

ANNUAL REPORT 2016

# Chair in Public Finance

VICTORIA BUSINESS SCHOOL  
ORAUARIKI

Capital thinking. Globally minded.



# Introduction



## HIGHLIGHTS OF 2016

The year 2016 was the final year of Victoria Business School's (VBS) initial five-year sponsorship agreement for the Chair in Public Finance (CPF) with the Treasury, Inland Revenue, Ministry of Social Development (MSD) and PwC. For my part, at least, this 'partnership chair' arrangement has been both enjoyable and productive. I have especially appreciated the helpful engagement on the CPF advisory board of the sponsors' representatives and those from the School of Accounting and Commercial Law, the School of Economics and Finance and the School of Government over the past five years.

A particular highlight of this year has, therefore, been the decision by the Treasury and Inland Revenue to renew their CPF sponsorship for another five years, together with new sponsorship from the Ministry of Education and the New Zealand Productivity Commission (NZPC). The new and renewed sponsorship is due in no small part to the tireless efforts of Tricia Walbridge of the University's Development Office: her engagement with the Chair has been a huge, and much appreciated, contribution in recent years. I would also like to record my thanks to MSD and PwC, and particularly David Rea, Chris Money and Richard Forgan for their contributions, especially in the early years of the Chair.

Collaboration with sponsors was also a driving force behind a new project in 2016 with the Treasury and Inland Revenue to build new models of income taxation for New Zealand that capture behavioural responses by taxpayers when personal

taxes and transfers change. We were especially pleased to learn in September that the Ministry of Business, Innovation and employment (MBIE) will support the research with a 'smart ideas' grant over the next three years. A major part of the work will be benchmarking the resulting New Zealand models with equivalents overseas and turning them into practical policy advice tools.

December 2016 saw the inaugural CPF Masterclass on tax compliance, in which two academic experts on the subject (Professor James Alm from Tulane University in the US and Professor Gareth Myles from the University of Exeter in the UK) combined to deliver a two-day workshop on research into tax compliance and its application to practical tax administration. The Wharewaka o Poneke on the Wellington waterfront provided a welcome, relaxing location during the disruption following the November earthquake.

Finally, a key highlight in 2016 was witnessing the presentation of this year's New Zealand Institute of Economic Research (NZIER) Economics Award to my Victoria University colleague Professor John Creedy for his research on tax policy. John and I have collaborated on tax research over many years but this award recognised the excellence of his unique and extensive contributions to tax policy in New Zealand. John is also helping to ensure that public finance capability is being built up in New Zealand—one of the objectives of the CPF.



Image: Athfield Architects

## PLANS FOR 2017

The year ahead looks likely to be another busy one for the Chair. Highlights are expected to include:

- a visiting professorship in the School of Advanced Studies, University of London, planned for April to July, to pursue comparative research on UK and New Zealand tax policy and deliver a series of public lectures
- developing research on international tax modelling and benchmarking with John Creedy and researchers at the Treasury and Inland Revenue, with support from a new PhD scholar
- pursuing further research on public sector productivity with NZPC, moving on from the 2016 focus on the education sector to the health sector
- continued research into income inequality and mobility of New Zealanders in conjunction with researchers at NZIER
- further modelling of taxpayer compliance with Professor James Alm (Tulane University), Dr Marisa Ratto (University of Paris, Dauphine) and Inland Revenue colleagues.

Thank you to all those who have taken an interest in, or engaged with, the work of the Chair in 2016. Your support and continued interest in CPF events and publications have been much appreciated. One of the pleasures of working on tax policy research in Wellington is never knowing exactly where it will lead and how or when new productive working relationships will emerge. We

look forward to whatever 2017 brings in these respects! With a new Minister of Finance as we move into 2017 and, potentially another one, after the 2017 election, there are plenty opportunities for change in the tax policy space.

Finally, and sadly, the end of 2016 (actually the first day of 2017) brought the unwelcome news of the death of Professor Sir Tony Atkinson (1944–2017), one of the undoubted giants of modern public economics. His work on inequality measurement is seminal and surely worthy of a Nobel prize that will now forever elude him. I had the privilege of delivering an oration for Tony when he was awarded an honorary degree by the University of Nottingham in 2000. A short while before the ceremony, his knighthood was announced, so I phoned to see whether he should be announced and referred to as ‘Sir Anthony’ or ‘Sir Tony’. With typical kindness and humility, he explained that Tony was fine, but if Sir was to be used it should be “Sir Tony”—the least formal of the two options. In an era of increasing self-promotion by academics, Tony Atkinson was the embodiment of unpretentiousness. A dedicated Tony Atkinson webpage is here: [www.tony-atkinson.com](http://www.tony-atkinson.com)

**Norman Gemmell**  
Chair in Public Finance

# Aims and objectives

The CPF was established in 2011 at Victoria University of Wellington with sponsorship for five years from the University, three New Zealand government departments (Inland Revenue, MSD and the Treasury) and advisory firm PwC. From November 2016, the CPF was pleased to enter a second five-year period of sponsorship with Inland Revenue, and Treasury, with the Ministry of Education replacing the Ministry of Social Development as a core sponsor. The NZPC continues its current sponsorship into 2017.

The Chair is located in Victoria Business School within the School of Accounting and Commercial Law and reports to an advisory board. The Chair aims to build up expertise in the area of public finance and to promote research, debate, policy analysis and advice on public finance matters. Specifically the Chair's objectives are:

- to advance rigorous, respected, public finance research in New Zealand
- to improve the quality of public finance analysis and discussion among key stakeholders in New Zealand
- to develop public finance research and teaching capabilities in New Zealand
- to research these topics, focusing on broad conceptual, empirical and policy issues and on specific applications to New Zealand public finance and social welfare policy debates
- to strengthen collaboration between the University and the public and private sectors on public finance issues.

# Advisory board

The CPF is supported by an advisory board that includes senior representatives from the University and partner and sponsoring organisations. The role of the board is to advise and support:

- the research work programme of the CPF
- links with key stakeholders
- policy and public engagement initiatives
- the financial underpinning of the Chair.

The Chair reports regularly to the advisory board on the research, public and executive education and other matters relevant to its work programme.

Reflecting the changes in sponsorship of the CPF from November 2016, the board consists of the following members:

- **Mr Gerald Minnee**  
Ministry of Social Development (Advisory Board Chair)
- **Dr Matt Benge**  
Chief Economist, Inland Revenue
- **Mr Paul Conway**  
Director, Economics and Research,  
New Zealand Productivity Commission
- **Mr Tim Ng**  
Chief Economic Adviser, Treasury
- **Dr Philip Stevens**  
Group Manager Analysis and Research, Ministry of Education
- **Professor Bob Buckle**  
Pro-Vice-Chancellor and Dean, Victoria Business School
- **Professor Ian Eggleton**  
Head of the School of Accounting and Commercial Law
- **Professor Girol Karacaoglu**  
Head of the School of Government
- **Associate Professor Jack Robles**  
Head of the School of Economics and Finance

# Research

## RESEARCH HIGHLIGHTS

### The Impact of Taxes and Public Spending on Long-run OECD Growth

**Researchers** Norman Gemmell, Richard Kneller and Ismael Sanz

This research project was completed in 2016 with the publication of research on the links between public spending and economic growth and the analysis of firm-level data on the effect of corporate tax rates on growth rates in various OECD countries, including a case study of Germany.

**Published papers** Gemmell, N., Kneller, R. and Sanz, I. (2016). Does the composition of government expenditure matter for long-run GDP levels? *Oxford Bulletin of Economics & Statistics*, 78, 4, 522–547.

Gemmell, N., Kneller, R., McGowan, D., Sanz, I. and Sanz-Sanz, J. (2016). Corporate taxation and productivity catch-up: Evidence from European firms. *Scandinavian Journal of Economics*. Published online at DOI: 10.1111/sjoe.12212.

### Estimating the Elasticity of Taxable Income (ETI) in New Zealand

**Researchers** John Creedy, Norman Gemmell and Josh Teng

This project investigates two aspects of the ETI concept: the impact of different econometric approaches on estimates of the elasticity of taxable income, based on the New Zealand 2001 reform; and analysis of the 2010 tax reforms that reduced all marginal income tax rates and simultaneously raised the rate of GST.

**Published paper** Creedy, J. and Gemmell, N. (2016). Measuring revenue-maximising elasticities of taxable income: Evidence for the US income tax. *Public Finance Review*, published online at DOI: 10.1177 /1091142115589970.

**Working paper** Creedy, J. and Gemmell, N. (2016). The elasticity of taxable income: Allowing for endogeneity and income effects. *Working Papers in Public Finance*, 03/2016, Victoria Business School, Victoria University of Wellington.

### The Size and Scope of the Public Sector in New Zealand

**Researchers** Norman Gemmell, Derek Gill and Loc Nguyen

This project began by documenting the changing size and scope of the public sector in New Zealand since the early twentieth century, using a variety of metrics or 'lenses' by which to assess government size. Taking the ratio of public expenditure to GDP since the early 1970s as one relative size metric, the project examines how far short- and long-term changes in size can be explained by existing theories of public expenditure applied to New Zealand. The work is being undertaken in conjunction with NZIER and is contributing to their public data project at [www.data1850.com](http://www.data1850.com)

**Working papers** Gemmell, N., Gill, D. and Nguyen, L. (2016) The changing size of the state in New Zealand, 1900–2015. *Working Papers in Public Finance*, 04/2016, Victoria Business School, Victoria University of Wellington.

Gemmell, N., Gill, D. and Nguyen, L. (2016) Explaining the size of the state in New Zealand, 1972–2014. *Working Papers in Public Finance*, 10/2016, Victoria Business School, Victoria University of Wellington.

### Income Inequality, Income Mobility and Taxation in New Zealand

**Researchers** Christopher Ball, John Creedy, Norman Gemmell and Loc Nguyen

This project aims to examine the extent of income inequality and income mobility among New Zealand taxpayers using new datasets and mobility measures. Research is being conducted on various datasets, including Statistics New Zealand and Inland Revenue data on taxpayer incomes back to the 1930s, and longitudinal Inland Revenue data on income mobility from the 1990s. New measures of income mobility have been developed and tested on longitudinal New Zealand income data, and the robustness of constructing 'pseudo-panel' data from repeated cross-sections is being investigated.

**Working papers** Creedy, J. and Gemmell, N. (2016) Types of income mobility: insights from TIM curves. *Working Papers in Public Finance*, 05/2016, Victoria Business School, Victoria University of Wellington.

Ball, C. (2016) Estimating income dynamics from cross-sectional data using matching techniques. *Working Papers in Public Finance*, 06/2016, Victoria Business School, Victoria University of Wellington.

## Local Taxes and Auckland Agglomeration

**Researchers** Norman Gemmell, Arthur Grimes, Mark Skidmore

In 2010, the Auckland super city was formed through the amalgamation of seven local authorities, consisting of around 200 suburban entities and towns. The amalgamation resulted in communities using capital values as the basis for local taxation (rates), whereas some communities had previously used land values. The new city also transitioned to a single system of 'development contributions' paid by developers. This project examines how far the changes in the Auckland property tax regime affected the location and intensity of building development.

This research is being undertaken with the support of Lincoln Institute of Land Policy, Cambridge, Massachusetts, USA, and Motu Economic and Public Policy Research, Wellington, New Zealand.

**Working paper** Gemmell, N., Grimes, A. and Skidmore, M. (2016) Do local property taxes affect new building development? Results from a quasi-natural experiment in New Zealand. *Working Papers in Public Finance*, 08/2016, Victoria Business School, Victoria University of Wellington.

## Public Service Productivity

**Researchers** Norman Gemmell, Patrick Nolan, Grant Scobie

This project reviews current evidence on public sector productivity in New Zealand at both the aggregate level and for key sectors, drawing on international literature on concepts, measurement and evidence. It aims to develop a principled framework for the analysis of public sector productivity with a focus on the micro level. This microfocus began in 2015-16 with public education. Specifically, the project reviewed existing evidence on productivity in the New Zealand education sector and assessed new approaches to adjusting for quality in measuring education sector productivity in in New Zealand. In 2016-17, the project examines similar issues for public sector health services.

**Working paper** Gemmell, N., Nolan, P. and Scobie, G.S. (2016) *Public sector productivity. A case study of the New Zealand education sector*, New Zealand Productivity Commission research paper 2016/1 (draft), September 2016.

## Tax Compliance, Late Payment Penalties and Enforcement

**Researchers** Norman Gemmell and Marisa Ratto

Standard models of tax evasion predict effects on compliance that are dependent on the probability of detection, the tax rate and the penalty for evasion. While compliance effects of the first two have been extensively debated and tested, the effect of penalties has rarely been tested directly. This project develops models of late payment non-compliance when enforcement is imperfect, and tests for the effects of both actual and perceived penalty rates on late payment compliance, based on an experiment involving a sample of New Zealand GST payers.

**Working paper** Gemmell, N. (2016) An Allingham-Sandmo tax compliance model with imperfect enforcement. *Working Papers in Public Finance*, 09/2016. Victoria Business School, Victoria University of Wellington.

## Modelling and Benchmarking Personal Income Taxes and Transfers in New Zealand

**Researchers** John Creedy, Norman Gemmell and Penny Mok

This project began in mid-2016 and is developing two new behavioural income tax-transfer models for New Zealand: a tax-transfer microsimulation model and econometric models of taxable income elasticities. These will be benchmarked internationally by comparing them with similar models for Australia and a number of European countries. The project aims to improve the evidence base for tax policy advice in practice, and is being conducted in collaboration with modellers at the Treasury and Inland Revenue. It is also supported by a three-year 'smart ideas' grant from MBIE.

**Working paper** Creedy, J. and Mok, P. (2015) Labour supply in New Zealand and the 2010 tax and transfer changes. *New Zealand Treasury Working Paper No. 15/13*. Wellington: The Treasury.

# Publications 2015–2016

## JOURNAL ARTICLES, BOOKS AND BOOK CHAPTERS

- Creedy, J. and Gemmell, N. (2016). Taxation and the user cost of capital. *Journal of Economic Surveys*. Published online at DOI: 10.1111/joes.12137.
- Creedy, J. and Gemmell, N. (2016). Measuring revenue-maximising elasticities of taxable income: Evidence for the US income tax. *Public Finance Review*. Published online at DOI: 10.1177 /1091142115589970.
- Gemmell, N., Kneller, R., McGowan, D., Sanz, I. and Sanz-Sanz, J. (2016). Corporate taxation and productivity catch-up: Evidence from European firms. *Scandinavian Journal of Economics*. Published online at DOI: 10.1111/sjoe.12212.
- Gemmell, N., Kneller, R. and Sanz, I. (2016). Does the composition of government expenditure matter for long-run GDP levels? *Oxford Bulletin of Economics & Statistics*, 78, 522–547.
- Aziz, O., Gemmell, N. and Laws, A. (2016). The distribution of income and fiscal incidence by age and gender: Some evidence from New Zealand. *Review of Income and Wealth*, 62, 534–558.
- Gemmell, N. and Gill, D. (2016) The myth of the shrinking state? What does the data show about the size of the state in New Zealand?, *Policy Quarterly*, 12, 3–10.
- Carey, S., Creedy, J., Gemmell, N. and Teng, J. (2015). Estimating the elasticity of taxable income in New Zealand. *Economic Record*, 91, 292, 54–78.
- Creedy, J. and Gemmell, N. (2015). Revenue-maximising tax rates and elasticities of taxable income in New Zealand. *New Zealand Economic Papers*, Published online: 16 March 2015. DOI:10.1080/00779954.2014.893860.
- Creedy, J., Gemmell, N. and Scobie, G. (2015). Pensions, saving and housing: A life-cycle framework with policy simulations. *Economic Modelling*, 46, 346–357.
- Gemmell, N., Kneller, R. and Sanz, I. (2015). The growth effects of tax rates in the OECD. *Canadian Journal of Economics*, vol. 47, no. 4. Published online, March 2015, DOI: 10.1111/caje.12105.
- Gemmell, N. and Morrissey, O. (2015). Distribution and poverty impacts of tax structure reform in developing countries: How little we know. Chapter 16 in J. Alm and J. Martinez-Vazquez (eds) *Tax Reform in Developing Countries, Volume 1*. Cheltenham: Edward Elgar.

## POLICY/MEDIA ARTICLES

- Gemmell, N. (2016) All Kiwis gain from putting paid to tax avoidance mysteries, *Dominion Post*, 5 October
- Gemmell, N. (2016) The size and shape of the state in New Zealand, *New Zealand Public Finance Newsletter*, Issue 10.
- Gemmell, N. (2016) We need to know more about taxpayer responses to tax changes: The New Zealand perspective, *Aus.taxpolicy.com.au* blog, 28 November.
- Gemmell, N. (2016) English has left a strong legacy, *New Zealand Herald*, 20 December.
- Gemmell, N. (2015) Tax to stop ‘bad’ behaviour dents level playing field, *Dominion Post*, 26 May.
- Gemmell, N. (2015) Return to budget surplus in 2015: Does it matter?, *New Zealand Public Finance Newsletter*, Issue 6.
- Gemmell, N. (2015) The 2015 budget: How will the economy be affected? *New Zealand Public Finance Newsletter*, Issue 7.
- Gemmell, N. (2015) Bright-line capital gains tax: A tax but not as we know it, *New Zealand Public Finance Newsletter*, Issue 7.





## CONFERENCE AND SEMINAR PRESENTATIONS

- Gemmell, N. (2016) Types of income mobility: Insights from TIM curves. Paper presented to the New Zealand Association of Economists Annual Conference, Auckland University of Technology, Auckland (July).
- Gemmell, N. (2016) Types of income mobility: Insights from TIM curves. Paper presented to the Department of Economics, Auckland University of Technology, Auckland (October).
- Gemmell, N. (2016) The elasticity of taxable income: Allowing for income effects. Paper presented to the 4th Annual Workshop of the Tax Administration Research Centre, University of Exeter, UK (April).
- Gemmell, N. (2016) The size and scope of the public sector in New Zealand. Presentation to the New Zealand Productivity Commission Roundtable, Wellington (June).
- Creedy, J. and Gemmell, N. (2015) Inequality in New Zealand: How should we measure it? Presentation to Victoria Business School's Commerce Teachers' Professional Development Day, Wellington and Auckland (December).
- Gemmell, N. (2015). Making value judgements in economics: Inequality and redistribution. Invited presentation to the Government Economics Network Annual Conference, Wellington (November).
- Gemmell, N. (2015). How do penalties affect taxpayer compliance? Evidence from a taxpayer experiment. Invited presentation to Inland Revenue, Wellington (November).
- Gemmell, N. (2015). Evaluating investment in education: Economic frameworks, challenges and evidence. Invited presentation in Knowledge Seminar Series at the Ministry of Education, Wellington (October).
- Gemmell, N. (2015). The elasticity of taxable income in New Zealand. Evidence for personal taxpayers from unit record data. Presentation to the International Institute of Public Finance Annual Congress, Dublin, Ireland (August).
- Gemmell, N. (2015). How do penalties affect taxpayer compliance? Evidence from a taxpayer experiment. Presentation to Her Majesty's Revenue and Customs, London, UK (July).
- Gemmell, N. (2015). Taxpayers' responses to penalties: Evidence from a taxpayer experiment in New Zealand. Presentation to the Shadow Economy Conference, Tax Administration Research Centre, University of Exeter, UK (July).



## WORKING PAPERS IN PUBLIC FINANCE

The Working Papers in Public Finance series includes papers by the Chair, New Zealand Public Finance (NZPF) research associates and other public finance researchers.

### Papers in the 2016 series

Number	Authors	Title
WP01/2016	Creedy, J.	The optimal threshold for GST on imported goods
WP02/2016	Gemmell, N., Kneller, R., McGowan, D., Sanz, I. and Sanz-Sanz, J. F.	Corporate taxation and productivity catch-up: Evidence from European firms
WP03/2016	Creedy, J., Gemmell, N. and Teng, J.	The elasticity of taxable income: Allowing for endogeneity and income effects
WP04/2016	Gemmell, N., Gill, D. and Nguyen, L.	The changing size of the state in New Zealand, 1900–2015
WP05/2016	Creedy, J. and Gemmell, N.	Types of income mobility: Insights from TIM curves
WP06/2016	Ball, C.	Estimating income dynamics from cross-sectional data using matching techniques
WP07/2016	Creedy, J.	Optimal tax enforcement: Keen and Slemrod explored
WP08/2016	Grimes, A., Gemmell, N., Skidmore, M.	Do local property taxes affect new building development? Results from a quasi-natural experiment in New Zealand
WP09/2016	Gemmell, N.	An Allingham-Sandmo tax compliance with imperfect enforcement
WP10/2016	Gemmell, N., Gill, D. and Nguyen, L.	Explaining the size of the state in New Zealand, 1972–2014

## NEW ZEALAND PUBLIC FINANCE NEWSLETTERS

The New Zealand Public Finance (NZPF) newsletter was launched in November 2013. It is now produced three times per year by the Chair, and has contributors from across New Zealand and overseas. Each newsletter aims to provide:

- summaries of recent research
- profiles of public finance people
- discussion on topical public finance policy issues
- reports on recent and forthcoming events
- news about public finance from around the world
- web links to other public finance organisations in New Zealand and overseas.

In addition to public finance news and other regular features, the three NZPF newsletters in 2016 included people profiles for Dr Angela Mellish, Dr Peer Skov, and visiting Professors James Alm and Gareth Myles. Shorter research articles covered such topics as:

- The distributional effects of consumption taxes in New Zealand (Alastair Thomas)
- The power of large datasets (Dr Peer Ebbesen Skov)
- The size and shape of the state in New Zealand (Norman Gemmell and Derek Gill)
- Public Finance Research at the Melbourne Institute (Guyonne Kalb and Nicolas Herault)
- Bill English as finance minister, 2008–2016: From ‘English patient’ to English legacy (Norman Gemmell)
- A firm-level perspective on New Zealand’s persistently weak labour productivity (Paul Conway)
- New Zealand needs to know more about taxpayer responses to tax changes (Norman Gemmell).

There were also conference and event reports from:

- Government Economics Network Conference (Callum Webb)
- Guarding the Public Purse: Fiscal Policy Frameworks to Support a Modern Economy (Norman Gemmell and Martin Fukac)
- Public Finance Papers at the New Zealand Association of Economics Annual Conference (Norman Gemmell)
- Tax Compliance Masterclass (Norman Gemmell).

In 2017, as a result of growing readership distribution, we will review how we will deliver public finance news to our stakeholders. This will also be in alignment with upcoming changes to our revamped website.



Past newsletters are available at <http://nzpublicfinance.com/newsletters/>

## PUBLICATION OUTREACH

The CPF uses various tools to track the number of publication downloads and citations to show which research areas are generating most interest. Citations of journal publications are tracked by Publish or Perish software. The Working Papers in Public Finance (WPPF) series is tracked via Research Papers in Economics (RePEc) and Victoria research archives. Access rates for the NZPF newsletters are calculated through Google Analytics.

### Total number of citations

	Dec 2012	Dec 2013	Dec 2014	Dec 2015	Dec 2016	% Inc 2015-16
2011	41	56	80	112	151	35%
2012	8	26	26	59	90	53%
2013		7	20	59	96	63%
2014			0	9	34	378%
2015				9	27	300%
2016		-	-	-	5	

Downloads for the WPPF series began in September 2012. The table below shows the download statistics through the Victoria University of Wellington Research Archive and RePEc for each calendar year, from September 2012 to December 2016.

### WPPF series downloads (annual)

	As of Dec 2012	As of Dec 2013	As of Dec 2014	As of Dec 2015	As of Dec 2016
RePEc	211	397	418	311	175
Victoria Research Archives	1,100	2,182	2,135	2,777	2,361



# Research supervision and teaching

## PHD STUDENTS

David Law, Senior Economist, New Zealand Electricity Authority



**Research project:** The performance of the New Zealand economy: Savings and retirement Income

**Abstract:** This thesis uses a variety of empirical techniques and data sources to explore aspects of New Zealand's savings behaviour, policy and other issues related to retirement income adequacy such as housing affordability. In particular, the performance of a flagship policy (KiwiSaver) is examined, with particular attention given to the question of whether or not membership has been associated with higher levels of net wealth, saving or improved expected retirement income outcomes. With the performance of KiwiSaver being poor on all dimensions, the effects of other retirement income policies on national savings are examined by developing a model that links these policies to reductions in New Zealand Superannuation costs. Finally, patterns of housing affordability across individuals are described and explained using panel regression techniques, and the likely effects of a policy designed to improve housing affordability are explored.

Carolyn Palmer, Principal Advisor, Treasury



**Research project:** Good tax policy—on shaky ground? An assessment of tax policy decisions in response to natural disasters

**Abstract:** In recent years, a series of natural disasters placed significant social and fiscal strain on a number of economies. Determining the appropriate government response to such natural disasters, both in the short-, medium- and longer-term, involves multiple complex policy decisions that often need to be made under significant time pressure with limited information. One area where governments are called on to respond is tax policy. Natural disasters raise tax policy issues such as how to treat insurance receipts, how to restore public finances and meet the public cost of natural disasters without jeopardising economic growth and the role tax should play in economic redevelopment. The focus for the study is tax policy changes made in response to three recent natural disasters: New Zealand—Christchurch earthquakes; Australia—Queensland floods; and Japan—Tōhoku earthquake and tsunami.

**Status:** Carolyn submitted her thesis in 2016.

Alastair Thomas, OECD Centre for Tax Policy and Administration



**Research project:** The distributional effects of consumption taxes in OECD countries

**Abstract:** This research investigates the distributional effects of consumption taxes in OECD countries. The analysis is based on consumption tax microsimulation models constructed using household expenditure microdata for 23 OECD countries, including New Zealand. The first part of the research investigates whether consumption taxes are regressive or progressive, by undertaking a detailed distributional analysis of consumption tax burdens across income and expenditure deciles. The models are then used to examine the effectiveness of reduced and zero GST/VAT rates at achieving redistributive goals. A third part of the research will be to simulate the redistributive effects of various hypothetical reforms, including removing poorly targeted reduced and zero GST/VAT rates identified in the prior analysis.

**Status:** In late 2016 Alastair suspended his part-time PhD registration for a year while he concentrates on his full-time research at the OECD.

## SUMMER SCHOLARS

### 2015–16

In February 2016, the Chair completed supervision of a 2015–2016 Summer Research Scholarship project with NZPC, and co-supervised a Treasury–CPF Summer Internship project on modelling material hardship during February to May 2016.

#### Matthew Horwell



**Topic:** Measuring productivity in the public education sector

**Sponsored by:** New Zealand Productivity Commission

**Research project:** Future real economic growth will increasingly depend on higher rates of productivity growth. This applies as much to the public sector as the private or market sector, of which education is a major part. There are, however, major challenges in measuring productivity for the education sector such as making adjustments for quality changes. This project is part of a larger investigation into the determinants of productivity growth in the public sector and will focus on how to account for changes in quality when measuring the outputs of government agencies.

Matt's research involved a review of international experience with quality adjustments (such as those used by the Office for National Statistics in the United Kingdom) and considers how different quality adjustment techniques could be applied in the New Zealand context.

This project was jointly supervised with Dr Grant Scobie and Dr Patrick Nolan at the New Zealand Productivity Commission.

#### Ritaban Bandyopadhyay



**Topic:** Modelling material hardship in New Zealand

**Sponsored by:** Treasury

**Research project:** This project investigated how far the Ministry of Social Development's Economic and Living Standards Index (ELSI) was correlated with other measures of income and non-income deprivation and other household characteristics of poor and non-poor households. Ritaban's research involved examining a series of bivariate relationships and cross-tabs and logit regression analysis to identify how far a household's material deprivation can be predicted from these household characteristics. Best predictions were found to be around 52 percent.

### 2016–17

The Chair is co-supervising a further Summer Scholar in 2016–17 with Professor Jackie Cumming of the the University's Health Services Research Centre and Dr Patrick Nolan of the New Zealand Productivity Commission.

#### Huon Fraser



**Topic:** Public sector productivity: Designing a health-sector case study

**Sponsored by:** the New Zealand Productivity Commission

**Research project:** This project is part of a larger investigation into the determinants of productivity growth in the public sector, in this case focusing on the question of how to assess changes in productivity in the health system. The project is reviewing local and international evidence on health sector productivity and examining how techniques can best be applied in the New Zealand context given available health sector data.

# Events

## PUBLIC FINANCE DEBATES

The 2016 Public Finance Debate series hosted by GEN and the CPF ran on 28 September and 15 December and featured two topical motions to engage both debaters and audience.

The first debate examined the motion 'Big data in policy advice: Big opportunity or big risk?' Dr Simon Wakeman argued in favour of using big data and the push for agencies to use data better to predict demand for services. Dr Peer Skov countered that the big data approach to policy is too narrow and all-too-readily misidentifies causal factors important for policy evaluation. Mark Sowden provided some commentary before a vote which, perhaps surprisingly, produced a majority against the motion, implying greater concerns about the risks of big data than favouring the opportunities it provides.

The traditional festive Christmas event debated 'New Zealand needs a sugar tax to protect us from Christmas excesses'. Sarah Hogan argued for the motion, educating the audience on the health effects of excess consumption of sugar and the need for regulation. Janesa Jaram countered the motion with a lighthearted plea to leave our Christmas treats alone, backed by her argument that there was a lack of evidence that sugar taxes change behaviour.

Thanks are due to everyone who attended the debates, and to all of our speakers for providing engaging input and food for thought. Finally, thank you to MBIE for providing the venue for the debates, and GEN for co-sponsorship and organisation.

## STAKEHOLDER ENGAGEMENT

Events included:

- NZIER presentation on 'Size of the New Zealand State' research
- Presentation to NZPC roundtable
- Presentation to Tax Administration Research Centre annual workshop at Exeter University
- Participation in NZPC Productivity Hub activities/workshops/seminar
- Chair/organiser for tax benchmarking workshop held at the Treasury
- AUT Seminar Series presentation
- NZIER annual general meeting
- Treasury Monetary Policy workshop
- Joint CPF-GEN public finance debates.

Other engagement activities:

- advice to Office of the Auditor-General: Report on Treasury's long-term fiscal statement
- appointed Chair of Treasury Technical Advisory group for tax model redevelopment
- tax compliance masterclass
- New Zealand Association of Economists Annual conference, panel chairman for Treasury-sponsored fiscal policy frameworks session.

# Websites

## CHAIR IN PUBLIC FINANCE

The CPF website is hosted within the School of Accounting and Commercial Law, Victoria Business School at [www.victoria.ac.nz/cpf](http://www.victoria.ac.nz/cpf)

The CPF site received around 3400 page views in 2016. The most popular pages were the home page and events pages relating to the public finance debate series.

## NEW ZEALAND PUBLIC FINANCE

The New Zealand Public Finance website ([www.nzpublicfinance.com](http://www.nzpublicfinance.com)) aims to improve the dissemination of research, publications and jointly sponsored events and hosts the quarterly NZPF newsletter.

In 2016, NZPF received over 3,100 page views, with 80 percent of the traffic on the site generated by new users. The most popular pages were the home page and the 'What is public finance?' page. The research pages and upcoming events also generate significant web traffic, along with the Working Papers in Public Finance series.

# Working with sponsors

Financial support from sponsors in 2016 again included core funding for the CPF from the University, PwC, Inland Revenue, MSD, the Treasury and NZPC. The Ministry of Education has signed up for sponsorship for five years from 2017.



We have also received additional funding for specific events or pieces of work from the following organisations:

- GEN for the public finance debates
- NZIER for income inequality, income mobility and size of the state research projects
- NZPC for the 2015–16 and 2016–17 summer scholars
- Lincoln Institute of Land Policy for the Auckland agglomeration project, phase II.





TE WHARE WĀNANGA O TE ŪPOKO O TE IKA A MĀUI