On 5 March 2007, SCAPE launched the book titled "The Singapore Economy: An Econometric Perspective" co-authored by Tilak Abeysinghe and Choy Keen Meng. The Guest-of-Honour for the book launch was Professor Shih Choon Fong, President of NUS. Following the launch of the book, Assoc Prof Abeysinghe and Dr Choy gave a presentation of the unique features of the SCAPE-ESU macroeconometric model. They also addressed pertinent issues facing the Singapore economy based on policy simulations of the model, including Singapore's medium term growth prospects as well as the impact of CPF changes and foreign worker policy on the economy. The launch and presentation of the book was attended by over 80 guests from the public and private sectors as well as academic and research institutions.


The SCAPE Working Paper series was established to profile the research capabilities of SCAPE and to serve as a means of disseminating our research work to the public and private sectors. As of 30 June 2007, a total of 43 working papers were published. The complete list of SCAPE's working papers can be found at http://nt2.fas.nus.edu.sg/ecs/cent/Working%20papers.htm.
SCAPE has achieved the following between 1 January 2007 to 30 June 2007:

**Published 6 Working Papers**


**Completed 3 Commissioned Projects**

- SCAPE-MOF study on “A Comparative Study of the Effective Tax Burden of Companies in Singapore and Other Countries”. The objective of the study was to provide an empirical framework to study the effective tax rates of selected economies, including the Singapore economy. The study was completed in March 2007 and was presented to senior officials from the various government ministries and statutory boards.
- SCAPE-MOM-WDA study on “Premium of Fields of Study: The Returns to Higher Education in Singapore”. The report was covered in Channel News Asia and reported in the press. The above report has been released as a SCAPE working paper.
➢ SCAPE-MOM study on "The Impact of Structured Training on Workers' Employability and Productivity". The report was covered in Channel News Asia and reported in the press. The above report has been released as a SCAPE working paper.

• Seminars
  ➢ ISAS-SCAPE-SASP Seminar on "Labour Regulation in India - Insurance versus Efficiency" by Professor Errol D'Souza of the Indian Institute of Management, Ahmedabad held on 19 June 2007 at the Shaw Foundation Building, Faculty of Arts and Social Sciences, NUS.

• Forthcoming Events
  ➢ Workshop on "Discrete Choice Modeling", Singapore, 3-5 July 2007. The speakers for the workshop are Professor David Hensher, Director, Institute of Transport and Logistics Studies (ITLS) and Associate Dean (Postgraduate Coursework), Faculty of Economics and Business, University of Sydney, and Dr John Rose, Lecturer, ITLS. This workshop is jointly organized with the University of Sydney, the Ministry of Trade and Industry, Singapore (MTI) and the Ministry of Transport, Singapore (MOT).
  ➢ SCAPE Public Lecture on "Developing a Service Quality Index (SQI): A Case Study in the Provision of Bus Services", 4 July 2007 at National University of Singapore. The speaker is Professor David Hensher, University of Sydney.
  ➢ Claremont-Bologna-SCAPE International Economic Policy Forum on "Capital Flows, Financial Markets and Economic Integration in Asia", Singapore, 30-31 July 2007. The speakers at the forum include Professor Barry Eichengreen, University of California-Berkeley; Professor Dominick Salvatore, Fordham University; Professor Tom Willett, Claremont College; Professor Sven Arndt, Claremont McKenna College; and Professor Michael Plummer, SAIS-Bologna. The workshop is partially sponsored by Ministry of Trade and Industry (MTI).
  ➢ Inaugural SCAPE Policy Forum on "Climate Change and the Kyoto Protocol", 29 August 2007 at National University of Singapore. The distinguished speaker to launch this series is Professor Parkash Chander, Head, Department of Economics, NUS. This will be the first of a continuing series of public lectures and talks by prominent academics and experts on economic issues of wide current interest. The aim is to stimulate a wider discussion and dialogue between academics and interested individuals from the public and private sectors.
  ➢ SCAPE Policy Forum on "Overlapping Free Trade Agreements of Singapore", 11 September 2007 at National University of Singapore. The speakers are Assistant Professor Jung Hur and Mr. Chong Soo Yuen, Department of Economics, NUS.
  ➢ SCAPE Policy Forum on "Projecting the Growth of Potential Output: Applying the Lessons of Growth Theory and Growth Accounting", 18 September 2007 at National University of Singapore. The speaker is Professor Oulton, Senior Visiting Research Fellow at the Centre for Economic Performance of the London School of Economics and Visiting Professor, University College London.
  ➢ Workshop on "Trade and Financial Market Integration: Developments and Key Challenges in Asia", Singapore, 8–9 October 2007. This workshop is jointly organized by SCAPE, Ministry of Trade and Industry, Singapore (MTI) and the East-Asian Bureau of Economic Research (EABER), Australian National University (ANU).
  ➢ SCAPE Policy Forum on "Monetary Policy Challenges in a Financially Liberalised Environment: The Indian Experience", 10 October 2007 at National University of Singapore. The speaker is Professor D. M. Nachane, Visiting Senior Research Fellow of the Institute of South Asian Studies (ISAS). This forum is jointly organized by SCAPE and ISAS.
  ➢ Singapore Economic Policy Conference 2007, 18 October 2007 at the Four Seasons Hotel. The invited speakers are Madam Halimah Yacob, Member of Parliament, Jurong GRC, and Assistant Secretary-General, NTUC; Assoc Prof Tilak Abeysinghe, Deputy Director, SCAPE; Mr Sum Yee Loong, Tax Partner, Deloitte and Touche; Mr Wong Keng Siong, Vice-President, Group Risk, Country Risk Management, DBS Bank; Assoc Prof Angelique Chan, Department of Sociology, NUS; Assoc Prof Albert Tsui, Department of Economics, NUS; and Ms Vivi Zainol, Lecturer, School of Interdisciplinary Studies, Ngee Ann Polytechnic. The Opening Address will be delivered by Professor Tan Eng Chye, Deputy President and Provost, NUS.
  ➢ SCAPE Public Lecture on "Competition Policies in the EU" by Professor Mario Monti, President of Bocconi University, Milan, 23 October 2007 at National University of Singapore. This Public Lecture is co-organized with the Embassy of Italy, the Delegation of the European Commission to Singapore, and the Singapore Academy of Law (SAL).
Professor Parkash Chander

Professor Chander was invited to present a seminar at Xiamen University on 17 January 2007 and the title of paper presented at the seminar was “The Gamma-Core and Coalition Formation”.

Assoc Prof Chia Ngee Choon

Assoc Prof Chia recently completed a research project titled “Reverse Mortgages as Retirement Financing Instrument” (January 2004 – August 2006). Housing equity forms a large fraction of the non-pension wealth for elderly households. A typical Singapore worker would have around 75% of his retirement assets in housing asset from age 50 (see McCarthy et al., 2002). Furthermore, simulations study by Chia and Tsui (2003) show that the existing CPF-decreed minimum sum is inadequate to meet the future consumption needs of the elderly, particularly the female elderly. This research project explores how reverse mortgages (RM) can be harnessed as an instrument to finance retirement expenditures for the elderly in Singapore. A home equity conversion model is constructed which incorporates both the demand and supply sides of the RM market. Findings from the research indicate that RM instruments are likely to achieve about 50% replacement ratio for 4-room HDB dwellers; and that the level of annuity payouts is more sensitive to property value and its appreciation rate than to transaction costs.

Dr Lee Soo Ann

Dr Lee Soo Ann, a Senior Fellow with the Faculty’s Department of Economics, has pledged a gift of $151,500 to support the Lee Wan Loke-Sarah Goh Sat Liap Bursary. The bursary is named in honour of Dr Lee’s grandparents, who migrated to Singapore from China in the mid 1880s to forge a new life here. The bursary, to be awarded from academic year 2007 onwards, will support financially needy students from the National University of Singapore (NUS) Faculty of Arts and Social Sciences (FASS). One bursary will be awarded every year and it will support the bursary holder throughout the course of his or her studies. Dr Lee, an Economics graduate from the Class of 1960 of the then University of Malaya, a predecessor institution of NUS, has been a staunch supporter of the Annual Giving fundraising campaigns in support of student bursaries and scholarships. He was also instrumental in setting up the NUS Economics Alumni Society, of which he is Chairman. Dr Lee said, “Giving is my way of showing my support for the NUS community. As an alumnus and staff, I feel a great bond towards the University. It is my hope that new alumni will similarly continue to retain their links to their alma mater and help to nurture the next generation by sharing their knowledge and experience.”

Professor Ivan Png

Following their research into piracy, Professor Ivan Png and Hui Kai Lung were commissioned by WIPO (World IP Organisation, a UN agency) to develop a methodology for measurement of piracy. The project was completed in January 2007. Following his research in privacy, Professor Ivan Png has been appointed for a 3-year term to Microsoft’s Academic Advisory Board for Trustworthy Computing.

Dr Sougata Poddar

Dr Poddar recently completed a research project titled: “Competition Policy, International Economics and Information Economics” (September 2004 – June 2006). The main aim of this project was four fold. Globalisation is not a new phenomenon but the pace, which it has occurred, has increased tremendously in the past few years. Seen as the integration of markets, regions and technologies, globalization has resulted in numerous changes in the economic landscape of the world and individual nations. To provide a forum to discuss some important developments on this theme an international workshop was held at the National University of Singapore in September 2004. Three specific themes chosen for the workshop were: International Economics, Information Economics and Competition Policy in the context of globalization. This special issue of the Singapore Economic Review (Vol. 51, No. 2, August 2006, Guest Editor: Dr. Sougata Poddar) includes articles which are the revised and edited versions of papers commissioned for the workshop as well as other papers submitted independently on the above mentioned three themes.

Dr Vijayakala Seevaratnam

Dr Seevaratnam gave an invited lecture titled ‘Development of Women in the Economic Sphere’ at the International Confederation of Free Trade Unions (ICFTU) NTUC Joint Women Seminar, held on 1 March 2007 in Singapore. She was appointed as Program Director of the Centre for Maritime Studies (CMS), a newly-established University-level Research Centre with effect from 2 March 2007.
Professor Sun Yeneng
Professor Sun Yeneng was the organizer of two sessions on mathematical economics and a programme committee member at the Eighth SAET Conference on Current Trends in Economics, held in Kos, Greece from 18 to 24 June 2007. He gave a talk on “Modeling Large Societies” at Xiamen University on 7 June 2007 and at the University of Warwick on 25 June 2007.

Assoc Prof Shandre M. Thangavelu and Assoc Prof Anthony Chin recently completed a commissioned project by Port of Singapore Authority Marine Pte Ltd titled “Study on Professional Pilotage Fees”.

Assoc Prof Shandre M. Thangavelu, Dr Liu Haoming and Dr Cheolsung Park recently completed a commissioned project by Ministry of Manpower titled “The Impact of Structured Training on Workers’ Employability and Productivity”. The paper was subsequently released by the Ministry to the public.

Assoc Prof Shandre M. Thangavelu recently completed a commissioned project by Ministry of Finance titled “Effective Tax Burden of Companies”.

Assoc Prof Julian Wright
Assoc Prof Julian Wright was an invited speaker at the Australian Competition and Consumer Commission workshop on Two-Way Access Pricing in Telecommunications on 13 March 2007 in Melbourne. His presentation was titled “Access Pricing Issues in Mobile Termination”. Assoc Prof Julian Wright gave a seminar on “Tacit Collusion with Price Matching Punishments” at The University of Auckland Business School on 18 May 2007. He was also a discussant for one of the sessions at the NBER (National Bureau of Economic Research) Conference – 18th Annual East Asian Seminar on Economics, held at the Singapore Management University on Saturday, 23 June 2007.

### INDUSTRIAL ORGANIZATION WORKSHOPS

Co-ordinator: Assoc Prof Julian Wright
Website: http://nt2.fas.nus.edu.sg/ecs/res/io.asp

<table>
<thead>
<tr>
<th>Semester II, Academic Year 2006/2007</th>
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<tbody>
<tr>
<td><strong>Speaker(s)</strong></td>
</tr>
<tr>
<td>Assoc Prof Edwin Lai</td>
</tr>
<tr>
<td>School of Economics, Singapore</td>
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<tr>
<td>Management University</td>
</tr>
<tr>
<td>Dr Kang Changhui</td>
</tr>
<tr>
<td>Department of Economics,</td>
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<tr>
<td>National University of Singapore</td>
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<tr>
<td>Dr Sougata Poddar</td>
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<tr>
<td>Department of Economics,</td>
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<tr>
<td>National University of Singapore</td>
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<tr>
<td>Assoc Prof Julian Wright</td>
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<td>Department of Economics,</td>
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<td>National University of Singapore</td>
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<tr>
<td>Assoc Prof Julian Wright</td>
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<tr>
<td>Department of Economics,</td>
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<tr>
<td>National University of Singapore</td>
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<tr>
<td><strong>Title</strong></td>
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<tr>
<td>Parallel Imports and Price Controls</td>
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<td>School Systems and Efficiency and</td>
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<td>Equity of Education</td>
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<td>Patent Licensing from High-Cost to</td>
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<td>Low-Cost Firm</td>
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<tr>
<td>Tacit Collusion with Price Matching</td>
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<tr>
<td>Punishments</td>
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<tr>
<td>Advertising on Ebay</td>
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<tr>
<td><strong>Date</strong></td>
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<tr>
<td>22 January 2007</td>
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<td>27 February 2007</td>
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<tr>
<td>26 March 2007</td>
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<tr>
<td>23 April 2007</td>
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<td>25 May 2007</td>
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</table>
The Department of Economics Seminars Series is usually held on Tuesdays and Thursdays, from 4.00pm - 5.30pm.

### Semester II, Academic Year 2006/2007

<table>
<thead>
<tr>
<th>Presenter</th>
<th>Topic</th>
<th>Date</th>
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</thead>
</table>
| Assoc Prof Joseph Dennis Alba  
Nanyang Technological University | The Impact of Exchange Rates on FDI and the Interdependence of FDI over Time | 9 January 2007 |
| Dr Fan-Chin Kung  
City University of Hong Kong and Institute of Economics, Academia Sinica, Taiwan | Coalition Formation with Local Public Goods and Network Effect | 18 January 2007 |
| Assoc Prof Kim-Sau Chung  
University of Hong Kong | Object-Based Unawareness | 26 January 2007 |
| Professor Chew Soo Hong  
Hong Kong University of Science and Technology | The Hawk-Dove Game: Evidence from a Behavioral-Neuroimaging Experiment - Joint Psychology and Economics Seminar | 21 February 2007 |
| Professor Claude d'Aspremont  
Université Catholique de Louvain and CORE (Center for Operations Research and Econometrics) | Strategic R&D Investment, Competitive Toughness and Growth | 22 February 2007 |
| Professor Charles M. Kahn  
Bailey Professor of Finance and Professor of Economics, University of Illinois at Urbana-Champaign and, Visiting Tan Chin Tuan Professor, NUS | Credit and Identity Theft | 13 March 2007 |
| Professor Myrna Wooders  
Vanderbilt University and University of Warwick, Visiting Professor, NUS | Price Taking Equilibrium in Economies with Multiple Memberships in Clubs and Unbounded Club Sizes | 14 March 2007 |
| Professor Charles M. Kahn  
Bailey Professor of Finance and Professor of Economics, University of Illinois at Urbana-Champaign and, Visiting Tan Chin Tuan Professor, NUS | A Theory of Payments: Finality and Debt Settlement *  
*: Survey Lecture | 21 March 2007 |
| Dr Ignacio Esponda  
New York University  
Stern School of Business | Behavioral Equilibrium in Economies with Adverse Selection | 22 March 2007 |
| Professor Myrna Wooders  
Vanderbilt University and University of Warwick, Visiting Professor, NUS | Cooperative Games with Many Players | 23 March 2007 |
| Dr Marko Terviö  
University of California, Berkeley | The Difference that CEOs Make: An Assignment Model Approach | 27 March 2007 |
| Professor Cuong Le Van  
CNRS (Centre National de la Recherche Scientifique) | New Technology, Human Capital and Growth for Developing Countries | 29 March 2007 |
| Assoc Prof Edwin Lai  
Singapore Management University | Endogenous Present-Biasedness and Policy Implementation | 3 April 2007 |
| Dr Nancy Qian  

*continued on page 7*
Dr Indrajit Ray  
University of Birmingham  
Compromise  
10 April 2007

Professor Zhijie Xiao  
Boston College  
Functional-Coefficient Cointegration Models  
12 April 2007

Dr Ilia M. Tsetlin  
INSEAD  
Auctions in which Losers Set the Price  
17 April 2007

Assoc Prof C. Simon Fan  
Lingnan University, Hong Kong  
The Brain Drain, “Educated Unemployment”, Human Capital Formation and Economic Betterment  
19 April 2007

Professor Kamihigashi Takashi  
Kobe University  
26 April 2007

Mr Jian Li  
Department of Neuroscience  
Baylor College of Medicine  
When Sanction Fails: Neural Correlates of the Adverse Effect of Sanction - Joint Economics & Psychology Seminar  
7 May 2007

Dr Andrei Hagiu  
Harvard Business School  
Exclusivity and Control  
24 May 2007

Professor Stephen Cheung  
Tunneling, Propping and Expropriation Evidence from Connected Party Transactions in Hong Kong  
26 June 2007

### MICRO-GROUP MEETINGS

Co-ordinator: Assoc Prof Indranil Chakraborty  
Website: http://nt2.fas.nus.edu.sg/ecs/res/micro.asp

#### Semester II, Academic Year 2006/2007

<table>
<thead>
<tr>
<th>Speaker</th>
<th>Title</th>
<th>Date</th>
</tr>
</thead>
</table>
| Dr Sander Onderstal  
University of Amsterdam | Fighting Collusion in Auctions | 29 January 2007 |
| Professor John Charles Wooders  
University of Arizona | Auctions with a Buy Price | 5 March 2007 |
| Professor Myrna Holtz Wooders  
Vanderbilt University and University of Warwick | Conformity, Correlation and Equity | 12 March 2007 |
| Professor John K. H. Quah  
University of Oxford | Comparative Statics with the Interval Dominance Order | 16 April 2007 |
| Assoc Prof Indranil Chakraborty  
Department of Economics  
National University of Singapore | Procurement Auction with a Corruptible Inspector | 27 April 2007 |
| Professor John Charles Wooders  
University of Arizona | An Experimental Study of Auctions with a Buy Price Under Private and Common Values | 21 May 2007 |
### MACROECONOMICS & MONETARY ECONOMICS

### BROWN BAG WORKSHOPS

Co-ordinator: Assoc Prof Aditya Goenka

Website: http://nt2.fas.nus.edu.sg/ecs/res/bb.asp

<table>
<thead>
<tr>
<th>Speaker</th>
<th>Title</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ms Liu Lin&lt;br&gt;Department of Economics&lt;br&gt;National University of Singapore</td>
<td>Infectious Diseases and Chaos in Growth Models - Joint work with Assoc Prof Aditya Goenka</td>
<td>7 February 2007</td>
</tr>
<tr>
<td>Dr Cheolbeom Park&lt;br&gt;Department of Economics&lt;br&gt;National University of Singapore</td>
<td>The Impact of Oil Price Shocks on the US Stock Market</td>
<td>14 February 2007</td>
</tr>
<tr>
<td>Dr Serene Tan&lt;br&gt;Department of Economics&lt;br&gt;National University of Singapore</td>
<td>Labor Hoarding Contracts, Risk Sharing, and Coordination Frictions</td>
<td>28 February 2007</td>
</tr>
<tr>
<td>Dr Lin Mau-Ting&lt;br&gt;Department of Economics&lt;br&gt;National University of Singapore</td>
<td>Long-Run Non-Neutrality Implication from Calvo Pricing</td>
<td>7 March 2007</td>
</tr>
<tr>
<td>Dr Partha Chatterjee&lt;br&gt;Department of Business Policy&lt;br&gt;NUS Business School</td>
<td>Democracy and Growth Volatility: Exploring the Links</td>
<td>14 March 2007</td>
</tr>
<tr>
<td>Professor Huw David Dixon&lt;br&gt;Cardiff University</td>
<td>Understanding Inflation Persistence: A Comparison of Different Models</td>
<td>21 March 2007</td>
</tr>
<tr>
<td>Dr Massimiliano Landi&lt;br&gt;School of Economics&lt;br&gt;Singapore Management University</td>
<td>Dynamics in Electoral Competition</td>
<td>28 March 2007</td>
</tr>
<tr>
<td>Assoc Prof Zeng Jinli&lt;br&gt;Department of Economics&lt;br&gt;National University of Singapore</td>
<td>Patent Protection versus Price Regulation in an R &amp; D Growth Model</td>
<td>4 April 2007</td>
</tr>
<tr>
<td>Dr Nicolas Jacquet&lt;br&gt;School of Economics&lt;br&gt;Singapore Management University</td>
<td>Illiquid Housing, Portfolio Choice and the Wealth Distribution</td>
<td>11 April 2007</td>
</tr>
<tr>
<td>Mr Aekapol Chongvilaivan&lt;br&gt;Department of Economics&lt;br&gt;National University of Singapore</td>
<td>The Impact of Outsourcing Ability, FDI and Technological Progress on the Employment across Skilled Groups in Non-Traded Sectors</td>
<td>18 April 2007</td>
</tr>
<tr>
<td>Dr Timothy Kam&lt;br&gt;School of Economics&lt;br&gt;Australian National University</td>
<td>Optimal Unemployment Insurance with Limited Government Commitment and Heterogeneous Agents</td>
<td>28 June 2007</td>
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</tbody>
</table>
The following graduate students of the Department were conferred degrees between 1 January 2007 and 30 June 2007.

### PhD

<table>
<thead>
<tr>
<th>Student</th>
<th>Topic</th>
<th>Supervisor(s)</th>
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<tbody>
<tr>
<td>Chen Heng</td>
<td>A Study of Chinese Stock Market: Empirical and Theoretical Explorations by Bayesian and GARCH Models</td>
<td>Assoc Prof Wong Wing Keung</td>
</tr>
<tr>
<td>Hawpage Neville Prabhath Jayasinghe</td>
<td>Essays on Exchange Rate Exposure</td>
<td>Assoc Prof Albert Tsui Dr Gamini Premaratne</td>
</tr>
<tr>
<td>J M A Jayawickrama</td>
<td>Essays on Fiscal Sustainability and Tax Smoothing and Fiscal Policy Simulation Experiments for Sri Lanka</td>
<td>Assoc Prof Tilak Abeysinghe</td>
</tr>
<tr>
<td>Kong Jing</td>
<td>Studies on China's Segmented Stock Market</td>
<td>Assoc Prof Lu Ding</td>
</tr>
<tr>
<td>Lu Yuanzhu</td>
<td>Three Essays on Firm's Pricing Behaviour</td>
<td>Assoc Prof Xing Xiaolin</td>
</tr>
<tr>
<td>Manoj Raj</td>
<td>Empirical Essays in Finance, Growth and Institution</td>
<td>Dr Yohannes Eko Riyanto</td>
</tr>
<tr>
<td>Navaratnam Ravinthirakumaran</td>
<td>Ethnic Politics and Economic Activity: A Comparison of Sri Lanka and Malaysia</td>
<td>Assoc Prof Tilak Abeysinghe Dr Gamini Premaratne</td>
</tr>
<tr>
<td>Omar Khaled Mohammad R Bashar</td>
<td>Impact of Economic Liberalization in Bangladesh</td>
<td>Assoc Prof Shin Jang Sup</td>
</tr>
<tr>
<td>Rasyad Akhmad</td>
<td>Essays on Banking Regulation and Restructuring: The Case of Indonesia</td>
<td>Dr Yohannes Eko Riyanto</td>
</tr>
<tr>
<td>Shi Yuhua</td>
<td>Three Essays on Population Economics</td>
<td>Assoc Prof Tay Boon Nga</td>
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### M. SOC. SCI. by Research

<table>
<thead>
<tr>
<th>Student</th>
<th>Topic</th>
<th>Supervisor(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Koh Phuay Leng</td>
<td>Entrepreneurial Networking, International Outsourcing Wage Inequality</td>
<td>Dr Chang Youngho Dr Ho Kong Weng</td>
</tr>
<tr>
<td>Wang Weiwei</td>
<td>Empirical Study of Money Demand Functions in China</td>
<td>Assoc Prof Shandre M Thangavelu Dr Sarah Tong Yueting</td>
</tr>
<tr>
<td>Wu Weifeng</td>
<td>On the Core of a Public Good Economy</td>
<td>Professor Parkash Chander</td>
</tr>
<tr>
<td>Xing Ziqiang</td>
<td>China’s Motives for Holding Foreign Exchange Reserve</td>
<td>Assoc Prof Wong Wing Keung</td>
</tr>
</tbody>
</table>
NUS Economics Alumni was launched on Friday, 2 March 2007 at the Orchard Cineleisure Complex by the Dean of FASS, Assoc Prof Tan Tai Yong, and the Director of the NUS Office of Alumni Relations. Over 80 persons attended and the Head of the Economics Department, Professor Parkash Chander, handed gifts to the sponsor, OCBC Bank, and members of the committee.

Forthcoming Events:
➢ Dinner talk by Dr. Tsao Yuan, 1978 First Class Economics Honours, at the Orchard Rd YMCA on Friday, 24 August on “The Manager as Coach”.
➢ Dinner talk by Assoc Prof Victor Savage on “The Significance of the Padang and Its Adjoining Roads” on Friday, 14 September at the Singapore Recreation Club boardroom in conjunction with a mooncake festival celebration.
➢ Dinner talk by Assoc Prof Peter Wilson, formerly of the Economics Department, NUS on “Asian Financial Integration” on Friday, 26 October at the Orchard Road YMCA boardroom.
➢ Bowling competition on the morning of Saturday, 17 November at the Singapore Recreation Club bowling alley.
➢ First Annual Dinner on Saturday, 1 December at the Pyramid, 2 Goodwood Hill with Mr. Ngiam Tong Dow, 1959 First Class Economics Honours, as the Guest of Honour.

In addition, alumni will also attend the Faculty Alumni Reunion Dinner on Friday, 19 October 2007.

Shirley Fong, 2006 Master’s and 2004 Honours, is the Webmaster of the alumni website at <http://www.nuseconomicsalumni> which anybody is welcome to visit to find out details about our membership of over 400, our activities and also to download application and donation forms. As there is no subscription fee, the alumni association is supported by donations, which all attendees at events should give.
I have thoroughly enjoyed my four years of study in the National University of Singapore (NUS). The economics syllabus imparts both a rigorous depth and flexible breadth of analysis, and has prepared me for my career as an economist.

The depth of the economics curriculum has been challenging but rewarding. I recall having to master long, complex mathematical models, painstakingly pouring over the equations for hours. However, far from abstracting from reality, the lessons served as a useful guide to enrich my perception of reality. The lecturers constantly challenged us to uncover the economic intuitions behind each model, and to explain each process in practical terms. This grounding has enabled me to examine both economics and day-to-day issues in a rigorous and scientific manner.

I enjoyed the opportunity to develop a breadth of expertise through exposure to a substantial number of non-economics modules. These modules span a diverse range, from the hard sciences like quantum physics, to business topics like finance, and humanities subjects like history and civilisation studies. More pertinent was my experience in the University Scholars Programme where each module spanned across several disciplines. I recall having to write a literature essay on nanotechnology, and conversely, to use my knowledge of physics to critically scrutinise a piece of literature.

The experience of venturing outside my major has given me the courage to be different and plunge into uncharted waters. In this, utmost gratitude must be given to Associate Professor Anthony Chin who supervised my Independent Study Module and Thesis. In the former, he enabled me to consult renowned professor Jack Knetsch, resulting in an auction experiment which involved designing a customised bidding computer programme. Professor Chin was also highly supportive of my thesis which utilised a computer model of a society which could evolve autonomously.

While it is important to be good at one’s area of expertise, the increasingly competitive economic landscape requires individuals to also be different and flexible. These skills are especially necessary in my job in the Economist Service at the Ministry of Trade and Industry. Not only do I have to be adept in using economics models, but I have to be able to think flexibly and creatively as I might be working on exciting tourism projects in one moment, and thinking about economic strategies to engage other countries in the next. I hence wish the Economics Department all the best as they continue to cultivate students with these vital skills for their work and their life.

Having finally graduated, it is time to take stock of my time spent in NUS. I recalled the first time I stepped into Lecture Theatre 11 for my basic economics lesson. I was unprepared and alone. I surveyed the audience and found no familiar faces. That was not encouraging. The first semester saw me toiling through school. However, things picked up in my second semester. I made new friends and found old ones. The academic workload had also become manageable.

During the second semester break, I made an important decision. I wanted to pursue a double degree in Economics and Finance due to my keen interest in both subjects. Hence, I registered my intention with the Dean’s Office and sought their approval. I knew it was not going to be easy as there were no precedent of double degrees in NUS, except for one student who completed two undergraduate degrees from the Faculty of Science.
THE SINGAPORE ECONOMY: AN ECONOMETRIC PERSPECTIVE
by Tilak Abeyasinghe and Choky Koen Meng

The phenomenal transformation of Singapore from Third World to First World status has generated keen interest from the rest of the world to learn more about its economy and the institutions. This book presents the Singapore economy through a macro-econometric model and lays the foundation for further research in this area, where the literature is rather scanty. The econometric model presented in the book is the ESU01 model constructed by the authors over 2001-2005. The model consists of 82 equations supplemented by 85 exogenous variables. The model is built in such a way that satellite models can easily be attached to it. The book offers a novel approach to macro-modelling of a small open economy. At the same time the authors have taken great pains to discuss the economics behind the econometrics and to present rare insights into the Singapore economy gleaned from formal econometric analysis. The implications of the findings are also emphasized, with policy sections included in the major chapters and an entire chapter devoted to policy simulations. Overall, the objective of the book is to introduce readers to how the Singapore economy works and to trace out the macroeconomic consequences of various government policies.

THE GAMMA-CORE AND COALITION FORMATION
by Parkash Chander

This paper reinterprets the gamma-core [Chander and Tulkens (1995, 1997)] and justifies it as well as its prediction that the efficient coalition structure is stable in terms of the coalition formation theory. We consider an infinitely repeated game in which players must choose whether to cooperate or not and show that a certain equilibrium of this game corresponds to the gamma-core assumption that when a coalition forms, the remaining players form singletons. We then use this result to show that the grand coalition is a stable coalition structure.

INCOME TAX EVASION AND THE FEAR OF RUIN
by Parkash Chander

This paper characterizes the optimal income tax function when the agent is risk averse and the objective of the principal is to maximize a social welfare function. We show that the optimal tax function is generally non-decreasing and concave if the principal's objective is maximin and the agent's utility function satisfies a reasonable condition that we call repetitive risk aversion. It is shown further that in many cases, the optimal tax function is generally non-decreasing and concave if the principal's objective is maximin and the agent's utility function satisfies a reasonable condition that we call repetitive risk aversion.

THE TRANSFER PARADOX IN A ONE-SECTOR OVERLAPPING GENERATIONS MODEL
by Emily T. Cremers and Partha Sen
Journal of Economic Dynamics and Control (forthcoming)

This paper examines the effects of international income transfers on welfare and capital accumulation in a one-sector overlapping generations model. It is shown that a strong form of the transfer paradox—in which the donor country experiences a welfare gain while the recipient country experiences a welfare loss—may occur both in and out of steady state. In addition, it is shown that a weak form of the transfer paradox—where either the donor or recipient (but not both) experience paradoxical welfare effects—may characterize all segments of the transition pathway. The weak form of the transfer paradox is characterized by the strong transfer paradox. The results are explained by the effects of transfers on world capital accumulation and the world interest rate, which imply secondary intertemporal welfare effects large enough to dominate the initial effects of the income transfer. A parametric example demonstrates that the transfer paradox may arise under plausible parameter values.

GLOBAL AND REGIONAL SOURCES OF RISK IN EQUITY MARKETS: EVIDENCE FROM FACTOR MODELS WITH TIME-VARYING SKEWNESS
by Aamir Rafique Hashmi and Anthony S. Tay

We examine the influence of global and regional factors on the conditional distribution of stock returns from six Asian markets, using factor models in which unexpected returns comprise global, regional and local shocks. The models allow for conditional heteroskedasticity and time-varying conditional skewness, and are used to measure mean, variance, and skewness spillovers. We find that incorporating time-varying conditional skewness improves the fit of our spillover models, and can alter measurements of variance spillovers. However, time-varying conditional skewness is mostly a local phenomenon; with exceptions, there is little spillover in skewness from global and regional factors.

FOREIGN LABOR AND ECONOMIC GROWTH: POLICY OPTIONS FOR SINGAPORE
by Hui Weng-Tat and Aamir Rafique Hashmi

Prior to the Asian economic crisis in 1997, Singapore’s official projected medium-term GDP growth target was set at 7% per annum. Since then, the targeted growth rate has been reduced to 5%. This paper examines the implications of the 5% growth target on the labor requirements of the Singapore economy. It is shown that the projected resident labor force will not be able to keep pace with the increased labor demand and the share of foreigners in the labor force will increase significantly even under the most favorable scenario. Some implications of the increased dependence on foreign labor in Singapore are discussed. With permanent immigration fixed at the current level, various policy options and their effects on the demand for foreign labor are considered. These include improving labor productivity, raising the total fertility rate, increasing labor force participation of older workers and lowering the targeted rate of economic growth.

THE SOURCES AND SUSTAINABILITY OF CHINA’S ECONOMIC GROWTH
by Albert Hu Guangzhou, Gary H. Jefferson and Jian Su

China’s growth trajectory is framed by dynamics that are seeking to close two productivity gaps: the gap between the international technology frontier and China’s technology frontier, which we define as China’s coastal industry, and the gap between China’s coastal industry and the country’s relatively less productive agricultural, industrial, and service sectors. While elements of China’s industrial sector have exhibited catch-up with China’s coastal industry during the past decade or longer, productivity disparities tend to have increased between coastal industry and agriculture and services across the four regions that we analyze. Associated with these persistent and generally growing productivity gaps is China’s heavy reliance on coastal industry to serve as the locomotive of China’s economic growth. As a result, relative to the growth trajectories of S. Korea and Taiwan, China is relying far more on its advanced industrial sector, as represented by coastal industry, in narrowing its gap in GDP with the U.S.

continued on page 13
However, due to severe diminishing returns of productivity growth with respect to productivity gap reduction, the fact that the present path China’s coastal industry will need to match or exceed the productivity levels of the existing international frontier implies a sharp slowdown in coastal industrial growth, thereby shifting much of the weight of sustained growth to the reduction of internal regional and sector productivity gaps. Institutional reforms are critically needed, so that China can achieve a greater share of its growth through internal restructuring and factor reallocation, rather than relying so heavily on catch-up with the international technology frontier.

**REGIONAL TIES AND DISCRIMINATION: POLITICAL CHANGE, ECONOMIC CRISIS, AND JOB DISPLACEMENTS IN KOREA, 1997-1999**
by Kang Chang Hui and Seungjoo Lee
Probing into the incidence of job displacements during the 1997-1999 recession period, this study offers theoretically grounded micro-causal explanations for regional ties and regional discrimination in South Korea. Our statistical analysis reveals the significant impact of a worker’s birth region (the basis of regional ties and discrimination) on the layoff process. Native Kyongsang workers are found to have faced higher rates of layoff in Seoul-Kyongki regional firms than native Jolla workers during the recession period. The Kyongsang-Jolla layoff rate gap is mainly due to differential treatment rather than difference in observable characteristics. The findings suggest that the problem of regional ties and regional discrimination is more deep-rooted and widespread in South Korea than previously reported.

**MANAGERIAL ECONOMICS**
by Ivan Png and Dale Lehman
Managerial economics is the science of directing scarce resources in management of a business or other organization. This book presents tools and concepts from managerial economics that practicing managers can and do use. The book is aimed at business students as well as practitioners. Accordingly, it is deliberately written in a simple and accessible style. In addition to the managerial focus, two features are worth emphasizing. First, the same principles of managerial economics apply globally. Reflecting this unity, the book includes examples and cases from throughout the world. Second, the book uses examples from both consumer and industrial markets. The reasons are simple: a customer is as likely to be another business as a human being and likewise for suppliers.

**FIRM OWNERSHIP, PRODUCT DIFFERENTIATION AND WELFARE**
by Sogjata Poddar and Yuanzhuo Lu
The Manchester School (forthcoming). The purpose of this paper is to study the impact of firm ownership in a differentiated industry. We find there is no effect on product differentiation and welfare due to ownership ratio change between private and state so long as the private (state) ownership in a partially state-owned firm remains at least half (less than half). However, when the private (state) ownership in the partially state-owned firm falls below half (less than half), the degree of product differentiation increases (decreases) whereas welfare decreases (increases) in the share of private (state) ownership, and thus, the extent of private or state ownership matters.
more robust and discriminating than the CAPM in the ranking of results, vary over time, stochastic dominance appears to be both dominance procedures identify dominant iShares. Although the refinements to compare the performance of 18 country market measures and the Sharpe Ratio, respectively. This study uses these and Duclos (2000) and Memmel (2003) provide procedures for Country indices as represented by iShares exhibit non-normal existence of day-of-the-week and January effects. We use daily paper we use a stochastic dominance (SD) test to test for the January effect has largely disappeared. Some recent studies, however, have concluded that calendar effects have largely disappeared. In spite of the non-normal nature of stock returns, most previous studies have employed the mean-variance criterion or CAPM statistics. These methods rely on the normality assumption and depend only on the first two moments to test for calendar effects. A limitation of these approaches is that they miss important information contained in the data such as higher moments. In this paper we use a stochastic dominance (SD) test to test for the existence of day-of-the-week and January effects. We use daily data for 1988 to 2002 for several Asian markets. Our empirical results support the existence of weekday and monthly seasonality effects in some Asian markets, but suggest that first-order SD for the January effect has largely disappeared. STOCHASTIC DOMINANCE ANALYSIS OF ISHARES NOMINAL INCREASES AND THE PERCEPTION OF LIKELIHOOD by Wong Wei Kang Economics Letters, Vol. 95, Issue 3, June 2007, pp. 433-437. Using surveys, this paper shows that a nominal increase in likelihood has a relatively small effect on individual’s own perception of likelihood, but a large and robust effect on beliefs about the perception of likelihood by others. These beliefs are consistent with acceptance theory. STOCHASTIC DOMINANCE AND MEAN-VARIANCE MEASURES OF PROFIT AND LOSS FOR BUSINESS PLANNING AND INVESTMENT by Wong Wing Keung European Journal of Operational Research, Vol. 182, Issue 2, October 2007, pp. 829-842. In this paper, we first extend the stochastic dominantiSD (SD) theory by introducing the first three orders of both ascending SD (ASD) and descending SD (DSD) to decisions in business planning and investment to risk-averse and risk-loving decision makers so that they can compare both return and loss. We provide investors with more tools for empirical analysis, with which they can identify the first order ASD and DSD prospects and discern arbitrage opportunities that could increase his/her utility as well as wealth and set up a zero dollar portfolio to make huge profit. Our tools also enable investors and business planners to identify the third order ASD and DSD prospects and make better choices. To complement the stochastic dominance approach, we also introduce an improved mean-variance criterion to decisions in business planning or investment on both return and loss for risk-averse and risk-loving investors. We then illustrate the superiority of the present approaches with well-known examples in the literature and discuss the relationship between the improved stochastic dominance and mean-variance criteria. DO WINNERS PERFORM BETTER THAN LOSERS? A STOCHASTIC DOMINANCE APPROACH by Vincent Lam Wing-Shing, Terence Chong Tai-Leung and Wong Wing Keung Applied Economic Letters (forthcoming) This paper offers an alternative view supporting the risk-based explanation of the momentum effect. Using stochastic dominance criteria, we find that the winners portfolio and the losers portfolio do not dominate each other. In general, the winners portfolio dominates at the right-hand side of the distribution of returns while the losers portfolio dominates at the left-hand side of the distribution. Our empirical results imply that the momentum profits provide neither an arbitrage opportunity nor a welfare improvement for rational investors ex ante. We interpret the evidence as follows: momentum profits are consistent with the notion of market rationality and market efficiency and are likely to be explained by omitted risk factors. Our findings also suggest that one possible reason why some investors prefer losers is because of less downside risk. PROFITABILITY OF INTRADAY AND INTERDAY MOMENTUM STRATEGIES by Vincent Lam Wing-Shing, Terence Chong Tai-Leung and Wong Wing Keung Applied Economic Letters (forthcoming) In this paper, examine whether a day’s surge or plummet in stock price serve as a market entry or exit signal. Returns of five trading rules based on one-day and intraday momentum are estimated for major world stock indices. It is found that the trading rules perform well in the Asian indices but not in those of Europe and the US. STOCHASTIC DOMINANCE THEORY FOR LOCATION-SCALE FAMILY by Lam Kin, May Wong Chun Mei and Wong Wing Keung Journal of Applied Mathematics and Decision Sciences (forthcoming) Meyer (1987) extended the theory of mean-variance criterion to include the comparison among distributions that differ only by location and scale parameters and to include general utility functions with only convexity or concavity restrictions. In this paper, we make some comments on Meyer’s paper and extend the results from Tobin (1958) that the indifference curve is convex upwards for risk averters, concave downwards for risk lovers, and horizontal for risk neutral investors to include the general conditions stated by Meyer (1987). We also provide an alternative proof for the theorem. Levy (1989) extended Meyer’s results by introducing some inequality relationships between the stochastic-dominance and the mean-variance efficient sets. In this paper, we comment on Levy’s findings and show that these relationships do not hold in certain situations. We further develop some properties among the first- and second degree stochastic-dominance efficient sets and the mean-variance efficient set.
MEAN, VOLATILITY SPILLOVER AND TIME-VARYING CONDITIONAL DEPENDENCE IN CHINESE STOCK MARKETS
by Zheng Yi and Wong Wing-Keung
Emerging Markets Letter (forthcoming)
This paper adopts a two-stage bivariate GARCH model to analyze the mean and volatility spillovers and time-varying conditional dependence between A and B shares in the Chinese stock market. Impacts of US and Hong Kong on China market are also examined. We find that in the Shanghai exchange where most state-owned big companies are listed, B shares trading is more influential in the information transmission while in the Shenzhen exchange with a smaller and less liquid market, the direction of the spillover effect reverses. We also find that there exist some time-varying dependencies patterns between A and B shares in both Shanghai and Shenzhen exchanges. In addition, there is an upward trend of correlation between A and B shares after 2002. The evolution of conditional dependence is closely linked to China’s government intervene policies on its stock market. In addition, our findings reveal that Hong Kong, as a neighbor of mainland China’s economy, is more influential than the US on the Shanghai and Shenzhen stock exchanges.

IS BEING A SUPER-POWER MORE IMPORTANT THAN BEING YOUR CLOSE NEIGHBOR? EFFECTS OF MOVEMENTS IN THE NEW ZEALAND AND UNITED STATES STOCK MARKETS ON MOVEMENTS IN THE AUSTRALIAN STOCK MARKET
by Chen Heng, Russell Smyth and Wong Wing-Keung
Applied Financial Economics (forthcoming)
We reprise the model with regards to the issue of American depository receipts which are more influential in the Shenzhen exchange with big companies are listed, B shares trading is more influential in the information transmission while in the Shanghai exchange where most state-owned big companies are listed, B shares trading is more influential in the information transmission while in the Shenzhen exchange with a smaller and less liquid market, the direction of the spillover effect reverses. We also find that there exist some time-varying dependencies patterns between A and B shares in both Shanghai and Shenzhen exchanges. In addition, there is an upward trend of correlation between A and B shares after 2002. The evolution of conditional dependence is closely linked to China’s government intervene policies on its stock market. In addition, our findings reveal that Hong Kong, as a neighbor of mainland China’s economy, is more influential than the US on the Shanghai and Shenzhen stock exchanges.

CREDIT CARD ISSUER FEES CHARGED TO CARDHOLDERS AND MERCHANTS: IMPACTS ON CONSUMER BEHAVIOR
by Liao Ziqi and Wong Wing Keung
Economic Theory (forthcoming)
This paper extends an ANOVA model by releasing the assumption of homoskedasticity in the traditional profile analysis by introducing a Fractionally Integrated Vector Error Correction Model (FIVEM) to examine the return transmission between the US and Chinese stock markets. We augment the FIVEM with a multivariate GARCH model in so doing, the first and second moments spillover between stock market indices are simultaneously revealed. Our empirical results support the hypothesis that the US stock market has stronger ties with the Chinese stock market than with the New Zealand stock market. We conclude that stock market movements in the US and China are the world’s economic superpower, are more important to the Australian stock market than stock market movements in New Zealand, Australia’s closest neighbor.

THEORETICAL STUDIES OF PREFERENCES OVER LOCATION-SCALE FAMILY
by Leung Pui-Lam and Wong Wing-Keung
Journal of Statistical Computation and Simulation (forthcoming)
The technique of ANOVA has been widely used in economics and finance where the observations are usually time-dependent but the model itself is treated as independent in time. In this paper, we extend an ANOVA model by releasing the assumption of independence in time. We further relax the assumption of homoskedasticity in the traditional profile analysis by introducing GARCH innovations in our proposed profile analysis that allows for both autoregressive and moving average components in the heteroskedastic variance to display a high degree of persistence. We rephrase the model with regards to the issue of American depository receipts which are more influential in the Shanghai exchange where most state-owned big companies are listed, B shares trading is more influential in the information transmission while in the Shenzhen exchange with a smaller and less liquid market, the direction of the spillover effect reverses. We also find that there exist some time-varying dependencies patterns between A and B shares in both Shanghai and Shenzhen exchanges. In addition, there is an upward trend of correlation between A and B shares after 2002. The evolution of conditional dependence is closely linked to China’s government intervene policies on its stock market. In addition, our findings reveal that Hong Kong, as a neighbor of mainland China’s economy, is more influential than the US on the Shanghai and Shenzhen stock exchanges.

ECONOMICS OF TWO-SIDED MARKETS: COMPETING PAYMENT SCHEMES
by Julian Wright with Graeme Guthrie
This paper develops the Prospect Stochastic Dominance theory with S-shaped and reverse S-shaped utility functions for investors. In this paper, we extend their work on Prospect Stochastic Dominance theory (PSD) and Markowitz Stochastic Dominance theory (MID) to the first three orders and link the corresponding S-shaped and reverse S-shaped utility functions to the first three orders. We also provide experiments to illustrate each case of the MID and PSD to the first three orders and demonstrate that the higher order MID and PSD cannot be replaced by the lower order MID and PSD. Furthermore, we formulate the following PSD and MID properties: hierarchy exists in both PSD and MID relationships; arbitrage opportunities exist in the first orders of both PSD and MID; and for any two prospects under certain conditions, their third order MID preference will be ‘the opposite of’ or ‘the same as’ their counterpart third order PSD preference. By extending the work of Levy and Wiener and Levy and Levy, we provide investors with more tools to identify the first and third order PSD and MID prospects and thus they could make wiser choices on their investment decision.

ECONOMICS OF TWO-SIDED MARKETS: COMPETING PAYMENT SCHEMES
by Liao Ziqi and Wong Wing Keung
Applied Financial Economics (forthcoming)
This paper extends the model with regards to the issue of American depository receipts which are more influential in the Shenzhen exchange with big companies are listed, B shares trading is more influential in the information transmission while in the Shanghai exchange where most state-owned big companies are listed, B shares trading is more influential in the information transmission while in the Shenzhen exchange with a smaller and less liquid market, the direction of the spillover effect reverses. We also find that there exist some time-varying dependencies patterns between A and B shares in both Shanghai and Shenzhen exchanges. In addition, there is an upward trend of correlation between A and B shares after 2002. The evolution of conditional dependence is closely linked to China’s government intervene policies on its stock market. In addition, our findings reveal that Hong Kong, as a neighbor of mainland China’s economy, is more influential than the US on the Shanghai and Shenzhen stock exchanges.

ECONOMICS OF TWO-SIDED MARKETS: COMPETING PAYMENT SCHEMES
by Zheng Yi and Wong Wing-Keung
Emerging Markets Letter (forthcoming)
This paper adopts a two-stage bivariate GARCH model to analyze the mean and volatility spillovers and time-varying conditional dependence between A and B shares in the Chinese stock market. Impacts of US and Hong Kong on China market are also examined. We find that in the Shanghai exchange where most state-owned big companies are listed, B shares trading is more influential in the information transmission while in the Shenzhen exchange with a smaller and less liquid market, the direction of the spillover effect reverses. We also find that there exist some time-varying dependencies patterns between A and B shares in both Shanghai and Shenzhen exchanges. In addition, there is an upward trend of correlation between A and B shares after 2002. The evolution of conditional dependence is closely linked to China’s government intervene policies on its stock market. In addition, our findings reveal that Hong Kong, as a neighbor of mainland China’s economy, is more influential than the US on the Shanghai and Shenzhen stock exchanges.
We provide a framework for analyzing two-sided markets that allows for different degrees of product differentiation on each side of the market. When platforms are viewed as homogeneous by sellers but heterogeneous by buyers, we show that “competitive bottlenecks” arise endogenously. In equilibrium, platforms do not compete directly for sellers, instead choosing to compete indirectly by inducing buyers to join. Sellers are left with none of the gains from trade. Despite this, it is sellers that choose to purchase from multiple platforms (multihoming). Finally, the role of exclusive contracts to prevent multihoming.

EXCLUSIVE DEALING WITH IMPERFECT DOWNSTREAM COMPETITION
by Julian Wright and Jose Miguel Abello
International Journal of Industrial Organization (forthcoming)

The existing literature on exclusive dealing is extended to take into account that buyers signing exclusive deals are typically competing firms that are differentiated from the perspective of their customers. We show, provided such downstream firms are not too differentiated or provided upstream firms can compete in two-part tariffs, exclusive dealing forecloses entry to a more efficient rival. An established upstream firm and competing downstream firms raise their joint profit by signing exclusive deals to protect the industry from upstream competition. Naked exclusion arises despite the Chicago School logic that buyers only sign contracts that make themselves (jointly) better off.

NAKED EXCLUSION AND THE ANTICOMPETITIVE ACCOMMODATION OF ENTRY
by Julian Wright
Economics Letters (forthcoming)

We model exclusive dealing when the incumbent and potential entrant offer differentiated products and buyers are downstream firms. While the resulting exclusive dealing is always anticompetitive, it does not necessarily involve foreclosure.

INFLATION TAXATION AND WAREHOUSE EXTERNALITIES AND LEISURE
by Ho Wai-Ming, Zeng Jinli and Zhang Jie

This paper examines how inflation taxation affects resource allocation and welfare in a neoclassical growth model with leisure, a production externality and money in the utility function. Switching from consumption taxation to inflation taxation to finance government spending reduces real money balances relative to income, but increases consumption, labor, capital, and output. The net welfare effect of this switch depends crucially on the strength of the externality and on the elasticity of intertemporal substitution. While it is always negative without the externality, it is likely to be positive with a strong externality and elastic intertemporal substitution.

SUBSIDIES IN AN R&D GROWTH MODEL WITH ELASTIC LABOR
by Zhang Jie and Zeng Jinli

This paper compares different subsidies in an R&D growth model with competitive suppliers of a final good and monopolistic suppliers of Intermediate goods. Unlike existing studies with lump-sum taxes and fixed labor, we assume distortionary taxes and elastic labor, finding some new insights. First, subsidizing R&D investment is more effective than subsidizing final output or subsidizing the purchase of intermediate goods in terms of promoting growth. Second, in terms of raising welfare, the R&D subsidy may also be more effective than the other subsidies and all of them are dominated by their mix, but none can achieve the social optimum.

HEALTH, EDUCATION AND LIFE-CYCLE SAVINGS IN THE DEVELOPMENT PROCESS
by Zhang Jie and Yang Kam-Kit

This paper studies investment in health and human capital in a life-cycle model. Health investment enhances survival to old age by improving health from its endowed level. The model predicts two distinctive phases of development. When income is low enough, the economy chooses heavy health and education subsidies, leading to slow growth. When income grows, health investment will become positive and wealthier agents invest more in longevity, leading to higher life expectancy and faster growth. A health subsidy can move the economy from the first phase to the next. Subsidies on health and human capital investments can improve welfare.

EFFECTS OF LONGEVITY AND DEPENDENT RATES ON SAVING AND GROWTH: EVIDENCE FROM A PANEL OF CROSS COUNTRIES
by Zhang Jie, Li Hongbin and Zhang Junsen

While earlier empirical studies found a negative saving effect of old-age dependency rates without considering longevity, recent studies have found that longevity has a positive effect on growth without considering old-age dependency rates. In this paper, we first justify the related yet independent roles of longevity and old-age dependency rates in determining saving and growth by using a growth model that encompasses both neoclassical and endogenous growth models as special cases. Using panel data from a recent World Bank data set, we then find that the longevity effect is positive and the dependency effect is negative in savings and investment regressions. The estimates indicate that the differences in the demographic variables across countries or over time can well explain the differences in aggregate savings rates. We also find that both population age structure and life expectancy are important contributing factors to growth.

OPTIMAL SOCIAL SECURITY WITH ENDOGENOUS FERTILITY AND BEQUESTS
by Zhang Jie and Zhang Junsen
Journal of Economic Dynamics and Control (forthcoming)

This paper studies optimal pay-as-you-go social security with positive bequests and endogenous fertility. With an investment externality, a competitive solution without social security suffers from under-investment in capital and over-reproduction of population. We show that social security can improve welfare under the rather weak condition that it reduces fertility and increases capital intensity. We also illustrate numerically that a small degree of this externality is enough to justify the observed high ratios of social security spending to GDP.

ON THE SEGMENTATION OF MARKETS
by Serene Tan and Nicolas L. Jacquet

This paper endogenizes the market structure of an economy with heterogeneous agents who want to form bilateral matches in the presence of search frictions and when utility is nontransferable. There exist infinitely many marketplaces, and each agent chooses which marketplace to be in: agents get to choose not only whom to match with but also whom they meet with. Perfect segmentation is obtained in equilibrium, where agents match with the first person they meet. All equilibria have the same matching pattern. Although perfect assortative matching is not obtained in equilibrium, the degree of assortativeness is greater than in standard models.

INTERNATIONAL ASSET MARKET NONCONVERGENCE, AND ENDGENOUS FLUCTUATIONS
by Toros Kikuchi

We develop an overlapping generations model with re-tradeable paper assets and capital accumulation to analyze the interaction

continued from page 15

TWO-SIDED MARKETS, COMPETITIVE BOTTLENECKS AND EXCLUSIVE CONTRACTS
by Julian Wright and Mark Armstrong

We develop an overlapping generations model with re-tradeable paper assets and capital accumulation to analyze the interaction...
between the real economy and an international asset market. The world consists of two homogeneous countries, which differ only in their initial levels of capital. Consumers who live for two periods transfer wealth over time and across countries by holding international mutual funds which pay stochastic dividends. The optimal portfolio decisions of consumers do not necessarily induce convergence of incomes between the two countries. Moreover, interaction through the asset market induces endogenous fluctuation of capital flows between the rich and the poor country.

**MANIPULATION OF ENDOWMENTS AND SUNSPOT EQUILIBRIA**

by Aditya Goenka and Stefano Matta

*Economic Theory (forthcoming)*

We study the connection between occurrence of manipulation via reallocating endowments by coalitions and sunspot equilibria. The uncertainty about which coalition will form introduces extrinsic uncertainty into the economy. Under certain conditions, manipulation of endowments by coalitions can occur if and only if sunspots matter.

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**CONFERENCES**

Conferences attended by our staff members between 1 January 2007 and 30 June 2007 are given below:

<table>
<thead>
<tr>
<th>Name</th>
<th>Title of Conference</th>
<th>Title of Paper</th>
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<tbody>
<tr>
<td>Dr Han Hee Joon</td>
<td>The Third Symposium on Econometric Theory and Applications (SETA 2007)</td>
<td>GARCH Process with Persistent Covariates</td>
<td>Hong Kong University of Science and Technology, Hong Kong</td>
<td>13 - 15 April 2007</td>
</tr>
<tr>
<td>Dr Han Hee Joon</td>
<td>Econometric Society Meeting</td>
<td>GARCH Process with Persistent Covariates</td>
<td>Sungkyunkwan University, Seoul, Korea</td>
<td>16 June 2007</td>
</tr>
<tr>
<td>Professor Parkash Chander</td>
<td>MIT Global Change Forum XXVI</td>
<td>- Panel Discussant -</td>
<td>Cambridge, MA, USA</td>
<td>20 - 22 June 2007</td>
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**Congratulations**

Dr and Mrs Heejoon Han on their new arrival - a BABY BOY!

Little prince **Sahn Han** was born on 21 May 2007.

Wishing them a whole new world and lifetime of happiness...!
NOTABLE ACHIEVEMENTS OF STUDENTS

Academic Year 2006/2007

<table>
<thead>
<tr>
<th>Awards &amp; Medals</th>
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<tr>
<td>Economic Society of Singapore Gold Medal</td>
<td>Goh Weizhi, Kenny</td>
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<tr>
<td>Lim Chong Yah Gold Medal</td>
<td>Tan Liang Ching</td>
</tr>
<tr>
<td>Lim Tay Boh Memorial Medal (Gold)</td>
<td>Xu Shaixin</td>
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<tr>
<td>Monetary Authority of Singapore Book Prize</td>
<td>Sue Dao Wei, Eddie</td>
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<td>SINCPEC Prize</td>
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<td>Tsao Ng Yu Shun Award of Excellence in Ageing Study</td>
<td>Ong Kheng Lee</td>
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<tr>
<td>You Poh Seng Prize in Econometrics</td>
<td>Chew Shu Fen</td>
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</table>

THANK YOU AND OUR BEST WISHES FOR THE FUTURE

Dr Chang Youngho
Faculty member in the Department of Economics, NUS
(6 July 1999 - 30 June 2007)

Professor Yongmiao Hong
Visiting Tan Chin Tuan Professor (20 Apr 2007 - 18 May 2007)

Professor Huw David Dixon
Visiting Professor (15 Jan 2007 - 31 May 2007)

Professor Charles Milton Kahn
Visiting Tan Chin Tuan Professor (5 March 2007 - 4 April 2007)

Dr Binod Khadria
Visiting Senior Research Fellow (13 May 2006 - 12 May 2007)

Professor Randolph Preston McAfee
Goh Keng Swee Visiting Professor (2 July 2007 - 31 July 2007)

Professor Janardhan Mohan Rao
Visiting Professor (15 August 2006 - 16 April 2007)

Professor Shlomo Weber
Visiting Professor (27 July 2007 - 26 August 2007)

Assoc Prof Peter Wilson
Faculty member in the Department of Economics, NUS
(1 November 1989 - 31 July 2007)

Professor John Charles Wooders
Visiting Professor (3 Jan 2007 - 25 May 2007)

Professor Myrna Holtz Wooders
Visiting Professor (5 March 2007 - 27 March 2007)

Assoc Prof Xing Xiaolin
Faculty member in the Department of Economics, NUS
(28 October 1993 - 30 September 2007)

Mr J. M.A. Jayawickrama
Research Assistant (22 September 2006 - 31 July 2007)

Mr Ng Kwan Kee
Research Fellow (6 April 2006 - 14 May 2007)

Dr Sanja Samirana Pattrayak
SMF-Postdoctoral Fellow (1 July 2005 - 30 June 2007)

Ms Irene Lim Lay Cheow
Management Support Officer (6 February 1996 - 13 April 2007)
We would like to express our sincere appreciation to all those who have contributed to this issue of ECONews.

We welcome your contributions on teaching, research and learning topics, as well as feedback on this issue. Please write to: ecsnews@nus.edu.sg.

Do we have your correct name and address? Would you like us to send a copy of ECONews to your friends/colleagues? Please fill in the form below and fax to:

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As it turned out, I was lucky. FASS was preparing to introduce their double degree programmes in a year's time. They were in the midst of finalising the details and were able to accede to my request if I met their requirements. That semester, I worked really hard. I had only one goal in mind, which was to convince the Dean's Office of my commitment and capacity to pursue two degrees at the same time. I was fortunate to be able to do so before the end of the third semester. From then on, every semester was packed with modular credits that I had to earn to graduate. This did not put me down. Instead, it provided me with a great sense of self-fulfilment.

At my commencement, I was humbly reminded of these achievements. The familiar faces I saw brought back fond memories. One of the most vivid images that flashed across was the joy we shared when the economics cohort gathered in the economics honours room and deliberated on everything and anything under the sun. My journey in NUS would not have been as enjoyable if these guys and gals were not around.

Another person who left a deep impression on me is Associate Professor Albert Tsui. He was my thesis supervisor and mentor. His generosity in sharing his knowledge and patience in guiding me motivated me to push new boundaries. He is also one of the most humorously intelligent men whom I have ever known. The jokes he shared never failed to lift the boredom in his classes.

As I step out of NUS into society, I would like to take this opportunity to express my deepest appreciation to people whom I am greatly indebted to. First and foremost, my heartfelt gratitude goes to my parents and my fiancée. It is with their support that I am able to engage in my academic pursuit with full conviction.

I am also deeply appreciative of the help rendered by FASS Dean's Office. Of special mention are Associate Professor Paulin Tay Straughan, Ms Shaw Lay Pheng and Ms Bun Pui Yoke. Without their faith in me, I would never have been able to complete the double degree in four years.

Last but not least, I would like to thank the generous donors of the Tsao Ng Yu Shun award. Their contribution as a foundation provides aspirants a privileged opportunity to be recognised for their efforts.

TSAO NG YU SHUN AWARD OF EXCELLENCE IN AGEING STUDY (con’td)
The Economics Society decided that the time had come to honour the great minds of our discipline. FASS Open House saw the society with an “Academy Awards” themed room, complete with a Walk of Fame that could rival Hollywood’s Walk of Fame in Los Angeles, California. Beautiful balloons of gold and silver, accompanied by “star tiles” with famous names such as Adam Smith, John Maynard Keynes, Irving Fisher and Milton Friedman adorned the walkway to the Lim Tay Boh Seminar Room, where our mini-exhibition was held.

To get into the Hollywood mood, we decorated our display boards to look like film strips. Movie and popular television show titles were changed to complement our society’s aim in gaining as much interest as we could from the incoming freshmen. “Survivor NUS” and “The Economics Apprentice”, named after popular reality-TV shows, were some of the more well-received ones.

We were bombarded with countless questions ranging from Student Exchange Programmes to modules offered by the Department to possible job prospects that an Economics major faced. Thankfully, we could provide satisfactory answers to questions presented to us. “I’m glad that we got such a good response from the incoming freshmen. Our hard work and preparation has really paid off,” said Lee Pei Ling, Head of the Open House Committee.

A WARM WELCOME TO THE DEPARTMENT

Assoc Prof Xiao Luo from the Institute of Economics, Academia Sinica
Visiting Associate Professor with effect from 26 July 2007

Assoc Prof Murali Krishna Agastya from the University of Sydney
Visiting Associate Professor with effect from 23 July 2007

Dr Shreekant Gupta from the University of Delhi
Visiting Senior Fellow with effect from 1 August 2007

Dr Guillaume Rocheteau from the Federal Reserve Bank of Cleveland
Visiting Senior Fellow with effect from 29 June 2007

Dr Huang Ke-Wei from New York University
Assistant Professor with effect from 16 July 2007
(on joint appointment with the Department of Information Systems)

Dr Tomoo Kikuchi from Bielefeld University
Assistant Professor with effect from 2 July 2007

Ms Goh Wuan Tze, Nancy
Senior Administrative Officer with effect from 2 May 2007

Ms Soong Wei Ling, Jamie
Management Assistant Officer with effect from 17 September 2007