

ANNUAL REPORT 2003
CENTRE FOR STRATEGIC ECONOMIC STUDIES

Centre for Strategic Economic Studies
Victoria University

March 2004



Table of Contents

1. History and Mission.....	2
2. Research Programs	2
Growth, trade and development.....	2
Governance and regional economies	3
Inequality and work	3
Information technologies and the information industries.....	3
Sustainable development and the environment	3
Technology, innovation and industrial change.....	3
3. CSES Staff and Students 2003	4
CSES staff 2003.....	4
CSES PHD student completions.....	5
CSES PhD students 2003.....	6
CSES DBA students 2001	6
3. CSES Research Activities 2003	7
4. CSES Research Output 2003	10
Books	10
Chapters in books	10
Journal articles	11
External working papers	12
Invited conference papers	12
Conference presentations.....	13
External seminars	14
Internal seminars.....	14
Working papers.....	15
Contract and technical reports	16
Consultancy contracts.....	16
Media mentions	17
Other outputs	18
Book reviews	18
5. 2003 Financial Outcomes	Error! Bookmark not defined.

CENTRE FOR STRATEGIC ECONOMIC STUDIES

Annual Report 2003

1. History and Mission

The Centre for Strategic Economic Studies (CSES) was established by the Council of Victoria University in May 1993. One of the six Designated University Centres, the CSES is located at the City Campus of Victoria University, 300 Flinders Street, Melbourne.

Professor Peter J. Sheehan is the Founding Director of the Centre. He is supported by a team of professional staff involved in research and business activities and by graduate students enrolled in both PhD and DBA degree programs.

The mission of the Centre is to:

- address long-term, strategic economic and social issues of international concern and significance;
- consider, in doing so, the role of both general ideas and specific institutions, and the relationship between ideas and institutions;
- develop a specific focus on basic issues relevant to Australia's future, with special reference to the Asian region; and
- develop and train a body of graduate students with the motivation and skills to address these strategic issues in the future.

In fulfilling this mission, the Centre pursues activities in three main areas: research on long-term economic, social and technological issues; commercial activities, including publications, conferences and electronic data services; and postgraduate research training.

2. Research Programs

The Centre's research programs focus on the massive processes of economic, technological and social change taking place in the contemporary world. They seek to develop an understanding of the causes and consequences of these global processes of change, and of the appropriate policy responses in different situations to the challenges arising. The Centre's six main research programs are noted below.

Growth, trade and development

This program concerns the nature and causes of the emerging global knowledge economy and the implications of these trends for individual industries regions and countries. Particular attention is given to the effects of the integration of economies through trade, financial markets and knowledge flows, and to the policy implications – at regional, national and international levels – of this integration.

Governance and regional economies

This program addresses the impact of economic and social change on regional economies, both sub-national and supra-national, and the appropriate policy responses at different levels of government to the new trends. Particular attention is given to impacts at or below the state or province level, and to the effect of these changes on existing institutions and structures, such as fiscal arrangements between national and regional governments.

Inequality and work

The global changes noted above are bringing about fundamental changes in the nature of work, in the supply of jobs and the skills required, and in the distribution of the rewards from working. This program addresses these issues, exploring their implications for increasing inequality across individuals, families and regions, as well as potential policy responses.

Information technologies and the information industries

This program focuses on the economic and organisational impacts of Information and Communication Technologies (ICTs), including information industry development and policy; the application of ICTs across the economy; consequent structural changes in the economy; emerging business models for information-based businesses; and statistical indicators of information industries and information infrastructure development.

Sustainable development and the environment

This program focuses on the issues involved in achieving a sustainable development path, both nationally and internationally. Particular emphasis has been given to the development of numerical growth models incorporating environmental effects, including climate change, to the impact of technological change and to optimal policy responses.

Technology, innovation and industrial change

Work in this program investigates processes of innovation and technological change in both developed and developing economies. Emphasis is placed on the impact of the information technology revolution and the growth of knowledge intensive industries, but the role of innovation across all industrial and service sectors is also a focus of concern.

Within the broad areas of research focus, the Centre has developed a special emphasis on a number of technologies and/or industries. These include:

- information and communications technologies;
- biotechnology and pharmaceuticals, and
- environmentally sustainable technologies.

The Centre has over a period of years built a small but highly qualified team capable of producing high quality research outputs in applied economics with a focus on better understanding the forces of globalisation, the development of the knowledge economy and their implications for economic, social and political change.

3. CSES Staff and Students 2003

The Centre has over a period of years built a small but highly qualified team capable of producing high quality research outputs in applied economics with a focus on better understanding the forces of globalisation, the development of the knowledge economy and their implications for economic, social and political change.

CSES staff 2003

Professor Peter J. Sheehan	Director
Professor Bhajan S. Grewal	Deputy Director
Mr Bruce Rasmussen	Associate Director
Prof. John W. Houghton	Professorial Fellow
Prof. Greg Tegart	Visiting Professor
Dr Sardar M.N. Islam	Director, Sustainable Development and the Environment Project
Mr Ainsley Jolley	Director, Emerging Technologies and Asian Growth (ETAG) Project
Mr Kim Sweeny	Senior Research Fellow
Dr Enjiang Cheng	Senior Research Fellow
Dr Fiona Sun	Research Fellow
Dr George Messinis	Research Fellow
Dr Matthew Clarke	Research Fellow
Dr Dana Nicholau	Research Fellow
Ms Alison Welsh	Data Analyst
Mrs Margarita Kumnick	Research Information Coordinator
Mrs Gordana Volkanovska	Administrative Officer

Postgraduate research is an important part of CSES activities. Seven CSES research scholars have received PhD degrees with high praise from the examiners for the quality of their theses. The broad range of the topics of the theses once again testifies that the focus of research in CSES is not narrow but covers a diversity of issues and skills.

CSES PHD student completions

<i>Student</i>	<i>PhD Thesis Title</i>	<i>Supervisor</i>	<i>Year completed</i>
Sally Weller	Globalisation, Trade and Power:: The Impact of Global Trade Liberalisation on Commodity Chains in the Australian Clothing Industry	Peter Sheehan	2003
Dexin Yang	Foreign Direct Investment from Developing Countries	Bhajan Grewal	2003
Jamie Sanderson	A Regional Analysis of Adaptive Response to Global Warming in Asia	Sardar Islam	2003
Mathew Clarke	Is Economic Growth Desirable? A Net Benefit Index Analysis of Economic Growth in Thailand	Sardar Islam	2003
Yvonne Dunlop	Low Paid Earners in the Australian Labour Market	Peter Sheehan	2003
Yan Guo	Developing the Information Industries in China 1979-1996: A Case Study in Government Learning in the Plan to Market Transition	Peter Sheehan	2003
Asoka Wettasinghe	THE DIVERSITY AND EFFECTIVENESS OF INDUSTRIAL POLICIES IN EAST ASIA: A CASE STUDY OF THE REPUBLIC OF KOREA, MALAYSIA AND THAILAND 1960-1997	Peter Sheehan	2001
Galina Tikhomirova	Information Technology Industries and National Competitiveness	Peter Sheehan	2001
Madhubani Ghosh	The Efficiency of the Calcutta-Haldia Port Complex	Bhajan Grewal	1999
Michelle Fong	IT and Economic Growth in China	Peter Sheehan	1998
Lucy Firth	Learning and Endogenous Technical Change	Peter Sheehan	1998
David Ray	Innovation and Growth in the Indonesian Economy	Peter Sheehan	1998
Joe Camilleri	Understanding the Implications for Australia of Hong Kong's Reversion to China	Peter Sheehan	1998

CSES PhD students 2003

<i>Student</i>	<i>Thesis Title</i>	<i>Supervisor</i>	<i>Year commenced</i>
Sudath Arumapperuma	The Role of Information Technology in Disseminating Agricultural Innovations: A Comparative Study of Australia and Sri Lanka	Peter Sheehan	2003
Ping Chen	Optimal Control Models in Finance	Sardar Islam	2003
Alexis Esposto	The Impact of Technology on Earnings Inequality in Australia	Peter Sheehan	1998
Tri Lam	Vietnam, 1986-2005: 20 Years Since The Economic Transition From Plan to Market, the Gains and the Losses In the Absence of Political Reforms.	Peter Sheehan	2003
Prabodh Malhotra	Pharmaceutical Industry and Public Health in Developing Countries: A Comparison Study of India and China	Bhajan Grewal	2002
Valerie McGown	The Effectiveness of Quality Control Systems in Australia and Japan: A Comparative Analysis	Peter Sheehan	1996
Bruce Rasmussen	Development Paths of Australian Biomedical Companies	Peter Sheehan	2003
Kim Sweeny	Competition in Australian Pharmaceutical Markets and the Returns to Innovation	Peter Sheehan	2003

CSES DBA students 2001

<i>Student</i>	<i>Title of Thesis</i>	<i>Supervisor</i>	<i>Year started</i>
Mohammad Aba-Bulgu	Stochastic Optimisation Model for Financial Planning	Sardar Islam	1996
Arun Anton	Project Appraisal Methods	Sardar Islam	1995
Sanjoy Bose	Financial Issues of Intellectual Property	Sardar Islam	2000
Sami Choi	Energy and Economic Growth: A Dynamic General Equilibrium Analysis	Sardar Islam	1994
Songporn Hansanti (Beau)	Globalisation and the Prospects for Developing Countries: A Study of Thailand's Financial Crisis	Peter Sheehan	2001
Christina Mak	Cost-Benefit Analysis Related to Pharmacoeconomics	Sardar Islam	1996
Watanapalachaikul Sethapong (Paul)	Financial Econometrics of a Developing Economy: A Study of the Thai Stock Market	Sardar Islam	2001
Shahram Sajjadi-Emami	Capital Budgeting	Sardar Islam	1998
Sergio Villegas	Optimal Level of Government Aged Care Expenditure in Australia: Application of Cost Benefit Analysis	Sardar Islam	1996
Mohammad Rusydi	The Determination of the Efficient Exchange Rate: Mathematical Models and Applications	Sardar Islam	2003

to Indonesia

3. CSES Research Activities 2003

This year was one in which the Centre made significant progress in expanding its research programs to achieve its overall objectives. This is evident in the comprehensive list of research activities provided in the table below, and in the Centre's research outputs for 2003 listed in the next section.

Merck Foundation (US) Project	In 2002, CSES was awarded, against global competition, a grant of US\$600,000 over 3 years by the Merck Company Foundation under its Program for Pharmaceutical Policy Issues to conduct a research program called Program on Global Change and Local Regulation in Pharmaceuticals. The grant has been matched by the Department of Innovation, Industry and Regional Development (Victoria) with a grant of up to A\$300,000. Some of the first results of the research carried out in 2003 will be presented in Philadelphia in March 2004.
Merck, Sharp and Dohme Project	During 2003, various CSES staff worked on a study of the pharmaceutical industry in Australia titled: <i>Pharmaceutical Industry: Equity, Sustainability and Industry Development</i> . The project is funded and overseen by a steering committee comprising representatives from Merck Sharp and Dohme (Australia), CSL, Eli Lilly, Department of Industry, Tourism and Resources, the Department of Health and Ageing and Medicines Australia. It is supported by each of these organisations in various ways. Financial support has been provided by Merck Sharp and Dohme (Australia), Eli Lilly (Australia) and the Merck Company Foundation.
ARC Linkage Grants	<p>In 2003, the CSES received 3 ARC Linkage grants. The first for 2003-2004 is titled <i>Climate Change, Industrial Structure and the Knowledge Economy</i> has Peter Sheehan, Sardar Islam, and John Phillimore (WA State Government) as Chief Investigators, and Dr M. Munasinghe (World Bank) as Partner Investigator.</p> <p>The second was granted in late 2003 and runs until mid 2006 is titled <i>General Purpose Technologies, Complementarities and the Convergence of Industries: A Comparative Study of Information Technology, Biotechnology and Nanotechnology</i> and has Peter Sheehan, John Houghton, Greg Tegart and David Charles (Director of The Allen Consulting Group) as their investigators.</p> <p>The third was granted to Sardar Islam and Phillip Lawn (Flinders University of South Australia) for the period 2003-2004 and is titled <i>A Universal Approach to Sustainable Development: Economic, Environmental and Social Indicators in Australia and Southeast Asia</i>.</p>
APEC Forum	<p>Peter Sheehan was invited panellist in the First Annual APEC Life Sciences Innovation Forum (Phuket, Thailand, 14-15 August 2003). The primary goal of this forum is to bring together representatives of the government, industry and academia to promote life sciences innovation in support of human health in the region in accordance with the APEC mandate. The Forum will also develop recommendations for economic and technical cooperation, including capacity building, and explore avenues to promote public-private sector collaboration in life-sciences innovation.</p> <p>At the forum, Peter Sheehan was elected to the position of Vice Chair (Academic), APEC Life Sciences Innovation Forum. The Group is chaired by the Deputy Prime Minister of Thailand. Eli Lilly's President, Asia Operations is one of the three Vice Chairs. The establishment of the Group is an initiative of President Bush. The US pharmaceutical industry and US State Department have a significant involvement.</p>
CSES book launch	On 19 March 2003, Professor Stephen Fitzgerald, first Australian Ambassador to the People's Republic of China, launched the CSES's new book at the Victoria University Conference Centre in Melbourne. The book titled <i>China's Future in the Knowledge Economy: Engaging the New World</i> , was jointly published by Victoria University and Tsinghua University Press in Beijing. A Chinese translation of the publication is soon to be published by TUP.
China –	Bhajan Grewal was invited by China's State Commission Office of Public Sector Reform

Public Sector Reform	(SCOPSR) to review their draft report on reforming China's intergovernmental relations and administrative system. After revision, the SCOPSR report was to be submitted to the State Council. The invitation was initially for a visit in April 2003, but had to be postponed until September 2003 because of the spread of SARS. Having been working on these issues with SCOPSR since 2001, Professor Grewal had overseen the work on which the draft report was based.
DIIRD technical reports	Two major reports were finalized by the CSES in 2003. Both were prepared for the Victoria Department of Industry, Innovation and Regional Development. The first was titled <i>Small Scale Technologies: Directions for Victoria</i> and examines the implications of small scale technologies for industries and firms in Victoria. The second is titled <i>The Australian Synchrotron Project: An Economic Impact Study</i> and examines overseas examples of the creation of technology clusters formed by major technology facilities such as a synchrotron. The report argues that the Australian Synchrotron can be successful in stimulating the development of a vigorous technology cluster in Melbourne.
DEST report released	In October 2003, the Department of Education, Science and Training in Canberra released a report titled: <i>Changing Research Practices in the Digital Information and Communication Environment</i> , authored by John Houghton , with Colin Steele and Margaret Henty. The report examines evolving research practices, focusing on how practices are changing and what the implications of those changes are for scholarly communication and the future development of the research infrastructure. The report is available at: http://www.dest.gov.au/highered/respubs/changing_res_prac/exec_summary.htm
Australian Computer Society Sponsorship	The Australian Computer Society continued its sponsorship of John Houghton's ICT Industry and Trade Update Reports for the third year running. Conference events were organised around the launch of this year's report in Sydney on November 17 th .
Advisor to World Bank	Early in 2003, Peter Sheehan was invited to be advisor of the Development Gateway's Knowledge Economy at the World Bank. The CSES 2002 publication <i>China's Future in the Knowledge Economy</i> was part of a feature on the Development Gateway's webpage http://www.developmentgateway.org/node/130667/sdm/docview?docid=423767 . Ellen Olafson, editor of the site commented that 'the feature we did in conjunction with your book on China has been the most popular feature ever on the Knowledge Economy community!' (personal communication, February 2003). John Houghton served on the Communications, Information Technology and E-commerce (CITEC) board of Standards Australia.
Other advisory activities	John Houghton sits of the Australian Library and Information Association's Research Committee, which advises on the allocation of ALIA's Research Fund and research activities. John Houghton is a member of the editorial board of <i>Telecommunications Policy</i> .
Invited research papers	Bhajan Grewal was invited by the editorial board of the Encyclopaedia of Social Measurement, published by Academic Press, to contribute an article on 'Examples of Social Measurement in International Economics'. A paper (with co-author Peter Sheehan) was submitted in November 2003 and has been accepted for publication in 2004. Bhajan Grewal was invited by the Editor of <i>Public Finance and Management</i> , (a new peer reviewed electronic journal published in Harrisburg, Pennsylvania), to prepare an article for a Special Issue. Consisting of 5-6 papers by prominent researchers in the area of fiscal federalism, the Special Issue will be published in 2004. The paper has been submitted with co-author Peter Sheehan . John Houghton was invited to prepare a OECD Working Paper in the Department of Science, Technology and Industry of the OECD titled: <i>Digital/electronic delivery of goods and services (Business services)</i> . John Houghton was once again invited to prepare 3 sections of the widely recognized publication <i>OECD Information Technology Outlook 2004, on the globalisation of the ICT sector, ICT Firms and Trade in ICT Goods and Services</i> . Summaries of this work were presented to the Working Party on Information Economy meeting in Paris, December 3-5. John Houghton was invited to contribute a chapter on the Economics of Publishing for the 2004 edition of the <i>International Yearbook of Library and Information Management</i> (Facet Publishing, London).

	<p>A paper by Sardar Islam and Matthew Clarke was published as a CESifo Working Paper. CESifo Group is the international platform of the Center for Economic Studies at the Ludwig Maximilians University) and the Ifo Institute for Economic Research (at the University of Munich). It builds bridges between theoretical and empirical economic research and between researchers from many countries, with a particular emphasis on Continental Europe. CESifo distributes the research and service products of CES and Ifo and supports an international academic research network of nearly 500 economists from two-dozen countries.</p> <p>In December 2003, WIDER published a policy brief authored by Matthew Clarke. WIDER is the World Institute for Development Economics Research which was established in Helsinki in 1985 by the United Nations University as its first research and training centre. The Institute undertakes applied research and policy analysis on structural changes affecting the developing and transitional economies. Dr Clarke's paper is titled <i>E-development? Development and the New Economy</i> (WIDER Policy Brief No. 7).</p> <p>A paper titled <i>A Modified Social Cost-Benefit Analysis and Operations Research Model for Evaluating Health Programs</i>, by Sardar Islam and Christine Mak was published at the World Bank website http://www1.worldbank.org/hnp/hsd/healthecon_cba.asp</p>
<p>Travel grant</p>	<p>Sardar Islam received a travel grant to present a paper (co-authored with Matthew Clarke) in Munich, at the University of Munich, Centre for Economic Studies, Program CESifo (Institute for Economic Research). The conference was titled 'Health and Economic Policy' 27-28 June 2003. The paper will be published in the proceedings and will also be published as a working paper and chapter of book (MIT Press).</p>
<p>Invited conference papers</p>	<p>Peter Sheehan was invited speaker to Emerging Issues in the Asia Pacific Region conference organised by PhRMA, 5-7 November, Singapore where he presented the paper Health Care Financing Session What is pharmacoeconomics and what are the implications for industry?</p> <p>Peter Sheehan was asked to prepare a Background paper for the National Medicines Policy Partnerships Workshop in Canberra on 31 October. It was titled <i>The Quality Use of Medicines: Serving Health and Economic Objectives?</i></p> <p>The Pharmaceutical Research and Manufacturers of America (PhRMA) invited Peter Sheehan, to present a paper at a seminar in Japan on Health, Industry Development and the Value of Medicines (Tokyo, 4 December 2003).</p> <p>Enjiang Cheng was invited to present two papers at the International Workshop on Rural Financial Reforms in China, Beijing, on August 16-18.</p> <p>John Houghton was invited by the Humanities Society of New Zealand to present a keynote address at Collecting, Connecting and Creating Knowledge: Libraries, Archives and Research in the 21st Century, in Wellington, New Zealand, on June 20-22. During the visit to New Zealand John also presented a paper to the New Zealand Academy of Sciences.</p> <p>Senator Kate Lundy invited John Houghton to present a keynote address to the ALP National Conference Forum on ICT Policy in Sydney, 28 January.</p>
<p>Microfinance projects</p>	<p>Enjiang Cheng was involved in the following international projects:</p> <ul style="list-style-type: none"> • International expert on UNDP/PBOC Microfinance Policy studies in China, the report will be delivered to the People's Bank of China (PBOC) and Chinese Government for the policy making on China's microfinance. • International Microfinance and Enterprise Development Consultant, preparation for the World Bank/DFID 'Poor Rural Community Development project', with trips to Sichuan Province. • International Microfinance Consultant, for World Bank Qianba Poverty Reduction Project, supervision mission. • International Microfinance Consultant, AusAID Qinghai Community Development Project, Microfinance program, project consolidation mission.

4. CSES Research Output 2003

Books

- Abdul, M. 2003, *Income Tax Non-Compliance in Malaysia*, Prentice Hall, Malaysia.
- Cheng, E., Findlay, C., Watson, A., Zhu, G. (eds) 2003, *Rural Financial Markets in China*, Asia Pacific Press, Canberra.
- Islam, S. and Oh, K. B. 2003, *Applied Financial Econometrics in E-commerce*, in series Contributions to Economic Analysis, North Holland, Amsterdam.

Chapters in books

- Cheng, E. 2004, 'Financing Small and Micro-Enterprises in Rural Areas', in R. Garnaut and L. Song (eds), *Private Enterprises in China*, RoutledgeCurzon.
- Cheng, E. 2003, 'Microfinance in rural China', in C. Findlay, A. Watson, E. Cheng and G. Zhu (eds), *Rural Financial Markets in China*, Asia Pacific Press, Canberra.
- Cheng, E. 2003, 'Rural Financial Markets and Institutions: New Developments', in R. Garnaut and L. Song (eds), *New Engine of World Growth*, Asia Pacific Press, Canberra.
- Cheng, E. and Cheng, Y. 2003, 'Banking reform and the separation of policy and commercial loans', in C. Findlay, A. Watson, E. Cheng and G. Zhu (eds), *Rural Financial Markets in China*, Asia Pacific Press, Canberra.
- Cheng, E., Findlay, C. and Watson, A. 2003, 'Institutional Innovation without Regulation: The collapse of China's Rural Credit Cooperatives and Lessons for Further Financial Reforms in China', in C. Findlay, A. Watson, E. Cheng and G. Zhu (eds), *Rural Financial Markets in China*, Asia Pacific Press, Canberra.
- Houghton, J.W. 2003, 'Employment and Productivity', in OECD, *Communications Outlook 2003*, OECD, Paris.
- Houghton, J.W. 2003, 'Internet and Broadband Infrastructure', in OECD, *Communications Outlook 2003*, OECD, Paris.
- Houghton, J.W. 2003, 'Trade in Communication Equipment', in OECD, *Communications Outlook 2003*, OECD, Paris.
- Islam, S. and Clarke, M. 2003, 'Indicators for social, ethical and environmental performance: Using systems analysis-based social choice theory for social welfare measurement', in J. Batten and T. Fetherston (eds), *Social Responsibility: Corporate Governance Issues*, Elsevier, Amsterdam.
- Islam, S. and Clarke, M. (2003), 'La relation entre niveau de vie, utilité et capacités: Une nouvelle approche de la mesure du bien-être social basée sur la hiérarchisation des besoins selon Maslow', in J-L. Dubois, J-P. Lachaud, J-M. Montaud, and A. Pouille (eds), *Pauvreté et Développement Socialement Durable*, Presses Universitaires de Bordeaux, Bordeaux (in French).

- Islam, S. and Craven, B. 2003, 'Models and measurement of sustainable growth and social welfare', in J. Batten and T. Fetherston (eds), *Social Responsibility: Corporate Governance Issues*, Elsevier, Amsterdam.
- Sheehan, P. and Messinis, G. 2003, 'Innovation', in I. McAllister, S. Dowrick and R. Hassan (eds), *The Cambridge Handbook of Social Sciences in Australia*, Cambridge University Press, Sydney.
- Tegart, G. 2003, 'Overview Paper', in *DNA Analysis for Human Health in the Post-Genomic Era: An APEC-Wide Foresight Study*, APEC, The APEC Center for Technology Foresight and National Science and Technology Development Agency, Bangkok.

Journal articles

- Abd hul, M. and Sheehan, P. 2003, 'Estimating the extent of income tax non-compliance in Malaysia and Australia using the Gap Approach (Part I)', *Tax Nasional*, vol. 12, 4th quarter, pp. 34-46.
- Cheng, E., Chu, B. and Liu, D. 2003, 'The reform of China's rural credit cooperatives, financial performance, subsidies and policy implementations: The case of Jiangsu', *Journal of Financial Research*, vol. 3, no. 273, pp. 98-104.
- Clarke, M. and Islam, S. 2003, 'Measuring social welfare: Application of social choice theory', *Journal of Socio-Economics*, vol. 32, no. 1, pp. 1-15.
- Clarke, M., Islam, S. and Sheehan, P. 2003, 'Economic growth and sustainability: An empirical study of the Thai development experience', *International Journal of Environment and Sustainable Development*, vol. 2, no.1, pp. 78-79.
- Grewal, B. 2003, 'Book review of Financial Stability Issues: The Case of East Asia by Mamiko Yokoi-Arai', *The Australian Journal of Asian Law*, vol. 5, no. 2, pp. 196-198.
- Houghton, J.W. 2003 'ICT and the productivity debate', *Information Age*, February.
- Houghton, J.W. 2003, 'Australian ICT Industries Update', *Information Age*, June.
- Islam, S. 2003, 'Climate change and economic growth: Computational experiments in adaptive economic modelling', *International Journal of Global Environmental Issues*, vol. 3, no. 1, pp. 47-73.
- Islam, S. and Mak, C. 2002, 'Social cost-benefit analysis of the pharmaceutical benefit schemes', *The Otemon Journal of Australian Studies*, vol. 28, pp. 1 –33.
- Islam, S., Munasinghe, M. and Clarke, M. 2003, 'Making long-term economic growth more sustainable: Evaluating the costs and benefits', *Ecological Economics*, vol. 47, nos 2-3, pp. 149-166.
- Islam, S. and Oh, K.B. 2003, 'Econometric modelling of e-commerce finance in the knowledge economy: Issues, macroeconomic determinants and public policies', *International Journal of Internet and Enterprise Management*, vol. 1, no. 3.
- Islam, S. and Oh, K.B. 2003, 'Interrelationship of valuation and portfolio selection of stocks', *Journal of Applied Management Accounting Research*, vol. 1, no. 2, pp. 49-63.

- Oh, K. and Islam, S. 2003, 'The role and policy implications of economic variables in e-commerce finance', *The Otemon Journal of Australian Studies*, vol. 29, December, pp. 87-105.
- Sanderson, J. and Islam, S. 2003, 'Economic development and climate change in South East Asia: The SEADICE Model and its Forecasts for growth prospects and policy strategies', *International Journal of Global Environmental Issues*, vol. 3, no. 4, pp. 382-408.
- Tegart, G. 2003, 'Technology foresight: Philosophy and principles', *Innovation: Management, Policy and Practice*, vol. 5, nos 2-3, pp. 279-285.
- Tegart, G. 2002, 'Nanotechnology: The emerging cutting-edge technology', *Asia Pacific Tech Monitor*, vol. 19, no. 5, pp. 41-46.

External working papers

- Clarke, M. 2003, 'E-Development: Development and the New Economy', WIDER Policy Brief No. 7, World Institute for Development Economic Research, Helsinki.
- Clarke, M. and Islam, S. 2003, 'Health Adjusted GDP (HAGDP) Measures of the Relationship between Economic Growth, Health Outcomes and Social Welfare', CESifo Working Paper no. 1002, July, Center for Economic Studies and Ifo Institute for Economic Research, University of Munich, Munich.

Invited conference papers

- Cheng E. 2003, 'From Rural Credit Cooperatives to Stock Banks: The case of RCBs in Jiangsu', invited paper presented at the International Workshop on Rural Financial Reforms in China, Beijing, August 16-18.
- Cheng E. and Chu, B. 2003, 'The Pilot Reforms of Rural Credit Cooperatives in Jiangsu', invited paper in the International Workshop on Rural Financial Reforms in China, Beijing, August 16-18.
- Clarke, M., Islam, S. and Paech, S. (2003), 'Australia's Well-Being based on Hierarchical Needs', paper presented at the 5th Australian Conference on Quality of Life, Deakin University, Melbourne, 21 November.
- Sheehan, P. 2003, 'Presentation to Medicines Australia Board', invited presentation, Sydney, 2 September.
- Sheehan, P. 2003, 'Australian Society: Is there a disturbance in the Force', invited keynote session, Anglicare National Conference, Moving Spirits, Lifiting Hope, Building Communities, Adelaide, 7-10 September, together with Prof Fran Baum, Head, Dept of Public Health, Flinders Univ and Chair of Session, Bishop Phillip Huggins.
- Sheehan, P. 2003, 'Panel Discussion: Drivers for Innovation: The Role of Government, Industry and Academia', invited panellist at the First Annual APEC Life Sciences Innovation Forum, APEC, Phuket, Thailand, 14-15 August.
- Sheehan, P. 2003, 'Establishing a Positive Policy Environment for Innovation', invited paper presented at the First Annual APEC Life Sciences Innovation Forum, APEC, Phuket, Thailand, 14-15 August.

- Sheehan 2003, 'What is pharmacoeconomics and what are the implications for industry?', invited paper presented at the conference Emerging Issues in the Asia Pacific Region, PhRMA and AMACS, Singapore, 5-7 November.
- Sheehan, P. 2003, 'The Quality Use of Medicines: Serving Health and Economic Objectives?', invited background paper presented at the National Medicines Policy Partnerships Workshop, The Pharmaceutical Alliance, Canberra, 31 October.
- Sheehan, P. 2003, 'Health, Industry Development and the Value of Medicines', paper presented to PhRMA Japan Seminar, Tokyo, 4 December.
- Houghton, J.W. 2003, 'Information into Knowledge: Collecting Information and Creating Knowledge Assets', invited paper presented at the Conference Collecting, Connecting, and Creating Knowledge: Libraries, Archives and Research in the C21st, organised by the Friends of the Turnbull Library and the Humanities Society of New Zealand, National Library of New Zealand, Wellington, 20-22 June.

Conference presentations

- Cheng, E. 2003, Chair of session on 'Microfinance and Poverty Session', International Workshop on Rural Financial Reforms in China, organized by the Research Department, People's Bank of China, sponsored by Ford Foundation, Beijing, China, 16-18 August.
- Cheng, E. 2003, Comment on the paper 'Demand for credit and supply of credit by rural credit cooperatives in China', International Workshop on Rural Financial Reforms in China, organized by the Research Department, People's Bank of China, sponsored by Ford Foundation, Beijing, China, 16-18 August.
- Cheng, E. and Xu, Z. 2003, 'New Developments in China's Rural Financial Markets: Since the Middle 1990s', paper presented at the China Brown Bag Seminar, Asian Development Bank, Manila, 28 February.
- Clarke, M. and Islam, S. 2003, 'Health, Economic Growth and Quality of Life: A New Approach to Indicators in Health Economics', refereed paper presented at CESifo Conference on Health and Economic Policy, Munich, 27-28 June.
- Clarke, M. and Islam, S. 2003, 'The Possibility of Measuring Human and Social Well-Being through Social Choice Theory: Two Approaches Applied to Thailand', refereed paper presented at WIDER/UNU Conference on Measuring Human and Social Well-Being, Helsinki, 30-31 May.
- Clarke, M. and Islam, S. (2003), 'Applying Ethics in Financial Systems: Financial Crises and Social Welfare Implications', paper presented at the Annual Conference of the Australian Association for Professional and Applied Ethics, Victoria University, Melbourne, 2-4 October.
- Houghton, J.W. 2003, 'Australian ICT Trade Update', Australian Computer Society, Sydney, 17 November.
- Islam, S. 2003, 'Knowledge Economy and Climate Change in the North American Economy: A Quantitative Assessment of the Impact of the Knowledge Economy on Economic Growth and the Environment', paper presented at the North

- American Symposium on Assessing the Environmental Effects of Trade, Montreal, March.
- Islam, S. and Clarke, M. 2003, 'Cost-Benefit Analysis of Economic Development in the Asian Region: A Case Study of Thailand', refereed paper presented at the 5th IRSA Conference on Regional Development in a Decentralized Era, Bandung, Indonesia, 18-19 July.
- Islam, S. and Clarke, M. 2003, 'The Impact of the Knowledge Economy on Climate Change: What the Emission Intensity Data is Telling Us', refereed paper presented at the 5th IRSA Conference on Regional Development in a Decentralized Era, 18-19 July, Bandung, Indonesia.
- Islam, S. and Clarke, M. 2003, 'What is Social Welfare? Resolving the Paradoxes of Individual Happiness and Social Happiness using Social Choice Theory', refereed paper presented at The Paradoxes of Happiness in Economics, Milan, March, 21-23.
- Islam, S. and Watanapalachaikul, S. 2003, 'Time Series Financial Econometrics of the Thai Stock Market: A Multivariate Error Correction and Valuation Model', paper presented to Global Business and Economic Development, Asian Institute of Technology, Bangkok, January.
- Islam, S., Clarke, M. and Mak, C. (2003) 'Incorporating Ethics and Moral Philosophy in Health Economics: A New Framework', paper presented at the *Annual Conference of the Australian Association for Professional and Applied Ethics*, Victoria University, Melbourne, 2-4 October.
- Sheehan, P. 2003, 'The Pharmaceutical Industry: A Future for the Bulls or the Bears?', paper presented at the ARCS 2003 Annual Scientific Congress, 'New Frontiers ...Your Future', Association of Regulatory and Clinical Scientists, Sydney, 2-4 June.
- Sweeny, K. 2003, 'Implications of recent trends in pricing and usage under the PBS', paper presented at the conference 'The Future of the Pharmaceutical Benefits Scheme: Sustaining and Improving Australians' Access to Quality Medicines', PBS, Sydney, 11-12 September.

External seminars

- Rasmussen, B. 2003, 'Regional Policy Options and Strategies for Victoria: Scoping Study', presentation to Regional Development Victoria, Melbourne, 3 June.
- Sheehan, P. 2003, 'Growth, Innovation and Social Malaise: Discerning the Underlying Reality in Australia', paper presented at the seminar 'Innovation and Transformation in the Australian Economy, National Graduate School of Management, ANU, Canberra, 13 May.

Internal seminars

- Baojin Chu, 2003, 'Recent Developments in China's Rural Finance', presenter from Nanjing Agricultural University, paper presented at the CSES Seminar Series 2003, Melbourne, 19 February.

- Higano, Y. 2003, 'Improvement of Water Quality in Lake Kasumigaura, Global Warming Problem', paper presented at the CSES Seminar Series, 25 September.
- Karagiannidis, S. 2003, 'Mergers and Acquisitions in Australia: Reasons and Timing', paper presented at CSES, Melbourne, 27 March.
- Liu, Y. 2003, 'Income Inequality in Transition Economies: Case of China', paper presented at the CSES Seminar Series, 8 December.
- Mohammad Rusydi, 2003, 'Exchange Rate Determination: Mathematical Models and Applications to Indonesia', paper presented at CSES, 27 March.

Financial Modelling Program Seminar Series, Faculty of Business

- Clarke, M. 2003, 'On the design optimal financial reform: Quantitative analysis and policy perspectives, paper presented at the Financial Modelling Program Seminar Series, Victoria Graduate School of Business, Melbourne, 28 October.
- Watanapalachaikul, S. 2003, 'Rational Speculative Bubbles in Emerging Stock Market', paper presented at the Financial Modelling Program Seminar Series, Victoria Graduate School of Business, Melbourne, 2 September.

Working papers and research monographs

- Grewal, B. and Sheehan, P. 2003, 'The Evolution of Constitutional Federalism in Australia: An Incomplete Contracts Approach', CSES Working Paper No. 22, Centre for Strategic Economic Studies, Victoria University, Melbourne.
- Sheehan, P. 2003, 'The Quality Use of Medicines: Serving Health and Economic Objectives?', CSES Working Paper No. 21, Centre for Strategic Economic Studies, Victoria University, Melbourne.
- Cheng, E. and Zhong Xu. 2003, ' Rates of Interest, Credit Supply and China's Rural Development', CSES Working Paper No. 20, Centre for Strategic Economic Studies, Victoria University, Melbourne.
- Rasmussen, B. and Houghton, J. 2003, 'The Convergence of Information Technology and Biotechnology: Bioinformatics Developments and Implications', CSES Working Paper No. 19a, Centre for Strategic Economic Studies, Victoria University, Melbourne.
- Watanapalachaikul, S. and Islam, S. 2003, 'Empirical Characteristics of the Thai Financial System', CSES Working Research Monograph, Victoria University, Melbourne.

Pharmaceutical Industry Project Working Papers

- Sheehan, P. 2003, 'Trade in High Tech Industries in the Australian Economy', Pharmaceutical Industry Project, Draft Working Paper, CSES, Victoria University, Melbourne.
- Sweeny, K. 2003, 'Price and Quantity Trends in the Pharmaceutical Benefits Scheme', Pharmaceutical Industry Project Working Paper No. 14, Centre for Strategic Economic, Victoria University Melbourne.

Rasmussen, B. 2003, 'Aspects of the Pharmaceutical Business Model: Implications for Australia', Pharmaceutical Industry Project Working Paper No. 15, Centre for Strategic Economic Studies, Victoria University, Melbourne.

Contract and technical reports

Houghton, J.W. 2003, *Australian ICT Industries Update 2003*, sponsored by the Australian Computing Society, Centre for Strategic Economic Studies, Melbourne.

Houghton, J.W. 2003, *Australian ICT Trade Update 2003*, sponsored by the Australian Computing Society, Centre for Strategic Economic Studies, Melbourne.

Houghton, J.W. and Morris, P. 2003, *National Electrical and Communications Association Industry Study*, report to NECA, Centre for Strategic Economic Studies, Melbourne.

Houghton, J.W., Steele, C. and Henty, M. 2003, *Changing Research Practices in the Digital Information & Communication Environment*, report to the Department of Education, Science and Training, Canberra.

Rasmussen, B. and Houghton, J. 2003, *The Australian Synchrotron Project: An Economic Impact Study*, report to the Department of Innovation, Industry and Regional Development (Victoria), Victoria University, Melbourne.

Sheehan, P. 2003, 'Pharmaceuticals and Public Policy: An Assessment of the Productivity Commission Draft Report', Submission to the Productivity Commission.

Sheehan, P. and Lang, J. 2003, *Preliminary Report to the Manufacturing Industry Consultative Council Export Subcommittee*, report to MICC, Centre for Strategic Economic Studies, Melbourne.

Sheehan, P., Sweeny, K., Rasmussen, B., Tegart, G. and Nicolau, D. 2003, *Small Scale Technologies: Directions for Victoria*, report to the Victorian Department of Innovation, Industry and Regional Development, Melbourne, September.

Consultancy contracts

Cheng, E. 2003, International Microfinance and Enterprise Development Consultant, preparation for the World Bank/DFID 'Poor Rural Community Development project', with trips to Sichuan Province.

Cheng, E. 2003, International Microfinance Consultant, for World Bank Qianba Poverty Reduction Project, supervision mission.

Cheng, E. 2003, International Microfinance Consultant, AusAID Qinghai Community Development Project, Microfinance program, project consolidation mission.

Houghton, J.W. 2003, ICT Industry and Trade Updates, Australian Computer Society annual sponsorship.

Houghton, J.W. 2003, ICT consultant, OECD Paris, preparation of report on Digital Delivery of Business Services.

Houghton, J.W. 2003, ICT Consultant, OECD Paris, preparation of chapters for the OECD Information Technology Outlook 2004.

Media mentions

On China's Future in the Knowledge Economy

The Age Higher Education, April 2003, 'The knowledge-based economy and the challenges to China's higher education, edited extract of Chapter 12, by Xue Lan.

Campus Review, 16 April 2003, 'VU book engages in China's future', p. 35.

Nexus, May 2003, 'Book looks at China's economy', by Vin Maskell, p. 9.

Journal of Economic Research, November 2003, Book review, Asia Pacific Economic Association, Seoul.

Book reviews forthcoming in:

ASEAN Economic Bulletin, ISEAS

Australian School Library Association (ASLA) Newsletter

NZ International Review, Wellington

Trade Talk, Chamber of Commerce and Industry of Western Australia

QETA, Newsletter of the Queensland Economics Teachers' Association

On ICT Industry and Trade Updates

The Australian, 21 January 2003, 'ACS boxed into a very small corner on trade', by Senator Richard Alston, Minister for Communications, Information Technology and The Arts.

The Australian, 14 January 2003, 'High-tech deficit a growing problem', by Richard Hogg.

The Australian, 5 August 2003, 'IT imports are breaking our national budget', by James Riley.

Australian Financial Review, 18 November 2003, 'Warning on dire tech exports', by Ben Woodhead. p. 33.

The Australian, 18 November 2003, 'IT exports slump to 10-year low', by James Riley.

Australian Financial Review, 17 November 2003, 'Parties at odds over ACS figures', by Emma Connors, p. 33.

ZDNet Australia, 18 November 2003, 'AU's ICT trade deficit temporarily stable: ACS', by staff writers.

The Australian, 18 November 2003, 'Closed-door talks stir passions', Comment by James Riley.

Computerworld, 18 November 2003, 'Australia fails the value adding test: ACS', by Julian Bajkowski.

The Australian, 25 November 2003, 'ICT deficit blows away gas deal', by John Houghton.

Sydney Morning Herald, 2 December 2003, 'Howard talks the talk in his own silicon suburb', Beverley Head.

The Australian, 16 December 2003, 'ALP forum to tackle ICT trade deficit,' James Riley.

Other outputs

Clarke, M. 2003, Lecturer, 1st Semester, RMIT, HUSO2080 - Assessing Progress (MA subject in International Development program), Melbourne.

Clarke, M. 2003, Lecturer, 2nd Semester, Victoria University, ASA3022/5002 - Community Development Project Management, (undergraduate and postgraduate subject in BA and MA programs).

Book reviews

Grewal, B. 2003, 'Book review, Financial Stability Issues: The Case of East Asia by Mamiko Yokoi-Arai', *The Australian Journal of Asian Law*, vol. 5, no. 2, pp. 196-198, (also listed in journal articles)