

---

## E Supporting research and related activities

The Commission's supporting research program encompasses a range of activities. This appendix provides brief summaries of Commission Research Papers, Conference Proceedings, Staff Working Papers and consultancy reports released in the year. It also lists the presentations given by the Chairman, Commissioners and staff to parliamentary committees, conferences and industry and community groups in 2005-06, as well as briefings to international visitors.

### Commission research papers

#### **The role of non-traditional work in the Australian labour market**

*May 2006*

The Commission found that, contrary to conventional wisdom, the growth of non-traditional employment in recent years has been in step with that of the workforce in general. Drawing on the HILDA survey, this study also demonstrated the diversity of circumstances of those in non-traditional jobs and the dangers of making generalisations about their job satisfaction or wellbeing. The major forms of non-traditional work considered in this paper were casual employees, fixed-term employees, labour hire employees and self-employed contractors. Key points from the paper were:

- Around 3.3 million people were engaged in non-traditional work in 2004, representing approximately one third of all employed people. Overall, this number had grown since 1998, but non-traditional work's share of the total workforce remained largely unchanged.
  - Casual employment is the largest non-traditional form of employment (1.9 million in 2004 or 20 per cent of all employed persons). Growth was rapid between 1998 and 2001, but has slowed since, resulting in a stable share of the employed population.

- 
- Self-employed contractors (0.8 million in 2004), fixed-term employees (0.6 million) and labour hire employees (0.3 million) are less common forms of non-traditional work. Their total number grew between 1998 and 2001, but has subsequently levelled off. Their combined share of the total workforce fell between 2001 and 2004.
  - There are significant differences between non-traditional workers:
    - Some, like fixed-term employees, closely resemble ongoing employees in many respects, such as education and skills. Casuals, by contrast, are typically less skilled.
    - Fixed-term employees, and students and mothers employed as casuals, mostly declare themselves to be satisfied with their employment circumstances. Prime working age males, a small proportion of all casual employees, are often recorded as less satisfied.
  - Non-traditional work is mostly a temporary or transitory experience, except for a few groups of casual employees, such as women with children. For many people who are not currently employed, non-traditional work provides a means of gaining employment and a stepping stone to ongoing employment.
    - There is merit in encouraging those outside the labour force to seek non-traditional work, if they cannot obtain ongoing work. However, particular attention should be paid to ‘at risk’ groups, so that they do not revert to unemployment or exit the labour force.
  - For one in four families, non-traditional work is the main source of wage income. Such families are found in all income deciles, indicating that reliance on non-traditional work for wage income is not synonymous with low family income.
    - Families which receive most of their wage income from non-traditional work tend to be less reliant on wage income than other families. Their income is supplemented by government transfers (lowest two deciles) or non-government, non-wage income (other deciles). This suggests that any wage differentials between traditional and non-traditional workers are only partly reflected in total income differences between their families.
  - Whether non-traditional work is associated with lower worker wellbeing needs to be assessed in relation to the personal circumstances of individuals in particular socio-demographic groups, and over the course of time.

---

## Conference/workshop proceedings

*Note: The views expressed in conference and workshop proceedings do not necessarily reflect the views of the Productivity Commission.*

### Quantitative tools for microeconomic policy analysis

*Conference proceedings, September 2005*

The Commission held a two day conference on quantitative tools for microeconomic policy analysis in November 2004 and this volume contains the 13 conference papers. The aim of the conference was to explore how new modelling techniques can improve policy analysis and decision making.

Policy modelling has played an important role in the work of the Productivity Commission and its predecessors over the years. Reform can be disruptive and costly to some. Gaining some assurance that the beneficial impacts will justify such costs is critical to developing and selling proposals for policy change. Quantitative models cannot replicate reality, but they can provide us with a better understanding of the ramifications of policy changes. Over time, increased access to and understanding of sophisticated quantitative modelling have improved the basis for policy decisions.

The six conference sessions covered:

- estimating policy effects — computable general equilibrium models;
- labour markets and human capital — discrete choice models;
- evaluating microeconomic policies — experimental techniques;
- productivity measurement;
- assessing health and ageing policies using micro simulations; and
- trade and welfare modelling.

### Productivity perspectives 2006

*Conference papers, March 2006*

The Australian Bureau of Statistics and the Productivity Commission held a one-day productivity conference in Canberra in March 2006. The program examined Australia's productivity performance from a mix of analytical, measurement and policy perspectives. Conferences in the Productivity Perspectives series are held

---

about 18 months apart. They provide a forum for analysts, statisticians, policymakers and economic commentators to be briefed on, and to discuss, recent trends in Australia's productivity performance, the factors affecting productivity performance and the implications for the welfare of Australians.

The 2006 presentations covered international economic developments from the perspectives of productivity, competitiveness and employment creation; explored recent trends in Australia; and canvassed the outlook for productivity growth and future directions in measurement and analysis.

Conference presentations and associated materials were made available on the Commission's website.

## **Productive reform in a federal system**

### *Roundtable proceedings, April 2006*

The federal structure of Australia's political system significantly influences many areas of public policy and their implementation. The current state of federalism and the scope for improving the operation of Australia's federation have been prominent and, at times, controversial topics of debate.

The Commission hosted a roundtable in October 2005 on productive reform in a federal system. The roundtable provided an opportunity for key issues bearing on national reform to be discussed in the lead-up to the COAG meeting in February 2006 which sought agreement on a post-national competition policy reform agenda.

The roundtable first examined some generic issues associated with federal systems and their operation in principle and practice. The roundtable then explored opportunities for improving outcomes in the key areas of health, the labour market and freight transport. The final session harvested ideas about ways forward.

This publication was prepared to enable wider dissemination and consideration of the ideas and insights that emerged from the roundtable. It included the papers prepared by the speakers as well as the responses of the discussants and panellists and summaries of the general discussion sessions. Also included was an overview covering the key points raised by the speakers and other participants. Roundtable invitees included senior government officials, consultants, academics, and representatives from industry and community groups.

---

## Staff working papers

*Note: The views expressed in staff working papers are those of the authors and do not necessarily reflect the views of the Productivity Commission.*

### The Armington Model

*Peter Lloyd & Xiao-guang Zhang, January 2006*

The Commission developed a research program on the role of Armington elasticities in quantitative models that are commonly used to analyse trade issues. Armington elasticities specify the degrees of substitution in demand between similar products produced in different countries. They are critical parameters which, along with model structure, data and other parameters, determine the results of policy experiments. Especially when many tariffs are small, trade liberalisation simulations can produce positive or negative welfare outcomes depending on the values assumed for Armington elasticities.

The research program was designed to improve the effectiveness of models used in analysing various options for unilateral, bilateral and multilateral liberalisation. The purpose of this paper was to explore how models adopting the Armington formulation differ from traditional models, in their quantitative properties and underlying theory of trade. The key points of the paper were:

- Multi-country computable general equilibrium models used to analyse tariff and trade policy changes typically incorporate the Armington structure which differentiates commodities by their country of origin (national product differentiation), and assumes them to be imperfect substitutes for each other.
- In contrast to the well-known Heckscher-Ohlin model, relatively little is known about ‘Armington models’ and their properties despite their wide acceptance among model builders and policymakers. This makes it difficult to interpret the trade and welfare results that might arise from trade liberalisation simulations that are based on Armington models.
- Introducing the Armington structure changes fundamentally the properties of a trade model regardless of the values assumed for the elasticities of substitution between imported and domestically produced goods. In particular:
  - there is no comparative advantage and hence no gains from trade due to product specialisation;
  - the number of products is fixed and hence there are no gains from trade due to increased product variety; and
  - large terms of trade effects tend to offset other gains from trade.

- 
- As a consequence of these properties, Armington models tend to understate the gains from tariff and trade policy liberalisation.
  - A numerical, 3-good, 3-country modification of the Global Trade Analysis Project model was used to illustrate these properties. Compared to a Heckscher-Ohlin model, a unilateral across-the-board cut in tariffs in an Armington model results in:
    - a larger shift in consumption from domestically produced goods to imported goods;
    - a larger decline in terms of trade; and
    - a smaller resource reallocation across industries.

The paper also indicated possible future directions for methodology and practice.

### **Armington elasticities and terms of trade effects in global CGE models**

*Xiao-guang Zhang, January 2006*

The purpose of this paper was to illustrate the effects of the Armington assumption on one of the main factors that affects welfare outcomes, namely, the terms of trade. The key points from the paper were:

- Multi-country computable general equilibrium (CGE) models are important tools for analysing tariff and trade policy changes and most such models incorporate the ‘Armington assumption’.
- The Armington assumption differentiates commodities by their country of origin. It takes the products of an industry which come from different countries to be imperfect substitutes for each other. This model structure enables the construction of complex models based on existing world trade statistics.
- The choice of the Armington assumption is an important one as it impacts on the outcomes of policy shocks introduced to CGE models. This is due to both the Armington structure itself and the size of the substitution elasticities, which can have a large effect on the terms of trade (the ratio of export to import prices).
- This paper illustrated the complex relationship between the Armington assumption and the terms of trade. In particular, it demonstrated that:
  - the terms of trade effect of a tariff is positively related to the home country’s elasticity of substitution between domestic and imported goods;
  - the terms of trade effect of a tariff is negatively related to the elasticity of substitution between domestic and imported goods in foreign countries and to all foreign countries’ elasticities of substitution between import sources;

- 
- increasing proportionally all elasticities of substitution, starting in the range of typical Global Trade Analysis Project (GTAP) default values, does not reduce terms of trade effects much, because these opposing effects approximately offset each other; however, reducing proportionally all elasticities of substitution below unity increases the terms of trade effect sharply.
  - The results on the relationship between Armington elasticities and terms of trade were robust. They were not affected by the size of the tariff-imposing country relative to the rest of the world, nor by the dimension and structure of the model. The results held for large sophisticated models of global trade, as well as for scaled-down versions.
  - The results highlighted the importance of understanding how the Armington assumption affects simulation results and the importance of having reliable, model-consistent and empirically sound estimates for Armington elasticities in any model that is used to simulate the effects of changes in trade policies.

### **Irrigation externalities: pricing and charges**

*Gavan Dwyer, Robert Douglas, Deborah Peterson, Joanne Chong & Kate Maddern, March 2006*

This paper is part of a larger suite of water policy research conducted by the Commission, including modelling of regional economic impacts of changes in water trade within the southern Murray–Darling Basin. The paper discussed the nature and causes of environmental change related to rural water use, and provided a taxonomy of the many diverse types. It also examined the possible role of a charge imposed by rural water utilities in managing externalities that may emerge.

Key points were:

- Externalities associated with irrigation water supply and use are complex and the links between these sources of environmental change and their effects are not always well understood or measured.
- Many factors influence the extent to which a charge or tax on water use would actually change water use, including the volume of water available to irrigators, the extent to which trade can occur, the size of the tax, the price responsiveness for irrigation water, and the existing mechanisms to address externalities.
  - Where there is water trade and where restrictions on water allocations result in scarcity rents, a charge will only reduce water use (and consequent environmental costs) if it exceeds the scarcity rents. If water use does not change, there will be no short run improvement in economic efficiency from such a charge, although it might encourage long run efficiency improvements.

- 
- Scarcity rents will vary within and between irrigation seasons, as well as between irrigation districts.
  - When assessing new policies to manage environmental externalities, care should be taken to define adequately the externality, and not simply identify instances of environmental change. Governments should carefully consider the potential benefits and costs in assessing such new policies.
  - An externality tax can make the costs of negative externalities transparent and provide incentives to some relevant economic agents. A tax equal to the marginal external costs at each level of output can improve efficiency and in the longer term may provide an incentive to undertake abatement activities.
  - A tax on water use may increase economic efficiency where external costs are related only to the level of water use. But such a tax is an unsuitable instrument if the government's policy objective is to reduce environmental damage to a predetermined level or to raise a target level of revenue to address the externalities.
  - Challenges in considering and implementing an externality tax include whether such a tax is appropriate for a particular externality, variations in efficiency benefits, interaction with other externalities, difficulties in determining the rate, use of the revenue and legal feasibility.

The Staff Working Paper was released as a complement to the government-commissioned research study, *Rural Water Use and the Environment: the Role of Market Mechanisms*.

## **Econometric modelling of R&D and Australia's productivity**

*Sid Shanks & Simon Zheng, April 2006*

Australia's productivity growth surged in the 1990s, potentially as a result of a sustained increase in business expenditure on R&D. This paper presented the results of a series of modelling exercises to determine to what extent econometric modelling can clarify the relationship between R&D and productivity growth in Australia.

The objectives of the study were to: identify the trends in R&D activity that may have had a significant influence on Australia's economic performance; and quantify the effect of R&D activity on Australia's past economic performance. The study focused mainly on the effects of R&D undertaken in the business sector.

---

The study follows a number of Australian studies that have generated estimates of the return to R&D, including earlier work by the Commission's predecessor, the Industry Commission.

The study tested the limits of standard models using many different specifications, and alternative indicators of domestic and foreign knowledge stocks. It also tested simple two-equation models explaining influences on business R&D investment and the effect of that investment on Australian productivity.

At the level of the market sector, the study first presented the results from basic models which have been used in the literature on the relationship between R&D and productivity. These initial tests did not produce satisfactory results. As there were many possible causes of model misspecification, the results of a comprehensive set of tests and extensions were presented. The results from many of these tests could be rejected, but were presented to show 'what didn't work'.

Of the acceptable specifications, a common finding was that productivity could be explained well by other sources of growth, including rising levels of human capital and reductions in industry protection. In preferred specifications, the foreign knowledge stock also had a large positive effect on Australian productivity. Australian business R&D added little to the explanatory power of the models and very wide confidence intervals existed around the implied rate of return to R&D. There was some evidence of changes in the effect and return to business R&D over time.

Across the industry sectors of agriculture, mining, manufacturing, and wholesale and retail trade, the estimated effects of R&D on productivity were positive, and, in some cases, estimated well. The effect appeared to vary widely across industries.

The authors' overall conclusion was that estimates of the effect of R&D on productivity are unreliable. Many problems confront any attempt to precisely estimate a relationship, including that the changes witnessed in the Australian economy over the last 30 years may have involved important changes in the relationship between R&D and productivity.

The paper complements the research study on public support for science and innovation, commissioned by the Government in March 2006. It is also part of a stream of Commission studies designed to explain productivity trends and improve understanding of the role of innovation.

---

## Stranded irrigation assets

*Heather Roper, Chris Sayers & Andrew Smith, June 2006*

The over-riding rationale for water reform in Australia is to ensure that scarce water is allocated to where it is valued the most. To this end, governments have established tradeable water entitlements and are introducing initiatives to increase the effectiveness of water markets. There is a concern, however, that when restrictions on the sale of water entitlements are relaxed and net permanent outward trade takes place, some irrigation infrastructure assets — weirs, delivery and drainage channels, pipes, pumps and flow measurement devices — will become under-utilised or ‘stranded’. Specifically, remaining irrigators utilising that infrastructure would have to bear increased charges and be financially disadvantaged, unless compensated by those who sell their entitlements.

This Staff Working Paper presented the results of research on the options to address the perceived adverse financial consequences of stranded irrigations assets. The key points of the paper were:

- Despite significant concern, it is not certain that proposals under the National Water Initiative to relax restrictions on permanent water trading will necessarily result in widespread stranded irrigation assets.
- Prior to the National Water Initiative, sales did not always reach restriction levels, suggesting that there are other factors influencing the volume of permanent trade;
  - two such factors could be the differential tax treatment of temporary, leased and permanent water trades and the option value of holding entitlements in the presence of uncertainty about the level and volatility of future prices.
- Stranded assets do not necessarily represent an impediment to the efficient use of infrastructure, the allocation of entitlements, or the use of water.
- Current proposals to manage the adverse financial impact of stranded assets — such as the ongoing payment of annual access fees, ‘tagging’ and ‘exit’ fees — will reduce the economic gains potentially available from entitlement trading.
- A more efficient approach would be the introduction of full cost recovery infrastructure pricing. This would involve:
  - abandoning charges for renewals annuities predicated on the full replacement of existing assets;
  - revaluing under-utilised assets ‘appropriately’ to reflect their current economic value in use;

- 
- charging to recover costs fully, as already agreed by governments (having regard for the demand for services); and
  - the introduction of cost-differentiated charges for individual irrigators within irrigation areas.
  - Action along these lines could be expected to:
    - encourage rationalisation of stranded assets where the provision of infrastructure services can no longer be justified;
    - ensure that the financial consequences of stranded assets on remaining entitlement holders are minimised; and
    - remove current distortions to temporary and permanent water trading caused by large variations in the level of cost recovery across irrigation areas.
  - Where assets are under-utilised or stranded and remaining irrigators are unable to afford the increase arising from entitlement trading, charges should be set at levels that allow irrigators to continue using the assets, as long as they are sufficient to cover the costs that would be avoided by withdrawing the service.

The paper was released as a complement to the government-commissioned research study, *Rural Water Use and the Environment: The Role of Market Mechanisms*.

## Consultancy papers

*Note: The views expressed in consultancy reports are those of the authors and do not necessarily reflect the views of the Productivity Commission.*

### Quantitative modelling at the Productivity Commission

*Philippa Dee, published December 2005*

This paper was commissioned from Dr Phillipa Dee — Visiting Fellow, Australia–Japan Research Centre at the ANU and formerly Assistant Commissioner at the Productivity Commission — as a background paper for the Commission’s conference on quantitative tools for microeconomic policy analysis.

The paper noted that modelling is the tool that economists use in the absence of being able to organise controlled experiments, in which two different real world outcomes would be generated — one with, and one without, the policy change in question. The policy conclusions drawn from such modelling exercises often hinge on the sign and magnitude of the difference between the factual and counterfactual — that is, the deviation from control.

---

The first part of the paper elaborated on some of the methodological issues to do with constructing the counterfactual, with the intention of explaining to a non-technical, policy audience why modellers do what they do.

The second part of the paper discussed the types of policy insights gained from the Commission's modelling exercises, and speculated on the extent to which they have influenced either the policy agenda or policy outcomes.

Dr Dee also canvassed directions for further modelling research.

### **Measuring the contributions of productivity and terms of trade to Australia's economic welfare**

*W. Erwin Diewert & Denis Lawrence, March 2006*

The Commission engaged the consultants to undertake research that would:

- identify and implement improvements in practical welfare measurement beyond the conventional average income or GDP per capita measure; and
- gauge the welfare contributions of productivity and the terms of trade.

The main conclusion emerging from this study was that, taken over long time periods of several decades, changes in the terms of trade have relatively little impact on Australian welfare. Welfare benefits from improvements in the terms of trade in one period tend to be offset by losses from subsequent deteriorations in the terms of trade. Over the last four and a half decades changes in the terms of trade have increased real income by less than 5 per cent in aggregate. Over the same period, real income has increased by almost four fold. Productivity improvements were the largest single source of improvements in real income followed by labour force increases and capital stock increases. This finding is consistent with previous Industry Commission research which found little overall impact from terms of trade changes in the two and a half decades to 1993-94.

There is evidence, however, that terms of trade changes can have a more important, albeit usually transitory, impact over shorter periods of time. In particular, improvements in the terms of trade over the decade to 2003-04 led to an increase in real income of 7.5 per cent. The total increase in real income over the same period was 47 per cent with higher productivity growth accounting for almost half this increase.

The other major conclusion to emerge from this study was that it makes a big difference whether the market sector gross domestic product or net domestic product framework is used in analysis. The latter framework is the more relevant

---

one for looking at the sources of real income growth generated by the market sector. Traditional gross domestic product measures tend to overstate the level of real income as they treat investment to cover depreciation as part of real output when only net investment increases sustainable final consumption possibilities. In a net domestic product framework, the role of capital deepening as an explanatory factor for improving living standards is reduced and the role of technical progress (or total factor productivity growth) and labour growth is increased.

The paper also identified priorities for further research in this area.

**Table E.1 Speeches and presentations by the Chairman, Commissioners and staff, 2005-06**

<i>Organisation/event</i>	<i>Topic</i>	<i>Date</i>
<b>Gary Banks, Chairman:</b>		
Australian Centre of Regulatory Economics Seminar, Public Lecture Series, ANU, Canberra	Regulation-making in Australia: Is it broke? How do we fix it?	July 2005
RBA Conference: The Changing Nature of the Business Cycle, Sydney	Comments on microeconomic reform and macro stability	July 2005
ANZSOG, Sydney	Economic perspectives on regulation	Aug 2005
HREOC Workshop, Sydney	Key findings of the Overcoming Indigenous Disadvantage Report	Sept 2005
CEDA Forum, Adelaide	Indigenous Disadvantage: Are we making progress?	Sept 2005
Australian Institute of Company Directors, Sydney	From 'the Bad and the Ugly' to 'Good' regulation: ways forward	July 2005
House of Representatives Standing Committee on Employment, Workplace Relations and Workforce Participation briefing, Parliament House, Canberra (with Robyn Sheen)	Overcoming Indigenous Disadvantage: Key Indicators	Nov 2005
Australian Financial Review Ageing Population Summit, Sydney	Policy implications of an ageing Australia: an illustrated guide	Sept 2005
ANZSOG Conference: Schooling in the 21st Century: Unlocking Human Potential, Sydney	Comparing school systems across Australia	Sept 2005
Australian Securities and Investment Commission Summer School, Sydney	Deep impact: can regulatory analysis save us?	Feb 2006
BCA & The Australian Critical Issues Conference, Melbourne	Over-regulated and over it?	Feb 2006
Politics and Public Policy Review, Canberra	The structural reform agenda and the Productivity Commission	Mar 2006
Victorian Consumer Affairs Conference, Melbourne	Reducing the regulatory burden on business	March 2006
International CEO Forum, Melbourne	Rethinking regulation — a report to the Prime Minister and Treasurer	April 2006

CRA International Freight Infrastructure Seminar, Canberra	Road and rail pricing: some early observations ... and more questions	April 2006
Monash Centre for Regulatory Studies, Inaugural Public Lecture, Melbourne	Reducing the regulatory burden: the way forward	May 2006
Australian Services Roundtable, Melbourne	Getting rid of red tape?	May 2006
MCA Minerals week 2006, Canberra	Reducing the regulatory burden — the key issues	May 2006
New Zealand Business Roundtable Seminar, Wellington, New Zealand	Rethinking regulation in Australia	May 2006
Victorian Government Regulatory Review Forum, Melbourne	Rethinking (financial) regulation — an overview	June 2006
<b>Commissioners:</b>		
Council of Social Services of NSW and Institute of Sustainable Futures, Window on Economics Seminar Series, Sydney (Helen Owens)	The economics of health and an ageing population	July 2005
National Conservation Incentives Forum, Latrobe University, Melbourne (Neil Byron)	How can we achieve conservation outcomes more effectively?	July 2005
Monash University, Depts of Management, Business & Economics Melbourne, Managing Across Boundaries, Melbourne (Philip Weickhardt)	Agendas and forums for effective and continuing reforms	July 2005
3 <sup>rd</sup> Australasian Conference for Safety & Quality in Health Care, Adelaide (Helen Owens)	Can revolutionary new technology be used to effect safety improvements	July 2005
Northern Rivers University Department of Health Workshop, Murwillumbah NSW (Mike Woods)	Commission's issues paper on Australia's health workforce	July 2005
Australian Institute of Building NSW Chapter , Sydney (Tony Hinton)	The building sector and public policy	July 2005
Australian College of Health Services Executives National Congress, Adelaide (Mike Woods)	Towards a more effective and efficient health workforce system	Aug 2005
Academy Technological Sciences & Engineering Crawford Fund Conference, Canberra (Neil Byron)	Forests, woods and livelihoods: summary address	Aug 2005

(continued next page)

Table E.1 (continued)

<i>Organisation/event</i>	<i>Topic</i>	<i>Date</i>
National Aged Care Alliance Forum, South Melbourne (Mike Woods)	Aged care costs and funding options	Aug 2005
Academy of Social Sciences in Australia, Brisbane (Philip Weickhardt)	Intra-organisation communication within a multinational corporation	Aug 2005
Partnerships Queensland CEOs' Committee, Brisbane (Robert Fitzgerald & Robyn Sheen)	Key findings of the Overcoming Indigenous Disadvantage Report	Aug 2005
Aged & Community Services Australia National Conference 2005, Canberra (Robert Fitzgerald)	Agenda for Aged and Community Services	Sept 2005
Australian Productivity Council, Forum, Melbourne (Tony Hinton)	Market failure, government intervention and getting the incentive right	Sept 2005
DCITA Seminar, Canberra (Robert Fitzgerald)	Overcoming Indigenous Disadvantage	Oct 2005
Business and Sustainability Summit 2005, Melbourne (Neil Byron)	Competition policy, competitive neutrality and eco-system services	Oct 2005
Northern Territory Government Officials Forum, Darwin (Robert Fitzgerald)	Overcoming Indigenous Disadvantage	Nov 2005
House of Representatives Standing Committee on Health and Ageing briefing, Parliament House, Canberra (Mike Woods and Robert Fitzgerald)	Australia's health workforce	Nov 2005
COAG Working Group on Health Reform briefing Melbourne (Mike Woods)	Briefing on health reform	Nov 2005
Australian Healthcare Reform Alliance Workshop on Healthcare Reform, Adelaide (Mike Woods)	The Commission's position paper on Australia's health workforce	Nov 2005
EdHealth Conference, Terrigal, NSW (Mike Woods)	Developing a flexible and responsive health workforce	Nov 2005
ACS Conference: Succeeding in Business & Care, Adelaide (Robert Fitzgerald)	Ageing, aged care and the aged care workforce	Nov 2005
Innovation Theme Table meeting: Smart Regulation – Innovation, Productivity and Business Environment, Ottawa, Canada (Tony Hinton)	Recent regulatory reform developments in Australia	Dec 2005

Policy Research Initiative Symposium, Ottawa, Canada (Tony Hinton)	Federal systems: impediments to economic reform	Dec 2005
ANZSOG/PM&C Conference on Project Management and Organisational Change, Canberra (Philip Weickhardt)	Principles and frameworks for evaluating medical technology	Feb 2006
APEC Working group on Investment and Market Access Issues in Preferential Trade, Hanoi, Vietnam (Tony Hinton)	Challenges for bilateral and multilateral investment agreements	Feb 2006
Australian College of Health Services Executive, Canberra (Mike Woods)	Australian health workforce: future reform	Feb 2006
FAO Expert Consultation on Reinventing Forestry Agencies and Establishing an Asia-Pacific Forest Policy Network, Manila, Philippines (Neil Byron)	Challenges in devising, implementing and revising forest policies	Feb 2006
Victorian Consumer Affairs Conference, Melbourne (Robert Fitzgerald)	Reforming consumer product safety in Australia	March 2006
Graduation Address, Faculty of Commerce and Economics, University of NSW, Sydney (Robert Fitzgerald)	Choices and challenges	March 2006
College of Nursing, Sydney (Mike Woods)	An overview of the Commission's health workforce report	March 2006
Australian Council of Deans of Health Sciences Meeting, Canberra (Mike Woods)	Health workforce reforms	March 2006
DITR Innovation Forum, Canberra (Mike Woods & Ralph Lattimore)	R&D and Australian productivity	April 2006
2006 Australian Social & Economic Policy Lecture Series, Canberra (Judith Sloan)	The economic effects of migration and population growth	June 2006
RBA Seminar, Sydney (Mike Woods)	Energy efficiency	May 2006
Australian Physiotherapy Association 2006 National Congress, Melbourne (Mike Woods)	The Productivity Commission report on Australia's health workforce: where to from here?	May 2006
Australian Medical Association National Congress 2006, Adelaide (Mike Woods)	The Productivity Commission report on Australia's health workforce: where to from here?	May 2006

(Continued next page)

Table E.1 (continued)

<i>Organisation/event</i>	<i>Topic</i>	<i>Date</i>
Australian Institute of Company Directors Victoria, Melbourne (Judith Sloan)	The economic impact of migration	June 2006
China Health Economics Institute Seminar, Beijing, China (Mike Woods)	Health workforce	June 2006
Chain Reaction Foundation, Sydney (Robert Fitzgerald)	Economic security and social well being – a recipe for social inclusion	June 2006
Chain Reaction Foundation, Melbourne (Robert Fitzgerald)	Economic security and social well being – a recipe for social inclusion	June 2006
Australia's Health 2006 Conference, Canberra (Mike Woods)	Health workforce	June 2006
<b>Staff:</b>		
NCOSS Windows on Economics Workshop, Sydney (Ralph Lattimore & Stuart Wilson)	The economics of health and an ageing population	July 2005
NSW Treasury Seminar, Sydney (Ralph Lattimore & Stuart Wilson)	Implications of an ageing Australia	July 2005
Civil Aviation Safety Authority, Canberra (Stephen Rimmer)	Best practice regulation, RISs, risk analysis and performance based regulation	July 2005
OECD/IIST Tokyo Forum on Services, Trade and Structural Adjustment, Japan (Lisa Gropp)	Globalisation, trade and structural adjustment – the policy options from an Australian perspective	July 2005
Annual Conference of the American Agricultural Economics Association, Rhode Island, USA (Gavan Dwyer)	Third-party effects of water trading	July 2005
National Employment Services Association Annual Conference 2005, Sydney (Ralph Lattimore)	Implications of an ageing Australia	July 2005
Department of Education, Science and Training Seminar, Canberra (Ralph Lattimore)	Implications of an ageing Australia	Aug 2005
Commonwealth Grants Commission Seminar, Canberra (Jonathan Pincus)	Fiscal equalisation: some questions of design'	Aug 2005
NZ Treasury Workshop on Benchmarking, New Zealand (Robyn Sheen)	Insights on performance monitoring and reporting	Aug 2005

USB Investment Bank Strategic Issues Forum, Sydney (Ralph Lattimore)	Growth prospects in an ageing Australia	Aug 2005
Hunter Valley Research Foundation Seminar, Newcastle (Ralph Lattimore)	Implications of an ageing Australia	Sept 2005
ANU Graduate Program Seminar, Canberra (Ralph Lattimore & Stuart Wilson)	Demographic and growth effects of an ageing Australia	Sept 2005
ANU Graduate Program Seminar, Canberra (Ralph Lattimore & Stuart Wilson)	Effects of an ageing Australia on health and ageing spending	Sept 2005
Tasmanian Treasury Productivity Workshop, Hobart (Dean Parham)	Policy lessons from five decades of Australia's productivity performance	Sept 2005
34 <sup>th</sup> Annual Conference of Economists, Melbourne (John Salerian)	Risk and regulatory truncation	Sept 2005
34 <sup>th</sup> Annual Conference of Economists, Melbourne (Paul Gretton)	The restrictiveness of rules of origin in preferential trade agreements	Sept 2005
Industry Economics Conference 2005, Melbourne (Paul Gretton)	Assistance conferred by preferential trade agreements – case study of the Australian-New Zealand CER Trade Agreement	Sept 2005
Department of Agricultural and Resource Economics, University of Sydney Contemporary Issues Seminar, Sydney (Paul Gretton)	Water use and farm performance	Oct 2005
Australian Private Hospitals Association 25 <sup>th</sup> National Congress, Melbourne (Lisa Gropp)	The impacts of advances in medical technology in Australia	Oct 2005
Occupational Health and Safety and Human Resources Conference, Sydney (Stuart Wilson)	Ageing, aged care and the aged care workforce	Nov 2005
OECD Workshop on Agriculture and Water: Sustainability, Markets and Policies, Adelaide and Barmera – South Australia (Deborah Peterson)	Integrating rural and urban water markets in south east Australia: a general equilibrium approach	Nov 2005
Economic Development, Growth Economics & Sustainability 2005 Workshop, ANU, Canberra (Paul Gretton)	Four decades of Australia's productivity growth	Nov 2005

(continued next page)

Table E.1 (continued)

<i>Organisation/event</i>	<i>Topic</i>	<i>Date</i>
Local Government Planning for an Ageing Population, Bateman's Bay NSW (Ralph Lattimore)	Effects of an ageing Australia	Nov 2005
Economic Society of Australia (South Australia), Adelaide (Jonathan Pincus)	Productive reform in a federal system	Nov 2005
Paediatric Workforce Forum, Westmead Hospital, Sydney (Ian Gibbs)	The Commission's position paper on Australia's health workforce	Nov 2005
Victorian Commercial Teachers' Association Annual Conference, Melbourne (Lisa Gropp)	Why Australia needs more microeconomic reform	Nov 2005
Treasury Seminar, Canberra, (John Salerian)	Economic impacts of migration and population growth	Feb 2006
IQPC Conference on Performance Measures for Service Delivery, Canberra (Lawrence McDonald)	Measuring the comparative performance of governments: the approaches of the Report on Government Services and the Overcoming Disadvantage Report	March 2006
Office for an Ageing Australia, Canberra (Ralph Lattimore)	Implications of an ageing Australia	March 2006
Korea Development Institute International Conference, Seoul, Korea (Darrell Porter)	Improving Australia's business environment through good regulatory process	May 2006
SA Treasury Seminar, Adelaide (Jonathan Pincus)	Horizontal Fiscal Equalisation Grants	June 2006
Vienna Conference: Efficiency, Environment & Employment 2006, Vienna, Austria (Michael Kohlhaas)	Policies for the integration of economic, social and environmental issues	June 2006
Land and Water Australia Seminar, Canberra (Deborah Peterson & Annette Weier)	Precaution: principles and practice in Australian environmental and natural resource management	June 2006

**Table E.2 Visits from international organisations and foreign delegations, 2005-06**

<i>Organisation/delegation</i>	<i>Briefing/discussion purpose of visit</i>	<i>Date and location</i>
Indonesian Study Tour	Regulation impact statement processes	Aug 2005 (C)
NZ Department of Labour	Productivity research and issues	Aug 05 (M)
Kobe Law School, Japan (Prof Norio Komuro)	Rules of origin and preferential trading agreements	Sep 2005 (C)
Chinese journalists	Australia's reform processes	Oct 2005 (M)
Korean Bureau of Regulatory Reform	The Commission's work, the role of the ORR, regulation impact statement process and related matters	Nov 2005 (C)
Ofcom (UK)	Regulatory issues	Nov 2005 (C)
China Free Trade Agreement delegation	Trade policy issues	Nov 2005 (C)
Kyoto University, Japan (Prof Kagatsume)	Agricultural, environment and trade policy in Australia	Nov 2005 (M)
Vietnamese Institute for Agricultural Economics	Commission's role and operations	Nov 2005 (C)
Indonesian officials	Regulation impact statement requirements and the role and operations of the ORR	Dec 2005 (C)
Korean Institute for Industrial Economics and Trade	Environmental regulation	Dec 2005 (C)
New Zealand Delegation (led by the NZ Minister for Commerce)	Regulatory issues	Feb 2006 (M)
OECD Mission to Australia	Reform issues and recent Commission work	Mar 2006 (C)
French Mission Economique	Commission's role and functions	Mar 2006 (C)
Chinese National Development Reform Commission	Structural reform in Australia	Apr 2006 (C)
Japanese Economic and Fiscal Policy Council member	Australia's reform program	Apr 2006 (C)
Korean Development Institute	Regulatory reform	May 2006 (C)
Malaysian Institute of Gerontology delegation	Population ageing in Australia	May 2006 (C)
IMF Article IV team	Reform agenda and productivity growth	Jun 2006 (M)
APEC delegation	The Commission's role, functions and activities	Jun 2006 (M)
Korean Development Institute	The Commission's role and functions, and research issues	Jun 2006 (C)
European Commission Directorate General for Trade	Respective work programs	Jun 2006 (M)

(C) Canberra (M) Melbourne