



Motu

MOTU ECONOMIC AND PUBLIC POLICY RESEARCH
AND MOTU RESEARCH AND EDUCATION FOUNDATION

Annual Report

July 2012 – June 2013

MOTU

PRODUCING
HIGH-QUALITY RESEARCH
PROMOTING
REASONED DEBATE
DISSEMINATING
TOPICAL ECONOMIC
AND PUBLIC POLICY RESEARCH



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July 2012 – June 2013

Patrons:



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From the Director

Motu Economic and Public Policy Research Trust was established in 2000 to promote high-quality research, broad dissemination of research results, and building of New Zealand's capability for economic analysis applied to public policy. Motu is independent and has a reputation for world-class research that is not compromised by any ideology or political position. Motu is funded through research grants, sponsorship for our Public Policy Seminar Series, and philanthropic support through the Motu Research and Education Foundation.

I became Motu Director and Senior Fellow in May of 2013. I come from almost three decades as an academic, economic consultant, and policy advisor in the United States. What drew me to Motu was the distinctive blend of world-class research, policy analysis, mentoring and capacity building. I have spent much of my first six months talking with people concerned about public policy in New Zealand. I have been struck by the strength of Motu's reputation, and the consensus that Motu plays a uniquely important role in supporting good public policy in New Zealand.

Public policy in a democracy is built on a complex base of political forces, judgment and ideology. But I believe firmly that understanding the facts and analysing the economic forces at work can make a difference in ensuring that policy will work for the long-run wellbeing of New Zealand. And economic analysis of specific, immediate policy issues is going to be much more effective if it is built on a base of research over a number of years that elucidates the overall structure and functioning of the relevant parts of the socio-economic system in New Zealand. Economists and other social scientists in universities are often focused on relatively general, abstract research, rather than research focused specifically on understanding New Zealand. Thus Motu fills a vital and distinctive niche lying between the academic researchers and the policy consultants/advisers, by undertaking ongoing, systematic research on New Zealand.

We at Motu believe that dissemination and capacity building should go hand-in-hand with undertaking the best research. Our Public Policy Seminars and mentorship and internship programmes are described later in this Report. We also try to incorporate capacity building directly into our research projects using conferences, workshops and dialogue groups.

Motu recently competed for and won a multi-year contract funded by the Productivity Commission, the Treasury, the Ministry of Business, Innovation and Employment, and Statistics New Zealand. Under this contract we have established a new programme to undertake research *and* build research capacity in the public and wider research sectors on issues related to improving the productivity of individuals and firms in New Zealand. We view this programme as a model for achieving Motu's multiple missions, and harnessing economics for the long-term benefits of all New Zealanders. Motu also recently received a significant grant from the US-based Aotearoa Foundation for a two-year project to help shape a low-greenhouse-gas future for New Zealand, incorporating a combination of research, dialogue and communications.

As shown in the summary financial statements, 2012/13 was a challenging year for Motu. The end of several large research contracts and the departure of two Senior Fellows led to a significant decline in research income. A major investment in upgrading the accounting systems and processes combined with the revenue decline to produce an operating deficit. Fortunately, financial reserves built during previous years allowed us to weather these challenges without harm to the organisation. And, as demonstrated by the new productivity programme and Aotearoa grant, we have recovered quickly and are now back on track.

I encourage you to browse this Report for a snapshot of our people and programmes. If you would like further information about anything we do, please email me at adam.jaffe@motu.org.nz.



Adam B. Jaffe
Director and Senior Fellow

From the Board Chair

Motu is a small but very special and very important organisation within New Zealand's research system. Our research is consistently of a very high international standard and is unique in its relevance to important long-term economic policy choices facing New Zealand in areas such as infrastructure, climate change, productivity, longevity and the performance of firms and cities.

Motu's unrelenting commitment to high-quality research is a tribute to the vision of the founding Senior Fellows Suzi Kerr and Dave Maré and all the Senior Fellows who work, and have worked, at Motu. Also impressive is the commitment to building research and research-related capability in New Zealand through the employment of research analysts and interns – all of whom are very impressive and talented young people – and the proactive undertaking to disseminate their research widely and freely through seminars and publications.

High-quality, research-based public policy is crucial to achieving the government's stated goals of improving economic, social and environmental outcomes for all New Zealanders. There is considerable potential for the public sector to work more effectively with research organisations such as Motu and its extensive network of New Zealand and international researchers to ensure that the issues that the country will inevitably face over the next few decades are being progressively informed by a relevant research programme. Building such relationships is also vital to increasing the public sector's capability to effectively utilise insights from research and incorporate research into policy making in a consistent and coherent way.

Howard Fancy stepped down as Director at the end of calendar 2012. I want to thank Howard for his contributions and commitment. Adam Jaffe began as Motu Director and Senior Fellow in May. We are all excited by his vision and energy, as well as the new perspectives he brings from his experience in the United States. I look forward with confidence to the coming years under his leadership and we welcome his expertise in the economics of innovation and the environment. Adam has broadened Motu's international networks and is already making significant contributions to economic research and policy advice in New Zealand.

I would like to thank the Trust Board and the Foundation Board for their commitment and hard work. All give their time willingly and freely.



John Hay
Chair of the Trust Board

About Motu

Motu works to build economic and public policy research capacity in New Zealand and prioritises disseminating our research to ensure that our findings are freely available. We invest in young researchers and help to develop collaborative research networks and relationships with universities within New Zealand and overseas. These activities increase Motu's profile and help to build trust in our research, independence, and charitable status.

About Motu

Motu Economic and Public Policy Research Trust has six core purposes:

1. To carry out empirical research of high quality, suitable for acceptance in reputable journals;
2. To make existing knowledge more accessible for policy debates in New Zealand;
3. To disseminate our work and our knowledge;
4. To build New Zealand's capability to carry out empirical and theoretical research;
5. To maintain close links with international experts working in our fields; and
6. To facilitate the visits of relevant international experts to New Zealand.

Research and Research Dissemination

Motu's 2012/13 research is summarised later in this Report. Motu is committed to making the results of this research on key issues facing New Zealand accessible to public and private decision-makers and the general public. Indeed, Motu does not take on any research project unless the project sponsor agrees in advance that whatever the results turn out to be, they will be published. Our two publication series, the Motu Working Paper Series and Motu Notes, are both available free from our website, www.motu.org.nz. Motu Working Papers are technical papers intended for working economists and other experts, while Motu Notes are less technical and designed to appeal to a general or policy audience. Motu also maintains an online archive of our public datasets.

Motu releases an electronic newsletter, the Motu Research Update, approximately six times a year. Its articles are short, topical, and designed to be accessible to a wide audience. Subscription to this series is also free on our website.

Seminar Series

Motu promotes the application of research to public discussion and public policy through the Motu Public Policy Seminar Series, held in both Auckland and Wellington. Public Policy Seminars are a venue for Motu researchers and other leading local and international scholars to speak to a general audience about their policy-relevant research. These seminars cater to a broad audience, including public servants and the wider public interested in particular economic and policy issues.

In 2012/13, Motu presented the following Public Policy Seminars:

“Promoting Growth in All Regions.” Jose Enrique Garcilazo, Unit for the Rural and Regional Development Program, OECD.

“The Green Paradox of the Economics of Exhaustible Resources.” Professor Robert Cairns, McGill University, Montreal.

“The Allocation of Water by the New Zealand Electricity Market: Effects of Particular Climatic Changes.” Professor Lewis Evans, Victoria University of Wellington.

“Cities: The Need to Understand Better before We Mess About with Them.” Professor Paul Cheshire, London School of Economics.

“Creating a Seller: How New Zealand Can Effectively Help Reduce Greenhouse Gas Emissions in Developing Countries.” Dr Suzi Kerr, Motu Economic and Public Policy Research.

“Comprehensive and Multi-Modal Urban Transport Planning.” Todd Litman, Victoria Transport Policy Institute.



Motu also runs an internal seminar series. This series, which is attended by Motu staff and local academics and researchers, aims to allow Motu researchers and visiting local and international scholars the opportunity for feedback on work in progress, while simultaneously allowing Motu's research to remain up-to-date with current research methodology and topics. It builds internal capability as well as developing Motu's relationships with local and visiting researchers. In 2012/13, Motu ran internal seminars given by Motu researchers, as well as by Les Oxley (University of Waikato), Ilan Noy (Victoria University of Wellington), John McDermott (Reserve Bank), Julia Bredtmann (Ruhr University Bochum and the Rhine-Westphalia Institute for Economic Research, Germany), Robert Cairns (McGill University), John Gibson (University of Waikato), Robert Heilmayr (Stanford University Emmett Interdisciplinary Program for Environment and Resources), and Steve Stillman (University of Otago).

Investing in Young Researchers

A key way in which Motu builds research capability in New Zealand is through its commitment to employing and training. Motu employs top economics honours graduates as Research Analysts to assist our Senior Fellows with all parts of the research process. Research Analysts are mentored by the Senior Fellows, and supported financially to continue their studies while they are at Motu. After two to three years at Motu, they then go on either to PhD programmes or to professional employment.

Motu regularly hires interns with an undergraduate degree in economics or statistics who plan to do post-graduate study. Internships help young researchers to build their skill base, while strengthening New Zealand's empirical research capability. New Zealand students intern at Motu for December and January between their university degree and their honours year, and northern hemisphere students intern at Motu in June, July and August.

Motu People

Senior Fellows



Adam Jaffe *Director and Senior Fellow*

Adam B. Jaffe joined Motu as Director in May 2013. He is also the Fred C. Hecht Professor of Economics at Brandeis University. He has been Chair of Economics and Dean of the Faculty of Arts and Sciences at Brandeis, Associate Professor of Economics at Harvard University, and Senior Staff Economist at the President's Council of Economic Advisers. Adam's research focuses on technological innovation and technology diffusion, particularly as it affects environmental and energy technologies. In addition to his scholarly activities, Adam is active in public policy formulation and debate.



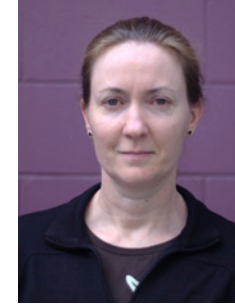
Richard Fabling *Senior Fellow*

Richard joined Motu as a Senior Fellow in October 2011, having previously held senior research positions at the Reserve Bank of New Zealand and the Ministry of Economic Development. He holds a doctorate from the University of Waikato in Applied Mathematics. Richard's current research focuses on the firm-level determinants of productivity growth, the behaviour and performance of internationally engaged businesses, and the effect of the Global Financial Crisis on workers and firms.



Arthur Grimes *Senior Fellow*

Arthur has a BSocSc (Hons) from University of Waikato, and completed his PhD in Economics at the London School of Economics in 1987. Before joining Motu, Arthur was Director of the Institute of Policy Studies, Victoria University of Wellington, and had prominent roles at the Reserve Bank of New Zealand and National Bank of New Zealand. He has published papers on macroeconomics, banking and finance, housing, and infrastructure topics in international academic journals, and has authored or edited five books. In 2005, Arthur was awarded the prestigious NZIER Economics Award. He is currently Chair of the Board of the Reserve Bank, the Hugo Group, and the Postal Network Access Committee, Associate Member of the Financial Markets Authority and Adjunct Professor of Economics at the University of Auckland.



Suzi Kerr *Senior Fellow*

Suzi founded Motu with Dave Maré in 1998. She graduated from Harvard University in 1995 with a PhD in Economics, was an Assistant Professor at the University of Maryland between 1995 and 1998, and a Visiting Professor at Stanford in 2009/10. She has been a visiting scholar at the Massachusetts Institute of Technology and at Resources for the Future. In 2010 Suzi was awarded the NZIER Economics Award for her work in environmental regulation. Suzi's research empirically and theoretically investigates environmental markets with emphasis on climate change regulation, greenhouse gas emissions, and carbon sequestration related to land use in New Zealand and the tropics. Her recent work has applied these tools to the problem of water quality in Lake Rotorua, the design of the Emissions Trading System and the design of emissions trading and avoided deforestation policies in developing countries.



David C. Maré *Senior Fellow*

Dave has been a Senior Fellow at Motu since 2000 and an Adjunct Professor of Economics at the University of Waikato since 2009. Before founding Motu with Suzi Kerr, he was a researcher at the New Zealand Department of Labour. Dave gained his PhD in Economics at Harvard University in 1995, specialising in labour economics and urban economics. His current research interests include the economics of immigration, the economic performance of cities and regions, and patterns of labour market adjustment – for individuals and in aggregate.



Isabelle Sin *Fellow*

Isabelle returned to Motu as a Fellow in 2012 after completing her PhD at Stanford University in 2011. Her research areas are applied microeconomics and economic history, particularly in the fields of the economics of knowledge and its international and domestic diffusion. In her dissertation she studied flows of book translations between countries to gain insight into the international flow of ideas codified in books. Isabelle graduated from the University of Canterbury in 2002 with an honours degree in economics. She then worked at the Reserve Bank of New Zealand and Motu before leaving New Zealand to pursue her doctoral studies.

Board of Trustees



Dr John Hay *Chair*
Dr John Hay & Associates
John became board chair in November 2011.



Rob Fenwick
Living Earth
Co-Founder



Stephen Goldson
AgResearch
Principal Scientist; Strategy Advisor to the Office of the Prime Minister's Science Advisory Committee



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Chief Executive Officer



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Chancellor and Environment Canterbury Commissioner



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Motu
Director and Senior Fellow

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University of Waikato
Professor of Economics



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Professor in the Department of Environmental Science and Policy; University Fellow at Resources for the Future



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Adolf Stroombergen
Infometrics
Chief Economist



Jacques Poot
University of Waikato
Professor of Population Economics



Malathi Velamuri
Victoria University of Wellington
Lecturer in the School of Economics and Finance

Research Analysts

In 2012/13, Motu's research analysts were Simon Anastasiadis, Corey Allan, Zachary Dorner, Sean Hyland, and Yun Liang. Levente Tímár also worked part time at Motu as a research economist.



Research

Motu's success as an organisation is built on our ability to produce high-quality, topical economic and public policy research. We have a strong desire to prove the academic quality of our work through publication, including in international journals. The audience we most wish to impress are top international academics and New Zealand and international policy makers and private sector leaders who are keen to understand and apply our results. We involve end-users at all stages of the research process to ensure our research is relevant and valuable.



Environmental Regulation

In 2012/13 Motu's environment work focused on climate change, and built on previous work on managing water quality.

Climate Change

Motu's climate change programme has continued to have three major and interacting themes. The first theme, land use and

climate change mitigation within New Zealand, has focused on agricultural emissions with work on the value of rural land; the effects of different greenhouse gas (GHG) metrics on farmers; heterogeneity in GHG emissions from farms; gradual land use change; and work on the incidence of agricultural mitigation costs and the effects of different allocation approaches on this incidence. We continued to strengthen and document our Land Use in Rural New Zealand (LURNZ) Model, produced a new set of more robust simulation results and worked with the wider New Zealand land use modelling community to strengthen our capability and effectiveness as a group.

Our second theme is New Zealand's role in the international climate mitigation effort. Suzi Kerr extended earlier research on cooperation between developed and developing countries to mitigate climate change – thinking beyond existing Kyoto mechanisms. A particular focus was on avoiding deforestation and degradation (and the associated emissions). She led an international project funded by the World Bank on the design of a potential emissions trading system for Chile. This complements ongoing work of a similar nature for Colombia and a linkage with Korea which shares New Zealand's need for effective links with poorer "seller" countries. Both Chile and Colombia are potential future carbon trading partners for New Zealand as our contribution to the global climate mitigation effort increases.

Our third theme, associated with a new programme led by NIWA and Landcare Research and a grant from the Kelliher Foundation, considers the potential impacts of climate change on New Zealand, our ability to adapt, and appropriate policy responses to ensure effective adaptation. Understanding the dependence of rural land values on local climate and international commodity prices as an indicator of total economic impact, and using LURNZ to simulate sensitivity of land use and productivity to climate change including extreme events, are new directions of research.

Notable events for the climate change programme in 2012/13 included a one-day symposium at the Institute of Policy Studies in August 2012, a Climate Economics Research workshop in March 2013 and the October 2012 release of a short film on agricultural emissions with the assistance of staff at the New Zealand Agricultural Greenhouse Gas Research Centre and Victoria University of Wellington, members of the Agricultural Greenhouse Gas Emissions Dialogue group and filmmaker Jess Feast. The film remains available from Motu and through the Motu-facilitated Agricultural Emissions blog, which remains active.

Nutrient Trading and Water Quality

Motu has continued to build on our earlier work focused in the Lake Rotorua catchment. We published an updated nutrient trading prototype that was a timely input for the Land and Water Forum, central government and local Rotorua policy development processes – which are progressing in very promising ways. We developed an electronic platform and broad set of water trading games to allow stakeholders to explore a wider range of design issues. Our new research has increasingly focused on what economics can contribute to inform the contentious debates about cost allocation and social impact.

In terms of modelling, we have further developed our NManager model to explore the impacts of policy design, incorporating heterogeneity and exploring linkages with climate policy, and have

worked with NIWA at a national scale to link our LURNZ modelling to the Catchment Land Use for Environmental Sustainability (CLUES) model that predicts nutrient loads. With a broad group of modellers we have created syntheses on the practice of water quality and land use models in New Zealand.

Complementing our empirical work on the impacts of climate change and policy on the economic value of land, we have written a paper to communicate the economists' perspective on valuing the environment – an attempt to facilitate a more productive interdisciplinary discussion on environmental values. This has led to our involvement in a wider discussion on the value of culture.

Publications

Refereed Journal Articles and Conference Proceedings

Cox, T. J., J.C. Rutherford, Suzi C. Kerr, D.C. Smeaton, and C.C. Palliser. 2013. "An Integrated Model for Simulating Nitrogen Trading in an Agricultural Catchment with Complex Hydrology," *Journal of Environmental Management* 127, pp. 268–77.

Kerr, Suzi, and Zachary Dorner. 2013. "Tackling Agricultural Emissions: Potential Leadership from a Small Country," in *Climate Change and Green Growth: Legislative Achievements and Prospects Special Edition*, Seoul: Korea Legislation Research Institute. Vol. II (Korean) pp. 201–238, Vol. IV (English) pp. 387–428.

Kerr, Suzi, Simon Anastasiadis, Alex Olssen, William Power, Levente Tímár and Wei Zhang. 2012. "Spatial and Temporal Responses to an Emissions Trading System Covering Agriculture and Forestry: Simulation Results from New Zealand," *Forests* 3:4, pp. 1133–56.

Kerr, Suzi, and Adam Millard-Ball. 2012. "Cooperation to Reduce Developing Country Emissions," *Climate Change Economics* 3:4, pp. 1250023-1–30.

Kerr, Suzi. 2013. "The Economics of International Policy Agreements to Reduce Emissions from Deforestation and Degradation," *Review of Environmental Economics and Policy* 7:1, pp. 47–66.

Book Chapters, Working Papers and Reports

Anastasiadis, Simon, Jim Sinner and Andrew Fenemor. 2012. "Market-Based Instruments for Water Management: MBI Simulation Software and Future Potential," appendix prepared for the Ministry of Primary Industries, MPI, Wellington.

Anastasiadis, Simon, Jim Sinner and Andrew Fenemor. 2013. "Educational Water Trading Games: Simulation Software and Future Potential," Motu Economic and Public Policy Research, Wellington.

Daigneault, Adam, Hugh McDonald, Sandy Elliott, Clive Howard-Williams, Suzie Greenhalgh, Maksym Guysev, Suzi Kerr, James Lennox, Linda Lilburne, Uwe Morgenstern, Ned Norton, John Quininn, Kit Rutherford, Ton Snelder, and Bob Wilcock. 2012. *Evaluation of the Impact of Different Policy Options for Managing to Water Quality Limits*. Wellington: Ministry for Primary Industries. Available online at <http://www.mpi.govt.nz/news-resources/publications>

Grimes, Arthur. 2012. "Optimal Infrastructure Adaptation to Climate Change," *Motu Note* #11, Motu Economic and Public Policy Research, Wellington.

Kerr, Suzi, and Zack Dorner. 2013. "Tackling Agricultural Emissions: Potential Leadership from a Small Country," *Motu Note* #13, Motu Economic and Public Policy Research, Wellington.

Kerr, Suzi, Catherine Leining, Chris Dodwell, Ruben Lubowski, Juan-Pablo Montero, Justine Sefton, Sebastian Vicuna, with Eduardo Sanhueza and Lucy Young. 2012. "Roadmap for Implementing a Greenhouse Gas Emissions Trading System in Chile: Core Design Options and Policy Decision-Making Considerations Report to the World Bank Partnership for Market Readiness," *Motu Working Paper* 12-14, Motu Economic and Public Policy Research, Wellington.

Kerr, Suzi, Hugh McDonald, and Kit Rutherford. 2012. "Nutrient Trading in Lake Rotorua: A Policy Prototype," *Motu Note* #10, Motu Economic and Public Policy Research, Wellington.

Kerr, Suzi, Simon Anastasiadis, Alex Olssen, William Power, Levente Tímár and Wei Zhang. 2012. "Spatial and Temporal Responses to an Emissions Trading System Covering Agriculture and Forestry: Simulation Results from New Zealand," *Motu Working Paper* 12-10, Motu Economic and Public Policy Research, Wellington.

Kerr, Suzi. 2012. "The Economics of International Policy Agreements to Reduce Emissions from Deforestation and Degradation," *Motu Working Paper* 12-12, Motu Economic and Public Policy Research, Wellington.

Woods, Darian, with Andrew Coleman. 2012. "Price, Quality, and International Agricultural Trade," *Motu Working Paper* 12-08, Motu Economic and Public Policy Research, Wellington.

Presentations

- Allan, Corey, and Suzi Kerr. 2013. "Examining Patterns in and Drivers of Rural Land Values in New Zealand," New Zealand Climate Change Centre Conference, Palmerston North, 5 June 2013.
- Anastasiadis, Simon, and Suzi Kerr. 2012. "Mitigation and Heterogeneity in Management Practices," New Zealand Agricultural and Resource Economics Society Annual Conference, Nelson, 30–31 August 2012; Motu Climate Economics Research Workshop, Wellington, 4–5 March 2013.
- Anastasiadis, Simon. 2012. "An Inertia Model for the Adoption of New Farming Practices," New Zealand Agricultural and Resource Economics Society Annual Conference, Nelson, 30–31 August 2012.
- Anastasiadis, Simon. 2013. "Land Use in Rural New Zealand: Modeling Land Use and Land-Use Change," Motu Climate Economics Research Workshop, Wellington, 4–5 March 2013.
- Grimes, Arthur, and Sean Hyland. 2012. "Passing the Buck: Impacts of Commodity Price Shocks on Rural Outcomes," New Zealand Agricultural and Resource Economics Society Annual Conference, Nelson, 30–1 August 2012; Motu Climate Economics Research Workshop, Wellington, 4–5 March 2013.
- Kerr, Suzi, and Hugh McDonald. 2012. "New Zealand – Environmental Policy Pioneers," Half-day Workshop at Freie Universität Berlin, 20 September, 2012 (with support from the New Zealand Embassy).
- Kerr, Suzi. 2012. "Allocation and Cost Sharing: Nutrient Trading and Greenhouse Gas Markets," New Zealand Agricultural and Resource Economics Society Annual Conference, Nelson, New Zealand, 30–1 August 2012.
- Kerr, Suzi. 2012. "Emerging Solutions: The Who, Why and How of Acting on Agricultural Emissions," Institute of Agricultural and Horticultural Science, Lincoln, New Zealand, 22 August 2012; and joint forum of the Institute of Governance and Policy Studies and Motu, Wellington, 7 August 2012.
- Kerr, Suzi. 2012. "Can Growth Be Sustainable?" in session on "Can Growth Be Sustainable? – 25 Years On from Brundtland", with lead speaker Phil O'Reilly. Lincoln University State of the Nation's Environment Series, Christchurch, 18 October 2012.
- Kerr, Suzi. 2012. "Emissions Trading in a Small Country," Expert Group Meeting on Current Status of Carbon Market and Prospects of Linkage, joint meeting of Korean Legislation Research Institute and New Zealand Ministry for the Environment, Seoul, 17 August 2012.
- Kerr, Suzi. 2012. "Emissions Trading in Latin America: Thoughts from a Chilean Context," Economics Department Universidad de los Andes, Bogotá, Colombia, 14 September 2012.
- Kerr, Suzi. 2013. "Contracting for Credible Climate Mitigation," University of Waikato seminar, Hamilton, May 2013.
- Kerr, Suzi. 2013. "Creating a Seller: How New Zealand Can Effectively Help Reduce Greenhouse Gas Emissions in Developing Countries," Motu Public Policy Seminar, Auckland, 23 November 2012.
- Kerr, Suzi. 2013. "Credible Climate Mitigation from Forests and Agriculture in Colombia: Three Prototype Markets," Stanford Environmental and Energy Policy Analysis Center, April 2013.
- Kerr, Suzi. 2013. "Ejemplos de sistemas en Colombia," Universidad de los Andes workshop: *Sistema de Negociación de Emisiones en Colombia*, Bogotá, Colombia, 15 April 2013.
- Kerr, Suzi. 2013. "El diseño y la implementación de una sistema de transacción de emisiones (ETS): la experiencia Neozelandés," Centro de Estudios Públicos workshop. Santiago, Chile, 17 April 2013.
- Kerr, Suzi. 2013. "El sistema de Nueva Zelanda que incorpora el sector forestal", Pontificia Universidad Católica de Chile workshop: *The Role of the Forestry Sector in an Emissions Carbon Trading System in Chile*, Santiago, Chile, 17 April 2013.
- Kerr, Suzi. 2013. "Emissions Trading in Chile?" Universidad de los Andes workshop, *Sistema de Negociación de Emisiones en Colombia*, Bogotá, Colombia, 15 April 2013; and Centro de Estudios Públicos workshop *Hacia una economía de bajo carbono: Lecciones internacionales y una propuesta de mercado para Chile*, Santiago, Chile, 17 April 2013.
- Kerr, Suzi. 2013. "Life after Kyoto: How Can New Zealand Contribute to Global Mitigation Beyond Our Borders?" Motu Public Policy Seminar, Wellington, 20 February 2013; New Zealand Climate Change Centre Conference, Palmerston North, 5 June 2013.
- Kerr, Suzi. 2013. "Tackling Agricultural Emissions," New Zealand Climate Change Conference, Palmerston North, June 2013; as "Tackling NZ's Agricultural Emissions," Presentation at Australian Agriculture and Resource Economics Society-run workshop *Source or Sink? Farm Level Implications of Pricing Carbon and Policy Responses to Manage Greenhouse Gas Emissions*, Sydney, 5 February 2013.
- Kerr, Suzi. 2013. "Water – A Commons or a Commodity?" Presentation to Network Waitangi Otautahi, Christchurch, 26 February 2013.

Sinner, Jim, Andrew Fenemor and Simon Anastasiadis. 2012. "Mixed Bag: Simulating Market-Based Instruments for Water Quality and Quantity in the Upper Waikato," New Zealand Agricultural and Resource Economics Society Annual Conference, Nelson, 30–31 August 2012.

Tímár, Levente, and Boon-Ling Yeo. 2013. "Allocation and Cost Sharing in Environmental Markets: Heterogeneity and Market Interactions," Market-Based Instruments for Freshwater Management in New Zealand mini-symposium as part of the Australian Agricultural and Resource Economics Society Annual Conference, Sydney, 6 February 2013.

Tímár, Levente. 2012. "Land Tenure and Rural Land Use: Insights from a Discrete Choice Model," presentation to the Ministry for Primary Industries, Wellington, 13 August 2012.

Tímár, Levente. 2012. "Rural Land Use and Land Tenure in New Zealand," European Association of Environmental and Resource Economists Annual Conference, Prague, 28 June – 2 July 2012.

Tímár, Levente. 2013. "Allocation and Cost Sharing in Greenhouse Gas Markets," New Zealand Climate Change Centre Conference, Palmerston North, 5 June 2013.

Tímár, Levente. 2013. "Allowance Allocation in Nutrient Markets with Heterogeneous Farmers: The Lake Rotorua Catchment," Lake Rotorua Catchment Stakeholder Advisory Group Meeting, Bay of Plenty Regional Council, Rotorua, New Zealand, 13 May 2013.

Tímár, Levente. 2013. "GHG Emissions in LURNZ," Motu Climate Economics Research Workshop, Wellington, 4–5 March 2013.

Tímár, Levente. 2013. "Policy Incidence and Permit Allocation in LURNZ," Motu Climate Economics Research Workshop, Wellington, 4–5 March 2013.

Yeo, Boon-Ling, Oliver Browne, Simon Anastasiadis and Suzi Kerr. 2012. "Synergies between Nutrient Trading Scheme (NTS) and the New Zealand Emissions Trading Scheme (ETS) in the Lake Rotorua Catchment," New Zealand Agricultural and Resource Economics Society Annual Conference, Nelson, New Zealand, 30–31 August 2012.



Economic Geography

Motu's economic geography programme includes work on infrastructure planning and the way infrastructure shapes urban development, cities and agglomeration, and the economic impacts of regional disasters.

Infrastructure and the Effects of Infrastructure on Urban Development

Arthur Grimes leads Motu's impacts of infrastructure programme. In 2012/13 he completed a chapter for the *Handbook of Regional Science*, which will appear in early 2014. Arthur leads one strand of the Resilient Urban Futures programme (led by University of Otago with a consortium of research bodies, and funded by MBIE). The first paper of this strand in the four-year programme uses long-term historical data (since the early twentieth century) to determine whether and how infrastructure links have shaped the growth of cities and towns across New Zealand over the past 80 to 100 years. Key infrastructures that will be included are roads, rail, port and airport links and tertiary education institutions.

Cities and Agglomeration

This programme builds on work done by Dave Maré over the last several years on the relationship between agglomeration and productivity. Work under the programme this year has examined the impacts of local area workforce composition, including the presence of immigrants, on firm productivity and (with Steve Stillman) on innovation.

Economic Responses to the Canterbury Earthquakes: Evidence from Labour and Property Markets

Richard Fabling, Arthur and Levente Tímár are in the early stages of two projects examining economic impacts of the Christchurch earthquakes in a project funded by the Ministry of Business, Innovation and Employment through the natural hazards platform. The first project uses property data to examine how the earthquakes have affected the pricing of disaster risk in other parts of New Zealand post-earthquakes. The second is using unit record administrative data to examine business and labour market outcomes in Christchurch following the earthquakes.

Publications

Refereed Journal Articles

Grimes, Arthur, and Chris Young. 2013. "Spatial Effects of Urban Rail Upgrades," *Journal of Transport Geography* 30, pp. 1–6.

Maré, David C., and D. J. Graham. 2013. "Agglomeration Elasticities and Firm Heterogeneity," *Journal of Urban Economics* 75, pp. 44–45.

Maré, D. C., R. Pinkerton, J. Poot and A. Coleman. 2012. "Residential Sorting across Auckland Neighbourhoods," *New Zealand Population Review* 38, pp. 23–54.

Fabling, Richard, Arthur Grimes & Lynda Sanderson. 2013. "Any Port in a Storm: Impacts of New Port Infrastructure on Exporter Behaviour," *Transportation Research E*, 49:1.

Book Chapters, Working Papers and Reports

Grimes, Arthur. 2012. "Optimal Infrastructure Adaptation to Climate Change," *Motu Note #11*, Motu Economic and Public Policy Research, Wellington.

Presentations

Maré, David C. 2012. "City Networks: Know Your Place," Auckland Two Years On – A Metropolitan Centre Emerges, Institute of Public Administration New Zealand conference, Auckland, 10 December 2012; and New Zealand Productivity Commission.

Housing

Motu's 2012/13 work on housing included the construction of a New Zealand Housing Market Model and work examining the way community outcomes change following external commodity price shocks.



Housing and Policy

Following the 2012 evaluation of the effectiveness of the government's New Zealand Insulation Fund (NZIF) with regards to improvements in health outcomes and reduction in household energy usage, extended funding from the Ministry of Business, Innovation and Employment has enabled Arthur Grimes to work with a PhD student (Nick Preval at the University of Otago) to assess the health outcomes from the programme over a longer period.

Housing Markets

Arthur has led two further housing-related programmes, working with Motu research analyst Sean Hyland. The first is a programme funded by the Kelliher Foundation, "How do Commodity Prices Affect Rural Community Outcomes?" This work uses housing markets to measure changing community outcomes following external commodity price shocks. This research was extended in 2012/13 to examine the impacts of climate change policy and water quality policy on rural community outcomes.

The second housing market work was the construction, funded by the Department of Building and Housing, of a New Zealand Housing Market Model. This programme built on earlier work by Arthur and by former Motu research analyst Andrew Aitken that modelled TLA-level house prices and new supply. The new model uses updated and better data, and extends the analysis to model determinants of residential land prices and residential rents. It also examines the effects of credit constraints caused by the Global Financial Crisis on both housing demand and housing supply responses. This research was funded by and conducted in collaboration with the Department of Building and Housing. It was published as a Motu Working Paper in early 2013 and presented at the 2013 New Zealand Association of Economists' annual conference.

Publications

Refereed Journal Articles

Roskrige, Matthew, Arthur Grimes, Philip McCann and Jacques Poot. 2013. "Homeownership, Social Capital and Satisfaction with Local Government," *Urban Studies* early view, 8 February 2013.

Book Chapters, Working Papers and Reports

Grimes, Arthur, and Sean Hyland with Andrew Coleman, James Kerr and Alex Collier. 2013. "A New Zealand Regional Housing Model," *Motu Working Paper* 13-02, Motu Economic and Public Policy Research, Wellington.

Presentations

Grimes, Arthur, and Sean Hyland. 2012. "Passing the Buck: Impacts of Commodity Price Shocks on Rural Outcomes," Victoria University of Wellington School of Economics and Finance Research Symposium and New Zealand Agricultural and Resource Economics Society Annual Conference, Nelson, 30–31 August 2012.



Productivity and Innovation

Motu has a long tradition of work on issues related to productivity and innovation by Senior Fellows Arthur Grimes, Dave Maré and Richard Fabling, and Fellow Isabelle Sin. Adam Jaffe's arrival as Motu's new director and Senior Fellow has added a new dimension to this work.

Firm Productivity and Performance

Dave Maré and Richard Fabling, along with Dean Hyslop (Victoria University of Wellington), worked on a study examining the link between firm productivity and the skill composition within firms. They are also continuing work on improving methods for measuring firm-level productivity. This work uses Statistics New Zealand's Linked Employer-Employee Data (LEED), and is part of the Ministry of Business, Innovation and Employment (Labour)-led LEED Research Programme.

Richard and Dave worked with Keith McLeod (MBIE) on an extension of earlier work looking at the link between innovation and local workforce composition. The extension uses the Integrated Data Infrastructure to establish whether recent migrants and returning New Zealanders – or a subset of those workers – have a disproportionate effect on the innovation outcomes of the firms they work for.

International Engagement, Exports and Innovation

Isabelle Sin, in collaboration with Dave, Richard, Lynda Sanderson (Treasury) and Adam Jaffe, began work on a project to investigating the implications of internationalisation for firm performance.

Dave has also started work on two projects examining the productivity and wage effects of foreign direct investment. He is working with Lynda and Richard to look at the magnitude and causes of higher wage rates paid by foreign-owned firms, and whether employees in such firms maintain higher earnings when they move to other firms. This work is being carried out on contract to the Treasury. He is also working with Tinh Doan (MBIE) and Kris Iyer to examine whether the productivity performance of New Zealand-owned firms is affected by the presence of foreign-owned firms.

Productivity Research Using the Longitudinal Business Database

During 2012/13 Motu began discussions with the Productivity Commission about multi-year funding for a research programme on topics related broadly to firm performance and productivity, using the Longitudinal Business Database ("LBD") maintained by Statistics NZ. This programme was funded by the Productivity Commission, the Treasury, the Ministry of Business, Innovation and Employment and Statistics NZ in November 2013. It will involve Motu Senior Fellow research as well as collaborative research between Motu and government agencies and other outside researchers. It will create a broad base of research in this area, and increase the capability of the New Zealand research community to use the LBD.

Science and Innovation Policy

Adam Jaffe brings almost three decades of experience in research on technological innovation, technology diffusion and science and technology policy to Motu. He has already engaged policy makers in the Treasury, the Ministry of Business, Innovation and Employment, and the Science Adviser to the Prime Minister in discussion of the issues facing New Zealand. He has undertaken a project to create a framework for evaluation of the economic and broader social benefits of publicly funded research, which will lead to reports to be published in 2013/14.

Publications

Refereed Journal Articles

- Jaffe, Adam. 2012. "Technology Policy and Climate Change," *Climate Change Economics* 3:4, 1250025.
- Maré, David C., and Richard Fabling. 2013. "Productivity and Local Workforce Composition," in *Geography, Institutions and Regional Economic Performance*, R. Crescenzi and M. Percoco, Eds. Berlin and Heidelberg: Springer-Verlag.

Presentations

- Sin, Isabelle. 2013. "The Gravity of Ideas: How Distance Affects Translations", presentation at Callaghan Innovation.



Macroeconomics and Other Topics

Motu carries out work across a range of other topics. In 2012/13 this included work with people at Treasury around exchange rates and prices, as well as an ongoing project measuring national wellbeing and sustainability.

Exchange Rates and Prices

In 2012/13 Richard Fabling worked with Motu affiliate Lynda Sanderson (Treasury) to better understand the relationship between exchange rate volatility and export performance. Richard and Dave Maré are working on improving methods for measuring firm-level productivity.

Indicators of Wellbeing and Sustainability

This ongoing programme led by Arthur Grimes was originally funded by the Morgan Foundation and analyses the validity and robustness of national measures of wellbeing and sustainability. It brings together international data from many different sources and tests whether international migration patterns are affected strictly by material differences between nations (such as GDP) or are also affected by differentials in other measures such as happiness, life satisfaction, the Human Development Index, and several other sustainability measures. Early work on the project is due to appear as a chapter in a book edited at the London School of Economics and published by Wiley-Blackwell (Oxford and New York). In 2012 this programme formed the basis for a successful bid in the Royal Society's 2012 Marsden funding round, with funding due to begin in July 2013. The programme, Testing the Validity and Robustness of National Wellbeing and Sustainability Measures, was funded for three years and will be led by Arthur and Les Oxley of the University of Waikato. Jamie Ataria (Lincoln University) and Robert MacCulloch (University of Auckland) will be associate investigators.

Central Banking and Financial Regulation

In late 2013, Arthur will be the NZ–UK Link Foundation Visiting Professor at the University of London, giving four public lectures on central banking issues. The lectures will be titled “Inflation Targeting: 25 Years’ Experience of the Pioneer”, “A Floating Exchange Rate is the Worst Exchange Rate Regime (Except for All the Others That Have Been Tried)”, “How Prudent are Macro-Prudential Policies?” and “Responsibility and Accountability in the Financial Sector”.

Publications

Refereed Journal Articles

- Grimes, Arthur. 2013. “Monetary Policy and Economic Imbalances: An Ethnographic Examination of Central Bank Rituals,” *Journal of Economic Surveys* 27:4, pp. 634–40
- Fabling, Richard, Arthur Grimes and Philip Stevens. 2012. “The Relatives are Fine: Use of Qualitative Firm Data in Economic Analysis”, *Applied Economics Letters* 19:7, pp. 615–8.

Book Chapters, Working Papers and Reports

- Fabling, Richard, and Lynda Sanderson. 2013. “Export Performance, Invoice Currency, and Heterogeneous Exchange Rate Pass-Through,” *Motu Working Paper* 13-01, Motu Economic and Public Policy Research, Wellington; also published as *Reserve Bank Discussion Paper* 2013/01, Reserve Bank of New Zealand, Wellington.
- Grimes, Arthur, Les Oxley and Nicholas Tarrant. “Does Money Buy Me Love? Testing Alternative Measures of National Wellbeing,” *Motu Working Paper* 12-09, Motu Economic and Public Policy Research, Wellington.
- McLaughlin, Eoin, David Greasley, Nick Hanley, Les Oxley and Paul Warde. 2012. “Testing for a Long-run “Sustainability”: Genuine Savings Estimates for Britain, 1760–2000,” *Stirling Economics Discussion Paper* 2012-05, Stirling Management School, University of Stirling, Stirling, UK. Available online from <http://www.stir.ac.uk/management/research/economics/working-papers/>.
- Coleman, Andrew. 2012. “Pension Payments and Receipts by New Zealand Birth Cohorts, 1916–1986,” *Motu Working Paper* 12-11, Motu Economic and Public Policy Research, Wellington

Presentations

- Hyland, Sean, and Dean Hyslop. 2012. “An Analysis of the Australian Income Distribution, 2001–2010,” Victoria University of Wellington, School of Economics and Finance Research Symposium, Wellington.



Labour and Population Economics

Motu's labour and population economics programme once more saw work under a wide range of topics. Work on firm performance and labour dynamics as well as migration continued, and new projects around tertiary education and a longitudinal household survey were introduced.

Labour Market Dynamics and Earnings

In 2012/13 Dave Maré and Richard Fabling did further work using Statistics New Zealand's Longitudinal Business Database and Linked Employer-Employee Dataset. One project analysed firm-level changes in employment hiring and separations, and in firm start-ups and closures. This project was one of a series of country case studies coordinated by the OECD to examine differences in labour market adjustment following the Global Financial Crisis, and was funded by the OECD and the New Zealand Department of Labour. In related work on the impacts of job turnover, Dave worked with Sylvia Dixon (MBIE) to examine the employment and earnings impacts of involuntary job loss. Dave and Richard have also been looking at patterns of reported hiring difficulties, identifying persistence, business cycle and labour market influences.

Richard, Dave and Arthur Grimes have examined the effect of human resource management changes on workers, and testing whether these effects differ by gender. This work made use of the demographic and wage data available from the recent linking of the LBD to the Linked Employer-Employee Dataset, and was funded by the Ministry of Women's Affairs as part of their work programme on the gender wage gap. Dave did further work with the Ministry of Women's Affairs to summarise gender differences in the employment rates and incomes of 18–45-year-olds with post-school qualifications. The work draws on Census data from 1996, 2001 and 2006, and analyses outcomes by field of study.

Richard is working with Steve Stillman on a Marsden-funded project comparing various estimated gender-wage gaps to gender-productivity gaps for the same worker groups.

Migration

Dave worked with Prof. Jacques Poot and two graduate students at the University of Waikato on a project analysing patterns of mobility across New Zealand regions, as an input into the modelling of multi-regional demographic and economic change. The work examines modelling of inter-urban migration flows in New Zealand, and links between labour mobility and migration intentions. This work contributes to *Nga tangata oho mairangi*, a two-year MBIE-funded programme of work lead by the University of Waikato's National Institute of Demographic and Economic Analysis (NIDEA) and Massey University.

Dave also worked with Keith McLeod (MBIE) to examine the rise of temporary migration in New Zealand and its impact on the labour market.

Isabelle Sin is pursuing work with Steve Stillman on a project investigating the geographical mobility of Māori in New Zealand. In particular, they are interested in how Māori ties to the traditional lands of their iwi and their social ties to other iwi members can be used to study how social networks affect location choice and labour market outcomes.

Longitudinal Household Survey

Dave helped to prepare a paper summarising the case for a new longitudinal household survey (LHS), which set out issues and options for its design, governance, and administration. Such a survey would make a valuable contribution to New Zealand's social science infrastructure. Dave and independent consultant Ron Crawford prepared a working paper investigating options for a LHS and current work under the project involves seeking support.

Policy Evaluation

Dave worked with Sarah Crichton (MBIE) on an econometric evaluation of the impacts of wage subsidies. They have examined impacts on jobseeker employment, earnings and benefit outcomes, as well as impacts on firm employment and earnings outcomes. Dave Maré also worked with Dean Hyslop and staff at the Department of Corrections to refine the application of econometric evaluation methods to assessing the impacts of prisoner rehabilitation, education, and training programmes.

Education and Skills

Dave and Isabelle completed a scoping study to investigate questions in tertiary education. They secured a contract with the Tertiary Education Commission to extend this work to study the pathways students take after completing compulsory education. In this research, they will use Statistics New Zealand's Integrated Data Infrastructure to investigate the drivers and economic consequences of students' decisions regarding education and work, including analyses of how the pathways taken vary for sub-populations such as different ethnic groups.

Publications

Refereed Journal Articles

- Fabling, Richard, and Lynda Sanderson. 2013. "Exporting and Firm Performance: Market Entry, Investment and Expansion," *Journal of International Economics* 89:2, pp. 422–31.
- Fabling, Richard, and Lynda Sanderson. 2013. "Foreign Acquisition and the Performance of New Zealand Firms," *New Zealand Economic Papers* Early View.
- Fabling, Richard, Arthur Grimes and Philip Stevens. 2012. "The Relatives are Fine: Use of Qualitative Firm Data in Economic Analysis," *Applied Economics Letters* 19:7, pp. 615–8.
- Hyslop, D. R., David C. Maré, Steven Stillman and Jason Timmins. 2012. "Heterogeneous Firm Responses to Rising Teenage Wages," *Labour: Review of Labour Economics and Industrial Relations* 26:4, pp. 436–54
- Grimes, Arthur. 2013. "Monetary Policy and Economic Imbalances: An Ethnographic Examination of Central Bank Rituals," *Journal of Economic Surveys* 27:4, pp. 634–40.
- Maré, David C., Richard Fabling, and Steven Stillman. 2013. "Innovation and the Local Workforce", *Papers in Regional Science* Early View, available online at <http://onlinelibrary.wiley.com/doi/10.1111/j.1435-5957.2012.00479.x/abstract>.

Working Papers and Reports

- Coleman, Andrew. 2012. "Pension Payments and Receipts by New Zealand Birth Cohorts, 1916–1986," *Motu Working Paper* 12-11, Motu Economic and Public Policy Research, Wellington
- Crawford, Ron, and David C. Maré. 2013. "Investigation of Options for a New Longitudinal Housing Survey: Issues and Options Paper," *Motu Working Paper* 13-04, Motu Economic and Public Policy Research, Wellington.
- Crichton, S. and David C. Maré. 2013. "The Impacts of Wage Subsidies on Job-seekers' Outcomes and Firm Employment," *MBIE Research Paper* and *Motu Working Paper* 13-05, Ministry of Business, Innovation and Employment, Wellington.
- Dixon, Sylvia, and David C. Maré. 2013. "The Costs of Involuntary Job Loss: Impacts on Workers' Employment and Earnings," *MBIE Research Paper* and *Motu Working Paper* 13-03, Ministry of Business, Innovation and Employment, Wellington. Also presented at New Zealand Association of Economists Annual Conference, Wellington, 3–5 July 2013.
- Fabling, Richard, and David C. Maré. "Firm-Level Hiring Difficulties: Persistence, Business Cycle and Local Labour Market Influences," *Motu Working Paper* 13-06, Motu Economic and Public Policy Research, Wellington. Also presented at New Zealand Association of Economists Annual Conference, Wellington, 3–5 July 2013.
- Fabling, Richard, and Lynda Sanderson. 2013. "Export Performance, Invoice Currency, and Heterogeneous Exchange Rate Pass-Through," *Motu Working Paper* 13-01, Motu Economic and Public Policy Research, Wellington; also published as *Reserve Bank Discussion Paper* 2013/01, Reserve Bank of New Zealand, Wellington.
- Fabling, Richard, Arthur Grimes and David C. Maré. 2012. "Performance Pay Systems and the Gender Wage Gap," *Motu Working Paper* 12-13, Motu Economic and Public Policy Research, Wellington.
- Grimes, Arthur, Les Oxley and Nicholas Tarrant. "Does Money Buy Me Love? Testing Alternative Measures of National Wellbeing," *Motu Working Paper* 12-09, Motu Economic and Public Policy Research, Wellington.

Maré, David C., and Richard Fabling. 2013. "Productivity and Local Workforce Composition," in *Geography, Institutions and Regional Economic Performance*, R. Crescenzi and M. Percoco, Eds. Berlin and New York: Springer.

Maré, David C., and Ron Crawford. 2013. "Options for a New Longitudinal Household Survey in New Zealand: Summary of Feedback on Draft 'Issues and Options' Paper, July–August 2012," Motu Economic and Public Policy Research, Wellington.

McLaughlin, Eoin, David Greasley, Nick Hanley, Les Oxley and Paul Warde. 2012. "Testing for a Long-run 'Sustainability': Genuine Savings Estimates for Britain, 1760–2000," *Stirling Economics Discussion Paper* 2012-05, Stirling Management School, University of Stirling, Stirling, UK. Available online from <http://www.stir.ac.uk/management/research/economics/working-papers/>.

McLeod, Keith, and David C. Maré. 2013. "The Rise of Temporary Migration in New Zealand and its Impact on the Labour Market," MBIE paper, Ministry of Business, Innovation and Employment, Wellington. Available online from <http://www.dol.govt.nz/publications/research/rise-temp-migration-nz-impact-labour-market-2013/rise-of-temporary-migration-in-NZ-and-its-Impact-on-the-Labour-Market2013.pdf>.

Presentations

McLeod, K. and D. C. Maré. 2012. "What Impact does Temporary Migration Have on the Hiring of New Zealanders?" Paper presented to Labour Employment and Work Conference, Victoria University of Wellington, November 2012.

Grimes, Arthur, and Sean Hyland. 2012. "Passing the Buck: Impacts of Commodity Price Shocks on Rural Outcomes," Victoria University of Wellington School of Economics and Finance Research Symposium and New Zealand Agricultural and Resource Economics Society Annual Conference, Nelson, New Zealand, 30–31 August 2012.

Hyland, Sean, and Dean Hyslop. 2012. "An Analysis of the Australian Income Distribution, 2001–2010," Victoria University of Wellington School of Economics and Finance Research Symposium, Wellington.

Maré, David C., and Richard Fabling. 2013. "The Incidence and Persistence of Cyclical Job Loss in New Zealand," presented at Waikato University, Hamilton, June 2013; and at New Zealand Association of Economists Annual Conference, Wellington, 3–5 July 2013.

Maré, David C., Richard Fabling, and Steven Stillman. 2013. "Innovation and the Local Workforce", *Papers in Regional Science* Early View. Available online at <http://onlinelibrary.wiley.com/doi/10.1111/j.1435-5957.2012.00479.x/abstract>.

Motu Foundation

The Motu Research and Education Foundation is a related but separate entity to the Motu Economic and Public Policy Research Trust. It was established in 2006 with the aim of building world-class economic research capability in New Zealand. To do this, the Foundation works alongside a range of organisations, particularly the Motu Economic and Public Policy Research Trust, with generous financial support from patrons and donors.

The Motu Foundation

The Motu Research and Education Foundation was established in 2006 with the aim of building world-class economic research capability in New Zealand. To do this, the Foundation works alongside a range of organisations, particularly the Motu Economic and Public Policy Research Trust. Its work is made possible by generous financial support from patrons and donors.

The Motu Foundation

Established under its own Trust Deed in September 2006, the Motu Research and Education Foundation is a separate, but related entity to the Motu Economic and Public Policy Research Trust (Motu Research). The Foundation Trust has a broad mandate to help support economic research of international quality and to build strong economic capability within New Zealand.

High-quality public policy is critical to the future development of New Zealand. The Foundation's focus is on building world-class applied economic research capability to ensure that public policy decisions can be well informed by thorough and non-partisan research.

The Foundation collaborates particularly with Motu Research. Through the Trust the Foundation works to build capability by freely disseminating research, offering internships and scholarships for young economists, administering grants for research leadership and research collaboration, and providing seed funding for new research ventures.

The Motu Foundation is dependent on the support of patrons and donors for its funding and thanks them for their generosity and support.

Priorities and Activities

Over the past year the Foundation has continued to fund a number of initiatives, including:

1. Building Research Leadership and Economic Research Capability

To support the growth of a world-class economic research capability in New Zealand, in 2012/13 the Foundation gave a \$10,000 grant to Motu Research to employ two top graduates, Gemma Wills (University of Auckland) and Josh Pemberton (University of Otago), as summer interns. Josh worked under the supervision of Suzi Kerr and Gemma was mentored by Arthur Grimes. Building on our existing successful internship programmes, the Foundation has received a grant from the Poutama Trust to fund a Māori intern each year at Motu Research.

In 2012, the Foundation established the Sir Frank Holmes Prize. This prize will be awarded annually to a top New Zealand final-year Economics undergraduate moving on to postgraduate studies in economics with a focus on application of econometrics to public issues. Funded by the Hugo Group, the first prize was awarded this year to Anna Robinson from the University of Otago. (Anna is completing her honours year at Otago and will begin working at Motu Research as a Research Analyst in February 2014.)

Under its research leadership programme, the Foundation provided partial funding to help bring Professor Edward Glaeser from Harvard University and Professor Rohini Somanathan from the Delhi School of Economics to New Zealand for visits and seminars.

The Foundation also provided funding to bolster Motu Research's successful internal seminar series, aimed at increasing collaboration between affiliates and visiting academics with Motu and other local researchers. These seminars are based on works in progress and aim to increase collaboration in research in order to further understanding in economic analysis.

The summer internships at Motu Research have created opportunities for some of New Zealand's best graduates to gain first-hand research experience and be supervised by excellent researchers. It is exciting to see how past interns have proceeded to complete PhDs and are now embarking on their careers as researchers or working in important public policy areas.

2. Research Dissemination

We ensure that existing knowledge, information and research about New Zealand public policy is readily accessible in New Zealand. This includes promoting the work of Motu Research through various publication channels including online, at conferences, seminars, workshops, and dialogue groups, and through teaching.

The Foundation continued to support events and communication channels to ensure that public policy research is readily accessible to those individuals, organisations and groups who can make use of its findings.

3. Supporting High-Quality Research

In 2012/13, the Kelliher Trust provided a grant through the Foundation that enabled research into the factors affecting changes in rural land prices in New Zealand. This research was undertaken by Research Analyst Corey Allan under the mentorship of Suzi Kerr.

We also provided a grant to Motu Research to support the preparation of a bid towards the prestigious Marsden Grant fund, which succeeded in being shortlisted. Grants such as the Marsden grants hold a pre-eminent position in the New Zealand research funding system. Senior Fellows at Motu have won several Marsden grants in the past and have been shortlisted for a number of others. The Foundation provided seed funding to Motu researchers who were shortlisted to support the development of the best possible proposals. In doing this the Foundation also strengthened research leadership, building stronger economic research capability in new areas. It also contributed to Motu Research continuing to be a strong centre of economic research excellence within New Zealand.

The Foundation also provided seed funding to develop research and research proposals by Motu Fellow Isabelle Sin. Motu hired Dr. Sin upon completion of her PhD from Stanford University, with the expectation that she will develop a portfolio of funded research and become a Motu Senior Fellow. (Sin was a Motu Research Analyst before going to Stanford for her PhD.) The Foundation funding allowed Dr. Sin to develop a proposal for a research project looking at the effects of various forms of international engagement by New Zealand firms on those firms' subsequent exports and innovation. That project has now been funded by the Ministry of Business, Innovation and Employment.

Patrons and Donors

Our activities are funded through generous support from patrons, and other donations. Our patrons are the backbone of the Motu Research and Education Foundation. Their commitment provides an ongoing level of financial support that makes the Foundation's work possible.

The Foundation had seven patrons during 2012/13:

- Auckland Council
- Environmental Protection Agency
- Fletcher Building Limited
- Mighty River Power Limited
- Ministry of Business, Innovation and Employment
- Ministry for the Environment
- Telecom New Zealand Limited

In addition, as discussed above, the Foundation received funding from the Poutama Trust and the Kelliher Trust in support of our internship and mentorship programs. We continue to benefit from a generous donation from the Tindall Foundation in the 2007/08 year.

Financial Position

Our financial base continues to grow, and with this our ability to make a difference. Since the Foundation was established, our Investment Fund has built up to just over \$600,000. In 2012/13 we provided \$63,000 in funding for scholarships and research.

We are now investing in providing a higher level of seed funding for new projects of value, as well as ensuring the Foundation's ongoing funding for the next decade.

Foundation Board of Trustees

The Motu Research and Education Foundation is governed by a Board of Trustees, which consists of distinguished people from New Zealand's business and community sectors.



Neil Green *Chair*
Senate SHJ
Chief Executive Officer



Dr John Hay
Dr John Hay & Associates
Managing Director



Adam Jaffe
Motu
Director



Kerry Prendergast (CNZM)
Environmental Protection Authority
Chair



John Roberts
Veda Advantage New Zealand
and International
Managing Director

Financial Information

Financial Information

The Motu Economic and Public Policy Research Trust's work is funded through research grants and sponsorship.

List of Grants

The following is a full list of grants and funding sources (of greater than \$30,000) active during the 2012/13 financial year:

Institute of Geological & Nuclear Sciences Limited (GNS Science), "MSI Natural Hazards", 2012-2015, \$270,000.

Ministry of Business, Innovation and Employment (MBIE) – (Building and Housing), "New Zealand Housing Market Model", 2012–2013, \$108,000.

Ministry of Business, Innovation and Employment (MBIE) – (Labour) "Cyclical Labour Market Adjustment Research", 2012–2013, \$50,000.

Ministry of Business, Innovation and Employment (MBIE) – (Labour) "Impacts of Temporary Migration", 2012–2013, \$54,000.

Motu Research and Education Foundation, "Kelliher – Rural Land Values", 2013, \$50,000.

National Institute of Water and Atmospheric Research Limited (NIWA), "Climate Impacts", 2012-2016, \$600,000.

Parliamentary Commissioner for the Environment, "Nutrient Mapping Study," 2012, \$100,000.

University of Otago, Wellington, "Resilient Urban Futures", 2012–2016, \$408,000.

University of Waikato, "Nga Tangata Oho Mairangi", 2013–2014, \$100,000.

Motu Economic and Public Policy Research Trust

Summary Group Statement of Financial Performance for the Year Ended 30 June 2013

	2013 \$	2012 \$
INCOME		
Research Grants	953,972	2,129,404
Interest Received	86,589	115,263
Patron Income and Donations	100,000	85,000
Other Income	55,284	61,509
Total Income	1,195,845	2,391,176
LESS EXPENSES		
Personnel	911,632	1,190,113
Research Project Costs	142,227	574,474
Other Operating Expenses	357,594	365,894
Total Operating Expenses	1,411,453	2,130,481
(DEFICIT)/SURPLUS	(215,609)	260,695
OTHER EXPENSES		
Senior Fellow Research Accounts	15,396	43,759
TOTAL EXPENSES	1,426,850	2,174,240
NET (DEFICIT)/SURPLUS	(231,005)	216,936

Motu Economic and Public Policy Research Trust

Summary Group Statement of Movements in Equity for the Year Ended 30 June 2013

	2013 \$	2012 \$
Net (Deficit)/Surplus for the year	(231,005)	216,936
Total recognised revenues & expenses	(231,005)	216,936
Opening Equity	1,745,407	1,528,471
Closing Equity	1,514,402	1,745,407
SENIOR FELLOW RESEARCH RESERVE		
Opening Senior Fellow Research Reserve	272,645	122,654
Transfers (to)/from Accumulated Funds	(49)	193,750
Expenses funded by Reserve	(15,396)	(43,759)
Closing Senior Fellow Research Reserve	257,200	272,645
ACCUMULATED FUNDS		
Opening Accumulated Funds	1,472,762	1,405,817
Net (Deficit)/Surplus for the year	(231,005)	216,936
Net Transfers from/(to) Senior Fellow Research Reserve	15,445	(149,991)
Closing Accumulated Funds	1,257,202	1,472,762
This Statement has been prepared on the basis as described p. 38		

Motu Economic and Public Policy Research Trust

Summary Group Statement of Financial Position as at 30 June 2013

	2013	2012
	\$	\$
CURRENT ASSETS		
Cash and Bank	138,937	268,611
Investments	1,387,519	1,478,024
Accounts Receivable	462,202	474,023
Work in Progress	65,748	43,487
Total Current Assets	2,054,405	2,264,145
CURRENT LIABILITIES		
Accounts Payable and Accrued expenses	215,019	418,528
Income Received in Advance	460,613	610,625
Total Current Liabilities	675,632	1,029,153
WORKING CAPITAL	1,378,773	1,234,992
NON-CURRENT ASSETS		
Plant, Property & Equipment	55,695	55,415
Investments	80,000	455,000
Total Non-Current Assets	135,695	510,415
NET ASSETS	1,514,468	1,745,407
Represented by:		
Accumulated Funds	1,257,268	1,472,762
Senior Fellow Research Reserve	257,200	272,645
EQUITY	1,514,468	1,745,407

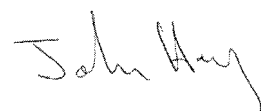
Motu Economic and Public Policy Research Trust

Note to the Summary Group Financial Statements for the Year Ended 30 June 2013

The summary financial statements for Motu Economic and Public Policy Research Trust for the year ended 30 June 2013 on pages 1 and 2 have been extracted from the full financial reports. The full financial reports were adopted by the Board of Trustees on 17 October 2013. The full financial statements were prepared in accordance with New Zealand generally accepted accounting practice ("NZ GAAP"). NZ GAAP in the case of the Group means Statement of Standard Account Practice and Financial Reporting Standards. The Group qualifies for the Framework for Differential Reporting.

The summary financial statements cannot be expected to provide as complete an understanding as provided by the full financial reports. A copy of the full financial reports can be obtained by email to: finance@motu.org.nz.

The auditor BDO Wellington has reviewed the summary financial statements for consistency with the audited full financial statements. An unqualified audit opinion has been issued. These summary financial statements have been approved for issue by the Board of Trustees.



John Hay
Chair

6 December 2013



BDO WELLINGTON

REPORT OF THE INDEPENDENT AUDITOR ON THE GROUP SUMMARY FINANCIAL STATEMENTS TO THE MEMBERS OF MOTU ECONOMIC AND PUBLIC POLICY RESEARCH TRUST

The accompanying group summary financial statements which comprise the summarised group statement of financial position as at 30 June 2013, the summarised group statement of financial performance, and the summarised group statement of movements in equity for the year then ended, and related notes, are derived from the group audited financial statements of Motu Economic and Public Policy Research Trust for the year ended 30 June 2013. We expressed an unqualified audit opinion on those financial statements in our report dated 17 October 2013.

The group summary financial statements do not contain all the disclosures required for full financial statements under generally accepted accounting practice in New Zealand. Those financial statements, and the summary financial statements, do not reflect the effects of events that occurred subsequent to the date of our report on those financial statements. Reading the group summary financial statements, therefore, is not a substitute for reading the audited group financial statements of Motu Economic and Public Policy Research Trust.

Board of Trustees' Responsibility for the Summary Financial Statements

The Board of Trustees are responsible for the preparation of a summary of the audited financial statements in accordance with FRS-43 *Summary Financial Reports*.

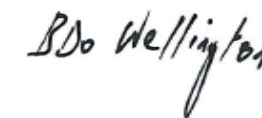
Auditor's Responsibility

Our responsibility is to express an opinion on the group summary financial statements based on our procedures, which were conducted in accordance with International Standard on Auditing (New Zealand) (ISA (NZ)) 810 *Engagements to Report on Summary Financial Statements*.

Other than in our capacity as auditor we have no relationship with, or interests in, Motu Economic and Public Policy Research Trust and its subsidiary.

Opinion

In our opinion, the group summary financial statements derived from the audited group financial statements of Motu Economic and Public Policy Research Trust for the year ended 30 June 2013 are consistent, in all material respects, with those financial statements, in accordance with FRS-43 *Summary Financial Reports*.



BDO Wellington
6 December 2013
Wellington
New Zealand

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