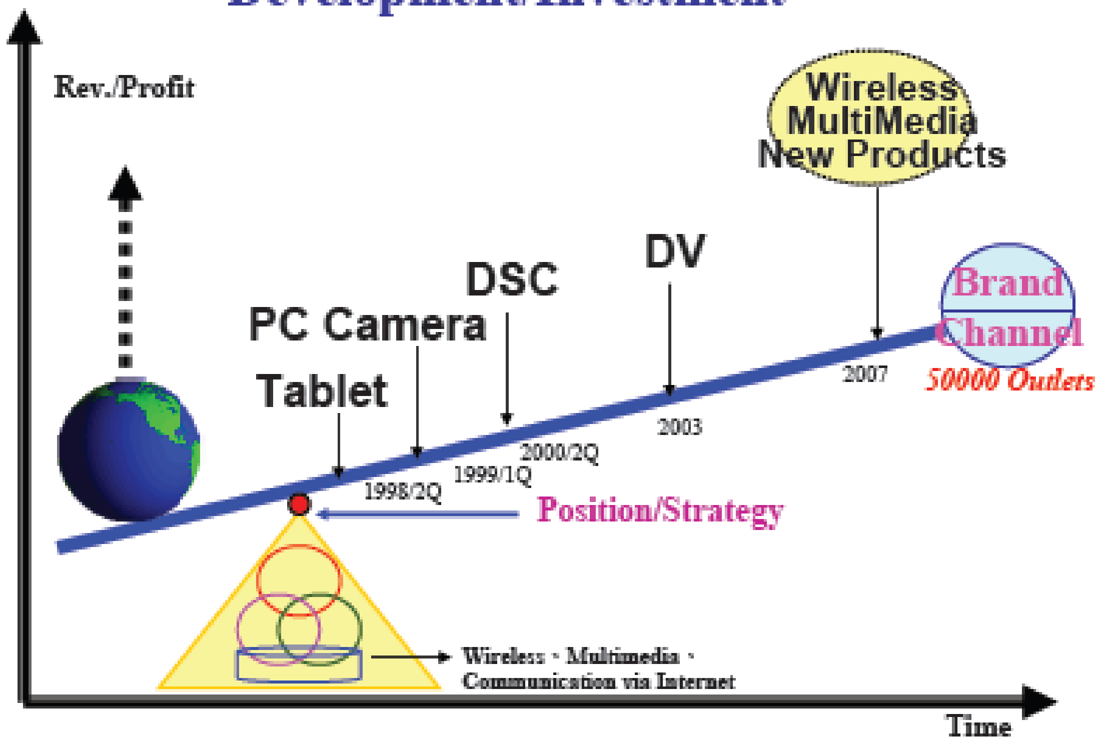
# BeiJing


# Leverage The Channel and Brand Development/Investment



# IV. Generation Change

---- *The Exceptional Opportunity for New Brand*

AIPTEK

## Generation Change Create Exceptional Opprtunity For New Brand

- **Stable Industry ---** Tier 1 Brands Dominate

  -----Almost Impossible to change the Rank

- **Generation Change ---** *No Dominator Yet*

Walkman (Tape) → Apple iPod (HDD)

35mm Camera → DSC → V8/DV → HDDV

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# Next Generation -TV (AV-Output)

**Black & White**
**1940**

**Color**
**1960**

**HD TV**
**2005**

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# Next Generation – (AV-Storage)

Beta/VHS

LD

VCD/DVD

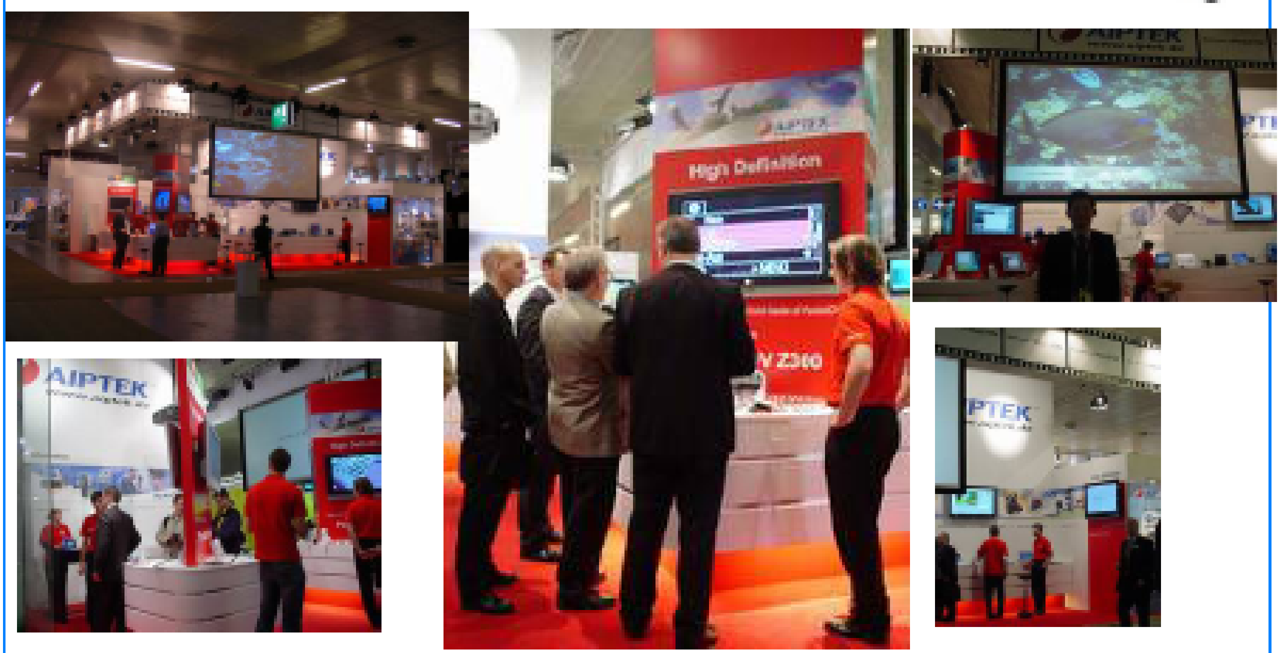
BD/HD

AIPTEK

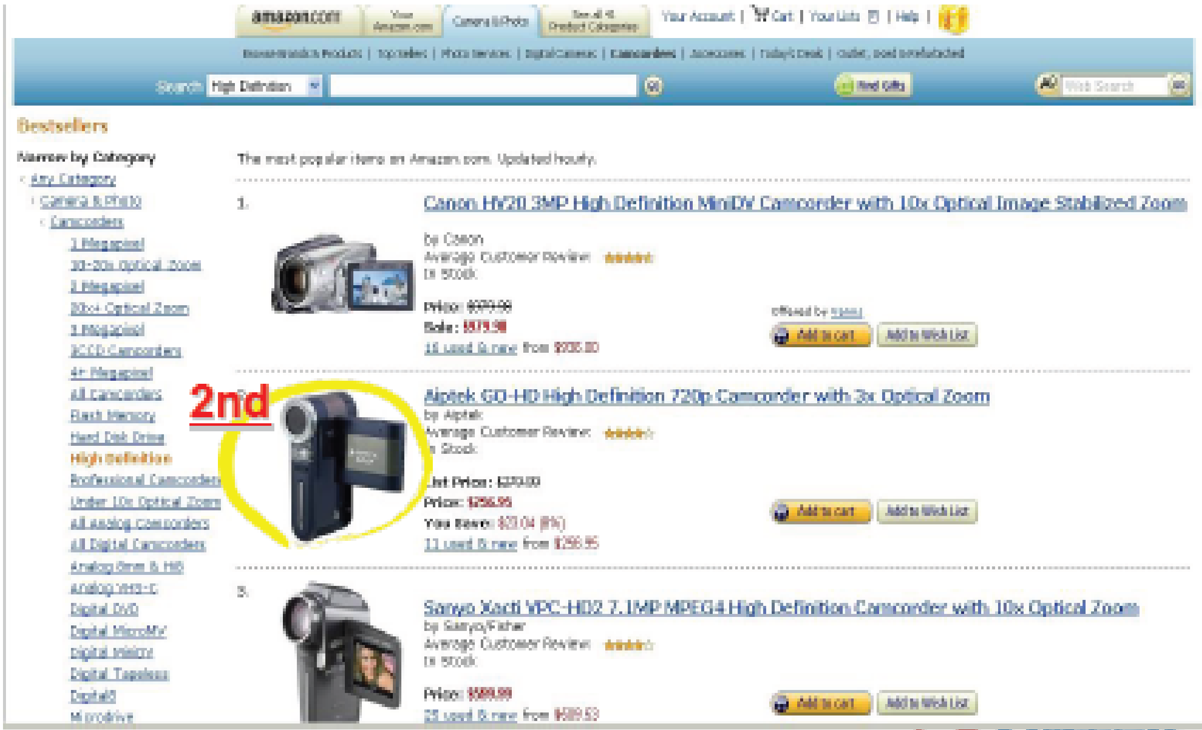
# Next Generation – ( AV-Input)
## -- (Aiptek) High Definition DV


# AIPTEK-- Cebit 2007

*(World First High Definition DV Under $299)*



# Aiptek Go-HD ranks as 2nd bestselling HD camcorder at Amazon.com




# KSF of Future Consumer Product

*---- Hint from the success of iPod and Wii---*

I Simplicity & User Friendly (Wii ↔ PS/3 )

II Natural User I/F

*0- Manual*
*1- Button*
*2- Step*
*3- Click*

III Design/ ID

## ~ The Economy of Aesthetics ~

I IQ → EQ → AQ

II Digital (America) VS. Analog (Europe)

- Wintel(Microsoft/Intel)
- Google/Amazon

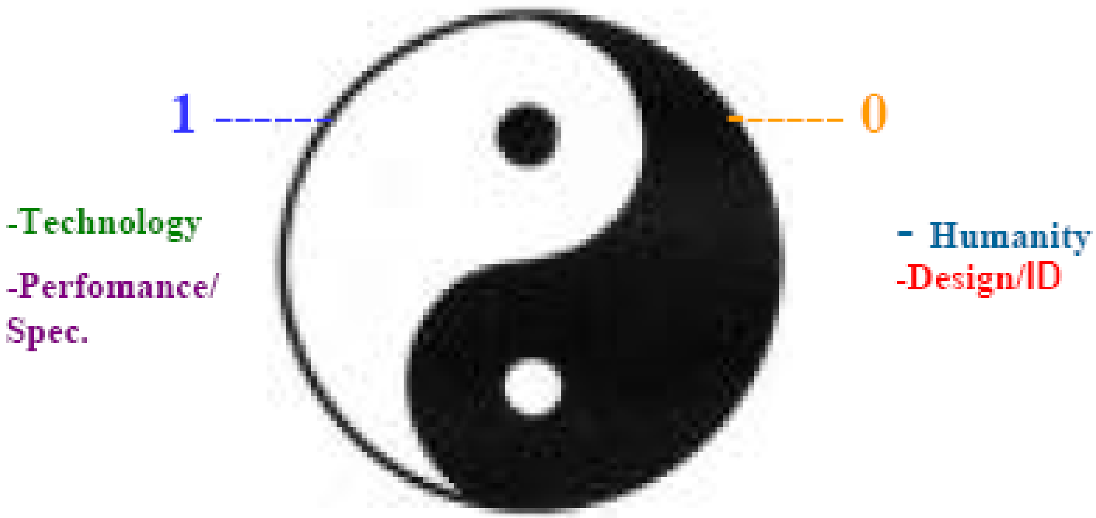
- Cosmetic/Red Wine/Architech…
- LV: Rev. USD 20B;GP:66%

III The Chance for ASIA – *Digital+ Analog*

AIPTEK

## The “ Digital TaiChi”

*Technology VS. Humanity*

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# US Top 10 DV Brand

NPD GROUP 2006

| CAMCORDERS TOTAL | $855,973,569 |
|---|---|
| 1 | Sony |
| 2 | JVC |
| 3 | Canon |
| 4 | Panasonic |
| 5 | Samsung |
| 6 | Hitachi |
| 7 | Aiptek |
| 8 | Optimus |
| 9 | Sanyo |
| 10 | DXG Technology |

# AIPTEK Goal

**6 2** (Mid-Term Goal) **2 5** (Short-Term Goal)

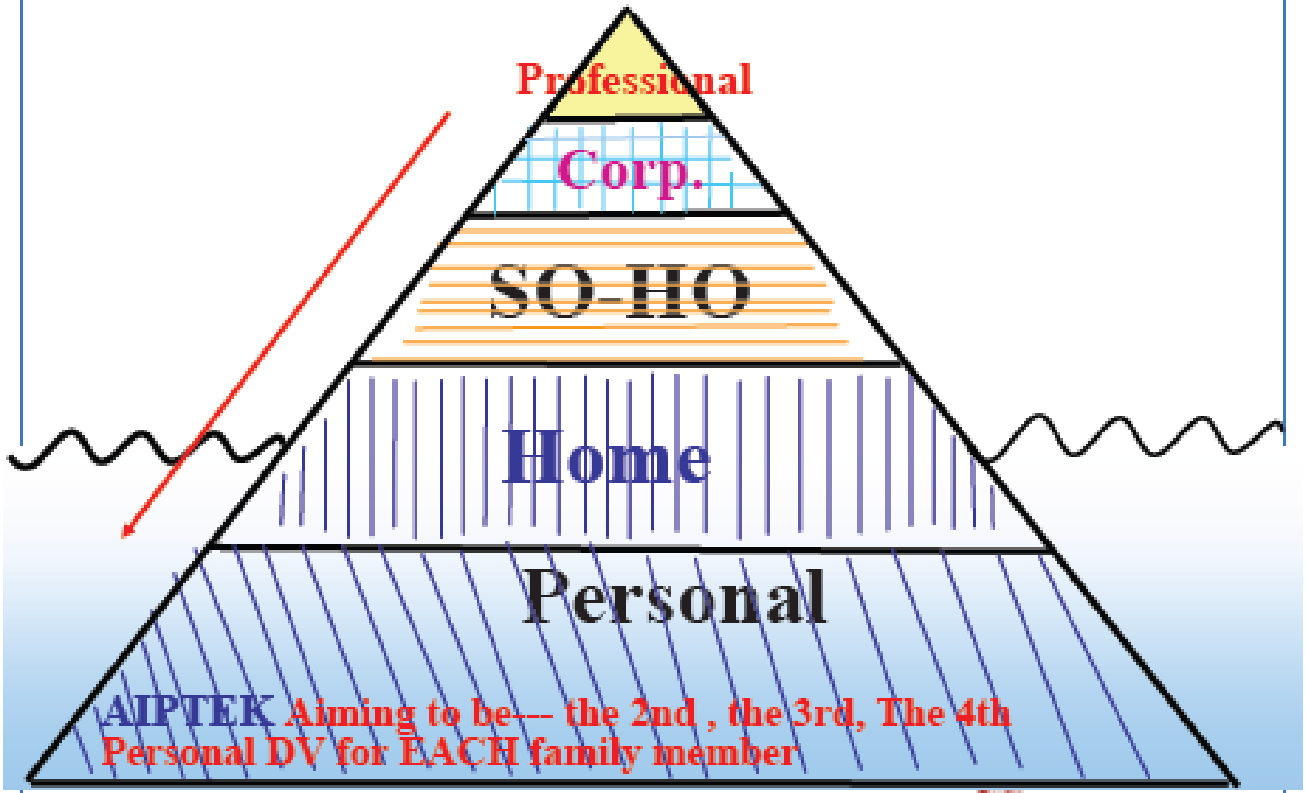
6 Year

Global Top 2 DV Brand

2 Year

Global Top 5 DV Brand

## Market Segmentation & Positioning




AIPTEK

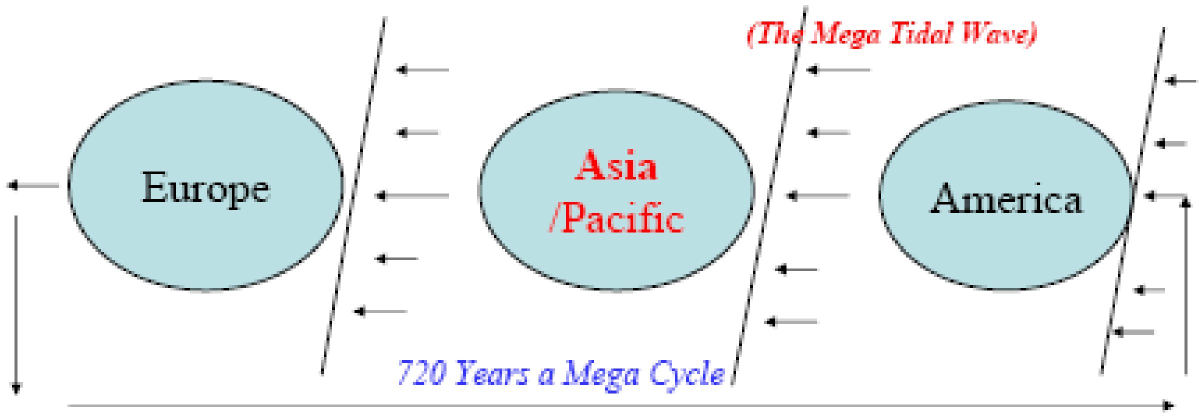
## V. The Global Economic Mega Cycle

*----The Exceptional Opportunity For Asia Pacific*

AIPTEK

# The Mega Cycle

## --- *Global Economy " Feng-Shui" Cycle*




1 B.C. – 0 Century
6 – 7 Century
13-14 Century

21 Century (The Mega Tidal Wave is now arriving Asia Pacific)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Email: Peterchen@aiptek.com.tw

# 2007 Annual Update on ISEAS-NTU Financial Reforms and Liberalization of ASEAN 10 + 5 Economies (i.e. China, Japan, Korea, Hong Kong & Taiwan)*

**By Dr Tan Khee Giap**
**Associate Professor of Banking & Finance**
**Founding Member, Asia Research Center (ARC)**
**Associate Dean, Graduate Studies Office**
**Nanyang Technological University (NTU), Singapore**
*** Prepared for presentation at the 15th Annual Conference on Pacific Basin Finance, Economics Accounting and Management, 20-21 July 2007, The Equatorial Hotel, Ho Chi Minh City, Vietnam**

# Presentation Outlines

- The state and progress of financial reforms and liberalization for ASEAN 10+5 Economies (China, Japan, Korea, Hong Kong and Chinese Taipei).
- What its means for being a leading financial center for a highly open and trade-oriented Singapore economy?
- What recipe makes a successful leading financial centre: Market forces versus role of the government?
- What it takes to be a world leading financial centre: Economic fundamentals and sequencing of financial development.
- How Singapore avoided currency and maturity mismatches which mitigated shocks from 1997 Asia financial crisis?
- A case study by Asia Research Centre at NTU: “Can Colombia be the leading regional financial center for Latin America?”

# The State and Progress of Financial Reforms and Liberalization in ASEAN 10 +5 Economies?

- Globalization has two pillars, namely trade and finance, however, progress made in finance is slower than expected. Hence the prime objective is to construct a prototype analytical framework to annually quantify progress made in financial reforms and liberalization for ASEAN 10+ 5 economies.
- The ISEAS-NTU ranking index is a Peer Pressure System that is non-confrontational, non-negotiating, non-obligatory and non-committal. The modus operandi works through influences, soft persuasion, constructive consultations,& most important of all, to exert annual peer pressure through publicity and power of international media and press.
- In terms of financial reforms and liberalization, the ISEAS-NTU study is intended not as much to single out top economies, but more so to encourage weaker economies to identify areas in need of reforms through our "What If" simulation exercises.

**ISEAS-NTU Ranking on Financial Sector Reforms and Liberalization for ASEAN 10+5 Economies**

| **1. Financial Institutions' Stability and Soundness** | | **2. Financial Markets' Development and Liberalization** | | **3. Regulatory Authorities' Policies and Management Efficiency** | | **4. Corporate Governance and Compliances** | |
|---|---|---|---|---|---|---|---|
| 1.1 | Banking Institutions | 2.1 | Money Market | 3.1 | Exchange Rate Regime | 4.1 | Shareholders' Right |
| | | 2.2 | Stock Market | 3.2 | Transparency and Regulations | 4.2 | Disclosure and Transparency |
| | | 2.3 | Bond Market | 3.3 | International Financial Development and Openness | 4.3 | Board Responsibilities |
| | | 2.4 | Futures Market | 3.4 | Efficiency of Management (Corruption and Nepotism) | 4.4 | Equitable Treatment of Shareholders |

## 1. Financial Institutions' Stability and Soundness
### 1.1 Banking Institutions

| | | | |
|---|---|---|---|
| 1.1.01 | Ratio of regulatory capital to risk-weighted assets | 1.1.08 | Ratio of liquid assets to liability base |
| 1.1.02 | Ratio of bank capital to assets | 1.1.09 | Ratio of foreign assets to total assets |
| 1.1.03* | Ratio of nonperforming loans to total gross loans | 1.1.10 | Ratio of foreign assets to foreign liabilities |
| 1.1.04 | Ratio of provisions to nonperforming loans | 1.1.11* | Ratio of foreign liabilities to total liabilities |
| 1.1.05 | Degree of sectoral distribution of loans to total loans | 1.1.12 | Ratio of banking sector assets to GDP |
| 1.1.06* | Ratio of property related loans to total loans | 1.1.13 | Moody's weighted average bank financial strength index |
| 1.1.07 | Return on equity | | |

* Indicator in reverse order (i.e. the lower the value, the better is the indicator)

## 2. Financial Markets' Development and Liberalization

| 2.1 Money Market | | 2.2 Stock Market | | 2.3 Bond Market | | 2.4 Futures Market | |
|---|---|---|---|---|---|---|---|
| 2.1.01* | Short-term money market rate (overnight) | 2.2.01 | Stock market efficiency | 2.3.01 | Ratio of bond market capitalization to GDP | 2.4.01 | Ratio of notional value of futures market to GDP |
| 2.1.02 | Ratio of volume traded for money market to GDP | 2.2.02 | Ratio of stock market capitalization to GDP | 2.3.02 | Ratio of annual bond turnover | 2.4.02 | Ratio of volume traded of futures market to GDP |
| | | 2.2.03 | Ratio of stock value traded to GDP | 2.3.03 | Ratio of volume traded for bond market to GDP | 2.4.03 | Ratio of open interest of futures market to GDP |
| | | 2.2.04 | Number of listed domestic companies | 2.3.04* | Ratio of foreign currency bonds to total bonds outstanding | | |
| | | 2.2.05 | Growth on stock market index | 2.3.05* | Aggregate effective currency mismatch index) | | |
| | | 2.2.06 | Stock traded-turnover ratio | 2.3.06 | Annual rate of growth of bond market | | |
| | | 2.2.07* | Long-term interest rate (1 year deposit) | | | | |

* Indicator in reverse order (i.e. the lower the value, the better is the indicator)

| 3. Regulatory Authorities' Policies and Management Efficiency | | | | | |
|---|---|---|---|---|---|
| **3.1 Exchange Rate Regime** | | **3.3 International Financial Development and Openness** | | **3.4 Efficiency of Management (Corruption and Nepotism)** | |
| 3.1.01 | Foreign reserves in months of imports | 3.3.01 | Foreign equity limits in existing local banks | 3.4.01 * | Risk of political instability |
| 3.1.02 | Exchange rate stability | 3.3.02 | Current account liberalization | 3.4.02 | Central bank policy |
| 3.1.03 | Exchange rate policy | 3.3.03 | Capital account liberalization | | |
| **3.2 Transparency and Regulations** | | 3.3.04 | Interest rate liberalization | | |
| 3.2.01 | Transparency | | | | |
| 3.2.02 | Adoption of international best practices in regulation | | | | |

* Indicator in reverse order (i.e. the lower the value, the better is the indicator)

| 4. Corporate Governance, Rules & Regulations | | | |
|---|---|---|---|
| **4.1 Shareholders' Rights** | | **4.2 Disclosure and Transparency** | |
| 4.1.01 | Time of notice to shareholders before meeting | 4.2.01 | Legally required consolidated financial reporting |
| 4.1.02 | Thresholds for shareholders to convene extraordinary shareholder meetings | 4.2.02 | Frequency of periodic information |
| 4.1.03 | Types of channels for shareholders to vote | 4.2.03 | Disclosure of non-financial information |
| 4.1.04 | Shareholders' right to vote on appointment of directors | 4.2.04 | External auditing of financial statements |
| 4.1.05 | Shareholders' right to vote on removal of directors | 4.2.05 | Rotation of audit firms and auditors |
| 4.1.06 | Shareholders' right to vote on remuneration of board members | 4.2.06 | Conformity of auditing and accounting norms to international standards |
| 4.1.07 | Shareholders' approval of related-party transactions | 4.2.07 | Reporting of internal auditors to the audit committee |
| 4.1.08 | Shareholders' ability to place items on meeting agenda | 4.2.08 | Penalties attached to irregular information disclosure |
| 4.1.09 | Types of redress if shareholders' rights are violated | 4.2.09 | Information contained in the company's annual report |
| 4.1.10 | Penalties attached to insider trading | 4.2.10 | Requirement to disclose Top 10 shareholders |
| 4.1.11 | Shareholder's right to vote on Major corporate transactions (acquisitions, disposals, mergers, takeovers) | 4.2.11 | Requirement to disclose director shareholding |
| 4.1.12 | Shareholders' rights to nominate a candidate for director | 4.2.12 | Requirement for directors to report their transactions of the company stocks |

## 4. Corporate Governance, Rules & Regulations (continue)

| 4.3 Board Responsibilities | | | | 4.4 Equitable treatment of shareholders | |
|---|---|---|---|---|---|
| 4.3.01 | Limit to number of boards an individual may serve | 4.3.07 | Establishment of nomination committee | 4.4.01 | Requirement of one-share-one-vote |
| 4.3.02 | Minimum number of board meetings per year | 4.3.08 | Requirements for directors to have professional experience[18] | 4.4.02 | Requirement for insiders to disclose their trading of company's stock? |
| 4.3.03 | Disclosure of attendance records of board meetings | 4.3.09 | Requirements for directors to have minimum education and training | 4.4.03 | Legal and regulatory framework requirement for disclosure of related-party transaction |
| 4.3.04 | Election of independent directors to the board | 4.3.10 | "Fit and Proper" test | 4.4.04 | Requirement for related persons to abstain from voting on the transactions |
| 4.3.05 | Establishment of audit committee | 4.3.11 | Disclosure of self-dealing transactions to Securities Commission or Stock Exchange[21] | | |
| 4.3.06 | Establishment of remuneration committee | 4.3.12 | Approval of self-dealing transactions by securities commission or stock exchange | | |

## ISEAS-NTU Overall Ranking of the ASEAN 10 + 5 Economies

| Economies | STD Value | 2005 | STD Value | 2004 |
|---|---|---|---|---|
| Singapore | 0.6735 | 1 | 0.6264 | 1 |
| Hong Kong, China | 0.5688 | 3 | 0.5129 | 2 |
| Japan | 0.5995 | 2 | 0.4665 | 3 |
| South Korea | 0.5001 | 4 | 0.4416 | 4 |
| Thailand | 0.3439 | 6 | 0.3416 | 5 |
| Chinese Taipei | 0.2735 | 8 | 0.3082 | 6 |
| Malaysia | 0.3251 | 5 | 0.2654 | 7 |
| Indonesia | 0.1712 | 9 | 0.2128 | 8 |
| China | 0.3151 | 7 | 0.0580 | 9 |
| Philippines | 0.1062 | 10 | 0.0576 | 10 |
| Vietnam | -0.5152 | 11 | -0.4313 | 11 |
| Cambodia | -0.6667 | 12 | -0.5681 | 12 |
| Myanmar | -0.7897 | 13 | -0.6738 | 13 |
| Laos PDR | -0.8630 | 14 | -0.7335 | 14 |
| Brunei | -1.0692 | 15 | -0.8843 | 15 |

## 1:ISEAS-NTU Ranking on Financial Institutions' Stability and Soundness

| Economies | STD Value | 2005 | STD Value | 2004 |
|---|---|---|---|---|
| Hong Kong, China | 0.5051 | 1 | 0.6053 | 1 |
| Indonesia | 0.3675 | 5 | 0.5189 | 2 |
| Singapore | 0.4686 | 2 | 0.4590 | 3 |
| South Korea | 0.4761 | 4 | 0.3300 | 4 |
| Thailand | 0.1866 | 9 | 0.2477 | 5 |
| Philippines | 0.3014 | 6 | 0.1975 | 6 |
| Chinese Taipei | 0.1945 | 8 | 0.1950 | 7 |
| Japan | 0.2461 | 7 | 0.1842 | 8 |
| China | 0.4210 | 3 | 0.1814 | 9 |
| Malaysia | 0.0685 | 10 | 0.1013 | 10 |
| Cambodia | -0.0979 | 11 | -0.1109 | 11 |
| Vietnam | -0.4220 | 12 | -0.4223 | 12 |
| Laos PDR | -0.6206 | 13 | -0.5724 | 13 |
| Myanmar | -0.7472 | 14 | -0.6710 | 14 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

## 2: ISEAS-NTU Ranking on Financial Markets' Development and Liberalization

| Economies | STD Value | 2005 | STD Value | 2004 |
|---|---|---|---|---|
| Singapore | 0.6702 | 3 | 0.7996 | 1 |
| Japan | 0.9021 | 1 | 0.7269 | 2 |
| Hong Kong, China | 0.7400 | 2 | 0.6408 | 3 |
| South Korea | 0.5475 | 4 | 0.5710 | 4 |
| Chinese Taipei | 0.3054 | 7 | 0.5241 | 5 |
| Thailand | 0.4573 | 5 | 0.4352 | 6 |
| Malaysia | 0.4018 | 6 | 0.3670 | 7 |
| China | 0.0245 | 8 | -0.1074 | 8 |
| Indonesia | -0.2791 | 9 | -0.2040 | 9 |
| Philippines | -0.3004 | 10 | -0.4254 | 10 |
| Vietnam | -0.5416 | 11 | -0.4517 | 11 |
| Brunei | -0.7319 | 12 | -0.7190 | 12 |
| Cambodia | -0.7319 | 12 | -0.7190 | 12 |
| Laos | -0.7319 | 12 | -0.7190 | 12 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

## 3: ISEAS-NTU Ranking on Regulatory Authorities' Policies and Management Efficiency

| Economies | STD Value | 2005 | STD Value | 2004 |
|---|---|---|---|---|
| Singapore | 0.8418 | 2 | 0.8745 | 1 |
| Japan | 0.8967 | 1 | 0.8485 | 2 |
| South Korea | 0.4872 | 3 | 0.5620 | 3 |
| Hong Kong, China | 0.4767 | 4 | 0.5234 | 4 |
| Thailand | 0.3324 | 5 | 0.4863 | 5 |
| Chinese Taipei | 0.2271 | 8 | 0.2891 | 6 |
| Indonesia | 0.2191 | 9 | 0.2605 | 7 |
| Malaysia | 0.3866 | 5 | 0.2187 | 8 |
| Philippines | 0.0125 | 10 | 0.0980 | 9 |
| China | 0.3426 | 6 | -0.1675 | 10 |
| Vietnam | -0.2806 | 11 | -0.2558 | 11 |
| Myanmar | -0.7260 | 12 | -0.7485 | 12 |
| Cambodia | -0.9449 | 13 | -0.8857 | 13 |
| Brunei | -1.1619 | 15 | -1.0177 | 14 |

## 4: ISEAS-NTU Ranking on Corporate Governance, Rules & Regulations

| Economies | STD Value | 2005 | STD Value | 2004 |
|---|---|---|---|---|
| Malaysia | 0.7509 | 2 | 0.7477 | 1 |
| Singapore | 0.7535 | 1 | 0.7410 | 2 |
| Philippines | 0.7164 | 3 | 0.7159 | 3 |
| China | 0.6295 | 4 | 0.6418 | 4 |
| South Korea | 0.5961 | 5 | 0.6062 | 5 |
| Hong Kong, China | 0.5377 | 7 | 0.5617 | 6 |
| Indonesia | 0.5834 | 6 | 0.5544 | 7 |
| Chinese Taipei | 0.4602 | 8 | 0.4444 | 8 |
| Thailand | 0.4548 | 9 | 0.3944 | 9 |
| Japan | 0.1064 | 10 | 0.2061 | 10 |
| Brunei | -1.1178 | 11 | -1.1227 | 11 |
| Cambodia | -1.1178 | 11 | -1.1227 | 11 |
| Laos PDR | -1.1178 | 11 | -1.1227 | 11 |
| Myanmar | -1.1178 | 11 | -1.1227 | 11 |
| Vietnam | -1.1178 | 11 | -1.1227 | 11 |

| | | | | |
|---|---|---|---|---|
| Singapore | 1 | 0.6264 | 1 | 0.6959 |
| Hong Kong, China | 2 | 0.5129 | 1 | 0.6784 |
| Japan | 3 | 0.4665 | 2 | 0.5545 |
| South Korea | 4 | 0.4416 | 2 | 0.5184 |
| Thailand | 5 | 0.3416 | 5 | 0.4339 |
| Chinese Taipei | 6 | 0.3082 | 4 | 0.4532 |
| Malaysia | 7 | 0.2654 | 5 | 0.4030 |
| Indonesia | 8 | 0.2128 | 5 | 0.3516 |
| China | 9 | 0.0580 | 6 | 0.3137 |
| Philippines | 10 | 0.0576 | 7 | 0.2569 |
| Vietnam | 11 | -0.4313 | 11 | -0.1348 |
| Cambodia | 12 | -0.5681 | 11 | -0.2133 |
| Myanmar | 13 | -0.6738 | 11 | -0.3346 |
| Laos | 14 | -0.7335 | 11 | -0.3744 |
| Brunei | 15 | -0.8843 | 12 | -0.4671 |

| | Simulation | Simulation | Simulation | Simulation |
|---|---|---|---|---|
| Singapore | 1 | 0.6735 | 1 | 0.7837 |
| Japan | 2 | 0.5995 | 1 | 0.6112 |
| Hong Kong, China | 3 | 0.5688 | 3 | 0.5916 |
| South Korea | 4 | 0.5001 | 3 | 0.5576 |
| Malaysia | 5 | 0.3521 | 5 | 0.4797 |
| Thailand | 6 | 0.3439 | 5 | 0.4537 |
| China | 7 | 0.3151 | 5 | 0.4656 |
| Chinese Taipei | 8 | 0.2735 | 5 | 0. 4406 |
| Indonesia | 9 | 0.1712 | 5 | 0.3422 |
| Philippines | 10 | 0.1062 | 9 | 0.3438 |
| Vietnam | 11 | -0.5152 | 11 | -0.1632 |
| Cambodia | 12 | -0.6667 | 11 | -0.2466 |
| Myanmar | 13 | -0.7897 | 11 | -0.3756 |
| Laos | 14 | -0.8630 | 11 | -0.4188 |
| Brunei | 15 | -1.0692 | 12 | -0.5529 |

# On The Singapore Economy: Some International Evaluations & Basic Economic Fundamentals

- **World second freest economy: consecutively since 1994 (2007 ranking by The Heritage Foundation & The Wall Street Journal.**
- **Overall economic competitivness:1st Hong Kong, 2nd Taiwan, 3rd Singapore (2007 ranking by ARC-NTU on 79 Asian economies including ASEAN-10, 34 Greater China & 35 Indian States).**
- **Overall country risks:1st Singapore, 2nd Australia, 3rd Japan, 4th USA, 5th Hong Kong (2007 ranking by PERC)**
- **Least corrupt in Asia:1st Singapore, 2nd Hong Kong, 3rd Japan (2007 ranking by PERC)**
- **The People's Action party has been democratically elected consecutively since 1965 through five general elections.**
- **Some Economic fundamentals :**

| | | |
|---|---|---|
| **GDP Growth:** | **1987-1997** | **1998-2006** |
| | **9.3% p.a.** | **4.5% p.a.** |

| | | | |
|---|---|---|---|
| **GDP size:** | **1987** | **1997** | **2007** |
| | **US$21 billion** | **US$95 billion** | **US$110 billion** |

**Projected potential output growth for 1998-2025: Singapore 5.5% p.a. (by ARC at NTU).**

| | |
|---|---|
| | **1997-2007** |
| **Inflation (CPI);** | **0.8%** |
| **Unemployment rate:** | **3.3%** |

**Per capita GDP 2006: US$29,838**

# What It Means To Have A Leading Financial Centre For A Highly Open Trade-Oriented Economy

- Financial services not just accounted for 12% of Singapore's GDP in 2006, and its share of employment is approximated to be about 5% in 2006. It is a a vital sector with spill-over and multiplying effect.
- The positive economic externalities of the financial centre can not be underestimated as it allows Singapore to expand her economic space beyond her small physical size and re-enforces her regional political significance.
- The financial centre directly supports manufacturing activities, maintaining attractiveness of Singapore as regional operational headquarters for MNCs, and indirectly enhance Singapore as a regional logistic, transportation and tourism hubs.
- The financial centre allows Singapore to be inter-connected to regional economies and stay relevantly globally, one of the critical engine for extending Singapore's 'external economy".

## What Recipe Makes A Successful Financial Centre: Market Forces Versus The Role of Government

- Having sound economic fundamentals such as sustainable non-inflationary GDP growth, strong human resources, prudent public finances and financial information technology infrastructure are some of the prerequisites of a successful financial centre.
- Financial center, is similar to transportation hub such as sea and airports, which requires heavy seed investment for financial infrastructure, pooled resources and operates efficiently with the economy of scale.
- Healthy functioning of a financial center is critical because it affects a large domain of population in terms of personnel saving and investment, hence having a set of sound corporate governance, rules and regulations are paramount not just socially but also politically.
- The above observations endorse the facilitative role of the government as a market enabler, as very often investment projects with heavy capital outlay, long period of gestation and returns, or some may term it as natural monopoly, tend NOT to prevail through market forces.

## How Singapore Avoided External Shocks & Mitigated Impacts From Financial Crises?

- If government is to play the role as market enabler, many of the textbook cases on how market forces work would have to be discarded or modified without apology.
- Some long standing policies, factors and conditions that mitigated double mismatches, i.e. maturity and currency mismatch.
- Begun with "correct" financial infrastructure, institutional framework and financial regulations
- The two-tier dichotomized financial entity, with on shore versus offshore financial activities.
- Conceptual correct rationales and policies for gradual internationalization of the Singapore dollar.
- Undertaken sequencing of financial development, avoided the "big bang" approach in terms of financial liberalization and markets reform.
- "Nurturing' indigenous banking industry in the infancy stage, but entice foreign competition when local banks matured.

# Economic Fundamentals &Sequencing Of Financial Development Liberalization

- Liberalizing the pricing mechanism for basic monetary aggregates in the late 1970s
- Restructured monetary policy framework and policies in the 1980s
- Deepening further financial markets and revamping bond market activities in the 1990s
- Challenges from cross-border financial activities, cyber-banking and further banking deregulation measures beyond the new millennium.
- Mitigate external shocks and impacts of financial crises through pursuing sustainable non-inflationary macroeconomic policies, prudent government budgeting, maintaining profitability via corporatising state-owned companies with decades of quality, value-creation, clean and continuity of democratically-elected governments.
- Good geographical location and time zone are added advantages, but people with good command of English as the business language, good financial infra-structure, efficient telecommunication system and a widely connected first class international airport are more important.

# The First Set Of Fundamental Lessons Learnt

- A pragmatic approach to financial liberalization best works according to the well established regulatory framework by considering changes from within by credible financial authorities or agencies
- An effective dichotomized financial system with effective policy instruments such as prudential safeguards, tax and fiscal incentives.
- A fine balance between Domestic Banking Unit (DBUs) and Asian Currency Unit (ACUs): Push factors such as ceiling on Singapore dollar loans, relative inaccessibility of local deposits and hence higher reserve costs, keeping foreign banks out of DBUs and pull factors such as abolition of withholding tax on interests income of non-residents need to be considered, waiver of statutory requirements and a wide range of fiscal tax incentives to encourage foreign banks to expand businesses in ACUs.
- “Nurturing” indigenous banks into bigger international players for “strategic national interests” *initially*, but “forced” modernization and innovation by enticing international competition would take over as local banks *matured*.

# The Second Set Of Fundamental Lessons Learnt

- The sequencing approach adopted on financial deepening involves tradeoffs and policy dilemma, and thus priority of objectives must be identified.
- Prima facie evidences suggests that hypothesis known as the triad of incompatibilities, i.e. the non-coexistence of exchange rate stability, free capital mobility and monetary autonomy, does not hold.
- Restrictive usage of the local currency for non-residents, which basically is equivalent to "throwing sends into the wheels" of perfect capital mobility.
- Large pools of GLCs and MNCs, intended for other objectives such as economic benefits and employment creation but nevertheless contributed significantly to mitigation of double mismatches.
- Costly to curb financial activities directly and direct intervention tend to cause market distortion, therefore more efficient and less arbitrary to aim for resilient financial structure and markets.

# The Third Set Of Fundamental Lessons Learnt

- Instead of trying excessively to fend off capital inflows or outflows, it is more pertinent for policy authorities to ensure macroeconomic conditions and political environments are not created to attract excessive inflows or exacerbate capital outflows
- While waiting for international monetary reform to take shape, initiatives to reform domestic financial framework consistent with international standards and global monetary order is more realistic.
- Weak financial institutions and rudimentary financial system evolve overtime and best be reformed via a gradual process of financial liberalization with effective mobilization of domestic financial savings to fund investment projects rather than external debt built-up.

# The Central Provident Fund: Fund Flows & Fund Management Industry

| | Holdings of SGS | Members' balances | Size of asset management industry |
|---|---|---|---|
| 1995 | $45b / | $66b | / $86b |
| 1996 | $52b / | $73b | / $125b |
| 1997 | $57b / | $80b | / $124b |
| 1998 | $60b / | $85b | / $151b |
| 1999 | $63b / | $88b | / $274b |
| 2000 | $61b / | $90b | / $276b |
| 2001 | $89b / | $92b | / $307b |
| 2002 | $94b / | $96b | / $344b |
| 2003 | $101b / | $104b | / $465b |
| 2004 | $104b / | $106b | / $500b |
| 2005 | $107b / | $110b | / $550b |

# Central Provident Fund: Policy Implications and Related Issues

- As public housing ownership plateau since the 1990s at 86%, new avenues must be found to channel the CPF for consistent and good returns.
- New financial instruments must be found to unlocked housing equity in order to finance retirement through wealth management to over come the asset-rich cash-poor syndrome.
- As regional cost competition intensifies and as CPF contributions are progressively reduced, more cash will be left with individuals to manage through the existing alternative investment schemes in gold, shares, unit trust, bonds, currencies, deposits and investment-endowment insurance policies.
- Private sector participations in fund management, private banking, insurance etc are expected to increase.

## Central Provident Fund: Policy Implications and Related Issues

- The pertinent issue for CPF members must be the improved and optimize returns on investments through privatization of funds as the central bank can not keep issuing bonds when there is no natural fiscal need when the government is able to run balanced budget over the business cycles.
- How to better satisfied the multi-pillar social security system (SSS) to achieve the tri-objectives as recommended by the World Bank:
- a. Income smoothing saving,
- b. Redistribution of incomes
- C. Insurance against risks
- The biggest challenge is for Singapore government to further fine-tune the CPF system with swifter fund divestment, which not only must fulfill the tri-objectives of the SSS but also serves to promote the fund management industry for the island state.

## Central Provident Fund: Catalyst For Developing Fund Management Industry

- Through fund allocation incentive, increasingly the government has been encouraging foreign fund managers to set up offices in Singapore with objectives of forming a critical mass on fund pools and attraction of top financial experts and institutions to upgrade local human resource capital.
- Further liberalization of CPF divestment also mean bigger funds will be made available to fund managers who do have a proven track record.
- More financial products such as unit trust, retirement-nest, gold & equity investment schemes are now qualified for individual CPF account holders to consider investing in.

## Banking Industry Consolidation, Meeting Corporate Sector's Financial Requirements and Coping With Portfolio Investment Inflows

- "Nurturing" domestic banking institutions to compete globally, because to be strong is to be big, to be big is to be few, to be few is to go through a series of mergers and acquisitions (M&A).
- Meeting multinational corporations, government-linked companies' financial requirements by effort to promote local bond market.
- Promoting bilingual capability of the financial workforce for growing Greater China markets. We must aim to secure more new businesses from mainland China, Taiwan and Hong Kong.
- Portfolio investment inflows into emerging economies such as China and India will be the next new wave and in fact it would be bigger than the foreign direct investment flows to mainland China which started in the middle 1990s.
- Setting up of government investment agencies such as Government Investment Corporation of Singapore (GSIC) and "Temasek Holdings" to manage accumulated surplus public funds are now being modeled by China, Japan, Korea, Malaysia, Brunei, Kuwait, Taiwan

## How Singapore Stays Relevant, Navigate and Keeps Up With Changes

- Monitoring competitiveness, understand industry drivers, consolidate core capabilities, review institutional functions and regulatory structure.
- Identifying emerging issues, development trends and structural shifts in financial innovations, products and processes.
- The setting up of Review Committees such as The Financial Sector Review Group (FSRG) in 1997 and the Economic Restructuring Committee (ERC) in 2002 regularly to strategize further liberalization and deregulation of the financial system.
- Take the emergence of Shanghai as a potential onshore financial center seriously, and Singapore must leverage on the Chinese niche markets in private banking, bond issuance, initial public offers, commodity trading and corporate financing.
- Reposition Singapore to stay ahead of Hong Kong in foreign exchange trading, bond market activities, and to better compete with Hong Kong in the equity market.

# A Case Study: “Can Colombia Be The Leading Regional Financial Centre for Latin America?”

**Some observations by Asia Research Centre at NTU on “The Case Study for Colombia As A Regional Financial Centre” are as follows:**

1. **The potential output growth for Colombia should be around 4%, the Colombia economy need to aim for a consistent non-inflationary average real GDP growth of 5% at least for two decades with policy continuity.**
2. **Inflation as measured by CPI, which was at double digits in the 1990s, has been increasingly under control in Columbia since 2000 indicating good coordination of monetary policy by the Colombia central bank but it should aim to have a medium and longer-term objectives of 4% and 2% respectively.**
3. **The Colombian economy had experienced budget deficits on average of up to 3.5% of GDP between 1996 to 2002, thus discipline and prudent public finances must be observed and the government should aim to have balanced budget over the business cycle.**
4. **Columbia needs to maintain and further enhance the diversity of her economy in terms of manufacturing (13%), social and personal services (21%), agricultural activities (14%), which should form the basic support demand of her financial services hub.**

# Thank You For Your Attention!

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# Ten Years After The Asian Financial Crisis

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# Outline

- I. Introduction
- II. A Review of Policy Responses to the Crisis
  - 1. Exchange Rate Flexibility
  - 2. Financial Restructuring
  - 3. Management of Short-Term Capital Flows
- III. Economic Growth and Domestic Investment
  - 1. Slower Growth
  - 2. Declining Investment Rates

# Outline (continued)

- IV. Financial Markets and Capital Flows
  - 1. Fluctuation in Exchange Rates
  - 2. Rise in Share Prices
  - 3. Trends in Capital Flows
- V. Strategies for Preventing Future Financial Crisis
  - 1. Implementation of Sound Economic and Financial Policies
  - 2. Establishment of an Early Warning System
  - 3. Development of Asian Bond Markets
  - 4. Promotion of Regional Financial Cooperation
- VI. Conclusion

# Table 1. Growth Rate of GDP

Table 1. Growth Rate of GDP

Unit: % per year

| | Average 1990-96 | Average 2000-06 | 1997 | 1998 | 2005 | 2006* | 2007** |
|---|---|---|---|---|---|---|---|
| A. Crisis-affected Countries | | | | | | | |
| Indonesia | 7.8 | 4.9 | 4.7 | -13.1 | 5.7 | 5.5 | 6.0 |
| Korea | 8.3 | 5.3 | 4.7 | -6.9 | 4.0 | 5.0 | 4.5 |
| Malaysia | 8.9 | 5.3 | 7.3 | -7.4 | 5.2 | 5.9 | 5.4 |
| Philippines | 3.1 | 4.8 | 5.2 | -0.6 | 5.0 | 5.4 | 5.4 |
| Thailand | 9.6 | 5.0 | -1.4 | -10.5 | 4.5 | 5.0 | 4.0 |
| B. Other Asian Economies | | | | | | | |
| China | 10.5 | 9.4 | 8.8 | 7.8 | 10.4 | 10.7 | 10.0 |
| Hong Kong | 4.9 | 5.5 | 5.1 | -5.0 | 7.5 | 6.8 | 5.4 |
| India | 5.6 | 6.9 | 4.8 | 6.5 | 9.0 | 9.2 | 8.0 |
| Japan | 2.2 | 1.9 | 1.4 | -1.8 | 2.7 | 2.8 | 2.0 |
| Singapore | 8.9 | 5.4 | 8.5 | 0.9 | 6.6 | 7.9 | 6.0 |
| Taiwan | 6.9 | 3.8 | 6.6 | 4.6 | 4.1 | 4.7 | 4.3 |
| Vietnam | 7.9 | 7.5 | 8.2 | 5.8 | 8.4 | 8.2 | 8.3 |

Notes: * preliminary estimate
** ADB forecast
Source: Asian Development Bank

# Table 2. Fixed Investment Rates

Table 2 Fixed Investment Rates

Unit: % of GDP

| | Average 1990-96 | Average 2000-05 | 1997 | 1998 | 2004 | 2005 |
|---|---|---|---|---|---|---|
| A. Crisis-affected Countries | | | | | | |
| Indonesia | 27.6 | 19.9 | 28.3 | 25.4 | 21.3 | 20.7 |
| Korea | 37.2 | 29.7 | 35.6 | 30.4 | 29.5 | 29.3 |
| Malaysia | 38.8 | 22.7 | 43.1 | 26.9 | 20.4 | 20.0 |
| Philippines | 22.4 | 17.6 | 24.4 | 21.2 | 16.5 | 15.5 |
| Thailand | 40.4 | 24.5 | 33.8 | 22.4 | 25.9 | 29.0 |
| B. Other Asian Economies | | | | | | |
| China | 32.4 | 37.7 | 33.6 | 35.0 | 40.2 | 41.5 |
| Hong Kong | 28.4 | 23.0 | 33.6 | 30.4 | 21.3 | 20.9 |
| India | 22.6 | 24.1 | 21.7 | 21.5 | 25.9 | … |
| Singapore | 34.8 | 25.8 | 38.7 | 37.4 | 23.8 | 21.8 |
| Taiwan | 23.1 | 19.8 | 22.5 | 23.5 | 20.5 | 19.9 |
| Vietnam | 20.4 | 31.3 | 26.7 | 27.0 | 33.4 | 33.1 |

Note: … = not available

Source: Asian Development Bank

# Table 3. Change in Exchange Rates

Table 3 Change in Exchange Rates (End of Period)

Unit: national currency units per US dollar

| Currency | Mid-1997 | 1998 | 2006 | June2007 | % change Mid-1997 -Dec 1998 | % change Mid-1997 -June 2007 |
|---|---|---|---|---|---|---|
| A. Crisis-affected Countries | | | | | | |
| Indonesian Rupiah | 2,431.9 | 8,075 | 8,995 | 9,045 | -69.9 | -73.1 |
| Korean Won | 889 | 1,204 | 929.65 | 923.80 | -26.2 | -3.8 |
| Malaysian Ringgit | 2.5249 | 3.8 | 3.527 | 3.453 | -33.6 | -26.9 |
| Philippine Peso | 26.375 | 39.145 | 49.01 | 46.24 | -32.6 | -43.0 |
| Thai Baht | 24.7 | 36.63 | 35.725 | 34.53 | -32.6 | -28.5 |
| B. Other Asian Economies | | | | | | |
| Chinese Renminbi | 8.3 | 8.28 | 7.8072 | 7.6155 | 0.2 | 9.0 |
| Hong Kong Dollar | 7.7468 | 7.7474 | 7.7751 | 7.8163 | 0.0 | -0.9 |
| Japanese Yen | 114.29 | 115.2 | 119.11 | 123.52 | -0.8 | -7.5 |
| Singapore Dollar | 1.4309 | 1.6595 | 1.5331 | 1.5324 | -13.8 | -6.6 |
| New Taiwan Dollar | 27.812 | 32.216 | 32.596 | 32.735 | -13.7 | -15.0 |

Sources: Bloomberg, Reuters

# Table 4. Change in Stock Indices

Table 4 Change in Stock Indices

| City | Mid-1997 | 1998 | 2006 | June2007 | % change Mid-1997 -Dec 1998 | % change Mid-1997 -June 2007 |
|---|---|---|---|---|---|---|
| A. Crisis-affected Countries | | | | | | |
| Jakarta | 724.56 | 389.08 | 1,805.12 | 2,139.27 | -45.1 | 195.3 |
| Seoul | 745.40 | 562.46 | 1,434.46 | 1,743.60 | -24.5 | 133.9 |
| Kuala Lumpur | 1,077.30 | 586.13 | 1,096.24 | 1,354.38 | -45.6 | 25.7 |
| Manila | 2,809.21 | 1,968.78 | 2,982.54 | 3,665.23 | -29.9 | 30.5 |
| Bangkok | 527.28 | 355.81 | 679.84 | 776.79 | -32.5 | 47.3 |
| B. Other Asian Economies | | | | | | |
| Shanghai B | 81.478 | 28.711 | 130.12 | 254.981 | -64.8 | 212.9 |
| Shenzhen B | 144.72 | 53.58 | 433.32 | 672.20 | -63.0 | 364.5 |
| Hong Kong | 15,196.79 | 10,048.58 | 19,964.72 | 21,772.73 | -33.9 | 43.3 |
| Tokyo | 20,604.96 | 13,842.17 | 17,225.83 | 18,138.36 | -32.8 | -12.0 |
| Singapore | 1,987.95 | 1,392.73 | 2,985.83 | 3,548.20 | -29.9 | 78.5 |
| Taipei | 9,030.28 | 6,462.03 | 7,823.72 | 8,883.21 | -28.4 | -1.6 |

Source: Bloomberg

# Table 5. Foreign Direct Investment & Portfolio Investment

Table 5 Foreign Direct Investment and Portfolio Investment

Unit: US$ billion

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
|---|---|---|---|---|---|---|---|---|---|---|
| A. Foreign Direct Investment in Reported Economies | | | | | | | | | | |
| Five Crisis-affected Countries[1] | 17.5 | 17.8 | 11.9 | 18.7 | 14.1 | 5.2 | 8.2 | 7.8 | 18.2 | 19.2 |
| China | 40.2 | 44.2 | 43.8 | 38.8 | 38.4 | 44.2 | 49.3 | 47.1 | 54.9 | 79.1 |
| Vietnam | 2.4 | 2.2 | 1.7 | 1.4 | 1.3 | 1.3 | 1.4 | 1.5 | 1.6 | 2.0 |
| B. Portfolio Investment[2] in Reported Economies | | | | | | | | | | |
| Five Crisis-affected Countries | 35.0 | 15.6 | -0.8 | 9.4 | 8.4 | 10.9 | 6.4 | 28.3 | 33.5 | 27.7 |
| China | 2.4 | 7.8 | 0.1 | -0.7 | 7.3 | 1.2 | 1.8 | 8.4 | 13.2 | 21.2 |

Notes: 1. Indonesia, Korea, Malaysia, Philippines and Thailand

2. Includes investment in equity securities and debt securities

Source: International Monetary Fund

# Development of Financial Markets in HCMC

Vũ Ngọc Anh

# Overview

- Finance and Development
- Following the vision of HCMC financial centre which has significant influences over Vietnam and ASEAN region.
- Pressure from WTO agreements
- Two big question:
  - What is?
  - What to do?

# Overview

- The backbone role of commercial banks and the control of financial State-owned commercial banks.
  – Assets of state-owned commercial banks in commercial bank systems.

| | |
|---|---|
| 1994 | 89% |
| 1998 | 82% |
| 2003 | 74,6% |
| 2005 | 71,5% |
| 2006 | 62,5% |

# Overview

- The very young capital market is in confusion with the problems of institutional structures.
- The lacking of financial instruments discourages linkages between markets
- Institution is the key actor which we can always blame for our unwanted outcomes.

# At local view

- Developing financial markets is the subject in the policy planning of HCMC People Commitee.
- Seeking for solutions, but must understanding what is going on at first.
- Banking system vs. securities market.

# Problems

- Being expanding, but improving is not apparent.
  - Some data of commercial bank system in HCMC

| (billion VND) | 2002 | 2003 | 2004 | 2005 | 2006 | 6 /2007 |
|---|---|---|---|---|---|---|
| Total Assets | 122777 | 167202 | 228131 | 292105 | 44159 | 552849 |
| Deposits | 84230 | 112127 | 146909 | 193329 | 285502 | 374604 |
| Loans and investment | 74252 | 101006 | 136624 | 17576 | 229747 | 282232 |

# Problems

- Total units of credit organizations in HCMC: 822
- Total transaction accounts: 2 millions.
- Growth rates:
  - Deposits: 25-28%/year
  - Outstanding loans: 25-27%/year

# Problems

- Some data of securities market

| (to the end of June 30/2007) | Entire market | Com. Stocks | Fund's Cert. | Bonds |
|---|---|---|---|---|
| Numbers of securities being listed: | 472 | 107 | 2 | 363 |
| (%) | 100.00% | 22.67% | 0.42% | 76.91% |
| Current Listing volume: | 2,569,173,825 | 1,878,363,975 | 100,000,000 | 590,809,850 |
| (%) | 100.00% | 73.11% | 3.89% | 23.00% |
| Current Listing value (VND mil.): | 78,982,975 | 18,783,640 | 1,000,000 | 59,199,335 |
| (%) | 100.00% | 23.78% | 1.27% | 74.95% |

# Problems

- VN Index has impressive changes
  - At the end of 2005: 307.5
  - 20th Demcember 2006: 809,86
  - 12th March 2007: 1.170,67
- Restraining Forces:
  - Technology
  - Human resource
  - Barriers from state ownership
  - Local bond market

# Local problems

- Out of local government's reach
- Information is not available
- Cooperation inside local government and between HCMC and central government.

# Shaping solutions

- Understanding financial market being formed in HCMC with appropriate forecast and data.
- More efforts into modernising material facilities, upgrading technology, improving quality and quantity of human resource which is needed for financial sector.
- An offilcal framework or mechanism supporting feasible solutions.

## Statement of CEO TRAN DAC SINH

***Name: PBFEAM Conference***

***Time: 11:00-12:30 (21/07/2007)***

***Place: Equatorial Hotel - Panel Session G***

Ladies and Gentlemen,

On behalf of Hochiminh Stock Exchange, today, I am so honor to join in this conference.

As you know, Vietnam' economy has made a great progress within few years and Vietnam is considered as one of the quicknest economy' growth in the world, which, then attracting much attention of foreign investors.

It can not be denied the role of financial and securities market in the economy' success. Vietnam stock market has made a great and comprehensive progress just more than one year, which takes advantage for domestic enterprises to raise capital to extent their business. Vietnam stock market has become the mid-long term channel to mobilise capital for the economy'development.

In June 30, 2007, there were 472 listed securities in entire market, including 107 shares, 02 fund's certificates; 363 bonds. The current listing volumn gained more than 2,5 billion stocks with the value upto 79 trillion Dongs. The number of broker firms were nearly 60, in which there were 48 companies operating as our members and managing more than 240 thousand accounts with about 5 thousand accounts of foreign investors. At that point, the Vn-index was 1,024,68 and the market cap was more than 211 trillion Dongs. The transaction volumn of the first 6 months of this year was 1.135 million stocks (equivalent to more than 101% as compared with 2006) with entire value 122.733 billion dongs (more than 141% as as compared with 2006)

Base on the facts, Vietnam'government has concentrated on building up an active, effective and stable securities market, including listed stocks, OTC stocks and bonds market, by improving the political enviroment. Besides, we also strengthen the infrastructure to surveilence the market, improving information system to provide information to customers transparently, quickly, timely and equally. Moreover, developing the IT system to meet the requirement of the market is also one of the most important duties, not only for our Exchange but alo for the broker firms. In the near future, when we finish the process of preparation, we will get rid of enterring orders through representatives of securities companies at trading floor and the next step is to carry out off-floor trading. We also have been researched about the derivatite stocks to introduce to the investors, making them have more business chances and diversifying Vietnam Stock market.

Besides, we are taking advantage for domestic enterprises to be cross-listed in other countries in the world and Singapore Stocks Exchange is our first parner in this field.

With the purpose of impulsing the equitization of the biggest 100% state-owned enterprises in some key industries such as Banking, Insurance, Telecommunication field... through IPO activity, the supply of stocks will be plentiful in the near future. This will create more choices for investors, then, fosterring the development of the market. The market cap is expected to increase quickly and strongly at the end of this year. The size of the market will be extended with the participating of more and more international and professional investors.

Ladies and Gentlemen, we are going to hold the ceremony of our exchange' establishment in the basic of transferring from HoSTC. With the new form, acting as an enterprise, with self-management, self-responsibilities, we believe that it will be one of the advantages for us to manage the development of Vietnam stock market actively, effectively in the near future.

In the way of development, it is very useful for us to receive the sharing information and experience from the developed countries. We expect to join the ranks of the countries with strongly developed finance, banking and stocks in the world.

Thank you for your attention, wish you health, happiness and success.

# How to Publish Papers in High Quality Journals

Prepared by

Carl R. Chen

Editor, *International Review of Economics and Finance*

For

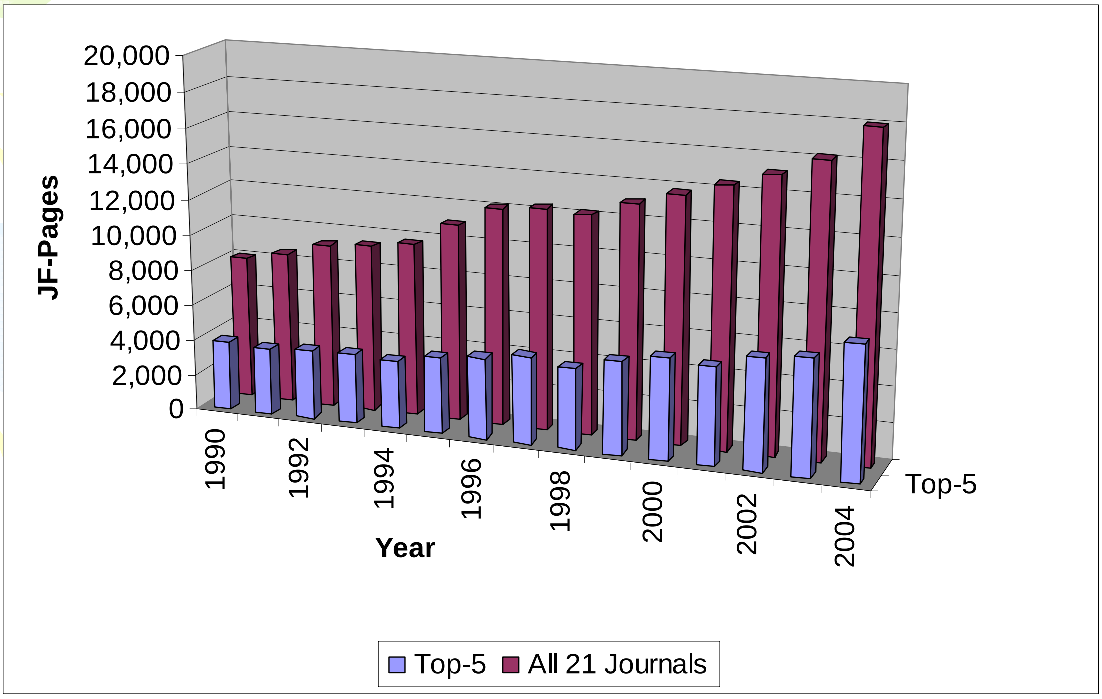
The 15$^{th}$ Pacific Basin Finance, Economics, Accounting, and Management Annual Conference

# I. Publication is very Competitive

| Number of unweighted publications (1990-2004) | Number of authors | % of total | Cumulative % |
|---|---|---|---|
| One publication | 3,583 | 52.95 | 52.95 |
| Two publications | 1,099 | 16.24 | 69.19 |
| Three publications | 580 | 8.57 | 77.76 |
| Four publications | 371 | 5.48 | 83.24 |
| Five publications | 253 | 3.74 | 86.98 |
| Six publications | 192 | 2.84 | 89.82 |
| Seven publications | 151 | 2.23 | 92.05 |
| Eight publications | 93 | 1.37 | 93.42 |
| Nine publications | 97 | 1.43 | 94.86 |
| Ten publications | 74 | 1.09 | 95.95 |
| Eleven publications | 57 | 0.84 | 96.79 |
| Twelve publications | 44 | 0.65 | 97.44 |
| Thirteen publications | 31 | 0.46 | 97.90 |
| Fourteen publications | 24 | 0.35 | 98.26 |
| Fifteen or more publications | 118 | 1.74 | 100 |
| Total | 6,767 | 100.00 | |

Source: Chan, Chen, and Lung, “One-and-Half Decades of Global Research Output in Finance:1990-2004,” Review of Quantitative Finance and Accounting, 2007.

- Total JF-Pages Published




Source: Chan, Chen, and Lung, "One-and-Half Decades of Global Research Output in Finance:1990-2004," Review of Quantitative Finance and Accounting, 2007.

# II. Target Journals

- What is my chance?

**AAI: Author Affiliation Index**

Proportion of the authors from top-80 academic programs

| Journal Rank | Journal Title | AAI |
|---|---|---|
| 1 | Journal of Finance | 0.803 |
| 1 | Review of Financial Studies | 0.803 |
| 3 | Journal of Financial Economics | 0.709 |
| 4 | Journal of Financial and Quantitative Analysis | 0.599 |
| 5 | Journal of Business | 0.558 |
| 6 | Journal of Corporate Finance | 0.511 |
| 7 | Journal of Financial Markets | 0.484 |
| 8 | Financial Analysts Journal | 0.372 |
| 9 | Financial Management | 0.370 |
| 10 | Journal of Financial Intermediation | 0.353 |

Source: Chen and Huang, "Author Affiliation Index, Finance Journal Ranking, and the Pattern of Authorship," Journal of Corporate Finance, 2007, forthcoming.

| | | |
|---|---|---|
| 11 | Mathematical Finance | 0.294 |
| 12 | Journal of Risk and Insurance | 0.292 |
| 13 | European Finance Review | 0.286 |
| 14 | Journal of Financial Research | 0.272 |
| 15 | Journal of Derivatives | 0.250 |
| 16 | Journal of Financial Services Research | 0.247 |
| 17 | Financial Markets, Institutions and Instruments | 0.242 |
| 18 | Journal of Computational Finance | 0.239 |
| 18 | Journal of Empirical Finance | 0.239 |
| 20 | Financial Review | 0.206 |
| 21 | Review of Quantitative Finance and Accounting | 0.203 |
| 22 | European Financial Management | 0.199 |
| 23 | Journal of Banking and Finance | 0.197 |
| 24 | Review of Financial Economics | 0.194 |
| 25 | Quarterly Review of Economics and Finance | 0.189 |
| 26 | Journal of Fixed Income | 0.181 |
| 27 | International Finance | 0.172 |
| 28 | Journal of Portfolio Management | 0.158 |
| 29 | Journal of Futures Markets | 0.150 |
| 30 | International Review of Economics and Finance | 0.147 |
| 30 | Journal of Behavioral Finance | 0.147 |
| 32 | Journal of International Money and Finance | 0.142 |
| 33 | Multinational Finance Journal | 0.133 |
| 34 | Journal of Multinational Financial Management | 0.128 |
| 35 | Journal of Int. Fin. Markets, Institutions & Money | 0.119 |
| 36 | Pacific-Basin Finance Journal | 0.114 |
| 37 | European Journal of Finance | 0.097 |
| 38 | Journal of Business Finance and Accounting | 0.094 |
| 39 | International Review of Financial Analysis | 0.071 |
| 40 | Global Finance Journal | 0.042 |
| 41 | Applied Financial Economics | 0.028 |

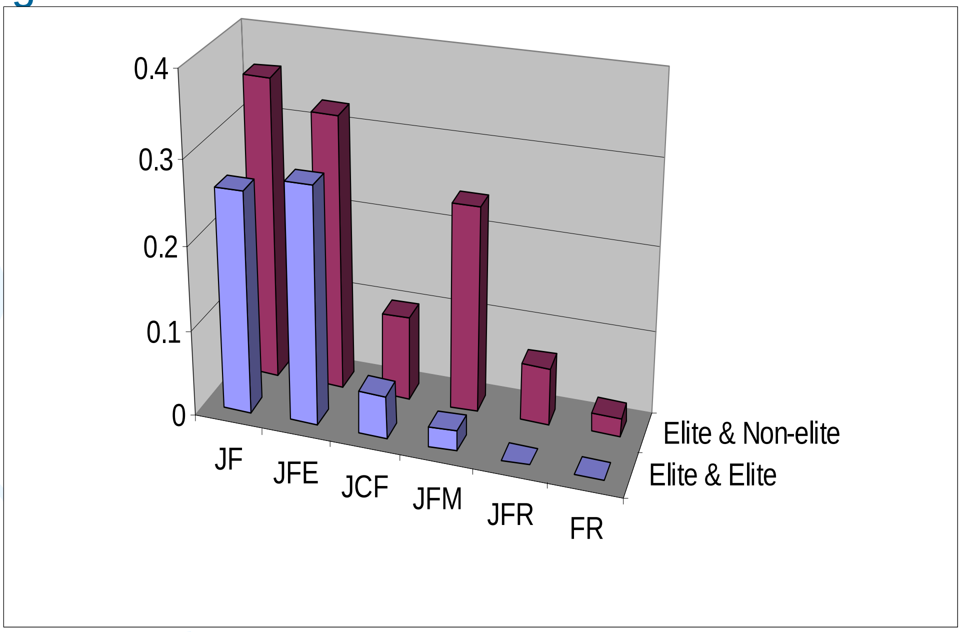
# III. Will Co-Authorship Enhance My Chance?

| Authorship Pattern | JF | JFE | JCF | JFM | JFR | FR |
|---|---|---|---|---|---|---|
| % articles with at least one author from top 20 | 0.55 | 0.48 | 0.15 | 0.22 | 0.05 | 0.03 |
| % articles with at least one author from top 80 | 0.87 | 0.75 | 0.62 | 0.58 | 0.38 | 0.28 |
| % solo authored articles | 0.3 | 0.283 | 0.333 | 0.317 | 0.25 | 0.233 |
| From top 20 | 0.39 | 0.35 | 0.15 | 0.105 | 0 | 0.07 |
| From top 21-80 | 0.28 | 0.35 | 0.6 | 0.37 | 0.33 | 0.36 |
| From "others" | 0.33 | 0.29 | 0.25 | 0.53 | 0.67 | 0.57 |
| % co-authored articles | 0.7 | 0.717 | 0.667 | 0.683 | 0.75 | 0.767 |
| At least one from top 20 | 0.62 | 0.53 | 0.15 | 0.22 | 0.05 | 0.03 |
| At least one from top 80 | 0.95 | 0.77 | 0.55 | 0.63 | 0.4 | 0.24 |
| All from top 20 and same school | 0.143 | 0.116 | 0.025 | 0.024 | 0 | 0 |
| All from top 80 and same school | 0.238 | 0.139 | 0.125 | 0.049 | 0.067 | 0.021 |
| All from top 20 but not same school | 0.119 | 0.163 | 0.025 | 0 | 0 | 0 |
| All from top 80 but not same school | 0.381 | 0.349 | 0.075 | 0.195 | 0.11 | 0.02 |
| At least one from top 20, one from 21-80 | 0.191 | 0.209 | 0.025 | 0.146 | 0.067 | 0 |
| At least one from top 20, one from "others" | 0.167 | 0.116 | 0.075 | 0.097 | 0 | 0.022 |
| At least one from top 80, one from "others" | 0.333 | 0.30 | 0.375 | 0.366 | 0.222 | 0.174 |
| All from "others" | 0.024 | 0.116 | 0.375 | 0.22 | 0.51 | 0.587 |

This table reports patterns of authorship in six finance journals: *Journal of Finance* (JF), *Journal of Financial Economics* (JFE), *Journal of Corporate Finance* (JCF), *Journal of Financial Markets* (JFM), *Journal of Financial Research* (JFR), and *Financial Review* (FR).

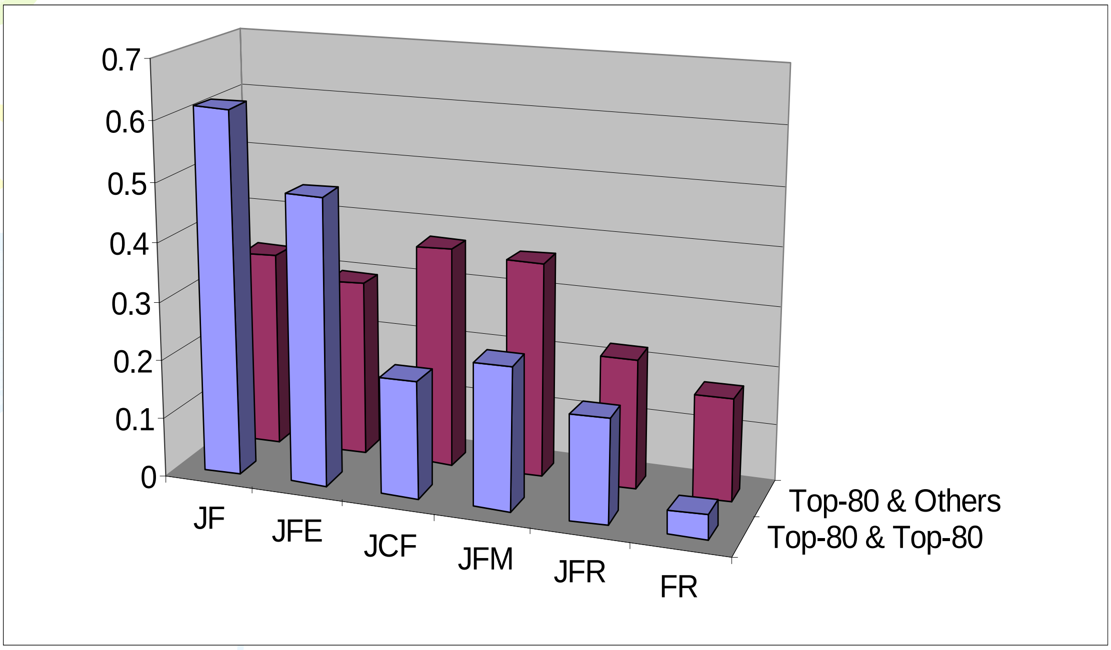
Source: Chen and Huang, "Author Affiliation Index, Finance Journal Ranking, and the Pattern of Authorship," Journal of Corporate Finance, 2007, forthcoming.

- Co-Authorship between Elite and Non-Elite Programs




Source: Chen and Huang, “Author Affiliation Index, Finance Journal Ranking, and the Pattern of Authorship,” Journal of Corporate Finance, 2007, forthcoming.

- Co-Authorship between Top-80 and Non-Top 80 Programs




Source: Chen and Huang, “Author Affiliation Index, Finance Journal Ranking, and the Pattern of Authorship,” Journal of Corporate Finance, 2007, forthcoming.

# IV. Most Commonly Seen Criticisms

- Makes no contributions
- Mechanical application of statistics (econometrics)
- Simply adopting a different country's data to an existing method (model)
- Sloppy writing, grammatical errors, typos

**PANEL DISCUSSION**

# How to Publish Papers in High Quality Journals

KASHI R. BALACHANDRAN

The first step, once you have qualified yourself as a 'researcher', is to identify a publishable research topic. It is followed by intense, deliberate and focused research work and subsequent eloquent writing of the manuscript. The next task is to submit the article to a proper journal and survive the entire refereeing- editorial process to successful publication. As an author and editor of a respectable journal, serving the dual role, I would like to discuss the publishing game.

## THE PUBLISHING GAME

As an individual we all like to wear several hats to be a complete person and enjoy what all the life offers. We find that we can never cover many areas to any satisfaction.
Specific to the role of an educator, we wear several hats as well. One of the major occupation is as an author trying hard to research and publish our findings in respectable high quality journals.
I have been the editor in chief of one of the respectable journals in accounting for the past 7 years and would like to share some thoughts on what I have learned.

## *Journal of Accounting Auditing and Finance* Editorial

Submissions to the journal are through the web. There is a submission fee of $125. With each major review, you may have to submit the fee again.
As Editor in Chief, I seek closure in 2 or 3 rounds.
They are double blind reviewed.
I send it to one referee.
If the referee report is positive and I agree with it or if it is negative and I disagree with it, I decide to send it to an associate editor (A.E.). I also send the referee report to the A.E. But it is all blind.
After getting the A.E. report, I make the decision.
If I agree with the first referee and the recommendation is to reject, it will be rejected. This decision can come within 2 months.
Otherwise, I try to get a decision within 4 months.
**Quick response is very important. In my experience sometimes as author, I had to wait for several years to get a response. I try my best to avoid this.**
Why the submission fee?—I pay the referees for replying within 3 weeks.

Referees and associate editors drive the decisions. If I disagree with the A.E. also, I may seek another A.E.
This can happen if they are all subjective or if I feel the referee did not understand the paper.

The rejection rate is high in early rounds but not after resubmissions. For resubmissions, acceptance rate is high.

I look for high quality papers. Journals compete for this.

I seek work that is innovative and citable. I have a section called TRACKS for innovative pieces, primarily for non treaded areas that may lead to further research.

I encourage U.S. and non US subject areas.

**The players to what I may call as the publishing game are: authors, editor, associate editor and referees. Of course, the major ultimate player is the reader.**

**Authors Role**

What makes a publishable good paper?

1. It is part of a research process not an independent game.
Focus on what interests you.

You can't publish in good journals if you don't read them

See what they publish. If you do behavioral, certain journals are better.
Ditto other types. Often a niche journal is a quality journal for a paper.

2. Never send first draft to a journal. Remember, rejection rate is high in the first round.
Circulate your papers for comments from friends (who you think are quality researchers).
Many good ideas do not make it into good journals because they were submitted too soon.

Try workshops at your department.
Informal brown bags, if you have them in your department are good sources to air your research.

If you get an opportunity to present, do it! People will get to know your work and make helpful comments.

Attend conferences and present your papers in them.

Study the papers that are published in the journals, but remember that the editors do change and have differing tastes.

Beware of ‘stuff’ you like too much in your paper.

3. Ask: can the reader understand the question for which you have the answer? Do you think the reader cares for the question for which you have answers?

4. Is your answer understandable?

5. Communicate in the paper your one idea well.

6. Motivate as to why you are looking at the issue. Clarity is important. Do not obfuscate with unnecessary jargon. You need wide readership for higher citation.

7. Stress the results up front and clearly relate to literature.

8. Strive to be clear and transparent about your data gathering and modeling.

9. Length should be appropriate. Check the journal for approximate length of articles.

10. If you are publishing results from your thesis:

watch for too much literature review;
fatigue and boredom in presentations;
things you have entered to satisfy the committee;
length of the article.

Papers can get rejected at first round if it is still a thesis.

11. Do not write the paper chronologically. Develop the idea, present the results and then justify them with a conclusion.

12. No typos, grammatical errors. Give the paper for others to read, even get editorial help. Referees get annoyed too and it shows in their reports.

13. Do not put too much of the paper in footnotes or end notes. Readers and referees spend time reading the main part.

14. If you are a young faculty member, don't be afraid to find a successful older faculty member who DOES publish in the best journals. See about

mentoring from him/her or joint authorships. You may be able to bring good stats training and the mentor may bring good presentation skills

Don't be afraid to take a good idea to a senior faculty member and talk about it as "bait."

**Second round**

1. When you do get a referee report, take the letter you receive--assuming it does NOT say "drop dead"-- and get someone else who is experienced to help you understand what the editor means. The editors are not always transparent--like ENRON financials--and may be trying to be encouraging but you don't realize it.

2. In the referee report, respond to each suggestion. Do not ignore- it will not go away. The referee has to see that you tried.

3. Do not argue with the referee, associate editor or the editor. We are all trying to understand and not fight.

4. Respond in a separate memo to the referee and one to the associate editor, if any. Point out where you have responded to the suggestion in the paper. Do not assume they can see.

5. Do not delay too much. Every one has other things to do, they may forget.

6. Do not ignore the suggestions and submit to another journal. Very likely the referees are the same.

7. If you do get a rejection at journal A and decide to go to another journal, be sure to revise it before submission. The set of reviewers is very small and they have their feelings hurt if you ignore them.

My experience: repeat referees across journals are common occurence.

8. Don't be afraid to publish in "non-A" journals. It is practice with the process and everyone needs a success.

That's the start. Good luck.

## Choosing a journal and journal ranking

Do not rely on just ranking.
Check for who will read the journal.  Will it be read widely and cited?

Does the journal publish in this area?

Look at the list of editors, possible referees, editorial board etc.

## If you are a referee

Use it as a chance to develop relationships in the profession – through the editor and associate editors.

It helps in your research, to identify colleagues and to keep up with literature.

Be on time.  How would you like to be delayed?  If you get delayed, before complaining to the editor, think about how fast you responded – to the same editor?

In your referee report, give citations to other papers, published or unpublished.

## Conflicts

Some referees and associate editors express their experience with philosophical bends.  Try to avoid it in your refereeing process and beware when you write your paper.

Author requesting the editor not to approach some possible referees- risky but I entertain.  If you are too junior, do not do it.

Look for topics by looking at recent conferences.

寶來投信

寶來金融集團成員之一
寶來投信獨立經營管理

Polaris International Securities Investment Trust Co.,Ltd

# Overview of Taiwan Investment Trust Industry

全球視野 在地深耕

Global Vison , Taiwan Focus

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# Milestones for Taiwan Fund industry

寶來投信

寶來金融集團成員之一
寶來投信獨立經營管理

Polaris International Securities Investment Trust Co.,Ltd

**Year 1983~1992** | **Year 1993~1996** | **From year 1997 until now**

Monopolized by **the big 4** investment trust companies → Liberalization of investment trust industry → Intensive competition era

**Year 1983**
Set up of the first Investment trust company
**Year 1985**
Granted additional 3 companies to be set-up

**Year 1993**
**11 new investment trust companies** were granted to be set-up, and financial groups invested heavily into the industry

**Year 1997**
Completed liberalization of the investment trust business, foreign investors, banks had set-up or merged the existing counterparties

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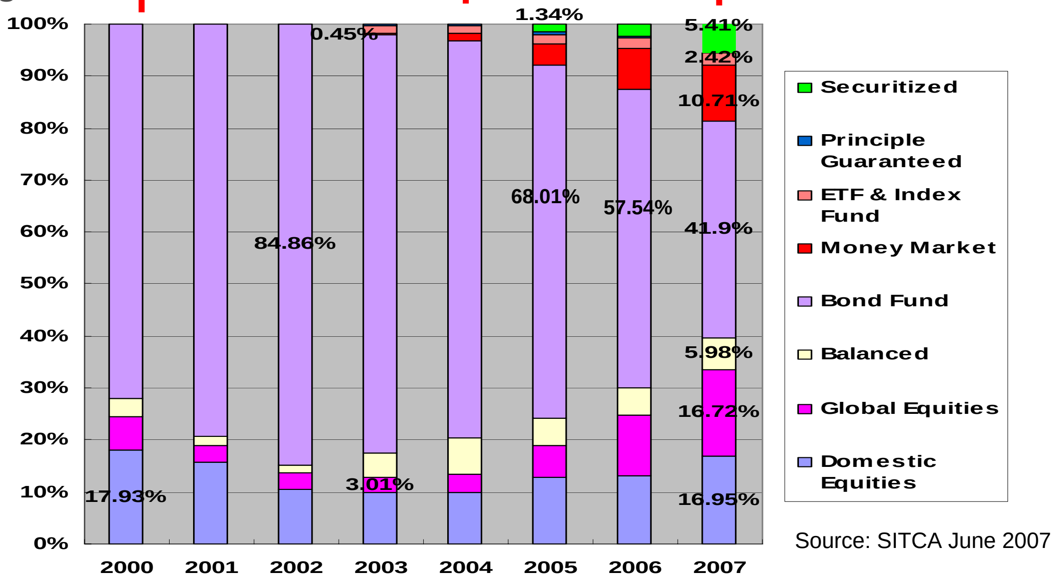
# Milestones for Taiwan Fund industry



There are 3 different product development stages for Taiwan's fund houses, the beginning stage was before year 2000, and the products focus were in equities and fixed-income, between 2001-2004, bond fund was the mainstream, and after 2004, it was diversify product line era.

Stone Ages | Bond Ages | Dark Ages | Renaissance



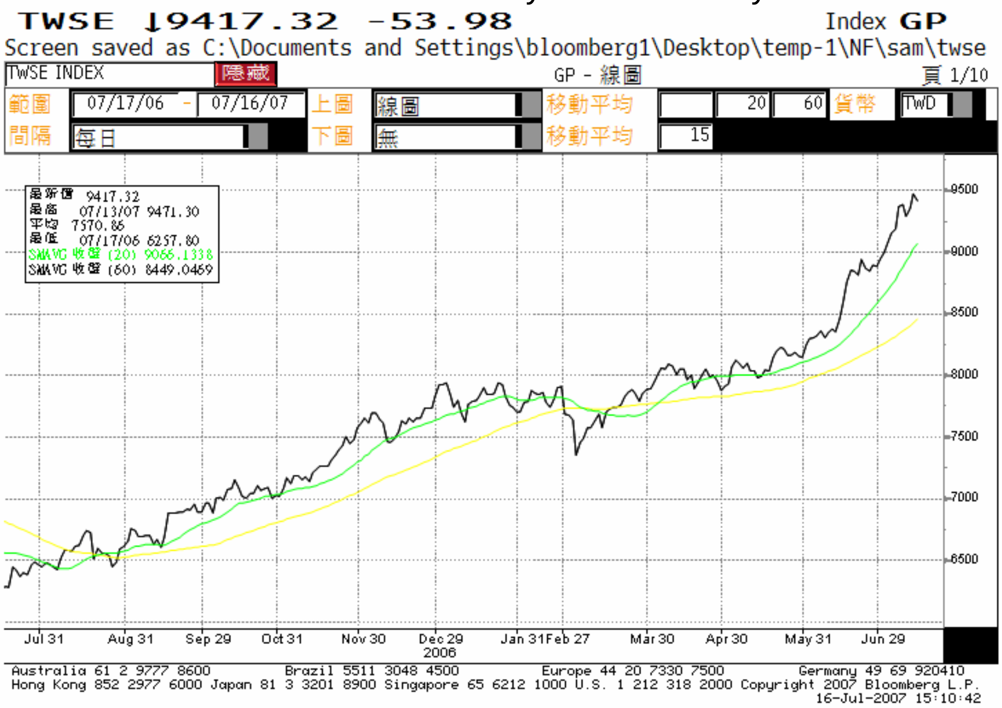

Source: SITCA June 2007



# Hot Spot Market



Taiwan Stock Market Trend July 17 2006 ~ July 13 2007



# Rapid Growth in Domestic Fund Size

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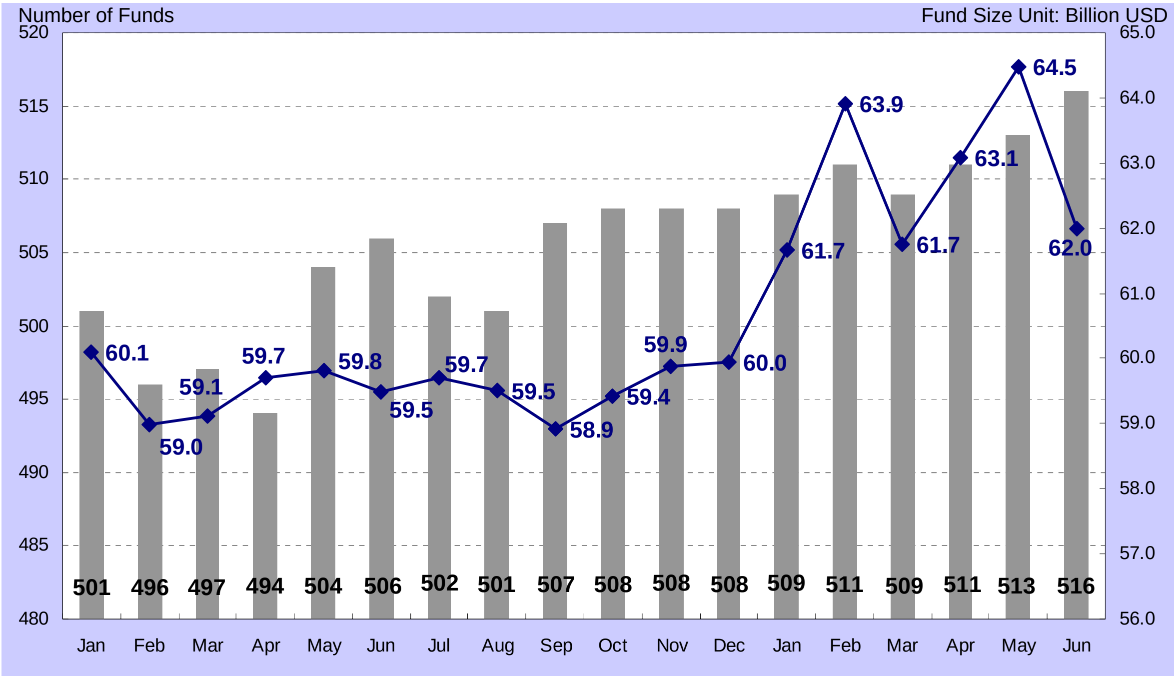
寶來金融集團成員之一
寶來投信獨立經營管理
Polaris International Securities Investment Trust Co.,Ltd

**Changes in Fund Size and Number of Funds**

Domestic Fund Size and Number of Funds

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# Fragmented market structure

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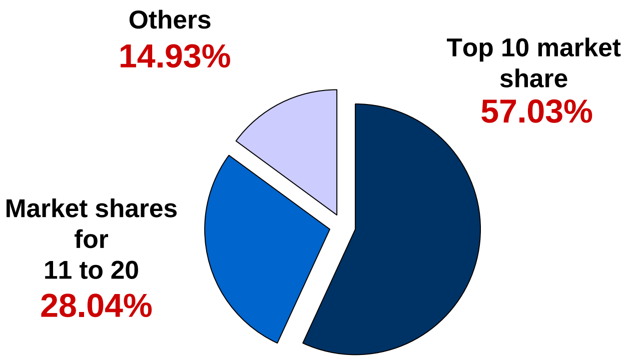
寶來金融集團成員之一
寶來投信獨立經營管理
Polaris International Securities Investment Trust Co.,Ltd

**As of market shares, none of investment trust companies in Taiwan has absolute advantages. On the other hand, foreign institutions continue to increase their exposure.**

**Top 10 Investment Trust Companies**

| rank | Company name | Total AUM (in M USD) | Market shares |
|---|---|---|---|
| 1 | JP Morgan | 4,349.5 | 7.02% |
| 2 | Capital | 4,256.6 | 6.87% |
| 3 | ING | 4,184.9 | 6.75% |
| 4 | Polaris | 3,658.9 | 5.90% |
| 5 | Prudential | 3,537.2 | 5.71% |
| 6 | Yuanta | 3,169.4 | 5.11% |
| 7 | HSBC | 3,162.4 | 5.10% |
| 8 | Cathy | 3,142.3 | 5.07% |
| 9 | PCA | 3,035 | 4.90% |
| 10 | National | 2,862.3 | 4.62% |
| Total AUM | | 61,988 | 57.03% |

**Top 20 investment trust companies takes up 80% of the market shares**




Units: USD at exchange rate of 32.8 NTD

Source: SITC June 2007

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# Non-bond AUM growth is becoming a mega trend

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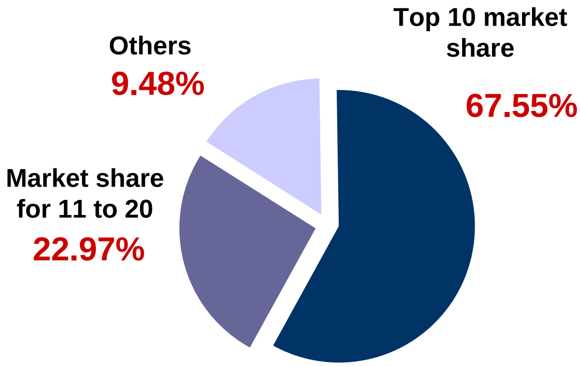
寶來金融集團成員之一
寶來投信獨立經營管理
Polaris International Securities Investment Trust Co.,Ltd

## The total AUM for non-bond fund for top 20 investment trust companies take up 90% of the market share

Top 10 investment trust companies
(AUM for non-bond fund )

| rank | Company name | Total AUM (in M USD) | Market shares |
|---|---|---|---|
| 1 | JP Morgan | 3,368.2 | 9.33% |
| 2 | Polaris | 2,964.3 | 8.21% |
| 3 | Prudential | 2,636.8 | 7.31% |
| 4 | HSBC | 2,551.9 | 7.07% |
| 5 | Yuanta | 2,371.2 | 6.57% |
| 6 | Cathy | 2,234.5 | 6.19% |
| 7 | ING | 2,154.1 | 5.97% |
| 8 | PCA | 2,044.1 | 5.66% |
| 9 | Allianz | 2,028.0 | 5.62% |
| 10 | Capital | 2,025.7 | 5.61% |
| Total AUM | | 36,083.4 | 67.55% |

Top 20 companies take up 90% of the market shares




More concentrated

Unit: USD at exchange rate of 32.8 NTD

Source: SITC, June 2007

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# Type of fund houses

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寶來金融集團成員之一
寶來投信獨立經營管理
Polaris International Securities Investment Trust Co.,Ltd

There are total of **39** investment fund houses in Taiwan, which can be classified into three categories, financial holding structure, foreign institutions and Independent. While each holding their uniqueness and advantages.

| Types of Structure | Advantages | Number of companies | Examples |
|---|---|---|---|
| Financial Holding Structure | Strong sales networks and channels | 13 | Cathay, Fubon, Sinopac, Taishin, Yuanta.. |
| Foreign Institution | Global Platform and Research Resources | 12 | HSBC, Invesco, Prudential, JP Morgan, UBS, AIG, Fidelity, Franklin Templeton |
| Independent | Focus on Innovations & R&D | 14 | Polaris, Capital |

Source: Polaris SITC

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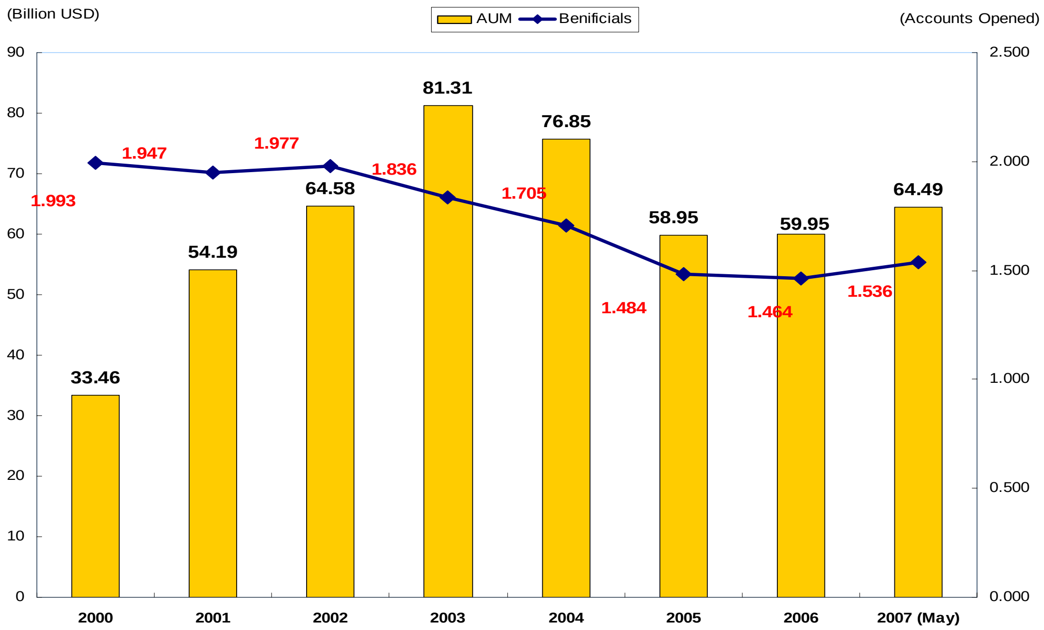
## Recovery of number of beneficiaries

寶來投信
寶來金融集團成員之一
寶來投信獨立經營管理
Polaris International Securities Investment Trust Co.,Ltd

**The total AUM and number of beneficiaries are in stagnancy, until this year the total AUM has grown back to 2 Trillion NTD benchmark (64.5b USD)**




Source: SITCA June 2007

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## Decreasing average fund size

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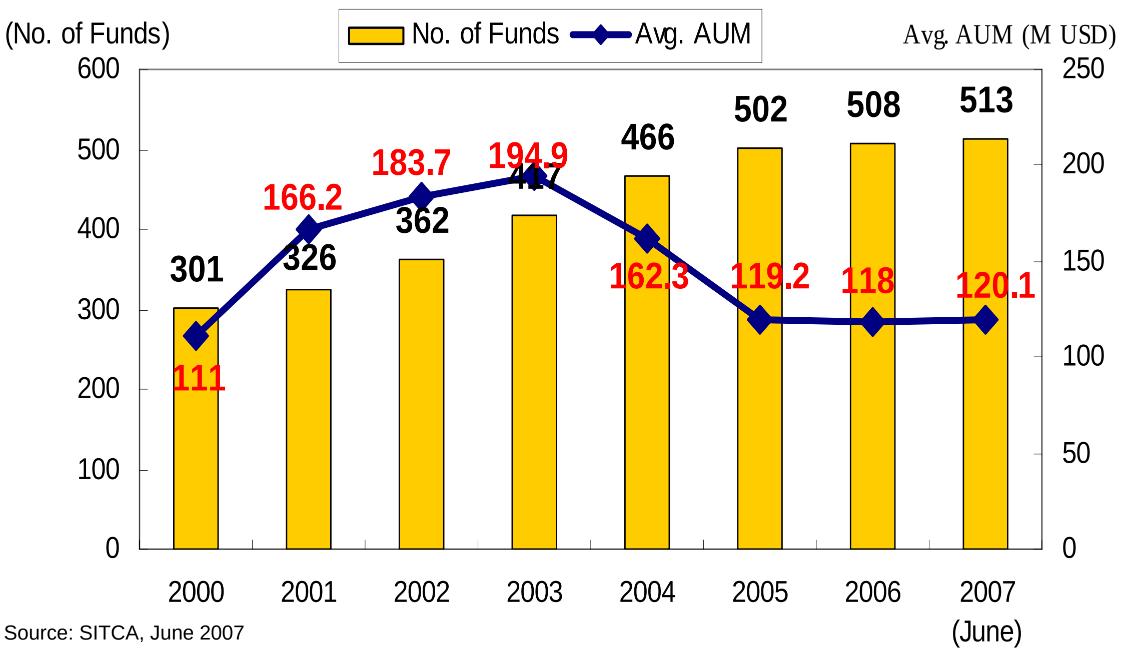
Polaris International Securities Investment Trust Co.,Ltd

**In recent years, the number of funds issued has increased from 301 to 513, however the average sizes per fund has drop from 194.8m USD to 125.6m USD**




Source: SITCA, June 2007

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# New funds launched

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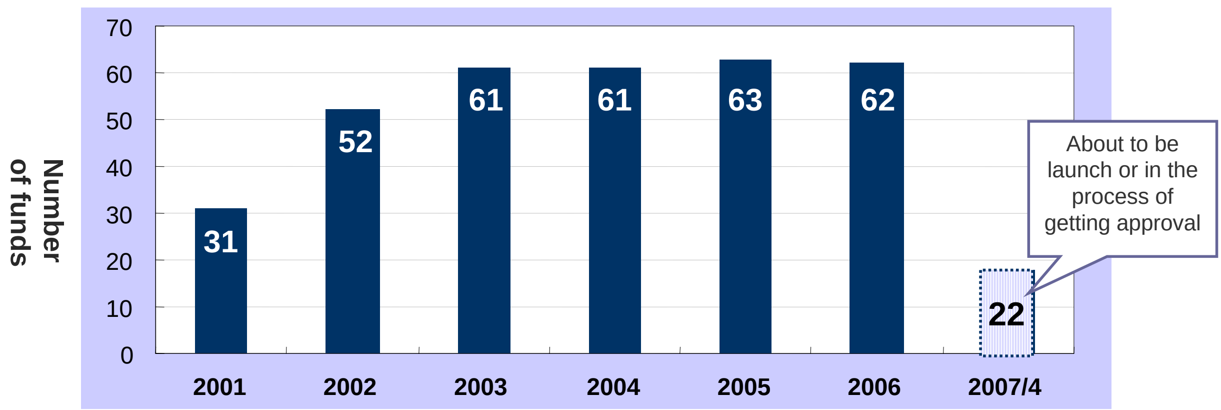
Polaris International Securities Investment Trust Co.,Ltd

(1) Raising demand in investment tools as interest rate falls to record low.

(2) Globalization, liberalization, lead to the new space in new financial products development.

(3) Intensively market competition forces the investment trust companies to enhance its product development capability and level of internationalization

Number of funds being launched at each year in Taiwan




Source: SITC, Polaris SITC (2007/4/30)

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# Types of products launched

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Polaris International Securities Investment Trust Co.,Ltd

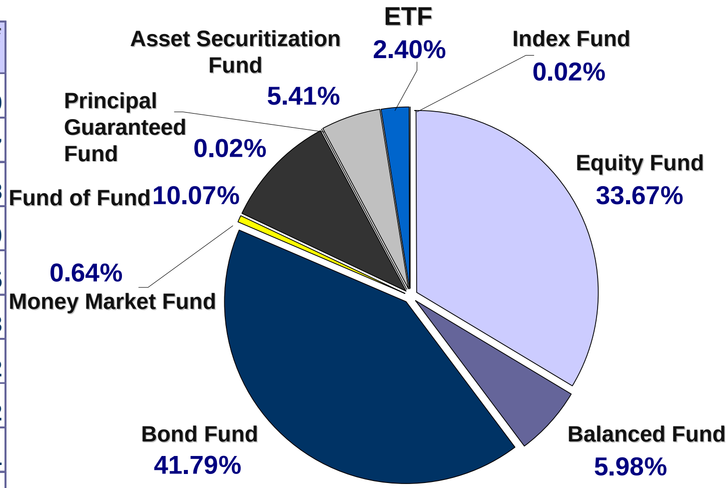
**As of June 2007, over 500 funds were launched by Taiwan Investment Trust companies. The size of bond funds has significantly decreases.**

Types of investment funds launched and total AUM for each types of funds

| Fund Types | Total AUM | Number of Funds |
|---|---|---|
| Bond Fund | 20.905 | 79 |
| Equity Fund | 20.872 | 267 |
| Fund of Fund | 6.245 | 68 |
| Balanced Fund | 3.704 | 80 |
| Asset Securitization Fund | 3.356 | 15 |
| ETF | 1.491 | 3 |
| Money Market Fund | 394M | 2 |
| Principal Guaranteed Fund | 8.59M | 2 |
| Index Fund | 12.933M | 1 |
| Total | 61.988 | 516 |

Units: Billion USD unless specified, exchange rate at 32.8 NTD

Percentage break down for the funds




Source: SITC June, 2007

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# Management fees



**Management fees:**

| Fund type | Avergae | High | Low | Polaris |
|---|---|---|---|---|
| International Equity Fund | 1.76% | 2.00% | 1.50% | 1.80% |
| REITs Fund | 1.66% | 1.80% | 1.50% | 1.80% |
| Taiwan Equity Fund | 1.55% | 1.75% | 1.20% | 1.40% |
| Financial Asset Securitization Fund | 1.38% | 1.50% | 1.20% | 1.40% |
| International Bond Fund | 0.95% | 1.20% | 0.55% | 1.00% |
| Fund of Fund | 0.91% | 1.20% | 0.50% | 1.10% |
| Taiwan Bond Fund | 0.27% | 0.60% | 0.10% | 0.35% |

source：Lipper (2007/4)

- **Front end fee: about 1.5%**
- **Custodian fee: Taiwan equity fund 0.15%**
  **International equity fund 0.25%**
  **Taiwan bond fund 0.08%**
  **International bond fund 0.12%**

| 2007 Jan~May Investment Trust Industry Source of Management Fee Income | | | | | | | |
|---|---|---|---|---|---|---|---|
| Month/Type | Equities | Balanced | Bond | Money Market | Structured | Securitized | Total |
| January | 21.62 | 3.23 | 7.35 | 0.152 | 3.75 | 2.38 | 38.482 |
| February | 19.76 | 3.17 | 6.52 | 0.122 | 3.72 | 3.45 | 36.742 |
| March | 22.32 | 3.51 | 7.01 | 0.15 | 4.21 | 3.84 | 41.04 |
| April | 22.71 | 3.78 | 6.8 | 0.157 | 4.51 | 3.9 | 41.857 |
| May | 25.03 | 4.15 | 4.15 | 0.183 | 5.06 | 4.48 | 43.053 |

Units: Million USD at exchange rate of 32.8 NTD

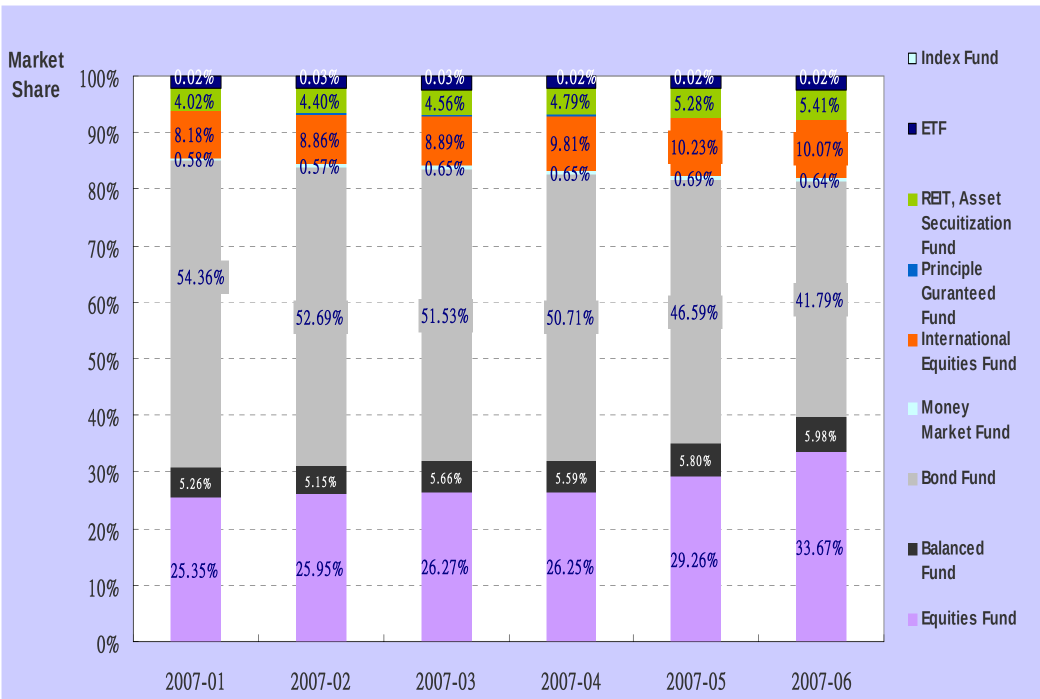
Source: SITCA June 2007



# Growth momentum of funds spectrum



**Percentage breakdown of all types of investment fund in Taiwan market**




Source: SITCA June, 2007

# Growth momentum of funds spectrum

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寶來投信獨立經營管理
Polaris International Securities Investment Trust Co.,Ltd

## Monthly Comparison of Domestic Funds

| | Fund Size | | Monthly Changes | | Since 1/1/2007 | |
|---|---|---|---|---|---|---|
| Type of Fund | May | April | Changes | (%) | Changes | (%) |
| Domestic Investment | 286.81 | 258.90 | 27.91 | 10.78% | 31.04 | 12.13% |
| Cross-Country | 331.99 | 284.11 | 47.89 | 14.42% | 100.18 | 43.22% |
| **Sub Total** | **618.80** | **543.01** | **75.80** | **12.25%** | **131.22** | **26.91%** |
| Balance Fund | 122.58 | 115.64 | 6.94 | 5.66% | 21.80 | 21.63% |
| Domestic Money Market | 944.98 | 1,012.23 | -62.25 | -6.55% | -94.37 | -9.04% |
| Domestic Fixed Income | 8.70 | 9.52 | -0.82 | -9.44% | -2.19 | -20.09% |
| Offshore Bond | 56.75 | 27.26 | -5.17 | -1.93% | -7.48 | 38.82% |
| **Sub Total** | **985.43** | **1,049.01** | **-63.59** | **-6.45%** | **-89.08** | **-8.29%** |
| Money Market | 14.60 | 13.55 | 1.05 | 7.21% | 3.75 | 34.60% |
| **Sub Total** | **14.60** | **13.55** | **1.05** | **7.21%** | **3.75** | **34.60%** |
| Structured | 216.30 | 202.98 | 13.32 | 6.16% | 60.82 | 39.12% |
| **Sub Total** | **216.30** | **202.98** | **13.32** | **6.16%** | **60.82** | **39.12%** |
| Principle Guranteed | 1.94 | 1.98 | 0.04 | -2.06% | -1.56 | -44.61% |
| **Sub Total** | **1.94** | **1.98** | **0.04** | **-2.06%** | **-1.56** | **-44.61%** |
| Asset Securitization | 111.61 | 99.09 | 12.53 | 11.22% | 65.06 | 139.77% |
| **Sub Total** | **111.61** | **99.09** | **12.53** | **11.22%** | **65.06** | **139.77%** |
| ETF | 43.493 | 43.132 | 0.361 | 0.83% | 2.832 | 6.96% |
| **ETF Sub Total** | **43.493** | **43.132** | **0.361** | **0.83%** | **2.832** | **6.96%** |
| Index Fund | 0.37 | 0.45 | -0.08 | -22.70% | 0.06 | -13.15% |
| **Sub Total** | **0.37** | **0.45** | **-0.08** | **-22.70%** | **0.06** | **-13.15%** |
| **Domestic Fund Total Size** | **2,115.13** | **2,068.84** | **46.29** | **2.24%** | **194.79** | **10.14%** |

**Source: SITCA May 2007** **Units: Billion NTD**

**Bond Fund Sizes continues to decrease**

**Net growth of NTD 194.79b (5.94b USD) 5M2007
vs.
NTD 150b (4.57b USD) in 2006**



# Shift in Industry Structure & Sentiment

寶來投信
寶來金融集團成員之一
寶來投信獨立經營管理
Polaris International Securities Investment Trust Co.,Ltd

- **Traditional industry Practice**
  - **Seek for ranking, market share and AUM size**
- **Brand New Focus for the New Era**
  - **Performance Driven along with Branding**
  - **Marketing Driven along with first mover advantage**
    - **However also creating copy-cat by other firms**
- **Government Interventions**
  - **Preventing further outflow of funding to overseas, Taiwan's Central Bank releases new measure in launching new offshore funds (Maximum Size of 10B NTD)**
  - **However do allow domestic fund house to apply a onshore fund while applying for offshore fund**
- **Introduction of Master Agent Accounts**
  - **Allow domestic Securities house, Investment Consulting Companies and Investment Trust Companies to supply offshore funds**

# Offshore Funds Investment

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寶來投信獨立經營管理
Polaris International Securities Investment Trust Co.,Ltd

| Categories | Detail | | Domestic Investors Investment Amount (Unit: M NTD) |
|---|---|---|---|
| Beneficiary Structure | Retailed Investors | | 129,431.49 |
| | Institutional Investors | Individual | 94,514.24 |
| | | Ominbus Acct. | 1,314,046.35 |
| Fund Types | Equities | | 845,741.78 |
| | Bond Fund | | 622,106.90 |
| | Balanced Fund | | 45,765.38 |
| | Money Market Fund | | 16,990.10 |
| | Others | | 7,387.92 |
| Investment Regions | Global | | 607,259.68 |
| | Single Country | | 357,458.54 |
| | Regions | America | 39,082.90 |
| | | Europe | 300,757.24 |
| | | Asia | 129,348.54 |
| | | Emerging Countries | 104,085.17 |
| | | Others | 0.00 |
| Currency Classification | US dollars | | 1,081,448.75 |
| | Euros | | 325,905.75 |
| | Japanese Yen | | 105,097.83 |
| | Others | | 25,539.75 |

Currently there are 32 master agents
58 offshore fund houses
749 registered offshore funds
Total AUM for offshore investment approximately NTD 153 0b (USD 47b)



# Development in innovate products

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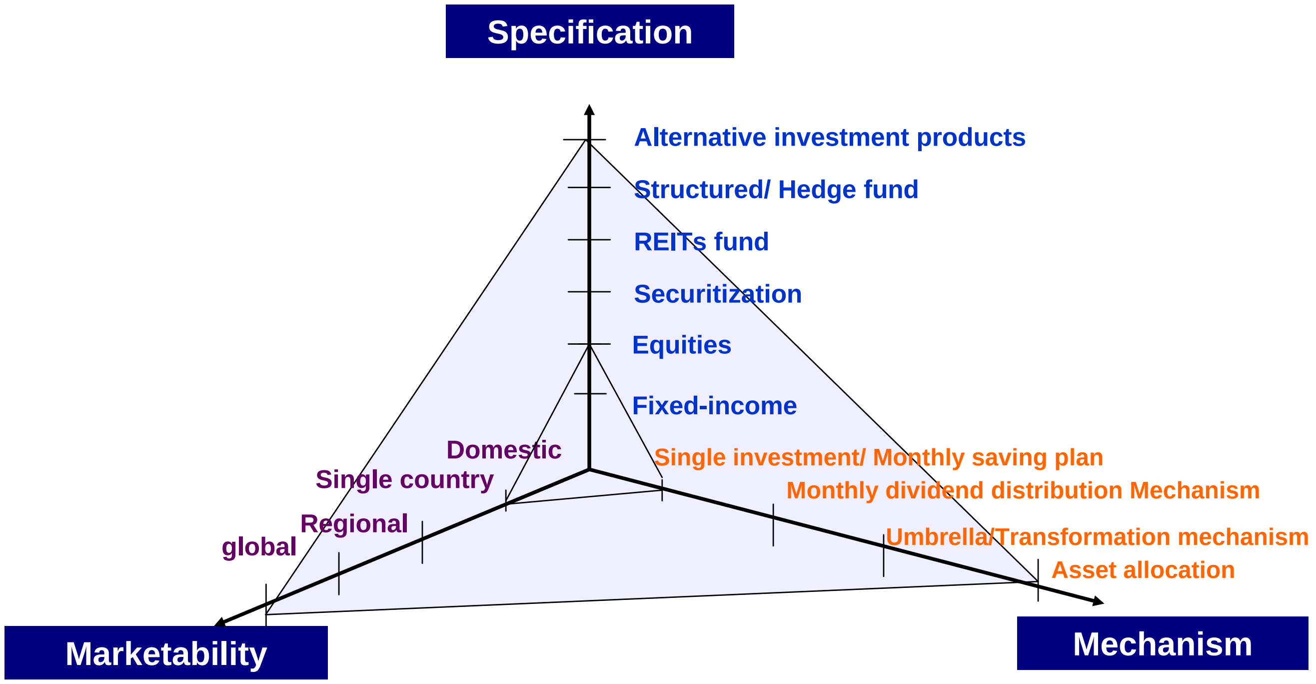
Polaris International Securities Investment Trust Co.,Ltd

| year | Innovate funds or concepts | Name of funds |
|---|---|---|
| 2003 | First ETF in Taiwan | Polaris Taiwan Top 50 Tracker Fund |
| 2003 | First FoF in Taiwan | FGIT Fund of fund |
| 2003 | First Principal Guaranteed fund in Taiwan | Polaris Glo Long-Short Strat Principal Gteed Fund |
| 2004 | First Index fund in Taiwan | Polaris Taiwan Weighted Stock Index Fund |
| 2004 | First umbrella fund in Taiwan | FGIT Dragon&Tiger umbrella fund |
| 2005 | First REITs fund in Taiwan | Fubon Global REIT Fund |
| 2005 | First fund in Taiwan with monthly dividend distribution | Polaris Global REITs Fund |
| 2005 | First 0 subscription fund in Taiwan | Fidelity Excellent Navigation Global Fund of Funds |
| 2005 | First target date fund in Taiwan | Allianz Global Investors Target 2015、2020、2030 Fund |
| 2005 | First fund in Taiwan with multiple class | Polaris Global ABS Fund |
| 2006 | First green energy fund in Taiwan | Allianz Global Investors Global Eco Trends Fund |

# Diversification in Product Design



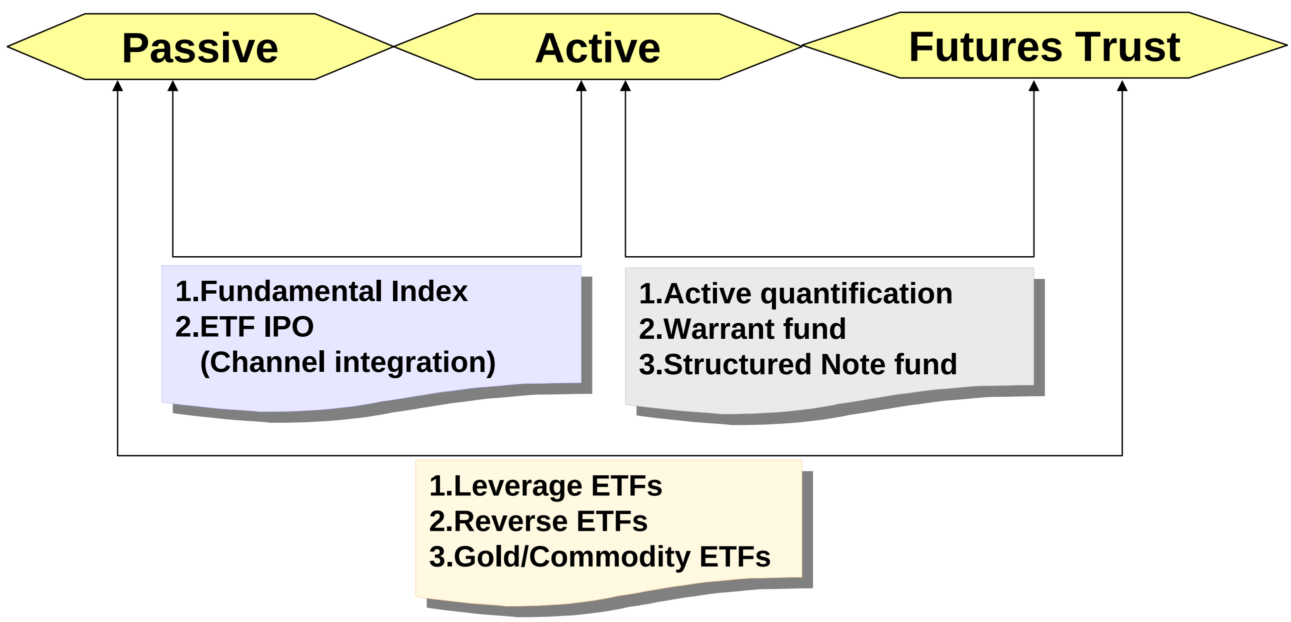





# Trend & Product Design Strategies



## Migration



# Active Management

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寶來投信獨立經營管理
Polaris International Securities Investment Trust Co.,Ltd

- In the recent years, the appetite of Taiwan Investors have shifted from traditional funds to more exotic funds
  - Theme investment & Alternative Investment
- Investors in Taiwan are also getting smarter as more investment tools are presented.

Local Investment → Global Investment

Global Investment → Local Investment

Active Investment → Quantitative Investment

Growth/Value → Theme Investment



# Passive Strategies

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Polaris International Securities Investment Trust Co.,Ltd

**Liberation 1**
Tailored-Made Indexes

**Liberation 2**
ETF – Cross listing of ETF

**Liberation 3**
Issuance of Foreign ETF

Infrastructure

Development

Catching up with Global ETF players

Cap Weighting
TTT & TMT → Basic Plain Vanilla ETF

Theme ETF
Sector, Fundamental, Value and Growth

Alternative Class
High Yield Dividend ETF

Tailored made
Customized ETF Indexes

Active investment
Inverse & Leverage ETF

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寶來金融集團成員之一
寶來投信獨立經營管理

Polaris International Securities Investment Trust Co.,Ltd

# Overview of Polaris Investment Trust

全球視野 在地深耕

Global Vison , Taiwan Focus

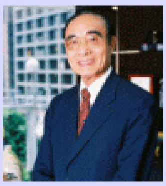
# Company Structure

寶來投信

寶來金融集團成員之一
寶來投信獨立經營管理

Polaris International Securities Investment Trust Co.,Ltd

- Shareholders Convention
  - Supervisors
  - Board of Directors
    - Auditing Office
    - Chairman
      - Performance Review & Risk Management Committee
      - President
        - Risk Management Office
        - Compliance Office
        - Investment Products Center
        - Business Development & Planning Division
        - Administration & Operations Center



## Chairman Shau-Dai Lin

**Experience:**
Chairman, Apex International Ltd.
Chairman, Taiwan Futures Exchange
President, Taiwan Stock Exchange
President, Fuhwa Securities & Finance

## President Julian Liu

National Management Excellent Award, 2004, 2006
Golden Goblet Award, 2005

**Experience:**
President, Polaris Securities HK
Vice President, Polaris Securities
International Financial Department
Director, Polaris Securities President Office

Source：Polaris SITC as of June 2007

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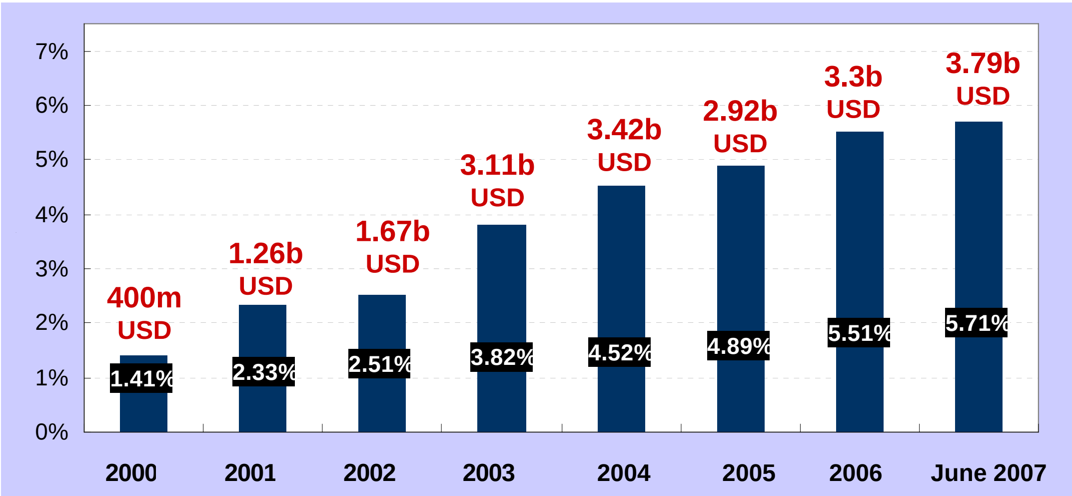
# Polaris AUM Growth



- Polaris has become the 4th largest investment trust company in Taiwan in 2007
- Discounting bond fund AUM, Polaris' market share stands at 8.5% and ranks as the 2nd largest Investment Trust Company

Polaris Investment Trust Historical AUM



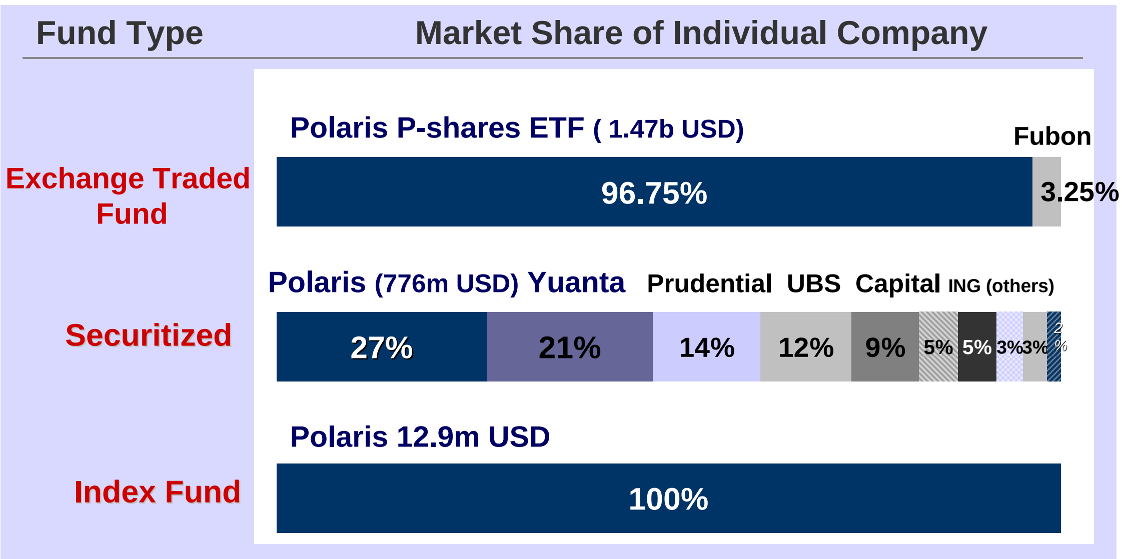

| Rank/Total | 21/38 | 20/40 | 18/44 | 9/43 | 6/44 | 7/44 | 6/41 | 4/40 |
|---|---|---|---|---|---|---|---|---|

Source: SITCA June 2007, figures not including discretionary services and private placement



# Pioneer in Market Branding






Sources: SITCA, organized by Polaris SITC June, 2007

Unit: USD at exchange rate of 32.8NTD

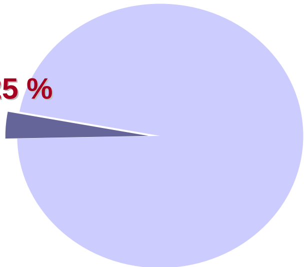
# Pioneer in Taiwan ETF

Polaris International Securities Investment Trust Co.,Ltd

Realization of future growing potential for ETFs, the first ETF in Taiwan was launched in June 2003.

The only Investment Trust company in Taiwan with 4 years of practical experiences in ETF management and operations.

Taiwan ETF market




Source: SITCA June, 2007

Comprehensive products development for Polaris SITC ETFs

- **June 2003** — First ETF in Taiwan : Polaris Taiwan Top 50 Tracker Fund
- **March 2005** — First Global ETF FoFs in Taiwan
- **August 2006** — Second ETF in Taiwan: Polaris Taiwan Mid-Cap 100 Tracker Fund
- **September 2006** — Fist ETF equity link product to be listed oversea-Taiwan Participation Certificate.
- **October 2006** — First Investment Trust company in Taiwan to develop customized index products

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# Polaris ETF - P-Shares

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寶來投信獨立經營管理

Polaris International Securities Investment Trust Co.,Ltd

- Currently Polaris' ETF have successfully capturing over 95% of the ETF market share in Taiwan (Total ETF AUM of Polaris 1.86b USD)
- Changing the dynamics of Polaris Investment Trust's product line

- P-Shares product line
  - Traditional Market Cap Weighting
    - TTT: ETF50 (Top 50 Companies) 0050 (AUM: 1.52b USD)
    - TMT: ETF100 (Mid-Cap 100) 0051 (AUM: 63.17m USD)
  - Sector
    - Electronics 0053 (AUM: 109.7m USD)
    - China Play 0054 (AUM: 115.9m USD)
    - Financial 0055 (AUM: 51.8m USD)
    - Non-Tech & Financial (TBL-4Q2007)
  - Theme
    - High Dividend (TBL-4Q2007)

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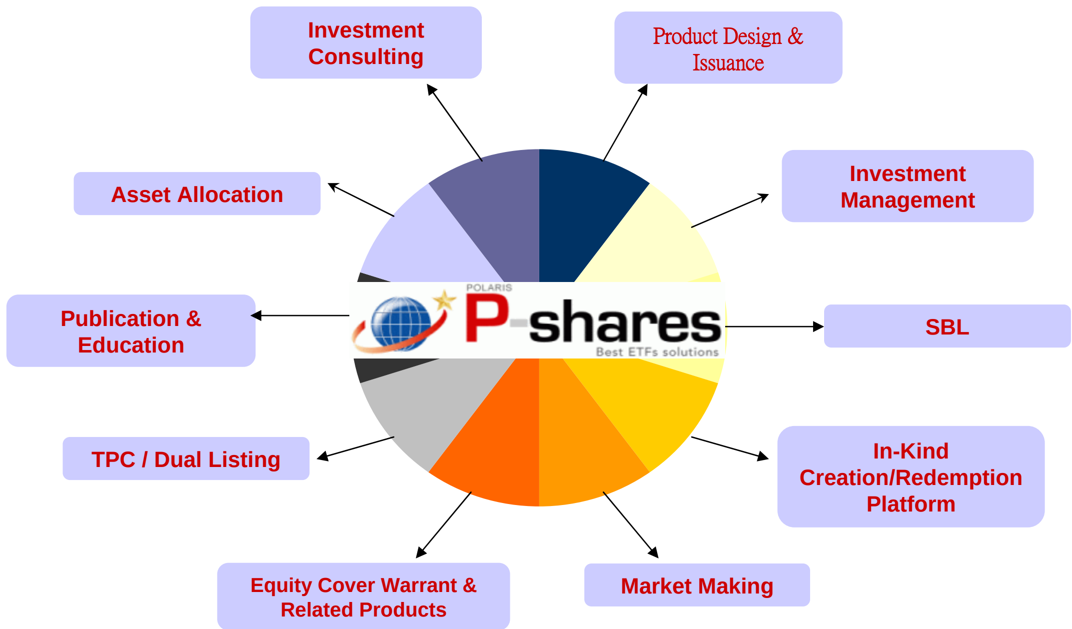
# Full Dimension thinking



**Establishment of Polaris ETF Brand, providing a "360 degrees Full Dimension ETF**

## -- ETF Engine 360° --



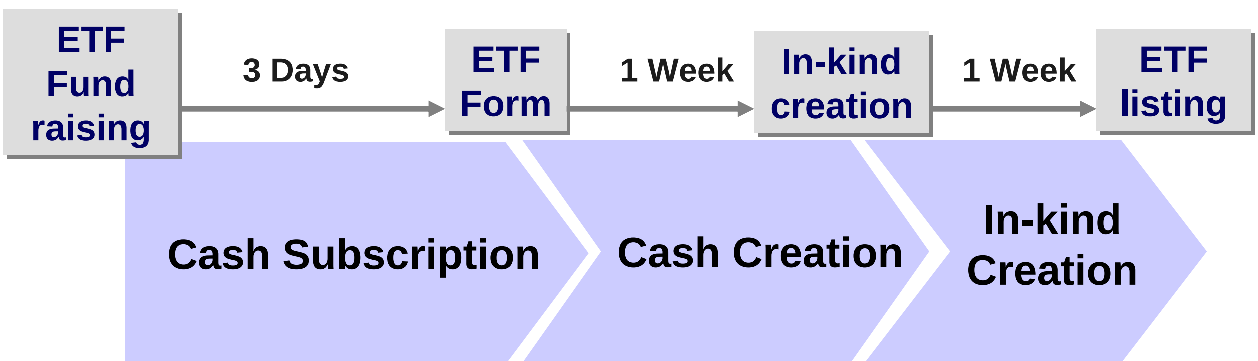



# ETF IPO



## First ETF In Taiwan using IPO + Seed Fund format

- **Polaris ETF umbrella fund allows the retailed investors to participate in the primary market in IPO format**
- **Low entry barrier of NTD 15,000 (USD 500)**




Source：Polaris Investment Trust, May 2007

*** For reference only, actual fund raising time may be differ from actual procedure**

# Passive + Active Strategy



## Fundamental Index

- Using fundamental information from financial report to describe fund size
  - Cash Flow
  - Sales
  - Book Value / Shareholders Equity
  - Gross Dividends payout

## Leverage ETF

The breakthrough of such product allows investors to short or long on equities without the hassle of having a collateral account and does not bear the mechanism of deposit like traditional ETF. By using leverage strategy, investors can double their return



# Futures Investment Trust



1. Public Offering + Private Placement
2. Commodity Fund / ETF
3. Forex Fund / ETF
4. Warrant ETF

# Marketing Strategy FY2007



- (New) => Listing of 2~3 public placement funds/ETF
- (Old) => REIT Ⅲ+ETF Classic Series + Domestic Flagship Funds +…

| | Q1 | Q2 | Q3 | Q4 |
|---|---|---|---|---|
| New Fund | | Domestic Umbrela ETF<br>Private Placement | Regional Umbrella ETF | Alternative Class<br>or other |
| Old Fund | REIT Ⅱ<br>Domestic Funds<br>Global ETF | ETF Wealth Manageme<br>REIT Ⅲ<br>Domestic EQ Fund<br>Monthly Savings Plan | REIT Ⅲ<br>TTT/MidCap Anniversary<br>Global Funds<br>ABS Fund | Domestic EQ Fund<br>Classic ETF series<br>Monthly Savings Plan |



# Marketing promotion patterns



•Investors is the center of marketing promotion, through sales/channels, services, brand and products, to reach the result of "closing the deal"

Professional financial planning training

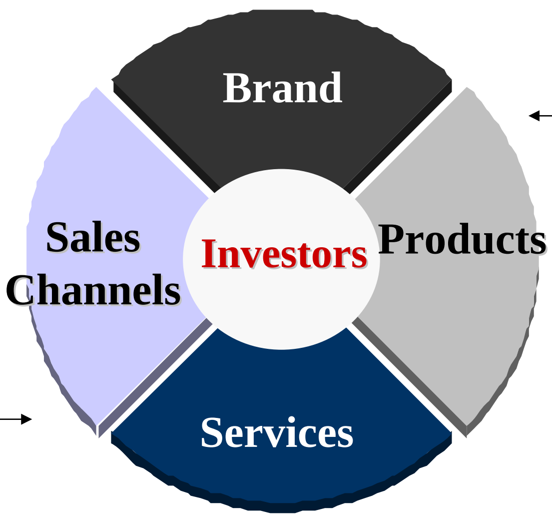
Sales training

Investment products training

Incentive plan

Professional back-up by investment teams

Discount in subscription fees




Advertising exposures

Press and news releases

Investment products conferences

Marketing materials

Internet and e-mail marketing

# Sales networks and channels



• using the example from Polaris Investment Trust：

- Customized privilege services
- Brokerages service networks
- Bank channel services
- Institutional services
- Customer consultation services

- Direct Sales： Taipei
- Gaoshiong
- Taichung
- Xinzhu
- Polaris Securities


- Polaris Funds Management Platform (FMP)
- Polaris Telephone & voice mail services (IVR)

- Polaris daily report
- Fund selection weekly reports
- Investment fund monthly reports
- Investment prospective for Taiwan Equity market
- Global investment prospective
- News flash



# Market Analysis for Investment Products



| Sales/services | Different layers of customers | Investment demand |
|---|---|---|
| •Professional investment consultation teams<br>•Customized privilege services | **Institutional investors** | •Cash management<br>•Long-term stability<br>•Absolute return products<br>•Fixed-income<br>•Asset allocation<br>•Customization |
| •Customized privilege services<br>•Through priority banking or securities brokers | **High net-worth individual** | •customization<br>•Tax advantage<br>•Long-term stable growth<br>•Professional financial planning |
| •Through priority banking or securities brokers<br>•Telephone banking services representatives<br>•Internet banking services | **Small investors** | •Different financial planning to meet different preferences<br>•Savings, wealth cumulation<br>•All types of investment funds products |

# Thank you !



# Q & A

•The Financial Supervisory Commission has either approved this fund or allowed its effective registration, but that does not indicate that this fund is risk-free. The prior management performance of Polaris SITC (the Manager) does not guarantee any minimum return on investment for this fund. The Manager will not, apart from exercising its duty of due care, be responsible for the gains or losses of this fund, and does not guarantee any minimum return. The investor should request the prospectus of the Fund and read it thoroughly before investing.

•This document is produced for information purposes in presentations only and does not constitute an offer to buy nor a solicitation to sell, nor shall it form the basis of or be relied upon in connection with any contract or commitment whatsoever or be taken as an investment advice.

•Past performance is no guarantee of future results. Returns may be affected by, among other things, investment restrictions, strategies or objectives of the portfolio and material or economic conditions. Investors should consult their own legal and tax advisors prior to investment, The value of an investment product may go down as well as up.

# ‘Deposit Insurance in the Wake of the Asian Financial Crisis’

By:

David K. Walker[1]

Seventh Draft: November 22, 2006

## *ABSTRACT* [2]

The last decade has seen tremendous growth in the number of deposit insurance systems around the world. This has been particularly noticeable in East Asia, driven by such factors as rapid financial system development, the Asian financial crisis and a general desire to improve depositor protection and financial stability. Deposit insurance systems have recently been introduced in Hong Kong, Indonesia, Malaysia and Singapore and a system is expected to be operational soon in Thailand. The People’s Republic of China plans to introduce a deposit insurance system in the near future.

Although each of these new systems has been designed to meet specific country and regional circumstances, their designers have sought to adopt evolving good practices in developing their deposit insurance systems. As a result, the systems share similarities in their objectives and design features such as governance, membership, funding and approaches to public awareness. The major differences arise in mandates and coverage limits. In addition, many of the new East Asian systems have had to deal with the challenge of transitioning from blanket deposit guarantees, initially adopted in the midst of the Asian financial crisis, to limited explicit deposit insurance while trying to maintain financial stability.

Finally, given that so many new systems are being set up at similar times the paper explores opportunities for greater information sharing and co-operation among all deposit insurers in East Asia.

---

[1] Mr. Walker is the Director of Policy and International Affairs for the Canada Deposit Insurance Corporation [CDIC]. During the past few years he has been providing assistance to a number of Asian economies developing deposit insurance systems.

[2] The findings, interpretations and conclusions expressed in this paper are entirely those of the author and do not represent the views and opinions of CDIC. The author would like to thank Ms. Michèle Bourque of CDIC, Mr. Goy Siang Boon (Monetary Authority of Singapore), Messrs. Raymond Chan and Gregory Zimnicki (Hong Kong Deposit Protection Board), Ms. Yvonne Fan and Ms. Fiona Yeh (Central Deposit Insurance Corporation of Taiwan), Mr. James Hambric (Bearing Point Indonesia), Mr. David Hoelscher (International Monetary Fund), Dr. Pongsak Hoontrakul (Sasin of Chulalongkorn University), Messrs. Takahiro Hosojima and Yatuka Nishigaki (Deposit Insurance Corporation of Japan), Mr. John Raymond LaBrosse (International Association of Deposit Insurers), Ms. Wai Keen Lai (Malaysia Deposit Insurance Corporation), Ms. Narida Sreshthaputra (Bank of Thailand), Messrs. Ricardo Tan and Antonio L. Panaligan (Philippine Deposit Insurance Corporation) and Dr. Jung Ryol Kim (Korea Deposit Insurance Corporation) for their helpful suggestions and comments. All comments are welcome and should be directed to David K. Walker at dwalker@cdic.ca

# KEIRETSU AND RISK: AN EXAMINATION OF THE RISK EXPOSURE OF KEIRETSU BANKS IN JAPAN

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## ABSTRACT

We compare risk positions adopted by keiretsu and non-keiretsu banks in Japan and examine how the risk positions of Japanese banks changed following the conclusion in 1997 of an escalating series of banking crises in Japan and East-Asia. The results indicate that keiretsu banks take less risk than non-keiretsu banks, and that Japanese banks in general adopted lower risk profiles after 1997. Japanese bank risk is positively associated with the ratio of non-performing loans to capital, interest rates, and private investment in residential construction, and negatively with the ratio of administrative expenses to average assets and the money supply.

**Keywords**: Banking, keiretsu, risk, Japan, financial and banking crises.
**JEL Classification Codes: G21 and G34**

# BANK LENDING & FIRM FINANCING IN TRANSITION ECONOMIES: EVIDENCE FORM LISTED DATA IN VIETNAM

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## *Abstract*

Our focus is to examine the lending behavior and Vietnamese listed firms' financing, using firm-level unbalanced panel data over the period of 1998-2006. The results show that Vietnamese listed firms have lower leverage ratios than those in the G7 countries and some transition economies (TEs). Firms tend to use more short-term debt than long-term-debt, and increase bank credit to offset trade credit during the sample years. There are signs that more profitable firms were increasing their borrowing from the banking system, and that larger firms had a strong tendency of using more bank debt than equity. We also find evidence for the hypothesis that banks prefer to direct their funds to their former clients with a hope of gaining the potential repayments of the previous debt.

Our robust results derived from changes in leverage/total assets cross-section regressions show that *(i)* tangible assets remain a poor source of collateral in 2003, *(ii)* firms increased shortterm financing from their suppliers and reduced long-term borrowing from financial institutions during 2004-2006, *(iii)* more profitable firms have a lower debt capacity during the period 2003-2004, and *(iv)* the lending behavior by banks towards long-term loans shows evidence of a bias in 2003, 2004 and 2006.

However, we fail to provide evidence for the lending bias hypothesis that banks are more likely to lend to state-owned enterprises (SOEs). Our findings show some improvements in the bank-firm relationship in Vietnam. They suggest that, although certain specific-firm factors correlated with leverage from modern finance theory are portable in Vietnam even if there are some indications of profound institutional distinctions between Vietnam and Western countries, the modern theories of corporate capital structure derived from the fundamentally institutional assumptions supporting the Western models could not explain the capital structure choices of Vietnamese listed firms. The capital structure decisions of Vietnamese listed firms appear to pursue a "*modified pecking order*" model – bank borrowing, trade credit, retained earnings, equity and market debt.

*JEL classifications: G21, G30, G32, P2*
**Key words:** Bank lending, firm financing, leverage, corporate capital structure, transition economies

# Analyzing Yield, Duration and Convexity of Mortgage Loans under Prepayment and Default Risks

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**Shu-Lin Chiang**＊＊＊

## Abstract

In this article, we construct a general model, which considers the borrower's financial and non-financial termination behavior, to derive the closed-form formulae of the mortgage value for analyzing the yield, duration and convexity of the risky mortgage. Since the risks of prepayment and default are reasonably expounded in our model, our formulae are more appropriate than traditional mortgage formulae. We also analyze the influence the prepayment penalty and partial prepayment have on the yield, duration and convexity of a mortgage, and provide lenders with an upper-bound for the mortgage default insurance rate.

Our model provides portfolio managers a useful framework to more effectively hedge their mortgage holdings. From the results of sensitivity analyses, we find that higher interest-rate, prepayment and default risks will increase the mortgage yield and reduce the duration and convexity of the mortgage.

**Keywords**: yield, duration, convexity, default insurance, prepayment penalty, partial prepaymen

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# Conducting Event Studies With Asia-Pacific Stock Market Data

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**October 2005**

## Abstract

We investigate the effectiveness of standard event study procedures with Asia-Pacific security returns data. Monte Carlo simulation experiments reveal that standard event study test statistics often exhibit modest misspecification under a null hypothesis of no abnormal performance.

This holds for both parametric and nonparametric tests. Test misspecification is severe with clustered event dates or a doubled event date returns variance.

JEL Classification: C12, C14, C15, G14, G15
Key words: Asia-Pacific stock markets, event study methods, Monte Carlo simulations

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# Price Discovery and Arbitrage between Futures and Cash Markets -A Case study on National Stock Exchange of India (NSE)

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***Rajesh Bhatt***
***Dharmesh M Maniyar***

## ABSTRACT:

The majority of prior studies on Price Discovery and Arbitrage examine the temporal relationship between a futures and its underlying cash market. The basis for these studies is that in perfectly efficient futures and cash markets, informed investors are indifferent between trading in either market, and new information is reflected in both simultaneously. Accordingly, the contemporaneous returns of the two markets would be perfectly correlated, whereas noncontemporaneous returns would be uncorrelated. The majority of empirical evidence, however, has documented some mis-pricing between the futures and cash markets, with the consensus view that futures generally lead cash markets. In this paper, we find that there exists a nonlinear relationship between futures and cash indexes. Within the arbitrage bounds, the change in basis can affect prices in both markets and a significant feedback relationship between futures and cash markets is noted. Besides, price discovery is not evident in the futures markets due to almost the same speed of information flows in both markets. While outside the arbitrage bounds, the influence of the change in basis on both futures and cash indexes is statistically insignificant and the change in the futures price leads the cash price, thereby indicating notably the function of price discovery in the futures market. As a result, the *Bivariate model* that allows for dynamic interrelationship between futures and cash prices is better than the traditional one in revealing both the price discovery of futures and cash indexes and arbitrage behavior within and outside the arbitrage bounds.

***Keywords*:** *Indexes futures, Price discovery, Arbitrage, Threshold co-integration, Multivariate threshold autoregressive model*

***JEL Classification:*** *C15, G10, G11, G18*

# Persistence of Size and Value Premia and the Robustness of the Fama-French Three Factor Model: Evidence from the Hong Stock Market

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## Abstract

We use Hong Kong stock market data from 1982-2001 to test the persistence of the size and value premia and the robustness of the Fama-French (FF) three-factor model in explaining the variation in stock returns. We document a statistically significant and persistent size effect or size premium that is robust even for non-January months. The book to market efffect or value premium however is weaker and less consistent than in Fama and French (1993) and Drew and Veeraraghavan (2003). Our results also support the explanation that the size and value premia are rewards for risk bearing. We further find a large improvement in explanatory power provided by the FF model relative to the CAPM but that the FF model is mis-specified for the Hong Kong market.

*JEL Classification*: G12

*Key words*: Asset pricing; Fama-French Three-factor model; CAPM; Size effect; Book to market effect; Hong Kong

# The Information Content of Directors' Trades: Empirical analysis of the Australian Market

**Harminder Singh· and Lisa Hotson♦**

## Abstract

We examine the trading activities of directors in shares of their own companies on the Australian Stock Exchange during the July-December 2005 period. We find that directors of small companies in particular earn abnormal return after both their 'Purchase' and as well as their 'Sale' trade. Directors of these companies have an uncanny ability to time the market by trading when mispricing is greatest, and are able to predict the future performance of their firms in short run. For directors of medium and large companies, we find evidence that 'Sale' trades are the ones which generate some abnormal return. Outsiders recognise to some extent that directors' trades are informative, however they are slow to incorporate the new information into prices, refuting much of the market efficiency literature.

# The Balanced Scorecard as a corporate governance tool: A French inquiry

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## Abstract

In this paper, we present the evolution of Management Accounting and the strategic management accounting (SMA) concept in the field of the Corporate Governance theory. The balanced scorecard (BSC), a SMA tool, is quite famous in the USA and in the European countries. Its principle objective is to articulate planning decisions with control ones thanks to non-financial indicators. Contractual approaches of the corporate governance theory constitute the foundations of this tool. But in Northern Europe, some specific BSC are designed in the framework of the knowledge-based theories.

We describe here the results of an inquiry conducted in France. Its aims are mainly:

- To test the usefulness of non-financial indicators in driving a firm's objectives,
- And to test the link between the use of non-financial indicators and the performance.

We demonstrate that the French managers associate non-financial indicators with strategic objectives. But we also conclude that they believe that there is no direct link between the use of non-financial metrics and the performance.

Keywords: Management accounting; Strategic management accounting; Balanced Scorecard; Non-financial indicators; Corporate governance; Contractual and knowledge-based theories

# Institutional Herding, Positive Feedback Trading and Opening Price Behavior in Taiwan

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## Abstract

This paper investigates the cross-sectional relation between opening price behavior and the institutional trading in the Taiwan stock market. As a result, inconsistent with the finding of Lee, Lin, and Liu (1999) that Taiwanese institutions follow neither positive-feedback nor negative-feedback trading strategies, we find that the institutional investors do herd, which is mostly driven by positive feedback trading rather than price impact or institutional forecasting ability. Moreover, the source of positive feedback trading comes from not only the returns measured over the past trading day but also over the opening session. Finally, the institutional positive feedback trading is more pronounced for small stocks than large ones.

JEL Classification: G10; G14; G15; G18
Keywords: Institutional Herding; Positive Feedback Trading; Opening price

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# The Role of Accruals as A Signal in Earnings and Dividend Announcements: NZ Evidence

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## *ABSTRACT*

In this study we examine the hypothesis that managers use accruals to convey information regarding firm future profitability. We use contemporaneous earnings and dividend announcements data as the literature strongly suggests that managers use these events to convey private information to the market. This setting reduces the likelihood of alternative motives and increases the likelihood of detecting the evidence on the signaling hypothesis of accruals. Employing New Zealand data from 1992 to 2003, we find evidence supporting the signaling hypothesis of accruals. Dividend increasing firms report positive discretionary accruals and that these positive discretionary accruals are positively correlated with the firms' future profitability. Our results are also robust to the performance, the growth and the earnings drift effects.

*JEL classification*: M41, G14, G30

*Key Words*: Accruals, Signaling, Earnings and Dividend Announcements

**IMPACT OF RESTATEMENT OF EARNINGS ON TRADING METRICS**

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# Abstract

This study uses a more recent sample of matched restating firms from 1997 to 2002 to investigate the microstructure impact on a broad spectrum of key trading metrics including return, volume, and particularly the spread for stocks of the restating firms. Daily spreads of firms in the sample are examined around the restatement announcement dates in order to test for evidence of increased adverse selection. We also investigate the effect of restatement announcements on measures of trading activity and on the relation of these measures to the bid-ask spread. We find that restatement produce substantial change in volume and spread after the announcement. Specifically, spread increases dramatically at day 0 and day 1 (relative to the announcement day), and persistently go back the normal level after that. Significant increases in trading volume begin at the announcement date and go back the normal level after about 10 trading days. This is consistent with the models of Kyle (1985), Easley and O'Hara (1982) and Kim and Verrecchia (1991a, 1991b) in that increased information asymmetry at announcement dates should result in higher trading volumes as well as increased spreads. We also find that announcements produce negative abnormal returns. We also postulate a cross sectional model in which spread is a function of normal trading volume, unusual trading volume, and return variability. As predicted by the inventory control model, we find that spread is negatively correlated to trading volume but positively correlated to return variability.

# PRACTICAL TRAINING AND AUDIT EXPECTATION GAP: THE CASE OF ACCOUNTING UNDERGRADUATES OF UNIVERISITI UTARA MALAYSIA

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**ABSTRACT**

The accounting profession has long faced the issue of an audit expectation gap; being the gap between the quality of the profession's performance, its objectives and results, and that which society's expect. The profession believes that the gap could be reduced over time through education. Studies have been carried out overseas and in Malaysia to determine the effect of education in narrowing the audit expectation gap. Extending the knowledge, this paper investigates whether academic internship program could reduce the audit expectation gap in Malaysia. Using a pre-post method, the research instrument adapted from Ferguson *et al*. (2000) is administered to the Universiti Utara Malaysia's accounting students at the beginning and end of their internship program. The results show there is a significant change in perceptions among student after the internship program. However the changes in perceptions do not warrant an internship program as a means to reduce the audit expectation gap as misperceptions are still found among respondents on issues of auditing after the completion of the internship program. Nevertheless, an internship program can still be used to complement the auditing education in a university as it is an ideal way to expose students to professional issues and enables them to have a better insight of the actual performance and duties of auditors.

**Keywords**: Audit expectation gap, accounting internship, Malaysia

# Corporate Bond Spread Decomposition and Diversification: A Pooled Estimation on Heterogeneous Panels

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## ABSTRACT

Following the method of Pesaran, Shin and Smith (1999), this study extends the results of Sun, Lin and Nieh (2007) to investigate risk diversification issue of individual corporate bonds in portfolios. This is one of the few studies on the decomposition of individual corporate yield spreads. Specifically we adopt the robust econometric method of ARDL-based Pooled Mean Group cointegration analysis on panels of corporate bond data which yields results with rich economic implications for fixed income portfolio management. Our empirical decomposition of individual corporate bond yield spreads indicates that the idiosyncratic component serves as a good vehicle for risk diversification while considering long run market behavior. In the long run systematic credit spreads are found to be consistent with the agency hypothesis where higher interest rate raises endogenous default risk and it is particularly meaningful for the Taiwanese capital market. Option hypothesis of the structural approach is still valid in the short run in predicting yield spreads to be inversely related to interest rate. Our findings contribute in general to the risk practice of bond portfolio diversification. In particular, the pooled estimation we conducted proves to be superior in working with individual corporate bond data panels and helps related studies in the area.

Keywords: bond pricing, credit spread, diversifiable risk, cointegration, heterogeneous panels, pooled mean group estimation.

JEL Classification: C32, E4, E21, G13, G33

# Diversification and Firm Value in New Zealand

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## Abstract

We find that diversified firms in New Zealand are associated with a value discount of 35% and that such firms also perform poorly relative to single-segment undiversified firms. However, we find no link between the lower value of diversified firms and either their poor performance or to the presence of agency conflicts. After controlling for endogeneity in the relationship between diversification and firm value, diversification does not explain the cross-sectional variation in the value discount. These findings suggest that performance and value discounts observed for diversified companies in our sample may be related to unobserved firm and industry attributes that are systematically related to the firms' decision to diversify rather than to diversification itself.

JEL Classification: G34
Key Words: Diversification, firm performance, value discount, New Zealand

# Dividend Policy in the Absence of Taxes

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## Abstract

We examine dividend policy in Oman, this being a unique environment where firms distribute almost 100% of their profits as dividends, and where firms are highly levered through bank loans, thus reducing the role of dividends in agency cost mitigation. We find that profitability, size and business risk are factors that determine dividend policy of both financial and nonfinancial firms. Government ownership, leverage and age have a significant impact on the dividend policy of non-financial firms but no effect on financial firms. The factors that influence the probability of paying dividends are the same factors that determine the amount of dividends paid for both financial and non-financial firms. Our results also show that agency costs mitigation is not a critical driver of dividend policy of Omani firms. Finally, we apply the Lintner (1956) model and find that non-financial firms adopt policies that smooth dividends, whereas financial firms do not have stable dividend policies.

*JEL Classification:* G35
*Keywords:* dividends, taxes, agency theory

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# Optimal Revenue Sharing Contracts with Externalities and Dual Agency

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## Abstract

A model of bilateral trade between an upstream supplier (landlord) and a downstream producer (retailer) is constructed, in which the upstream supplier confers long-term property usage rights to the downstream supplier in return for a base rental fee plus a percentage of verifiable sales production. Our model allows for the possibility that downstream sales production complements other activities of the upstream supplier to increase its total revenues. An optimal contract is designed that balances investment incentives of the downstream producer with initial investment and subsequent reinvestment incentives of the upstream supplier. A number of important stylized empirical facts associated with retail lease contracting are addressed with the model, including why: i) retail leases contain base rents and often (but not always) contain an overage rental feature, ii) stores that generate greater externalities pay lower base rents and have lower overage rent percentages than stores that generate fewer externalities, iii) the overage rent option is typically well out-of-the-money at contract execution, and iv) stand-alone retail operations often sign leases that contain an overage rental feature.

# A New Study On The Impacts Of Stock Split

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## ABSTRACT

Stock splits are one of the common phenomena in the stock market. Three main theories are proposed to explain why firms split their stocks. They are liquidity, signaling, and optimal tick size theories. In this paper, we empirically test all three theories using some of the most recent methodologies. We use stock split data from 1962 to 2004. The empirical result is consistent with the signaling hypothesis in the sense that the firm-specific information has been found to decrease after the announcement of stock split. The liquidity has been found to decrease (increase) and the transaction cost has been found to increase (decrease) after the forward (reverse) split. Therefore, for the forward split, the empirical result is not consistent with the liquidity hypothesis which states that the liquidity should increase after the forward stock split. However, the evidence for the reverse split is consistent with the liquidity theory. Even though the increase in transaction cost is consistent with the optimal tick size hypothesis, the decrease in liquidity is not consistent with it. Therefore, the optimal tick size hypothesis is not fully supported by the empirical evidence.

# "Expiration Hour Effect of Futures and Options Markets on Stock Market" - A Case Study on NSE (National Stock Exchange of India)

By

***Hiren M Maniar, Dr.Rajesh Bhatt, Dr.Dharmesh M Maniyar***

## ABSTRACT

This paper studies the effect of expiration day of the Index futures and Options on the trading volume, variance and price of the underlying shares. The impact of derivatives trading on the underlying stock market has been widely documented in the Finance literature. In particular, significant differences in the statistical properties of asset returns (for instance, mean and variance) during expiration and non-expiration days have been advanced as *an* evidence for the destabilization effect (or lack there of) of derivative instruments. The earlier studies have, however, drawn their conclusions without rigorously modelling the underlying stochastic data generation process. Given that the statistical properties mentioned before are merely traits of the asset returns, this approach can lead to spurious results if analysed in isolation of the underlying process. We propose to address this crucial shortcoming by examining the expiration day effect from a GARCH (Generalized Auto Regressive Conditional Heteroskedastic) framework. We use both daily and high frequency (5 minutes and 10 minutes) data on S&P CNX Nifty Index. Our central finding using intra-day data is that while there is no pressure – downward or upward - on index returns, the volatility is indeed significantly affected by the expiration of contracts. This effect, however, doesn't show up in daily data.

***Keywords****: Futures Markets, GARCH, CNX Nifty, Expiration etc.*
***JELClassification****: G14, G19, G12*

# Valuing Cash-financed Takeover Offers: An Option Pricing Approach

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## Abstract

Mergers and acquisitions are in theory undertaken by firms to derive competitive advantages and thereby enhance shareholder value**.** However, substantial empirical evidence from several countries suggests that a majority of acquisitions do not create value for acquirer shareholders and that most of the value created accrues to the target shareholders. A possible reason for this pattern of wealth gains is that the acquisition price includes significant overpayment by bidders. In this study we seek to disentangle the observed offer price to target firms into incremental value due to various synergies and overpayment by employing an option-based valuation approach. The observed target stock price during a takeover offer is assumed to combine the value of two unobservable, hence notional, securities – the target firm's stock revalued to incorporate any synergy-driven incremental value and a put option the bidder has given to the target shareholders which may be estimated using the Black-Scholes model. The value of the put depends upon a number of target and deal characteristics that impinge on the probability of bid success. For a sample of over 200 UK cash-financed takeover bids during 1990-2004, we find that the target firm revaluation accounts for a substantial part of the observed takeover premium and the put value accounts for a smaller but still significant proportion. In exploring the bid characteristics that may account for the put value we find that it is higher in hostile bids than in friendly ones. It is also much higher in failed or withdrawn bids than in completed bids. Further the length of the offer period increases the put value. These findings suggest that a significant part of the observed bid premium reflects bid characteristics and the bid process. Our analysis also suggests that some of the wealth gains for targets are due to the bidding firm and target firm having unique synergies.

**JEL Classification:** C12, C13, G13,G34

**Keywords:** Mergers and Acquisition, Option, Synergy

# A fuzzy real option valuation approach to capital budgeting under uncertainty

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## Abstract

The information needed for capital budgeting is generally not known with certainty. Therefore, capital budgeting procedures under conditions of uncertainty should be developed to improve the precision of assessment of the value of risky investment projects. The sources of uncertainty may be either the net cash inflow, the life of the project, or the discount rate. We propose a capital budgeting model under uncertainty in which cash flow information can be specified as a special type of fuzzy numbers. Then, we can estimate the present worth of each fuzzy project cash flow. At the same time, to select fuzzy projects under limited capital budget, we give an example to compare and analyze the results of the capital budgeting problem using a fuzzy real option model. Hence, the fuzzy numbers and the real option model can be jointly used in solving capital budgeting under uncertainty.

**Keywords:** Capital budgeting; Real option; Fuzzy numbers; Uncertainty.

# Crises, Contagion and Cross-Listings

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**This draft: January 2007**
**Comments Welcome**

Our research addresses the question of whether cross-listings in the form of depository receipts (ADRs or GDRs) is beneficial to firms in emerging market countries during currency crises in their home countries or in other emerging market countries. We identify five significant emerging markets crises events from 1994 to 2002 and provide empirical analyses of the differential reactions of cross-listed (CL) and non-cross listed (NCL) firms' stocks in response to currency/financial market crises. We also examine the differential reactions of CL and NCL firms during periods of crisis in other countries when the popular financial press suggested contagion effects. Although the results vary across countries and events, in general we find that CL firms react less negatively compared to NCL firms during a crisis in the home country or due to contagion effects. The evidence of significant abnormal returns in a country during periods of crisis in another country also provides evidence for contagious effects. Interestingly, the importance of cross-listing increases in the aftermath of the crisis event, and this effect is pervasive and persistent post-crisis. This is consistent with prior research suggesting that crosslistings overcome some of the limitations of market segmentation. Our findings generally support predictions of models of international asset pricing under market segmentation and suggest that investing in cross-listed firms may partially insure foreign investors against unforeseen crises in emerging markets. Generally, we do not find any evidence that the foreign investors 'panic' during periods of crisis.

# Risk and Returns in Asia Pacific Markets

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First Draft (12 February 2007)

## Abstract

We use various volatility models to study the intertemporal relation between the conditional mean and the conditional variance of the aggregate stock market returns in Asia Pacific region. Using the mixed data sampling (MIDAS) we find that there is no significant positive relationship between risk and the expected stock returns in most markets except New Zealand and Thailand. For comparison, we also use symmetric and asymmetric GARCH, EGARCH, and QGARCH models. The results are qualitatively similar. We also employ asymmetric specifications of the variance process within the MIDAS framework, and the results do not improve much compared to the symmetric models. Finally we perform a number of diagnostic tests, which suggest that the QGARCH seem outperform other models in terms of model specification. Using Campbell and Hentschel's (1992) QGARCH model, we capture the strong positive volatility feedback effect in Australia. Asymmetric effect of positive and negative return shocks are present in some markets as per EGARCH, GJR and QGARCH model, but they are not pervasive for the Asia Pacific markets.

JEL Classification: G12; G15; C22
Keywords: Risk-Return Trade-off; Volatility Models; ICAPM; MIDAS; Asia Pacific markets; Conditional Variance

# Value-at-Risk Performance of Stochastic and ARCH Type Volatility Models: New Evidence

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March 20, 2007

## Abstract

This paper evaluates the effectiveness of selected volatility models in forecasting Value-at-Risk (VaR) for 1-day and 10-day horizons. The latter is the actual reporting horizon required by the Basel Committee on Banking Supervision, but not considered in existing studies. The autoregressive stochastic volatility (Taylor, 1982) is found to be less effective than simpler ARCH type models such as the RiskMetrics and GARCH models. 10-day VaR forecasting is shown to be a difficult task by construction. Various schemes to construct this forecast are proposed and evaluated. In particular, a scheme that uses return time series of 10-day intervals transforms the 10-day VaR forecasting into 1-step-ahead forecasting and shows considerable improvement in accuracy although the result might be due to inclusion of the 1987 crash in training the models.

# Default correlation at the sovereign level: Evidence from Latin American markets

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## Abstract

Using the eruption of Argentina debt crisis in 2001 as a natural experiment, we investigated the correlated default at the sovereign level for some Latin American countries. Daily closing market quotes for sovereign credit default swaps (CDS) of Argentina, Brazil, Mexico and Venezuela were obtained from *Credit Trade database*. Using copula approach, we observed increased correlations among sovereign CDS markets during the crisis period. Their dependence structures were found to be asymmetric. Moreover, the degree of credit contagion was related to the creditworthiness of the country. This study also discussed the implications of these findings for policymakers in the governments.

*JEL classification*: F21; G15
*Keywords*: Credit contagion; Sovereign credit default swaps; Copula

# Private Placement and Share Price Reaction: Evidence from the Australian Biotechnology and Health Care Sector

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First Draft, please do not quote without consulting the authors.

## Abstract

This paper analyses Private Placements for the Australian biotechnology sector. Private placement is one of the favoured methods of secondary equity offering around the world. However, it is also one of the least studied corporate financing mechanisms. A major issue around private placement is the impact of issuance to a selected group of institutional and/or high net worth sophisticated investors and the high direct costs of doing so. We first employ an event study methodology and identified that there exists substantial difference in the private placement effects in the short and long run for large and small private placement issues. We find significant negative cumulative abnormal return following private placements in the short term supporting the price pressure hypothesis with our sample and especially with the subgroup of large private placement issues. At the same time, we also find that the subgroup of small private placement issues exhibited a positive cumulative abnormal return. This is consistent with current empirical studies, where international evidence has had mixed results regarding the directional impact following private placements. We then hypothesize a model to measure and test the key factors identified in the literature. The model captures and explains strong medium term cumulative abnormal return effects and these effects are quite different between small and large placements.

Keywords: private placement, event study, price effect, price pressure

# Ownership concentration, agency conflicts, and dividend policy in Japan

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## Abstract

We examine the dividend policy of Japanese firms and find that dividend payout is negatively related to ownership concentration. This result contradicts the argument that dividends are substitute for shareholder monitoring, but supports the assumption that controlling shareholders extract private benefits at the expense of minority shareholders. Consistent with their lower payout, firms with dominant shareholders are less likely to increase dividends when profitability increases and more likely to omit dividends when investment opportunities improve. On the other hand, they are more likely to increase dividend when debt is high and less likely to omit dividends when debt increases, which is tantamount to a wealth transfer from debtholders. Overall, ownership concentration appears to play a critical role in corporate decisions, mainly due to the way it intensifies the agency conflicts between majority and minority shareholders.

**Keywords**: dividend policy, agency conflicts, ownership concentration
**JEL Classification**: G35

# The Long-run Out-performance of the Chinese IPOs

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## Abstract

We investigate the long-run performance of Chinese IPOs using 897 A-share IPOs listed on both stock exchanges from 1996-2002. We find consistently positive abnormal returns up to three-year after listing by using the cumulative abnormal return measure, the buy-and-hold abnormal return measure and the Fama-French three-factor model. After the series reforms in 1999-2000, the out-performance has shown signs of decreasing. The cross-sectional analysis supports the view that the reasons for the out-performance are the partial nature of the privatisation and the inequality of demand and supply. However, the uncertainties of the reforms have reduced investors' confidence for investing in IPOs in the long-run.

JEL Classification: G32, G15, P21
Keywords: Chinese IPOs, Long-run, Out-performance

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# Study on Capital Structures & Operating Performances of Credit Cooperatives in Taiwan —Application of Panel Threshold Method

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## Abstract

This paper collects financial data of the credit cooperatives in Taiwan from 1994 through 2005, applies regression model based on panel threshold and explores their capital structure and operating performance. This paper uses savings on net worth value ratio, net worth on loan ratio, net profit margins, current ratio and loan growth rate as proxy variables. Overall, the empirical finding is that the credit cooperatives of Taiwan are under the influence of capital structures. The threshold variables (net worth to loan ratio) have two threshold values, 0.16 and 0.212. When the threshold value is between 0.16 and 0.212, every unit of growth in loans increases net profit margins by 2.094 times. On the contrary, with a poor capital structure, the increase in loans reduces net profit margins. The empirical finding also shows that the growth in loans for the credit cooperatives in northern and central Taiwan affects net profit margins, especially for those in central Taiwan. However, threshold relationship does not exist for the credit cooperatives in southern Taiwan.

Keywords: Credit cooperatives, capital structure, Panel Threshold, performance.

# The Impact of Economic Development on Capital Structure Taking into Account Financial Flexibility, Macroeconomic Conditions and Tax Integration: Evidence from Taiwan


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## Abstract

Previous studies on capital structure have mostly ignored the effect of economic growth as they mainly focused on the determinants at the firm and industry levels. We utilize the partial adjustment model of capital structure to examine the impacts of economic growth, financial flexibility and firm-level factors on capital structure changes within the electronic industries across the years of economic trough and peak during the periods before and after tax policy change of 1998 in Taiwan. This paper finds a negative but not significant impact of economic growth on capital structure changes. However, this paper finds that its impact on capital structure varies across years of economic trough and peak during the period before the tax policy change but the effect disappears during the period after the tax policy change. Further, as expected, this paper also finds a significantly negative impact of financial flexibility on capital structure changes and structural change for this impact across the years of economic trough and peak during the period before tax integration but the effect of structural change disappears after tax integration. Furthermore, this paper finds some firm-level determinants of capital structure changes found commonly in most of prior studies to be also significant and their effects on capital structure to exhibit structural change across the years of economic trough and peak during the period after tax integration.



JEL Classification: G32, O16

*Keywords*: capital structure; structural change; economic growth and development; macroeconomic conditions; financial flexibility


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# Relations among Dividend Yields, Price Earning Ratio and the Expected Stock Returns Based on Multivariate Causal Estimates: The Case of Malaysia

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## Abstract

The study examines the relationship among Malaysian's market stock return, dividend yields and price earnings ratio. Specifically, it examines the existence of long-run and short-run relationship and also their predictive power (causality) between and among market stock return, dividend yields and price earnings. Using the monthly data from 1989-2005, the study finds that all these fundamental variables have a strong long run relationship. As for the short run relationship, the results show significant positive predictive power from dividend yield to stock return and significant negative relation from stock returns to price earning ratios. In addition, applying multivariate causality test, the results show that both dividend yields and price earning ratio Granger cause (predict) the stock return. Similar results are found from stock returns and P/E ratio to dividend yield, as well as from dividend yield and stock returns to P/E ration but with lesser magnitude. Thus, fundamental variables are an important source of information in determining stock market returns and useful to investors and other market participants in deciding their investment strategies.

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Keywords: Stock return, dividend yield, price earning ratio, Malaysian market

JEL Classification: G20, G30

# Ultimate Owners, Financial Constraints, and Capital Structure: Evidence from Thailand

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## Abstract

Using a multi-year sample of publicly traded non-financial firms in Thailand, this study finds that firms' ownership characteristics influence the observed capital structures. The results are from an emerging market, which features concentrated, family-dominated corporate ownership structures. This study uses a measure of financing constraint developed by Cleary (1999, 2005) from the work of Kaplan and Zingales (1997) to explain observed differences in leverage. The book debt and market debt ratios of widely-held firms, firms controlled by families, and corporate-controlled firms are negatively related to a measure of financing constraint. Concentrated ownership has a negative influence on the amount of debt used by family and corporate-controlled firms. The results show that capital structures are largely consistent across different types of controlling shareholders.

Keywords: capital structure, financing constraint, ultimate ownership structure
JEL Classification: G32, G34

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# Announcement Effect on the Credit Spreads of US Dollar Malaysian Bonds

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## Abstract

We find that international political events have more influence on the changes of bond yield spreads from Malaysian USD issues than domestic events. Significant results are consistent across different issues. The resignation by the former Prime Minister, Dr. Mahathir, however created a mixed response from the market. Using an error correction model, this study also found the monetary policy by Federal Reserve has long term and significant impact on the behaviour of the Malaysian USD issues. This study also provide further evidence that current theoretical framework is sufficient to explain changes in the credit spread of bonds issued by the emerging market.

Keywords: credit spreads, Malaysia, Mahathir effect
JEL Code: G14, G15

# Panel Threshold Effect of Debt Ratio on Firm Value in Taiwanese Listed Companies

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## Abstract

The goal in this paper is to analyze whether leverage affects firm value for a panel of 272 Taiwanese listed companies during the nine-year period 1997 to 2005. Advanced panel threshold regression model is performed to test if there exists an "optimal" debt ratio, which may result in threshold effects and asymmetrical relationships between debt ratio and firm value. Tobin's q is adopted as proxy variables for firm value.

The result in this study shows that there exists two thresholds effect between debt ratio and firm value. The estimated threshold value ($\hat{\gamma}_1, \hat{\gamma}_2$) are found to be 48.92% and 49.55%. Among three coefficients ($\hat{\alpha}_1$, $\hat{\alpha}_2$, $\hat{\alpha}_3$), the estimate of coefficient $\hat{\alpha}_1, \hat{\alpha}_3$ are negative but not significant which means when the debt ratio is smaller than 48.92% or greater than 49.55% , the relationship between debt ratio and firm value is unclear. In the second regime, where the debt ratio is between 48.92% and 49.55%, the estimate of coefficient $\hat{\alpha}_2$ is 0.009, which implies Tobin's q will be increased by 0.009% via 1% increase of debt ratio. Tobin's q will also be increased. Thus, this suggests that financial managers should utilize the relevant financial leverage wisely in order to maximize the firm's value.

**Keywords:** Tobin's q, Panel threshold effect, Debt ratio

# On the Use of Data Envelopment Analysis in Hedge Fund Performance Appraisal

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This Draft: December 2006

## Abstract

This paper aims to show that Data Envelopment Analysis (DEA) is an efficient tool to assist investors in multiple criteria decision-making tasks like assessing hedge fund performance. DEA has the merit of offering investors the possibility to consider simultaneously multiple evaluation criteria with direct control over the priority level paid to each criterion. By addressing main methodological issues regarding the use of DEA in evaluating hedge fund performance, this paper attempts to provide investors sufficient guidelines for tailoring their own performance measure which reflect successfully their own preferences. Although these guidelines are formulated in the hedge fund context, they can also be applied to other kinds of investment funds.

JEL CLASSIFICATION: G2, G11, G15
KEYWORDS: hedge fund, mutual fund, data envelopment analysis, performance measures, Sharpe ratio.

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# Investment Style of Mutual Funds: How Is It Related to Economic Indicators

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## ABSTRACT

From the perspective of microeconomics theory, the existence of principal-agent relationship in financial market inherently breeds information asymmetries between fund managers and investors. Without the information of investment styles, investors face the issue of mismatch between their investment objectives and funds' profiles. Style analysis by Sharpe (1988, 1992) is used to decompose the funds into style and selection components, and reclassify the funds into growth and value styles in order to mitigate the misclassification of fund objectives. Although the sample periods from May 1997 to May 2003 were during the onset of Asian financial crisis and post-crisis periods, this study shows that the investment style has information content which is useful to investors. Our empirical results show that: First, both MSCI Value/Leading Indicators and MSCI Value/Coincident Indicators have positive correlation. Second, the cross correlation analysis confirms that MSCI Value/Leading Indicators have a lead time of 7 to 8 months, in both directions. Third, fund returns data further confirm the relationship between MSCI Value/Leading Indicators. These empirical evidences confirm that investment style has information content which is useful to investors. This study highlights the importance of investment styles in the context of Malaysian fund management industry.

***Keywords***: style analysis, equity style management, mutual fund, investment style, economic information

***JEL classifications***: G11, G18, G23

# Portfolio Size and Lifecycle Asset Allocation in Pension Funds

*Preliminary Draft: Comments welcome*

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## Abstract

Lifecycle funds offered by retirement plan providers allocate aggressively to risky asset classes when the employee participants are young and gradually switch to more conservative asset classes as they grow older and approach retirement. This approach focuses on maximizing growth of the accumulation fund in the initial years and preserving its value in the later years. This paper simulates terminal wealth outcomes under conventional lifecycle asset allocation rules as well as those given by contrarian strategies that reverse the direction of the switching of assets. Our evidence suggests that the general increase in portfolio size as one approaches retirement is significant from an asset allocation perspective. Due to this portfolio size effect, we find the terminal value of accumulation in retirement account to be critically dependent on the asset allocation strategy adopted by the participant in later years (relative to earlier years). By investing conservatively in such crucial phase, lifecycle strategies recommended by financial advisors sacrifice significant growth opportunity and prove counterproductive to the participant's wealth accumulation objective. This does not seem to be compensated adequately in terms of reducing the risk of potentially adverse outcomes.

# Consolidation, Market Structure and Competition in the Malaysian Banking Industry: Empirical Evidence from Malaysia

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## ABSTRACT

This paper investigates the effect of bank consolidation on market structure and competition in Malaysian banking industry over the periods 1998-2005. The study evaluates the degree of competition using *H*-statistic proposed by Panzar and Rosse (1987). The estimated *H*-statistics are positive ranging from 0.38 to 0.62 and the Wald test for the market structure of monopoly or perfect competition is rejected. The results imply that the financial institutions in Malaysia earned their revenue in the condition of monopolistic competition. The traditional interest-based market however is significantly less competitive than the overall market. The evidence is insufficient to show that there is an increase in competition due to a change in the market structure. Thus, the findings suggest that additional competition policy responses need to be considered to make the Malaysian banking market more competitive in the wave of further bank liberalization.

*JEL Classification*: G21; D24, L1

*Keywords*: Competition; Panzar-Rosse model; Malaysia; Market structure (ADD Consolidation, Banking)

# Using debt-related events as explanatory factor of audit failures

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## ABSTRACT

This paper sets out to examine the issue of audit failure and to answer the question, "Why do some bankrupt companies receive unmodified opinions while others do not?" We examine the use of contrary information, the occurrence of negative debt-related events, in auditors' decisions to issue firms with going-concern opinions. We found that, in general, the occurrence of negative debt-related events does not prompt the issuance of qualified opinions. However, the occurrences of specific news, namely debt, notes-related, restructuring and waiver news are positively associated with the issuance of qualified opinions. The need to retain audit clients may be a factor that results in the low propensity to issue going-concern qualification. In the midst of accounting scandals that have put the profession under scrutiny, it is especially crucial that the accountants practice good professionalism and uphold their integrity, so as to restore the public's trust in them.

Key words: audit independence, event study, debt-related events, going-concern; audit failure

# Can Size Effect Be Explained by the Survivorship Bias and Bankruptcy Risk?

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## Abstract

Empirical research proposed by Reinganum has indicated that the bias in beta estimations appears to not explain completely the size effect, and the small firm anomaly is still a significant phenomenon. This paper shows that the small firm effect is not a significant anomaly after correcting the survivorship bias of the sample. Furthermore, the empirical evidence presents a significant large firm anomaly when taking account into the neglected risk premiums of bankruptcy in the previous literature.

*Keywords*: Size effect, Survivorship bias, Risk of bankruptcy

# Should all competitors cooperate together?
# A coopetition contest model

Duc-De Ngo*†

This draft: January 2007

## Abstract

In this paper, I develop a coopetition model where firms' efforts contribute (1) to making markets and (2) to dividing them up. Using a rentseeking contest approach, I investigate how the market structure influences these efforts and profits of firms. In order to focus on the effect of entrants in the game, the setting is limited to the symmetric, pure strategy Nash equilibrium. Furthermore, the collaboration via an association or a governmental agency is examined. Besides, I also consider the impact of asymmetric valuations in simultaneous-move and two-stage games. Equilibrium efforts are determined and subjected to comparative static analysis. The results show that equilibrium efforts are greater in simultaneous game than in two-stage one.

**Keywords**: coopetition, contest, industrial organization.
**JEL Classification**: C70, D21, L22

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# Testing Static Tradeoff against Pecking Order Models of Capital Structure in Japanese Firms

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## Abstract

The static tradeoff and pecking order models are tested on a sample data of 1325 non-financial Japanese firms for 2002-2006. Empirical results prove that both models can explain some part of the capital structure. The static tradeoff model shows that firm leverage is affected by several determinants, and the pecking order model displays similar movements between the change of long-term debt and financial deficit. However, both models have shortcomings. The static tradeoff model fails to explain the negative correlation between profitability and firm leverage, and the pecking order model fails to explain the low deficit coefficient.

*Keywords:* Static tradeoff theory; Pecking order theory; Capital structure

# THE PERFORMANCE OF PAKISTANI ISLAMIC BANK DURING 1999-2006: AN EXPLORATORY STUDY

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## Abstract

In the wake of meteoric growth of banking industry in Pakistan, Islamic banking has captured 2 percent market share in only three-year period. To evaluate this progress, attempt has been made to measure and analyze the performance of Islamic banks in Pakistan during the 1999 and 2006.In this compendious analysis I have evaluated intertemporal and interbank performance of Islamic bank (Meezan bank). To actualize this objective, analysis has been made in four major areas of financial ratios i.e. profitability, liquidity, risk and solvency and community development. Mean, standard deviation, T-test and F-test has been used to test the significance of the results of the analysis. The basic source of data for this paper is annual reports of banks. This study finds out that not only Islamic banks are less profitable than the conventional banks in Pakistan, but the basic modes of Islamic banking, Mudharabah and Musharakah, are not popular in Pakistan.

# Global Integration of the Banking Industry: Evidence from A Renowned International Financial Centre Based on A Markov Regime Switching Approach

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## Abstract

Due to the crucial role that banks play in the economy and the financial system, the issue of global integration of banks is of utmost importance. However, at present, the evidence on this issue is mixed. We therefore re-examine this issue with respect to a well-known international financial centre – Singapore. We test whether Singaporean banks are globally integrated. We investigate the extent, duration and speed of co-movement between the bank stock prices of Singapore and those of the top three global financial centres - the U.S., U.K. and Japan, based on a Markov regime switching approach. This approach allows us to incorporate market cycles into the analysis. Our results provide evidence of the integration of the Singaporean banking industry with that of the US and to a lesser extent with that of the UK; but not with that of Japan, however.

Keywords: Global Banking, Banking Integration, Markov Regime Switching

JEL Classification: G21, C32

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# Evaluating the Efficiency of Vietnam Commercial Banks – an Application of -System Mode, DEA Approach

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## Abstract

The objectives of this study are firstly to explore the Vietnam commercial banks' efficiency. Secondly this study applies the system model, DEA approach to compare the efficiency between the two groups: the small size of commercial banks and the larger ones in terms of its asset. This paper of findings shows that the efficiency of Vietnam commercial banks was increasing from 0.804 in 2004 to 0.887 in 2005. And larger banks were more efficiency than the rest. However, it was found that the state-owned banks were inefficiency. Through this study, we hope that its findings can help bank managers and governors understand their bank's efficiency and the reason of inefficiency. We also hope that this study can give some suggestions to improve the efficiency of the Vietnam commercial banks in performance.

Key words: Vietnam commercial banks, efficiency, DEA

# Policy Coordination and Risk Premium in Foreign Exchange Markets for Major EU Currencies

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## Abstract

This study updates and extends prior studies related to policy coordination and the risk premium in foreign exchange markets. It specifically examines (1) if spot exchange rates for the Danish krone, British pound, and Swedish krona have long-run equilibrium or cointegrating relationships with the euro after the EMU inception in January 1999; (2) if the presence/absence of the relationships actually reflects the differing degree of monetary interdependence of Denmark, the U.K. and Sweden with the EMU; and (3) if the relationships can represent the risk premium to foreign exchange market participants. The results suggest that only the krone and the pound are cointegrated with the euro. Additional tests of inflation convergence and further analyses of reduced-form and structural VARs indicate that the cointegration evidence indeed reflects the relatively stronger degree of monetary policy coordination and at least the de facto fixed exchange rate regime of Denmark and the U.K. with the EMU. Additionally, cointegration of spot exchange rates can be considered one of the factors that represent the risk premium due to its significant explanatory power for the return to forward speculation.

# Foreign Exchange Exposures, Financial and Operational Hedge Strategies of Taiwan Firms

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## Abstract

Using multiple-horizon data of Taiwan non-financial firms during the period of 1998 - 2002, this study examines financial and operational hedge strategies of foreign exchange exposures simultaneously. Our empirical findings show that the use of operational hedge strategies does not help reduce foreign exchange exposures for Taiwan firms. Also, the use of foreign currency derivatives (FCD) is an effective hedging strategy in a one-month horizon, but it is less effective when the horizon lengthens. In addition, the use of foreign currency-denominated debts (FDD) always increases foreign exchange exposures.

**JEL classifications:** F31, G32

**Keywords:** foreign exchange exposures, operational hedge, foreign currency derivatives, foreign currency-denominated debt

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# Are Capital Controls Effective in the Foreign Exchange Market?

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First Version: December, 2006
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## Abstract

One of the reasons for governments to use capital controls is to obtain some degree of monetary independence. This paper investigates the link between capital controls and interest differentials/ forward premia. This to test whether they can indeed give governments the power to drive exchange rates away from parity conditions. Two capital control variables are constructed to measure liberalization in a panel of Western European countries. Results show that capital controls do not give governments extra monetary freedom. There is even some evidence that capital controls decrease the level of monetary freedom governments enjoy.

Keywords: Capital controls; Exchange Rates; Interest differentials; Forward premia; Monetary freedom

JEL: E42, F21, F31, G15

*The authors thank Jim Lothian for helpful comments. All mistakes are our own.
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# Egalitarianism and International Investment

Jordan I. Siegel, Amir N. Licht, and Shalom H. Schwartz*

## ABSTRACT

In applying a new approach from social psychology for how culture can be decomposed and measured, this study identifies the historical foundations for differences in a key cultural dimension—egalitarianism—and it cleanly estimates the effect of egalitarianism on a set of economic outcomes. Egalitarianism is defined as a society's cultural orientation with respect to intolerance for abuses of market and political power. We show egalitarianism to be based on historical factors including social fractionalization, religion, and war experiences. We use theory and empirical data from social psychology to construct measures of distance between countries in their orientations toward egalitarianism. Controlling for a large set of competing explanations, we find robust support for the influence of egalitarianism distance on cross-national investment flows of equity, debt, and mergers and acquisitions. An informal cultural institution largely determined a century or more ago, egalitarianism exercises its effect on international investment via an associated set of consistent policy choices made in recent years. But even after controlling for these associated policy choices, egalitarianism continues to exercise a direct effect on cross-border investment flows, likely through its direct influence on managers' daily business conduct.

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# Efficient Market Hypothesis: A Focused Survey of the Empirical Literature*

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## ABSTRACT

Efficient Market Hypothesis (EMH), which deals with the informational efficiency of the capital market, is one of the most thoroughly tested hypotheses in finance. Nonetheless, it remains an unresolved empirical issue as to whether the capital market satisfies the notion of market efficiency. In this review article, after delineating its historical origin of the EMH, the author summarizes the empirical findings of the past four decades bearing on the EMH under the headings "supporting empirical findings as documented in 1960's", "mixed empirical findings as merged in the late 1970's through 1980's", and "challenging empirical findings as appeared in 1990's". The author moves on to sketch the on-going debate in the 21st century and then present an overall assessment of the EMH. At the end of the article, once necessary reservations and precautious interpretations are taken, the author argues that the EMH is here to stay and will continue to play an important role in modern finance for years to come.

**Keywords:** Efficient Market Hypothesis (EMH); The Historical Origin of the EMH; Empirical Evidence Bearing on the EMH; An Overall Assessment of the EMH

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# Comparison of relative market efficiency in different trading system: Open-outcry and electronic trading system for Nikkei 225 Futures in Singapore Exchange Derivatives Trading※

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## Abstract

In our paper, we compare two types of trading system, open-outcry and electronic trading system (ETS), of Nikkei 225 futures in Singapore Exchange Derivatives Trading in terms of market efficiency. Convergence speed of any assets returns to its equilibrium level can be one of the indicators of the market efficiency. If the market is efficient, price adjustment ends as soon as new information comes into market. The longer the adjustment time becomes, the lower the efficiency level of market is. This adjustment speed can be measured by impulse response curve.

In addition to convergence speed, we are going to explore market efficiency in terms of volatility persistency in GARCH analysis. If the market is efficient, volatility in each price interval should be independent. Therefore, we cannot conceive volatility persistency if the market is efficient.

In preliminary analysis, the number of trades in a given time interval and the ratio of the trades with price change indicate that ETS might be better in terms of market efficiency. This fact finding is consistent to the research to date. The number of trades in a given interval in ETS is more than that in open-outcry. The ratio of the trades with price change is higher in open-outcry and the ratio of trades with price unchanged is higher in ETS. These facts are showing that the efficiency of market in ETS period is better than that in open-outcry.

Impulse responses are employed to test convergence speed and smoothness of the path to equilibrium level. For estimating volatility persistency, we estimate GARCH model and use coefficient in conditional variance equation. Higher convergence speed and smoother convergence path suggest higher market efficiency. Shorter volatility persistency also indicates higher market efficiency.

As for convergence speed, regardless of type of trading system, returns converge within about 3 minutes. Nikkei 225 futures return shows significant volatility persistency in both trading system. These results denote that the markets in both trading system are not strictly efficient. But future returns in ETS converges through smoother path to equilibrium level. The estimated length of volatility persistency in ETS is shorter than that in open-outcry. By these findings, we confirm that the market in ETS is more efficient than the market in open-outcry. Therefore, ETS is better trading system than open-outcry system in terms of market efficiency concept.

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# Asymmetric Causal Relationship between Stock and Exchange Rate—Evidence from Japan and Taiwan

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## Abstract

This paper investigates the asymmetric causal relationships between exchange rate and stock indices of Japan and Taiwan, respectively. M-TART is first found to be the most applicable model for adjustment to long-run equilibrium between the exchange rate and stock index for both countries. The evidence from our M-TART estimations supports the long-run equilibrium relationships between exchange rates and stock indices, but an asymmetric threshold cointegration relationship only exists in Taiwan, not in Japan. Further evidence from M-TECM Granger-Causality tests illustrates that no short-run causal relationship exists between the two financial assets. However, in the long-run, when the differences in the previous disequilibrium term are above their threshold value, a positive causal relationship running from stock index to exchange rate (by European quotation) in Japan supports the portfolio approach, whereas a positive causal relationship running exchange rate (by American quotation) to stock index in Taiwan argues for the traditional approach. Another interesting finding from our M-TECM estimations is that the speed of adjustment towards long-run equilibrium in relationship between stock indices and exchange rates is faster in the higher regime than in the lower regime for both countries' cases.

***Keywords:*** Exchange rate, Stock index, Threshold Error-Correction Model, Asymmetric causality

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# The Declining Trend in Idiosyncratic Volatility: Post Decimalization Evidence

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## Abstract

Extant research has documented the major effects of decimalization on market microstructure variables of U.S. markets such as lower spreads, and lower quoted depths. We concentrate our research attention on idiosyncratic volatility given the recent surge in research regarding idiosyncratic volatility. We provide empirical evidence of lower idiosyncratic volatility post-decimalization on both NYSE and Nasdaq using a procedure of matched samples. Furthermore, we find that the observed reduction in idiosyncratic volatility is related to the dramatic post-decimalization decline in bid-ask spreads documented in earlier research. Other notable findings include our discovery that Nasdaq firms show a greater decline in idiosyncratic volatility ceteris paribus. Also, the impact on idiosyncratic volatility on a given change in spread is higher on the NYSE as compared to Nasdaq. High volume and low price stocks benefit more from the decimalization as compared to other firms. These findings are particularly significant given new evidence of a dramatic drop in idiosyncratic volatility during the first few years of the twenty-first century as documented by Brandt, Brav, and Graham (2005). Our findings are likely to be useful to researchers especially those involved in event studies and option pricing.

**JEL Classification:** G14, G15, G18
**Key Words:** Decimalization, idiosyncratic volatility, institutional factors, tick size
**EFM Classification Code: 360**
http://ssrn.com/abstract=891038

# The Pricing of Securitization of Life Insurance under Mortality Dependence

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## Abstract

This article studies the pricing of securitization of life insurance under mortality dependence and stochastic interest rate. Following the empirical results of Brown and McDaid (2003), this paper models stochastic mortality intensity and then considers certain important risk factors (income, gender, age, and others) affecting mortality rate to derive the mortality probability for each policyholder. Further, multiple Clayton copula is used to measure the mortality dependence of multiple life insurance policies. Death time of each policyholder can be projected through multiple Clayton copula. This paper applies the estimated death time to design and price Collateralized Insurance Obligation under mortality dependence. The numerical results of Monte Carlo simulation show that the independence assumption tends to overestimate the premium of equity tranche and underestimate the premiums of mezzanine tranche and senior tranche.

*Keywords:* Securitization; Mortality dependence; Clayton copula; Stochastic mortality intensity; Monte Carlo simulation; Collateralized Insurance Obligation

# Insurance and construction project risks: a review and research agenda

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## Abstract

There is a growing body of interests in construction insurance, supporting interactions between the construction industry and the insurance industry. However, it is not always clear why construction insurance exists and how it operates from the perspective of the construction industry. This paper argues that to provide a convincing explanation on this interaction, one needs to improve the theoretical and analytic frameworks in four key areas: the nature of construction risks, risk transfer and insurance mechanism, insurable risks, and perspectives on risks from concerned parties. They explain how insurance can be used as a risk transfer tool in the construction industry and examine the interaction between risk management and insurance. The existing literature on construction insurance is reviewed in the light of this analysis to identify key gaps in knowledge and help to focus further the research priorities. A better understanding of construction insurance can contribute to successful risk management performance on projects.

**Keywords:** construction insurance, construction risks, alternative risk transfer solutions, insurance purchase, risk management, procurement methods, construction contracts

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# THE ROLE OF PRIVATE SECTOR IN DEVELOPING HEALTH SYSTEM IN A MOUNTAINOUS AREA: THE CASE OF BINHPHUOC PROVINCE IN VIETNAM

By
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Hochiminh city, March 2007

## SUMMARY

This paper is a summary of findings from a research project on "Modernization and Industrialization of Agriculture and Rural Area in Binhphuoc" in 2003 by University of Economics, Hochiminh city and Binhphuoc Department of Industry. The authors also use a simple econometric model with data of Binhphuoc from Vietnam Household Living Standard Survey 2004 for estimation of patient preference. We found that the private sector, although subject to some drawbacks, can contribute to the development of health system in a mountainous province. The private sector can help to share the burden of community health care, so the problem of limited fund for investment in public health system can be reduced.

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# The Impact of the SEC on the First 100 Statements of the FASB*

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## Abstract

In the U.S. there is a close relationship between the Securities Exchange Commission (SEC), a governmental agency legally responsible for setting accounting standards and the Financial Accounting Standards Board (FASB), a private sector body to whom the SEC has delegated this responsibility. In this paper we examine the influence of the SEC on the FASB as evidenced by the first 100 statements issued by the FASB. Minor statement, amendments and strictly technical pronouncements were omitted because of their limited exposure to the political process.

Our examination of the relationship between the SEC and the FASB indicates that the SEC has put pressure on the FASB in the standard setting process and has not adopted a position of benign neglect. The issues addressed by the FASB, the speed at which the FASB responds, and even its position on certain issues can at times be solely attributed to SEC pressure. In some cases we even witness the FASB's protection from criticism of outside groups by the SEC. Our analysis strongly suggests that the SEC is active in the standard setting process and not nearly as passive as appears on the surface. Indeed, the involvement of the SEC is often strong and intense and goes beyond occasional creative stimulation.

Nevertheless, the FASB plays an important role both in the setting of accounting standards and in the life of SEC. The existence of the FASB is particularly important to the SEC because it removes by one step the inevitable temptation of Congress to let politics influence the setting of financial reporting standards. Since the SEC has the ultimate power of dismantling the FASB and therefore can greatly influence its decisions, the SEC might prefer to have the standards set by the FASB thus minimizing its own (SEC) exposure to political pressures.

* Working Paper: This paper was originally written in the mid-1980's, and covered the FASB's first 100 statements. It is now in the process of being updated to include all FASB statements to date. This will give depth to the paper's historical perspective.

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# AN EVIDENCE-BASED TAXONOMY OF INTELLECTUAL CAPITAL

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## Abstract

Purpose:

Though Intellectual Capital (IC) has received much attention for more than a decade, there is a lack of consensus on its components and definition. IC is a multi-disciplinary concept and the understanding of it varies across different business-related disciplines. This paper proposes a grouping of IC items based on empirical evidence in the form of managers' responses to questions about the availability of information about IC inside their companies.

Approach:

A postal questionnaire was implemented across 520 companies listed on the main board of *Bursa Malaysia*. The empirical grouping of IC derived by factor analysis is compared with *a priori* groupings constructed from the IC literature.

Findings:

It is found that the conventional three *a priori* categories, namely human capital, customer capital and structural capital, expand into eight facets. Nevertheless, there is remarkable consistency between literature-based expectations and empirical groupings.

Research limitations:

The paper takes a broad scope perspective and in this rapidly evolving field, is based on information in place in 2005. In addition, the usual limitations of postal questionnaire surveys apply. Extension of this research approach to other cultures may reveal a different set of groupings and such research is encouraged.

Practical implications:

Managers and designers of information systems may use the findings as a benchmark against which to evaluate their own systems or proposals. More significantly, the eight-factor model facilitates conceptualisation, measurement and management of IC and the preparation of IC reports.

Value of the paper:

This evidence-based confirmation of the broad three-category model, together with the empirical identification of more detailed facets, makes a contribution to the, as yet largely normative, literature on the classification of the components of intellectual capital.

**Keywords: Intellectual capital, empirical classification, internal reporting**

**Acknowledgement:** The authors are grateful to the Malaysian Accountancy Research & Education Foundation (MAREF) for funding this research.

# Do auditors' opinions, industry factors and macroeconomic factors signal financial distress? Evidence from Taiwan

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## Abstract

This study investigates the usefulness of auditors' opinions, macroeconomic factors, and industry factors in predicting bankruptcy based upon a sample of public firms in Taiwan. Auditors' opinions examined include going concern", "consistency", "contingency" (uncertainty), "long-term investment audited by other auditors" ("other auditor"), and "realized investment income based on non-audited financial statements" ("no auditor"). Macroeconomic factors assessed consist of currency (M1b) supply change ratio, 1-year depositary interest rate change ratio, and consumer price index change ratio. We also study the impact of electronic industry factor given electronic industry constitutes a vital part of Taiwan economy. Our major empirical results are consistent with general bankruptcy literature and the unique nature of Taiwan economy. First, in addition to auditors' "going concern" opinions, "other auditor" is also found to be a significant bankruptcy predictor. Due to auditors' being lack of knowledge and tendency of sharing litigation risk, investment income audited by other auditors tend to have lower earnings quality and firms with such income items are more likely to fail. Secondly, higher currency supply and higher consumer price index are signals of better macroeconomic environment, in which the likelihood of bankruptcy is reduced. In contrast, higher interest rate imposes more burdens upon firms' cost of raising capital and therefore increases the likelihood of bankruptcy. Thirdly, since electronic firms in Taiwan have lower debt ratios and therefore survival of electronic firms are less likely to be influenced by interest rate fluctuations. Discrete-time hazard models are developed with different combinations of financial ratios, auditors' opinions, macroeconomic factors, and industry factor. The models' overall goodness-of-fits and out of sample prediction accuracy are compared using various criteria. Overall speaking, the models in incorporation with auditors' opinions, macroeconomic factors, and industry factor perform better than the financial-ratio-only model. More importantly, not only do auditors' opinions, macroeconomic factors, and industry factor contain incremental information beyond financial ratios in predicting bankruptcy, but also they have incremental contribution beyond one another.

*Key Words*: Financial distress, Auditors' opinion, Discrete-time hazard model, Going concern

# An Empirical Study on Issues in Taiwanese Employee Bonuses Plans

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## Abstract

Most previous studies on employee bonuses, such as Chang (2000), Wu (2002), Chen (2003) and Yeh (2003), focused on the relationship between employee bonuses and the market value of a company. Most of those studies, adopting the models suggested by Ohlson (1995) and Easton and Harris (1991), did not explore the possible incremental explanatory power of employee bonus plans and presented inconsistent conclusions regarding the incentive and dilution effects of employee bonuses.

This study adopts the perspective of Collins, Maydew and Weiss (1997) and Theil's (1971) Econometric method to investigate the possible incremental explanatory power of employee bonuses. Furthermore, we examine whether the industry effect on investors' attitude toward employee bonuses causes the inconsistency found in previous studies. We also investigate the industry effect of employee bonus plans by comparing the electronics industry with traditional industries. The results, using the Ohlson model, shows that employee bonuses, regardless of whether remuneration goes to directors and supervisors, or is in the form of an employee cash bonus or stock bonus, has the incentive effect. Moreover, our findings suggest that the incentive effect of cash and stock bonuses in the electronics industry is stronger than that in traditional industries.

The previous research assumed but left unexamined whether or not investors have rational expectations. This study sheds light on this topic by using Mishkin's rational expectation model (Mishkin, 1983) to examine the market efficiency of employee bonuses. The results show that, although the electronics industry shows a stronger incentive effect than traditional industries, investors generally over-estimate the incentive effect of cash and stock bonuses and under-estimate the remuneration to directors and supervisors.

*Keywords*: Employee Bonus, Market Efficiency, Incentive Effect, Dilution Effect

# A COMPARATIVE EVALUATION OF THE BOSE-EINSTEIN ENTROPY, SPATIAL EQUILIBRIUM AND THE LINEAR PROGRAMMING TRANSPORTATION MODELS

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## LITERATURE REVIEW

Laws on the motion of masses date back to the works of Galileo and Newton in the beginning of the seventeenth century. The latter have been subsequently refined by several first rank physicists (e.g., Maxwell and Einstein). On the other hand, shipments of commodities over economic space or spatial allocation models in general have not advanced much beyond either the classical linear programming formulations proposed by Hitchcock (1941), Kantorovich (1942) and Koopmans (1949), or its market-oriented versions (the spatial equilibrium models) emanating from the works by Enke (1951), Samuelson (1952), and Takayama and Judge (1964, 1971). The objective of the Hitchcock- Kantorovich - Koopmans formulation is to minimize total energy (transportation and other production costs) in trans locating masses (interregional commodity shipments). Similarly, the objective of the spatial equilibrium models (an analogue of Kirchhoff's law of electric circuits) is to maximize the net social payoff (Samuelson, 1952) while subject to the same constraints as that in its linear programming counterpart. There has been a large body of literature that improves or extends the original Takayama-Judge model, including: reformulation and a new algorithm by Liew and Shim (1978), Nagurney (1986); inclusion of income by Thore (1982); transhipment and location selection problem by Tobin and Friesz (1983, 1984); sensitivity analyses by Yang and Labys (1981, 1982), Chao and Friesz (1984), Daffermos and Nagurney (1984), and Tobin (1984, 1987); computational comparison by Meister, Chen and Heady (1978), and Nagurney (1987a); iterative methods by Pang and Chan (1982), Irwin and Yang (1982);a linear complementarity formulation by Takayama and Uri (1983); sensitivity analysis of complementarity problems by Tobin (1984) and Yang and Labys (1985); applications of the linear complementarity model by Kennedy (1974), Sohl (1984), Khatri-Chhetri, Hite and Nyankori (1988), Takayama and Hashimoto (1989), and Uri (1989); a solution condition by Smith (1984); the spatial equilibrium problem with flow dependent demand and supply by Smith and Friesz (1985); nonlinear complementarity models by Friesz, etc. (1983), and Irwin and Yang (1983); variational inequalities by Pang and Chan (1982), Daffermos (1983), Harker (1984), Tobin (1986) and Nagurney (1987b); a path dependent spatial equilibrium model by Harker (1986); and dispersed spatial equilibrium by Harker (1988). For the detailed description of the advances in the spatial equilibrium models, readers are referred to Labys and Yang (1991).

However, both linear programming and spatial equilibrium models being built on the foundation of relatively low total energy levels, are known to exhibit certain regularities. For instance, there exist very limited numbers of positive commodity flows (Silberberg, 1971; Gass, 1985). As a result, an important phenomenon of cross-hauling is precluded from the models. In addition, all optimum commodity flows must obey some symmetrical or reciprocity condition (Silberberg, 1971; Yang, 1989). Despite these limitations, applications of the linear programming transportation and spatial equilibrium models have proliferated especially in agricultural and energy markets in which transportation costs constitute a significant portion of the market demand price. For instance, one of the earliest applications of the linear programming model was on the U.S. coal market (Henderson, 1958) and most applications of the spatial equilibrium models may be found in agricultural and energy market (see Labys, 1989; and Thompson, 1989 for literature review of such applications). Another branch of important spatial interaction models is based on Newton's gravity law. The problem of applying various gravity models to interregional commodity shipments lies in the choice of an appropriate functional form and consistency of the estimates (Hwa and Porell, 1979). While Newton's model may be appropriate for essentially a large-scale structure, it is not suitable for modeling a small-scale problem from a physical point of view. Perhaps, this is a reason that one of the successful applications of the gravity models may be found in the multi-commodity input-output formulation by Leontief and Strout (1963). Like that in physics, Newton's model fails in the world of (i) extremely small particles (insignificant commodity flows) in which the quantum mechanics prevails and (ii) fast and highly massive objects (extremely strong markets) dealt with by relativity. It is interesting to note that the large-scale Leontief-Strout was published one year before Takayama and Judge reformulated the Enke-Samuelson problem into a standard quadratic programming or spatial equilibrium model. The entropy modeling had not received enough attention until 1970 when Wilson derived the gravity model from the entropy-maximizing paradigm. By the middle of the 1970's Evans (1973), and Wilson and Senior (1974) proved the relationship between the linear programming and the entropy-maximizing models. As a matter of fact, Hitchcock-Kantorovich-Koopmans linear programming transportation problem was shown to be a special case of the entropy model. The detailed descriptions on these models may be found in Batten (1983), and Batten and Boyce (1986). However, the implementation of such entropy models to the interregional commodity shipment problem has been limited despite the recent result by Yang (1990).

The purpose of this paper is to implement the Bose-Einstein entropy model to the Appalachian steam coal market in which coal flows are viewed identical. It is interesting to explore that if the coal shipments of the Appalachian market are more closely related to the law of electric circuits or particles of quantum mechanics. Such a comparison, to the best of our knowledge, has never been implemented in the context of interregional spatial commodity modeling. In the next section, we formulate the model. We then compute the coal flows from the Bose-Einstein entropy model, and compare them with that of the Hitchcock-Kantorovich-Koopmans transportation problem, and the Enke-Samuelson-Takayama-Judge spatial equilibrium model.

# A study of Causal Relationship among Economic Freedom, Economic Growth, and Corruption: Empirical Evidence from Panel Data

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## Abstract

This study uses panel data to investigate the causal relationship among corruption, economic freedom and economic growth for 83 countries over the 1998-2006. Empirical evidence reveals that feedback exists between economic freedom and corruption, and one way causality runs from economic growth to economic freedom and corruption, respectively. Based on the results of panel Granger causality test, the economic freedom and corruption are respectively employed as the dependent variables to perform the panel OLS estimation. Conclusively, on the whole, the higher economic growth and lower corruption in the previous year will grease the wheels of economic freedom next year but the higher economic growth and freedom in the previous year will sand the wheels of corruption next year.

Keywords: Economic Freedom, Corruption, Economic Growth, Granger Causality, Panel OLS Estimation

# FINANCIAL DISINTERMEDIATION IN THE 1990s: IMPLICATIONS ON MONETARY POLICY IN MALAYSIA

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March 2007

## ABSTRACT

Evidence in the literature suggests that monetary policy appears to have less of an impact on real activity than it once had, and financial disintermediation offers a possible explanation. An increased financial disintermediation characterizes the Malaysia's financial system since the early 1990s. Using quarterly data from 1980:1 to 2005:4, we demonstrate that the dynamics of monetary transmission mechanism have changed significantly since the early 1990s. The increased financial disintermediation has contributed towards changes in the said transmission mechanism. A greater effectiveness of monetary policy prevails during the pre-1990:3 period, but the post-1990:3 period poses much difficulty for the conduct of monetary policy. Innovations in the financial market appeared to have led to lower output and price variability. Further, when the real interest rate is made a function of financial disintermediation, the real interest rate appeared to have lost its significance in influencing real variables in the post-1990:3 period. This study did not, however, find evidence in support of the significance of the real interest rate in affecting real variables through the direct financing channel via the capital market.

*Keywords*: bank lending channel, capital market, cointegration, VAR.
*JEL classification*: E44, E52

# Do Mergers and Acquisitions Create Shareholder Wealth In The Pharmaceutical Industry?

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**Purpose:** This paper analyzes mergers and acquisitions (M&A) focusing on the U.S. pharmaceutical industry in the period 1981-2004. This industry is chosen because it is global, engages intensively in M&A which it uses to both complement and substitute for early stage research, and because the potential abnormal returns to blockbuster drugs are substantial. It is our assumption that if abnormal returns to M&A exist in the short and long run, this is the industry to find them.

**Design:** Our study examines short term abnormal returns separating mergers from acquisitions and US-based from foreign-based M&A targets. We examined 405 mergers and acquisitions during 1981-2004 to address the issues of our research.

**Findings:** Evidence of short and long term abnormal returns, as well as accounting and efficiency effects are found for acquisitions but not for mergers, however, our tests do suggest that mergers with US-based targets are not value destroying. We also find differences as to the effects of acquisitions of foreign-based, as opposed to US-based targets.

**Value:** Taken in total our results provide support for the view that, at least in the pharmaceutical industry, acquisitions of US-based companies have a positive impact on wealth creation for company shareholders.

**Key Words:** Pharmaceutical, M&A, Stock Performance

**Category:** Research Paper

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* Dilip Patro is from the Office of the Comptroller of Currency - Washinton DC, Howard Tuckman is from Fordham University and Xiaoli Wang is from Bear Sterns. Corresponding author is Mahmud Hassan from Department of Finance and Economics, Rutgers Business School—Newark and New Brunswick. and he can be reached at hassanm@andromeda.rutgers.edu. All views expressed in this paper are of the authors, not of their respective employers.

# Structure of Board of Directors and Financial Reporting Fraud

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## Abstract

A board of directors structured in staggered terms can be very effective in stopping or discouraging hostile takeovers and thereby protecting incumbent directors from removal. As directors play important roles in operations of a firm, protecting directors from removal may have effects on financial reporting quality. The direction of the effect, however, is not clear. The literature has suggested opposite effects on both financial reporting quality and earnings manipulation: the entrenchment effect and the alignment effect. This study tests the association between directors' protection from removal by shareholders and financial reporting fraud and finds evidence in favor of the alignment theory: firms with staggered boards are less likely to commit financial reporting fraud.

**Keywords**: directors' protection from removal; staggered boards; financial reporting fraud; alignment

**Data Availability**: The list of sample firms is available from the first author upon request. The remainder of the data is available from public sources.

# Executive Pay Dispersion, Corporate Governance and Firm Performance

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## Abstract

Much of the research on management compensation focuses on the level and structure of executives' pay. In this study, we examine a compensation element that has not received so far considerable research attention—the *dispersion* of compensation across managers—and its impact on firm performance. We examine the implications of two theoretical models dealing with pay dispersion—tournament vs. equity fairness. Tournament theory stipulates that a large pay dispersion provides strong incentives to highly qualified managers, leading to higher efforts and improved enterprise performance, while arguments for equity fairness suggest that greater pay dispersion increases envy and dysfunctional behaviour among team members, adversely affecting performance. Consistent with tournament theory, we find that firm performance, measured by either Tobin's *Q* or stock performance, is positively associated with the dispersion of management compensation. We also document that the positive association between firm performance and pay dispersion is stronger in firms with high agency costs related to managerial discretion. Furthermore, effective corporate governance, especially high board independence, strengthens the positive association between firm performance and pay dispersion. Our findings thus add to the compensation literature a potentially important dimension: managerial pay dispersion.

**JEL classification : G30; G34; J33; L22**
**Keywords : Compensation, Corporate Governance, Performance, Pay dispersion.**

# EFFECTIVENESS OF DIVIDEND POLICY UNDER THE CAPITAL ASSET PRICING MODEL: A DYNAMIC ANALYSIS

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July 2007

## ABSTRACT

Most contemporary dividend policy models, including that of M&M, tend to be basically static while our analysis shows that dividend policy is dynamic in nature. This is clearly seen when the stochasticity and nonstationarity of the firm's profit rates is analytically treated and formally introduced into the model. This permits, in contrast to the static models, an analysis of the dynamic process of the firm moving from one equilibrium state to another. Furthermore, the dynamic dividend payout model presented here integrates the advances in the theory of capital asset pricing with the managerial decision making on dividend policy.

The separate effects of the relative changes in the total risk, and its diversifiable and nondiversifiable components, on the optimal corporate dividend policy are identified. In the absence of such decompositions of risk and its inclusion into the formulation of our model, it would be difficult, for example, to identify the effects on corporate dividend policy of a shift in the systematic risk within a stationary total risk of the firm.

Using similar assumptions of DeAngelo and DeAngelo (2006), we have shown the existence of optimal payout ratio under a frictionless market. We also explicitly derive the theoretical relationship between optimal payout ratio and important financial variables. Additionally, we perform comparative analysis between: (i) payout ratio and total risk, and (ii) payout ratio and $\beta$ coefficient.

# Side-by-Side Management of Hedge Funds and Mutual Funds*

**by**

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**December 22, 2006**

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## Abstract

We examine situations where the same fund manager simultaneously manages mutual funds and hedge funds. We refer to this as side-by-side management. We document 112 such cases involving 189 hedge funds and 304 mutual funds. The 155 side-by-side managed mutual funds in our sample in existence in 2004 managed a total of $123 billion, raising significant concerns for regulators. Proponents of this practice argue that it is essential to hire and retain star performers. Detractors argue that the temptation for abuse is high and the practice should be banned. Our analysis based on various performance metrics shows that side-by-side *mutual fund* managers significantly *outperform* peer funds, consistent with this privilege being granted primarily to star performers. Interestingly, side-by-side *hedge fund* managers *under-perform* their style category peers, casting further doubt on the idea that conflicts of interest undermine mutual fund investors. Thus, we find no evidence of welfare loss for mutual fund investors due to exploitation of conflicts of interest.

# The Relationship between Stock Prices and Dividends: Evidence Based on Taiwan Panel Data Investigation

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## ABSTRACT

In this study, we employ the newly developed panel unit root test and cointegration technique to determine the long-run relation between stock prices and dividends in Taiwan's stock market during June 1991 to February 2005. Panel methods amplify the power and precision of the estimation procedures, allowing to concentrating on both the short- and long-run relations. The results indicate that there exists a significant cointegration relationship between stock prices and dividends. These findings further support the existence of stock price increases relative to fundamentals. Different from previous studies, our results reveal that stock prices adhere to dividends and rational bubbles were nonexistent in the Taiwan's stock market.

**Keywords: Present Value Model; Panel Unit Root Test; Panel Cointegration Test**

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# HIGHER ORDER SYSTEMATIC CO-MOMENTS AND ASSET-PRICING: NEW EVIDENCE

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University of Massachusetts Dartmouth

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## Abstract

In this paper, we provide evidence supporting Rubinstein (1973)'s theoretical model that if returns do not follow normal distribution, measuring risk requires more than just measuring covariance, higher order systematic co-moments should be important to risk averse investors who are concerned about the extreme outcomes of their investments. Our paper also provides a contribution to the existing literature that not only Fama-French factors (SMB, HML) but also the momentum and the market liquidity factors are simply proxies for higher order co-moments. Using portfolios sorted by several criteria (size, book-to-market, and momentum), we find that including a set of 10 or higher systematic co-moments reduce the explanatory power of these factors to insignificance in almost every case. Our results are consistent in several robustness checks

# The intraday price behavior of Australian exchange traded options and warrants

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EFM Classification codes 310, 360, 440

## Abstract

This study focuses on the price discovery process in Australian option and warrant markets. Characterizing these two markets in terms of their cost structures and institutional features, we formally test competing price discovery hypotheses. The general findings indicate that the warrants market is the dominant market suggesting that their lower trading cost outweigh their less attractive institutional features. Additionally, we find that idiosyncratic differences among firms may result in a clientele effect thus providing justification for the coexistence of these seemingly redundant markets.

Keywords: Options and warrants, price discovery, error correction models.

JEL Classification: G14, G15

# THE DETERMINANTS OF STOCK MARKET INTEGRATION: A PANEL DATA INVESTIGATION*

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March 2007

**ABSTRACT**

This study contributes to understand the driving forces for the process of stock market integration. Based on 26 stock markets of countries affiliated to five trading blocs, the results show that market attributes, economic fundamentals and world information are significant in explaining world stock market integration. The integration process is found to be significantly weakened during the world recession in 2001. The results highlight that regionalism due to economic bloc plays an important role in stock market integration. The level of integration is highest among stock markets in the EU countries, while those in EFTA and AFTA are most segmented.

*Keywords*: CAPM, economic blocs, panel data models, regionalism

*JEL classification*: F02, F15, G12

*The first author is a PhD candidate at the University of Malaya. This paper presents part of his research work in preparation of his dissertation. He gratefully acknowledges funding from the University Science Malaysia Fellowship. He is indebted to Andrew Ang, Michael Adler, Charles Jones and participants in the PhD seminar in Columbia Business School for valuable inputs at the early stages of this study. We gratefully acknowledge financial support from the University of Malaya (P0172/2006B). The usual disclaimer regarding errors and omissions applies.
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# A Panel Unit Root and Panel Cointegration Test of The Modeling International Tourism Demand in India

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## Abstract

This paper sought to find the long-run relationships between international tourist arrivals in India with economic variables such as GDP, transportation costs and the exchange rate for the period from 2002-2006. The cointegration techniques used was based on Panel Cointegration Test as well as both the OLS estimator and DOLS estimator were used to find long-run relationship of the international tourism demand model for India. This paper used the five standard method test for Panel Unit Root Tests such as Levin, Lin and Chu (2002), Breitung(2000), Im, Pesaran and Shin(2003), Maddala and Wu(1999) and Choi(2001) and Handri(1999). The long-run results indicate that growth in income (GDP) of India's major tourist source markets has a positive impact on international visitor arrivals to India. This empirical results imply that when GDP of international major tourist source market such as England, America, Canada, France, German, Japan, Malaysia, Australia, Singapore and Korea increasing 1% then the number of international visitor arrivals to India increasing about 3% to 4%. As well as when transportation cost of these country increasing 1% then the number of international visitor arrivals to India increasing about 0.3% to 0.6%. Finally when the value of India's currency strong than the value of these country's currency increasing 1% then the number of international visitor arrivals to India decreasing 0.003% to 0.006%. Furthermore mostly findings were consistent with economic theory and the implications of the model can be use for policy making.

**Keyword:** India; tourism demand; Panel Unit Root Test; Panel Cointergration Test; Long-run relationship;

# An Ordered Probit Model for Understanding Student Performance in Operations Management

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## Abstract

This paper uses an Ordered Probit Model to investigate student performance in Operations Management, a required course in the curriculum of many Colleges of Business. A sample of 427 student records were used to determine which, if any, variables are good predictors of student performance. The results were that a student's GPA and major are good predictors of student performance in Operations Management. Other variables such as gender, term in which the course was taken, and performance in various prerequisite courses were found to not be significant predictors of a student's performance.

# What Does a Concept Attract? The Case of Gaming in Macau

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Current Version: February 2007

## Abstract

This paper examines herding behavior among Hong Kong investors using announcements of the opening of new casinos in Macau. The results show that there is a difference in the herding behavior toward these “Macau concept” stocks before and after the change in investment sentiment regarding Macau. Similar results are also revealed for the impact of announcements related to the Macau concept. Furthermore, investors in general herd more on selling than on buying upon a corresponding announcement. The evidence that is documented in this paper also suggests that there is herding around exceptional price and trading volume movements in the trading of Macau concept stocks.

Keywords: Macau, herding, gaming, behavioral finance.
JEL Classification: G12, G14.

We thank Rhea Tingyu Zhou for her excellent research assistance. Address correspondences to Rose Neng Lai, Department of Finance and Business Economics, Faculty of Business Administration, University of Macau, Macau, China; email: RoseLai@umac.mo, tel: (853)- 397-4744; fax: (853)-2883-8320.

# How Much are College Presidents Paid?

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## Abstract

We study college presidential compensation from 1997 to 2004. During the eight-year period, the annual growth rate of presidential compensation ranges from slightly over 5% to 8.5% depending on the types of institutions. These growth rates far outpaced the increasing rate of faculty salaries. Although presidential salaries have acquired the media, congressional and IRS attentions in recent years, they are substantially below that of the corporate CEOs, and most of the highly-paid presidents are affiliated with doctoral institutions, in particular, major research universities. We find college presidential salaries are related to job complexity and the human capital of these presidents. This relationship, however, is stronger for the liberal arts and master level universities, but noisier for the doctoral and research institutions. The labor market has priced college presidents in a similar way that professors are priced for bachelor (liberal arts colleges) and master institutions. However, presidents of doctoral institutions are priced differently from the faculty. Irrespective of college types, faculties are priced based upon the financial strength and the academic reputation of the institution. On the other hand, presidents of doctoral institutions are priced according to the physical size of the institution.

*JEL classification:* G00, G3, J33

*Keywords*: College presidential salaries, Executive compensation, Not-for-profit institution

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# An Empirical Study on the Relationship between Intellectual Capital and Knowledge Creation

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## abstract

Knowledge creation has become an important topic for knowledge researchers in recent years. However, the existing academic literatures do not provide a clear indication of how new knowledge is created. Few empirical researches are found in this area. This study synthesizes two different literature streams, i.e. intellectual capital and knowledge creation, in order to understand their linkage. It examines and tests the effects of social capital, human capital and structural capital on knowledge creation and the moderating effects on the technological knowledge diversity between intellectual capital and knowledge creation, respectively. The results are found as follows: First, partly proves empirically that intellectual capital is a phenomenon of interactions. Second, partly proves empirically that technological knowledge diversity is a phenomenon of moderations. Finally, all dimensions of intellectual capital are positively and significantly influenced on knowledge creation.

**Keywords: Knowledge Creation, Intellectual Capital, Technological Knowledge Diversity**

# An Empirical Study of Taiwan Bond Market Based on Nonlinear Dynamic Model

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**Shu-Chen Kang,**
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## Abstract

This paper examines long-run dynamic adjustment of the term structure of interest rate using Taiwan's government bond interest with different maturities for the period of 2000 to 2003. We employ a methodology that permits threshold and the momentum-threshold adjustment to test asymmetry unit-roots and cointegration. Specifically, we examine if the term structure of interest rate is consistent with expectation theory by using non-linear methodology. To compare with previous research, we assume that the dynamic adjustment of yield spreads in different maturity bonds. The result supports the expectation theory of the term structure of interest rate with dynamic adjustment. It could be resulted in bias by using symmetry adjustment assumption to build the term structure of interest rates. Furthermore, whenever interest rates increase or decrease, we find the effect of asymmetric price transmissions between different maturity bonds both in the short and long run. But the result is not significant when interest rates increase. We use asymmetry error-correction model to catch up the dynamic adjustment of interest rates.

Keyword: Term Structure of Interest Rates, Threshold Autoregressive Model (TAR), Momentum- Threshold Autoregressive Model (M-TAR)

# Stock manipulation and its impact on market quality

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## Abstract

Using a new hand-collected data set, this study examines the stock price manipulation in the Taiwan Stock Exchange (TSE). We examine the characteristics of the manipulated stocks, and their impacts on market quality. The results show that manipulated stocks tend to be small. The stock prices rise throughout the manipulation period, followed by a price reversal. The average cumulative abnormal return of the manipulated stocks is over 70 percent, which is far higher than that found in the developed markets but similar to emerging market circumstances. In addition, manipulated stocks display increased return continuation conditional on high trading volume, and increased volatility of stock price conditional on high liquidity of market during the manipulation period. Market depth is also worse during the manipulation period. This suggests that stock manipulation can actually create market inefficiency, lead to both abnormally high trading volume and volatility, worsen the market depth, and hence have important impacts on market quality.

JEL classification: G14; G15

**Key words:** Stock manipulation; Market quality; Depth; Emerging markets

# The Causal Relationship between Foreign Ownership and Stock Volatility in Indonesia

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February 2007

**VERY PRELIMINARY**

## Abstract

Using daily foreign holdings of Indonesian stocks from January 1996 to December 2000, we find that foreign investors prefer to hold stocks with low historical volatility. However this preference weakened over the sample period. More importantly, we show that even though gross foreign trading is positively correlated with contemporaneous volatility, foreign holdings at the end of the current month (quarter) have a negative, calming effect on the volatility in the next month (quarter). This calming effect is independent of gross and net foreign trading, and was present before, during, and after the Asian financial crisis. The calming effect increases with the level of foreign holdings. The finding suggests the presence of different economic mechanisms leading to opposite volatility impact from foreign ownership and foreign trading.

Keywords: emerging markets, foreign ownership, foreign trading, volatility, Granger causality, Asian financial crisis

JEL Codes: F32, F36, G12, G15

I thank Hadi Munadi for numerous helps on the data, and Farina Gandadjaja, Alada Phaovibul and Elfani Wen for excellent research assistance.

# The Forecasting Performance of Model Free Implied Volatility: Evidence from an Emerging Market

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## Abstract

This paper considers an estimator of the model-free implied volatility (MF-IV) derived by Jiang and Tian (2005) and investigates its information content in index option market in Taiwan. We compare the forecasting performance of MF-IV and other volatility forecasts such as the Black-Scholes implied volatility (BS-IV), historical volatility (HV) and GARCH. The empirical results show that MF-IV outperforms other approaches. The results also reveal that the MF-IV is informational efficient and subsumes all information contained in the HV and GARCH (1,1) in forecasting future realized volatility (RV) on weekly forecast horizon.

# Dynamics of Event-Induced Liquidity Changes In the Aftermarket

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## Abstract

This paper studies the effects of large price changes on the liquidity measures such as spread and depth, as well as transaction prices immediately following the IPO. In the immediate aftermarket the underwriter is almost always the market maker for NASDAQ stocks, and different sets of incentives are present from the perspectives of the underwriter and market maker. Previous studies have documented that liquidity providers manage additional uncertainty by decreasing liquidity exposure – widening the spread and reducing the depth. In the immediate aftermarket, however, I document that quoted spread is the only dimension along which the liquidity providers manage the additional uncertainty. I also document that the magnitude of the quoted spread increases as the time since the IPO elapses, which supports the hypothesis that the market makers have an incentive to offer additional liquidity to ensure the success of the offering. Surprisingly, the magnitude of spread increases seems to have negligible effect on post-event return predictability on daily basis.

# Delayed Price Discovery and Momentum Strategies: Evidence from Vietnam

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## Abstract

This paper investigates the effectiveness of momentum strategies for equities listed on the Vietnam Stock Exchange. It also investigates the roles of trading volume and price limits to examine the profitability of momentum strategies. Our paper finds evidence of significant momentum profits during the period 2000–2006 and our findings are robust to various tests, risk adjustments and market microstructure biases. We also show that trading volume is particularly important in generating momentum returns. We further document that price limits significantly hinder market liquidity. This fact, to a large extent, accounts for the strong price continuity of the Vietnam Stock Exchange.

JEL Classification: G11, G12, G15
**Keywords:** Momentum, Turnover Ratio, Past Returns, Price Limits, Vietnam

# Premium-Discount Patterns in Exchange-Traded Funds (ETFs): Evidence from the Tracker Fund of Hong Kong (TraHK)

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## Abstract

Tracker Fund of Hong Kong (TraHK), the first Exchange-traded fund (ETF) in Asia, is designed to trace the Hang Seng Index (HSI). However, the TraHK does not track the HIS successfully at the market opens. Results also show that the TraHK tracks the HSI more efficiently with a higher number of transactions. Compare positive and negative premiums, the positive premiums, between the HSI and TraHK, have higher mean values than those of negative premiums. For intraweek periodicity, a U-shaped pattern forms.

**Key words:** Exchange-traded funds; HSI; intraday; intraweek

# The Impact of Surprise Offer-Share Adjustments on Offer-Day Returns: Evidence from Seasoned Equity Offers

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January 2007

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## Abstract

Using a sample of seasoned equity offerings (SEOs), we examine the eleventh-hour information carried by the final offer-share adjustment. We argue that if market participants interpret the final offer-share adjustment as new information signaling the demand for the stocks issued, a greater final offer-share adjustment will affect the offer-day return positively (*demand information hypothesis*). Alternatively, if investors interpret the final offer-share adjustment as increasing the supply of stocks issued and/or as diluting the value of existing shares, a greater final offer-share adjustment will affect the offer-day returns negatively (*price-pressure and dilution hypothesis*). We show that the offer-day returns are positively related to the final offer-share adjustment, which is consistent with the demand information hypothesis. Our results remain robust even after controlling for the endogeneity and other confounding factors. Our results suggest that the final offer-share adjustment is another important determinant of offer-day returns, in addition to the final offer-price adjustment that Altinkiliç and Hansen (2003) report.

**Keywords:** Seasoned equity offerings, offer-day return, eleventh-hour information
***JEL* classification**: G1; G14; G32

Jo acknowledges financial support from the Dean Witter Foundation. Kim acknowledges support from the Accounting Development Fund of Santa Clara University. Park acknowledges financial support from School of Business at Virginia Commonwealth University.

# Value capturing: a realistic funding source for urban transportation in Ho Chi Minh City?

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## ABSTRACT

Like other developing cities in South-East Asia, Ho Chi Minh city is lacking stable and important funding for urban transportation projects, especially public transportation projects. At present, the public transportation system in the city, though considerably improved, just satisfies only 6-7 percent of the urban travel needs and the majority of city-dwellers rely on private transportation for their travel, especially motorized two-wheelers. Many factors have long been identified for the weaknesses of the city's urban transportation system but it seems that the vital issue which is funding sources for the transportation system hasn't received much attention from the authorities who just depend on an annually fixed meager budget for maintenance, operation of and investment in the system. Because Ho Chi Minh City needs to find new means to finance transportation capital investment, particularly public transit, value capture offers an essentially painless opportunity to achieve these goals.

**Key words:** transportation finance, urban transportation, value capture, Ho Chi Minh City

# An Empirical Test of a Resources Deployment Portfolio (RDP) Approach to Business Group ROE Decomposition

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## Abstract

This study proposes a resources deployment portfolio (RDP) approach to decomposing multibusiness corporations' ROE for business analysis and tests its valuation validity empirically. Under the RDP approach, ROE is decomposed into five components: return on operating equity (RoOE), return on financial equity (RoFE), return on other equity (RoXE), return on influencing equity (RoIE), and R&D intensiveness (R&DI). Empirical results demonstrate that RDP decomposition offers substantial improvement over DuPont decomposition. Confirming the perceived sustainability, RoOE is the most consistently significant component across industries and years for both long-term and short-term value creation, while RoFE and RoIE are nonstable components that exhibit considerable inter-industry and inter-temporal variation in valuation significance, and RoXE is consistently nonsignificant due to its transitory nature. Also, in line with prior research finding, R&DI is generally significant in contributing to long-term value creation but is nonsignificant in explaining short-term value creation.

Key Words: Valuation, DuPont decomposition, Resources deployment portfolio, Research and development

# Financial Constraints and the Effects of Alternative Financial System Design

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## Abstract

How does the design of a country's financial system affect the relative performance of its firms or industries, particularly in supporting their innovative processes? Firms' realization of technological innovations may critically depend on the degree of financial constraints they face. An appropriate design of the financial system may alleviate the financial constraints of otherwise innovative firms, contributing to overall economic performance. The paper examines the relation between financial system design and industrial technological innovations in the presence of financial constraints. We find that industrial sectors with relatively heavy external financial dependence by their small and young firms realize faster technological progress in bank-based financial systems. There is also a weak evidence of a general positive effect on technological progress associated with a market based financial system design regardless of industrial heterogeneity.

**JEL Classification:** G1, G21, G32, E44, O14, O3, O4
**Key Words:** Innovation, Financial Architecture, Bank-Based System, Market-Based System

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# Offshoring of Software Development from Japan to China

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## Abstract

This article discusses recent development of offshoring in information technology industry in Japan. With interviews to several Japanese ICT companies, we reveal the present condition and problems of offshoring software development, which cannot be recognized from its macro data. Japanese firms must expand offshoring because of increasing competition within Japan, although offshoring brings about outflow of technology and know-how to foreign firms. This outflow fosters their prospective foreign competitors, especially in China. Those firms are raising technology by the outflow. Japanese small and medium-sized software companies which don't have excellent technology will face competition for survival against foreign firms in the near future. The income gap among Japanese software engineers will also increase.

# Are large returns followed by predictable patterns?

# Evidence across Asia-Pacific Markets

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**ABSTRACT**

This paper aims to expand the overreaction literature by examining whether the price reversals occur in the short-term period i.e. three days and longer term period i.e. up to twenty days following the large one-day price changes in Asia-Pacific markets over the period 2001 to 2005. Our results based on firm data in three Asia-Pacific markets, namely, Australia, Japan and Vietnam indicate the followings. First, stock prices tend to be reversed after large price changes. Second, in the case of large price declines, investors may earn profit from exploiting the phenomena of price reversals, however, the profit is not worthy to exploit since it is less than the profit from passive funds. This result is supportive of the weak-form of EMH. Third, we find mixed evidence of whether the price reverses or not over the longer term period. Forth, market conditions, i.e. bear or bull, may not explain the magnitude of price reversals. Finally, the dynamic measures of large price changes based on individual firms provide most consistent evidence across markets which are supportive of short-term price reversals and overreaction hypothesis.

*JEL classification:* G12, G14
*Keywords:* Event Studies; Information and Market Efficiency; Overreaction; Price Reversals; Asia - Pacific stock markets.

# Socially Responsible Investments:

# Do They Make A Difference to the Systematic Risk of Australian Superannuation Funds?

Victor S.H. Wong[1 2], Eduardo D. Roca[2] and Anand G. Tularam[3]

**Draft version**.

*Please do not quote.*

## Abstract

An increasing proportion of Australian superannuation funds are being placed in socially responsible investments (SRI). Existing studies show that SRI funds perform similarly to non-SRI funds. However, these studies have mainly focused on a comparison of returns. Hence, we examine the sensitivity of Australian superannuation SRI funds to the movements, in terms of the extent, speed and duration, in the equity market and SRI sectors of Australia and the US. We perform the analysis by taking into account the different market conditions through the application of Markov regime switching approach. Our results reveal that Australian superannuation SRI funds, just like their non-SRI counterparts, as reported in Roca and Wong (forthcoming), are driven mainly by the US equity market and to a certain extent, by the Australian equity market. In addition, we found that the US (but not the Australian) SRI sector affects Australian superannuation SRI funds. This implies that the US SRI sector is also a source of systematic risk for Australian superannuation SRI funds.

Keywords: Superannuation funds, Ethical investments, Markov switching

JEL Classification: G23, Q21, C32

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# Investment Behavior of Foreign Investors in Taiwan: Momentum vs. Contrarian Strategies

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## Abstract

This article focuses on the investment strategy of foreign investors in five different economic industries. Employing a three factors model, we advance an analysis of investment behavior. Relationships among investment behavior, β values, company size, and book-to-market ratio are calculated, to determine whether there exists a relationship of long term equilibrium among these values and investment strategy. Moreover, an error correction model is employed to examine whether the model has corrective power when short term investment behavior deviates from long term equilibrium. We also test for the existence of causal relationships among the variables explored in this article. Finally, we investigate whether bringing investment strategy under consideration has an influence on investment behavior.

Summary of findings

1. Overall, foreign investors in all five economic sectors adopted momentum strategies in their investment behavior and considered home bias in their decisions.
2. In each economic sector, home bias had a relationship of long-term equilibrium with β values, company size, and book-market ratio and with investment strategy.
3. In the electronic, financial, and steel sectors, foreign investors' home bias had corrective power in the short term.
4. The results of causal tests in each sector reveal that in the financial and textile sectors, home bias has a one way leading relationship with β values; while in the steel sector, home bias and β values have a relationship of two-way causal feedback. Sectors where company size leads home bias include electronics, finance, and steel. Book-market ratio leads home bias in only the textile sector.
5. In each sector, company size is among the predominant factors that foreign investors take into account when making decisions. The influence of β values and investment strategy on home bias does not appear significant. Moreover, the influence of book-market ratio is not consistent across each sector. Research outcomes show that bringing investment strategy under consideration does not make a difference for home bias.

**Keyword:** Foreign Investment, Home Bias, Investment Strategy

# The Order Submission Behaviors surrounding Open-Market Repurchase Announcements: The Examination of a Missing Link Embedded in the Signaling Hypothesis

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This Draft: February 22, 2007

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## Abstract

This paper highlights a concern for a link possibly missing in the traditional justification of the signaling hypothesis of open-market repurchases (OMRs). To recover the missing link, we employ the order-level data for the Taiwan stock market to contrast the order submission behaviors among different groups of investors surrounding OMR announcements－who trade the repurchased stocks and how they trade them. As a result, only from the standpoint of price behavior, OMR announcements are reliable signals to which the price reactions of those stocks are favorable. However, the observed order submission behaviors among most investors contradict the essence of the signaling hypothesis.

Keywords: open-market repurchase, the signaling hypothesis, price behavior, order submission behavior, order imbalance

# Difference of linkage between spot and futures markets in Nikkei225 stock index and DJIA index

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## Abstract

This paper investigated the difference of linkage between spot and futures in Nikkei225 stock index and Dow Jones Industrial Average (DJIA) index. Especially we focused on information transmission with volatility spillover effect. We used bivariate generalized autoregressive conditional heteroskedasticity (GARCH) model and bivariate exponential GARCH (EGARCH) model to estimate. Daily data from 2001/01/03 to 2006/03/30 were chosen. From empirical result, it became clear that Nikkei225 stock index followed bivariate GARCH, while DJIA did bivariate EGARCH. Additionally in Nikkei225 stock index, futures market was more dominantly to have an affect on spot market and reverse case doesn't exist. Contrary to Nikkei225 stock index, volatility spillover from spot to futures in DJIA index is stronger than reverse case. But effect from futures to spot couldn't be ignored.

# Alternative Methods for Estimating Hedge Ratio: Review, Integration and Empirical Evidence

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## Abstract

This article theoretically integrates the three alternative models, the ordinary least squares (OLS) model, error correction model (ECM) and AutoRegressive Distributed Lag (ARDL) cointegration models through suitable assumptions of the parameters on the time series model. Moreover, we compare the estimation of hedge ratio and hedging effectiveness within the three alternative models using six index futures contracts. Furthermore, the effects of the length of hedging horizon on the optimal hedge ratio and hedging effectiveness are considered here. The empirical results show that the OLS, ECM and short-run ARDL hedge ratios are different for different hedging horizons and approach the naive hedge ratio of unity as we increase the length of hedging period. However, the estimates of the long-run ARDL hedge ratios are close to the naive hedge ratio of unity regardless of the data frequencies being used. In addition, the in-sample hedging effectiveness, in terms of portfolio variances, tends to decrease when the hedging horizon increases. Moreover, the in-sample hedging effectiveness of OLS hedge ratios is superior to the ECM, short-run ARDL and long-run ARDL hedge ratios. However, the out-of-sample hedging effectiveness of the ECM, short-run ARDL and long-run ARDL hedge ratios outperform OLS hedge ratio. In sum, we can conclude that the length of time interval has an important impact on the estimation hedge ratio and the in-sample hedging effectiveness, but the effect is minimal for the out-of-sample periods.

# A Mortgage Backed Securities Pricing Model and Its Implication of Trading Strategy

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National Taiwan University

Very Premiere, Please Don't Quote

## ABSTRACT

Mortgage-backed security (MBS) is a capital market innovation that gained popular acceptance in the 1980s and are even stronger in the 1990s in the states. In Taiwan since 2000 tech bubbles busted, stock market sunk, investors tended to invest their money into bond market that represents the features of having stable return than equity market. MBS as an instrument has the same credit rating as US treasury but get higher returns, become popular in the market. Since 2003 the US interest rate hit historical low level, said 1% through 2004 to now MBS attract lots of money to invest in. However, even in the states, MBS having longer history than in other countries, the pricing is still subject to uncertainty due to the existence of the mortgage prepayment option. This study describes the options-based model that can be used to price MBS and details possible prepayment functions that can be incorporated into the model. The Bloomberg prepayment model is suggested because the well-organized sub models are established and the data is completed to capture the prepayment behaviours. Also due to MBS is now the most common investment vehicle in the US fixed income market, trading MBS in the real world is also an important part to dig in. The Option adjusted spread method for trading MBS is selected in this study for studying the trading strategy of MBS to better understanding this blockbuster fixed income investment tool.

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# Herd Behavior towards the Market Index: Evidence from 21 Financial Markets

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## ABSTRACT

This paper uses the cross-sectional variance of the betas to study herd behavior towards market index in major developed and emerging financial markets (categorized as developed group, Asian group, and Latin American group). We propose one of the robust regression techniques to calculate the betas of the CAPM and those of the Fama-French three factor model, with an intention to diminish the impact of multivariate outliers in return data. Through the estimated values obtained from a state space model, we examine the evolution of herding measures, especially their pattern around sudden events such as the 1997-1998 financial crises. This 1997-1998 turmoil turns out to have formed a turning point for most of the financial markets. We document a higher level of herding in emerging markets than in developed markets. We also find that the correlation of herding between two markets from the same group is higher than that between two markets from different groups. This paper will shed light on the calculation of beta and on the financial policy to understand the dynamics of herding in financial markets.

***JEL Code:*** C1, C60, G12, G14, G15
***Keywords:*** Beta, Herding, Kalman Filter, Outlier, Robust Regression, Cycle.

# Submission Strategies in Automated Markets*

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This Draft, July 2007
Comments Appreciated

## Abstract

We study limit order traders' joint decisions regarding order price, order size, and order exposure in a market where they have the option to hide a portion of order size. Using order-level data from Euronext-Paris, we document that hidden orders are used extensively by market participants, representing approximately 44% of order volume. All else equal, hidden orders are associated with smaller opportunity costs and lower implementation shortfall costs. However, hidden orders are associated with lower probability of full execution and longer times to execution. We estimate the joint determinants of order price aggressiveness, order exposure, and order size, using a simultaneous equation framework. Traders electing to post less aggressively priced orders tend to hide order size. Further, traders choose to hide a larger portion of their orders when they have also selected larger orders. Overall, the evidence indicates that hidden orders are used primarily by uninformed traders to lower the option value of standing orders on the book.

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# Formulation of a Herd Measure for Detecting Monthly Herding Behaviour in an Equity Market

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## Abstract

Herding in financial markets refers to a situation whereby a group of investors intentionally adopt the actions of other investors by trading in the same direction over a period of time. In this study we propose a new herd measure for detecting the prevalence of herding of a portfolio of stocks towards the market by exploiting the information contained in the cross-sectional stock price movements. We adopt the same underlying argument as Hwang and Salmon (2001, 2004) -that the changes in the cross-sectional dispersion of the betas reflect investors' sentiments towards the market. The betas are obtained from the multivariate linear regression model where we consider separately both normal and non-normal distributions of the random errors. When the random errors are assumed to be normally distributed, we use the bootstrap method to determine the confidence interval of the herd measure. The modified chi-square method is used instead when non-normal random errors are assumed. We applied the herd measure to a portfolio of stocks in the developing Malaysian market, covering from 1993 to 2004 - a period spanning the market bull-run in the early nineties, the 1998 Asian financial crisis and the subsequent recovery phase. Both methods for obtaining confidence interval of the herd measure yield similar herding results. The patterns of herding found are closely linked to the prevailing market conditions and sentiments.

Keywords: Herd measure, Bootstrap method, Modified chi-square method,
Quadratic-normal distribution

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# What Make Institutional and Individual Investors Trade Intensively?

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This version: June 25, 2007

(Preliminary version, Comments welcome)

## Abstract

This paper investigates the different trading patterns and determinants between institutional and individual investors in the China stock market on a weekly basis. Using logistic and multinomial logistic regressions, we find strong evidence that institutions are positive feedback traders, while individuals are contrarians. Second, we find that institutions tend to sell intensively the small stocks, whereas individuals tend to sell the large stocks. Institutions also tend to buy stocks with high EPS and sell stocks with low EPS intensively, while individuals prefer to buy and sell intensively stocks with high EPS. Individuals also have higher propensity to trade intensively stocks with low book-to-market ratio. Finally, we find that individual investors are more sensitive to volatility of past returns than institutions.

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# VIETNAM'S BANKING SECTOR REFORM FOR WTO ACCESSION

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## ABSTRACT

After joining WTO, Vietnamese banking sector must be reformed to survive WTO – enforced trade liberalization and to compete with foreign banks to attract customers. In the past, State – owned banks played a dominant role in the financial market and this made private enterprises difficult in acquiring loan for their business development.

BTA and Commitment to WTO has forced Vietnamese banking system to quickly liberalize itself through regulatory changes and modernize its banking activities. However, during this liberalization process, Vietnamese banks have faced many challenges in capital mobilization, system transparency, technology, management, skill and human resources, etc.

With all efforts have made, Vietnam might shorten time to integrate in regional and world financial market to meet the capital requirement of its economy.

# Macroeconomic volatility and stock returns:

# Evidence from Mediterranean markets

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## Abstract

The link between the macroeconomy and the stock market has intuitive appeal. Our attention in this paper will be addressed to evaluate the effects of macroeconomic shocks on five Mediterranean stock markets (France, Spain, Portugal, Tunisia, and Egypt). Using monthly data from 1995M1 to 2003 M12, A standard VAR model is estimated for each country and the effects of macroeconomic shocks on stock prices are evaluated by means of impulse responses analysis. Our findings highlight weak form efficiency of the Arab stock markets. This weakness was the main obstacle for these two stock returns to respond normally to macroeconomic shocks as it is seen in France, Spain and Portugal. But, there is evidence of a significant cross-country heterogeneity in the persistence, magnitude and timing of these responses. A special precaution is set up to account qualitatively interpretations for the responses of stock prices to macroeconomic shocks.

**Keywords:** Macroeconomic shocks, stock prices, five Mediterranean stock markets, VAR Methodology, Heterogeneity, Weakness.

# Aggregation of Forecasts, Data and Model

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## Abstract

This paper introduces three GARCH-based forecast approaches for volatility: *Procedures AF* (aggregation of forecasts), *AD* (aggregation of data), and *AM* (aggregation of model). The first one refers to the aggregation of forecasts, a method inspired by Andersen *et al.*'s (1999) approach. In particular, it involves summing the volatility forecasts by a strong GARCH(1,1) model for all sub-intervals to provide the volatility forecasts for the aggregated original intervals. *Procedure AD* contrasts *Procedure AF* by estimating the strong GARCH(1,1) model for the aggregated original intervals, a traditional method in the literature on GARCH forecasting. In addition, we adopt Drost and Nijman's (1993) weak GARCH specification and calculate the parameters of the weak GARCH(1,1) model for the original intervals, using the ML estimates for the strong GARCH(1,1) model estimated upon the sub-intervals. This weak GARCH(1,1) model is then used to generate approximates of the volatility for the original intervals, which constitutes *Procedure AM*. Via Monte Carlo simulations, we compare the forecast performances of these three approaches against 'clean' data with only the GARCH effect. Moreover, we explore the same issue in the context of periodicities along with the GARCH effect. The simulation results tend to suggest that *Procedure AF* dominates its two competitors. This conclusion leads us to the exploration of whether accommodating the effect of periodicities further enhances the performance of *Procedure AF*. To achieve this goal, we replace the standard GARCH(1,1) model in the framework of *Procedure AF* by Andersen and Bollerslev's (1997) intraday-periodic-component GARCH(1,1), Bollerslev and Ghysels' (1996) periodic GARCH(1,1) and our IPC-PGARCH(1,1) models. Our empirical study suggests that the standard GARCH(1,1) model remains the best volatility predictor under the scheme of *Procedure AF*.

***Keywords:*** *strong- and weak-GARCH, temporal aggregation, IPC-GARCH, PGARCH, IPC-PGARCH*
***JEL classifications:*** *C15, C52, C53*

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# Determining Optimal Period of Training

by

Chew Soon Beng, Nicholas Groenewold and Rosalind Chew

## Abstract

This study attempts to assess the effectiveness of the training programmes sponsored by a local organization. This is done by analysing the impact on salary[1] prior to and upon completion of the training programmes. By using ordinary least squares (OLS) regression methods, the results obtained show that the training programmes, on the whole, have a positive impact on improving salary. Most of the demographic variables such as age and gender yield expected results similar to past research, with the exception of marital status. Lastly, an attempt to is made to estimate the optimal period of training.

[1] In this study, salary is taken to be the participant's actual pay earned excluding overtime and other bonuses. Wages are frequently measured as a rate on an hourly basis and earnings is usually a lump sum amount, which includes overtime, sick pay and parental benefits. See Håkan Regnér (2002).

# Bank lending and interest rate channels in Egypt: An empirical investigation based on SVAR models

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## Abstract

A critical issue involved with the transmission of monetary policy subjects is the degree and speed at which changes in the official policy rate are transmitted to other rates faced by firms and households. The paper explores an empirical assessment of the effectiveness of the interest rate channel in correcting troubles in the Egyptian economy by imposing contemporaneous and long run restrictions. Furthermore, the empirical analyses are provided to investigate the long-run relationship and the degree of pass-through of the money supply in stimulating the productivity without altering macroeconomic stability in Egypt.

Using a structural VAR approach with contemporaneous restrictions, we find that after a monetary policy expansion, output is stable in the first period, rises temporarily reaching a peak within the second period, and the global monetary aggregate rises but not significantly. In addition, the price level rises sharply in response to a negative interest rate shock to the global liquidity aggregate. The excess of money supply has a transitory effect on the Egyptian output but it causes inflation pressures.

SVAR Blanchard and Quah estimation reveals contradictory results to the previous findings. This means, last but certainly not least, that the effect of bank lending and the interest rate channels on the economy are limited in time.

The paper shows that the transmission of monetary policy through the interest rate channel has become weak in the short run but more important in the long run. Nonetheless, the banklending channel through the commercial bank lending is not a potent monetary transmission mechanism of Egypt. It is worth noting that there is a decrease in the degree of disintermediation as well as an increase in the roles of other sources of fund.

**Keywords:** Monetary policy, Banklending channel, interest rate channel, Egyptian economy, SVAR, Contemporaneous restrictions, long run restrictions,

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# Banking Fragility and Disclosure: International Evidence

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This version: September 2006

## Abstract

Motivated by recent public policy debates on the role of market discipline in banking stability, the study examines the impact of greater bank disclosure in mitigating the likelihood of systemic banking crisis. In a cross sectional study of banking systems across forty-nine countries in the nineties, it finds evidence that banking crises are less likely in countries with regulatory regimes that require extensive bank disclosure and stringent auditing.

**JEL Classification:** G21, G28

**Key Words:** Banking Crisis, Disclosure, Audit Stringency

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# Islamic Banking: Interest-Free or Interest-Based?

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Ming-Hua Liu [2, *]

Current Version: February 2007

**ABSTRACT**

A unique feature of Islamic banking, in theory, is its profit-and-loss sharing (PLS) paradigm. In practice, however, we find that Islamic banking is not very different from conventional banking. Our study on Malaysia shows that only a negligible portion of Islamic bank financing is strictly PLS based and that Islamic deposits are not interest-free, but are closely pegged to conventional deposits. Our findings suggest that the rapid growth in Islamic banking is largely driven by the Islamic resurgence worldwide rather than by the advantages of the PLS paradigm and that Islamic banks should be subject to regulations similar to those of their western counterparts.

JEL classification: G21, F37, P51
Keywords: Islamic banking, interest-free, profit-and-loss sharing, *mudarabah*, bank financing, bank deposits.

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We would like to thank Mohammed Hilmi Said and seminar participants at the 2005 AFAANZ Conference and Nanyang Technological University for their helpful comments.

# Fuzzy Multi-Criteria Decision Making to Select Mutual Funds Investment Style

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## Abstract

The investment of mutual funds which investors are often required evaluating the investment strategies according to their own subjective preferences in terms of numerical values from various criteria. This situation can be regarded as a fuzzy multiple criteria decision-making (MCDM) problem. The purpose of this study attempts to propose an alternative approach, fuzzy multiple criteria decision making with fuzzy integral, relaxing the independence among considered criteria for evaluation of MCDM problems, which is oftentimes the basic assumption in applying AHP, for evaluating the strategies of selecting the mutual funds investment style in Taiwan. We also employ triangular fuzzy numbers to represent the decision makers' subjective preferences on the considered criteria, as well as for the criteria measurements to evaluate mutual funds investment style for investors. First, in this study we employ factor analysis to extract four independent common factors from those criteria. Second, we construct the evaluation frame using AHP composed of the above four common factors with sixteen evaluated criteria, and then derive the relative weights with respect to considered criteria. Third, the synthetic utility value corresponding to each mutual fund investment style is aggregated by the fuzzy weights with fuzzy performance values. Finally, we compare with empirical data and find that the model of FMCDM predict the rate of return very exactly in certain range$\lambda$, hence the non-additive fuzzy integral technique is an effective method to predict the mutual funds performance, meanwhile it can help investors to make decision in different conditions ($\lambda$).

**Keywords**: Mutual Fund, Fuzzy Multiple Criteria Decision Making (FMCDM), Triangular Fuzzy Number, Non-additive Fuzzy Integral.

# CONSIDERATIONS ON RISK

# OF A SECURITIES PORTFOLIO

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## ABSTRACT

The risk of a portfolio is hereby defined as the probability of in fine being rewarded with a return lower than expected. Taking this definition as starting point, we present procedures to compose an optimal portfolio for an individual investor or for an assets manager.

# Examining Financially Distressed Company in Australia:

# The Application of Survival Analysis

*Nongnit Chancharat*[1], *Pamela Davy*[2] *and Michael McCrae*[3]

## ABSTRACT

The prediction of corporate financial distress employs a variety of predictive methodologies and models including Multivariate Discriminant Analysis, probit and logit analysis and Artificial Neural Networks. While often effective in predicting ultimate corporate failure, these approaches provide little analysis or insight into the dynamics of corporate failure. As static predictors they assume a steady state progression of financial distress, and omit 'time to failure' as an integral factor in corporate distress analysis.

Survival analysis is a dynamic technique that estimates the survival probability of a distressed company up to a specified time based on a selected set of indicator variables. We use the Cox proportional hazard form to assess the usefulness of traditional financial ratios and company-specific variables as predictors of the probability of company endurance to a given time. A sample of publicly listed Australian companies is examined over the period 1989 to 2005. Comparison of survival probabilities to a specified time calculated from the model indicates with actual corporate survival times indicates that the selected ratios and company specific variables are efficient as estimators of corporate endurance and in detecting financial distress.

**KEYWORDS**: Financial Distress, Survival Analysis, Cox Proportional Hazards Model

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# Credit Rating Forecasting Using Combining Technique: The Case in Taiwan

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## Abstract

The aim of this study is to predict firm's credit rating using a forecasting technique combining ordered logic and ordered probit models. Data is collected from the Taiwan Economic Journal database, covering firms listed in TSE and OTC, with samples from the first quarter 2000 to the third quarter 2005. The empirical results suggest that the combining forecasting method leads to a significantly more accurate rating prediction than that of any single use of the ordered logit or ordered probit analysis. The performance evaluations by ROC, AUC or McFadden $R^2$ consistently show that the combining forecast performs the best.

Key Words: Credit Rating, Combining Forecast, Ordered Logit, Ordered Probit

# Management Forecasts and Information Asymmetry: An Examination of Adverse Selection Cost around Earnings Announcements

Feb 27, 2007

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## ABSTRACT

We investigate the effect of management earnings forecasts on the level of information asymmetry around subsequent earnings announcement. Employing the adverse selection cost method suggested by George, Kaul and Nimalendran (GKN, 1991), we compare for each sample firm the adverse selection cost around earnings announcement in forecasting years with that in non-forecasting years.

Consistent with Diamond and Verrecchia (1991) is our finding that the earnings announcement in non-forecasting years decreases information asymmetry during a three-day announcement period and increases in a post–announcement period up to seven days. We find no significant change in information asymmetry between pre- and post-announcement periods when firms released ‘good’ news forecast. The firms that previously released ‘bad’ news forecast experience a significantly lower information asymmetry than those that did not forecast during announcement or post-announcement days, and experience a decrease in information asymmetry in a five to seven-day post-announcement period.

**Keywords:** *Management forecasts, information asymmetry, adverse selection cost.*

# ANALYSIS THE REVENUE AND EXPENSE ON ECONOMIC GROWTH, POVERTY, AND UNEMPLOYMENT

**(Study of State Revenue and Expense Budget for 1999 – 2006)**

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## ABSTRACT

The purpose of this study are to know effect variables expense and revenue on economic growth, poverty and unemployment. The samples of the study are APBN for 1999 – 2006. The result study with descriptive analysis indicate that revenue and expense meanly increase, but increase expense bigger than revenue. Indicate this meanly deficit. The gowth economic and unemployment meanly increase, while poverty fluctuative from year to year. The result of study with regression indicate that $expense_{t-1}$ positively significant effect on $revenue_t$. For effect $revenue_t$ and $revenue_{t-1}$ on $unemployment_t$ indicate positively significant effect. The effect $expense_t$ and $expense_{t-1}$ on $unemployment_t$ indicate positively significant effect. For effect economic $growth_{t-1}$ on $unemployment_t$ indicate positively significant effect.

Keyword: expense, revenue, economic growth, poverty, unemployment

# Does Stock Market Appreciate the Implication of Order Backlog for Future Earnings? A Re-examination

by

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## Abstract

Rajgopal, Shevlin, and Venkatachalam (2003) examine whether order backlog predicts future earnings and whether analyst forecast incorporates the contribution of order backlog to future earnings. They find order backlog information contain additional information about future earnings over current earnings. A hedge portfolio based on the decile ranking of the level of order backlog yield an average abnormal return of 5.8% per year over the 19-year period. They also find that analysts fully capture the marginal predicting power of order backlog for future earnings. Overall, there is a strong tendency for firms to remain in the neighborhood of the deciles in the previous year.

In this paper, we first argue that the level of order backlog is not comparable across firms. Then, we present transition matrices to show that firms have a strong tendency to remain in the neighborhood of the deciles, based on the level of order backlog, in the previous year. Therefore, it is hard to argue that a hedge portfolio based on the decile ranking of the level of order backlog could earn persistent abnormal returns. We further argue that in a cross sectional model and given current earnings, a better measurement of the order backlog information to test whether this leading indicator predicts future earnings is the change in order backlog, not the level of it. This issue is important since the evidence of market inefficiency could be due to the uncontrolled industry factor or other firm characteristics. In addition, the results that analysts seem to fully appreciate the implication of order backlog for future earnings could be due to the measurement error of the explanatory variable.

Our results show that change in order backlog, not the level of order backlog, which has incremental information about future earnings over current earnings. In addition, financial analysts are not able to adequately appreciate the implication of order backlog information about future earnings.

**Keyword:** order backlog, leading indicator, future earnings, rational pricing

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# The Role of Transfer Pricing Schemes in Coordinated Supply Chains

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February 2006

## ABSTRACT

The objective of the paper is to study how transfer pricing schemes interact with subcontractors' opportunistic behaviors to affect supply chain coordination. We model the supply chain incorporating asymmetric information among all the parties, contractor's innovation activities, subcontractors' misappropriation, and transfer pricing schemes. We examine the impact of various transfer pricing schemes on supply chain efficiency. Specifically, we conduct a performance comparison between the variable-cost transfer pricing scheme and the full-cost transfer pricing scheme. We find that the subcontractor's choice of a transfer pricing scheme affects the contractor's sourcing decisions and the supply chain performance, and the variable-cost transfer pricing scheme performs better in achieving supply chain coordination.

***Keywords:*** Transfer pricing scheme, Coordinated supply chains, Nash bargaining solution, Misappropriation.

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