ISSN 1177-6366 (Print)
ISSN 1177-634X (Online)

nzae
New Zealand Association of Economists

Asymmetric information

ISSUE NO.54 December 2015

A newsletter to promote the exchange of information, news and ideas among members of the New Zealand Association of Economists (Inc).

PAST ISSUES

All past issues are now available for downloading (or for citing in scholarly publications) free of charge from:
http://www.nzae.org.nz/blog-page/nzae-newsletters/

New Zealand Association of Economists Inc.
VIV HALL Editor *email:* viv.hall@vuw.ac.nz
http://www.nzae.org.nz

Asymmetric Information Issue 53, August 2015: Interview with John Yeabsley (by David Galt)

The previous editor of AI, John Creedy, apologises for inadvertently having an early version of this interview printed in the August 2015 issue. The version which should have been printed will be made available as soon as possible at http://www.nzae.org.nz/blog-page/nzae-newsletters/.

CONTENTS

EDITORIAL

Viv Hall
viv.hall@vuw.ac.nz

In May of this year, I was surprised to be contacted by Seamus Hogan, inviting me to consider succeeding John Creedy as editor of Asymmetric Information. Not the least because the invitation came from Seamus, I was pleased to accept. I am also very pleased that John then agreed to be interviewed by Norman Gemmell for this issue.

The 'Five Minute Interview' is with Roger Procter, whose most recent contribution to New Zealand economics has been as Chief Economist at the Ministry of Business, Innovation and Employment (MBIE). In September, Alan Bollard was announced as winner of the 2015 NZIER Economics Award, and this issue therefore includes both the award citation and Alan's acceptance speech.

Paul Walker continues to provide his always informative 'Blogwatch', and Adam Jaffe provides key insights from the Motu/ Royal Society of New Zealand evaluation of the Marsden Fund's effect on New Zealand's research output. Also from Motu, and produced under Motu's Partnership with the Productivity Hub, David Maré, Dean Hyslop and Richard Fabling highlight some key findings from their investigation of cyclical changes in New Zealand's workforce skill and firm productivity measures.

Lindsay Beck describes the new statistics being developed by Statistics New Zealand to enhance further our understanding of linkages between the financial sector and the 'real' economy, and the links between stock and flow measures. We have a Report from GEN featuring their November 2015 Annual Conference and their Training Courses for 2016, and this issue's Research in Progress comes from the University of Waikato. Members of the Association will also be able to note the significant number of 2015 New Members.

Regular readers of AI will see that there is not yet a successor to Grant Scobie's 2B RED column, nor a 'Fine Lines' piece. This is therefore a good opportunity for me to remind members that I would welcome either a regular or a from-time-to-time contributor or group of contributors in the style of Grant's filings. His 2B REDs generally featured books of interest, but the highlighting of material from international Working Papers or Discussion Papers could provide material of similar interest to members. And on 'Fine Lines', let me indicate that contributions in this area need not be confined to elegant economic-theoretic diagrams – a memorable empirical diagram or applied econometric insight would be equally welcome.

In a wider context, I provide a general reminder that the submission of brief articles or comments on any issue of interest to NZAE members will be welcome.

Finally, it would be helpful to all those consulting the NZAE Website if new members could provide their initial member profile and if existing members with now somewhat dated profiles could provide their updates to economists@nzae.org.nz.

INTERVIEW WITH JOHN CREEDY

by Norman Gemmell

Q. Can you start by saying how you came to choose economics as your degree subject?

A. It would be nice to give an explanation in terms of having the standard kind of motivation given by economists. But, I actually came close to doing civil engineering, and had offers for that as well as economics. I had a marginal preference for economics and a determining factor was simply that I was keen to go to Bristol. I had a very difficult time choosing A-Level subjects because I was interested in all the O-level subjects, although maths was my weakest.[1] We had no advice at school, but I read a careers-advice book that I borrowed from the council offices, and that convinced me that economics and maths would offer more choice at a later stage. So although I had no idea what economics was about, I selected Economics, Maths and Physics. I was very fortunate that we had a new teacher at my school and he was very encouraging.

My motivation was absolutely clear. My home background in Coventry was very homogeneous, in that virtually everyone at my primary and secondary schools lived in the same kind of small terraced house and our fathers worked in car factories or factories making car components. I was simply desperate to avoid working in a factory, so I had one single-minded aim - to get to university – and that was more important than the actual subject. Of course you have to remember that a very small proportion of people went to university in those days, and a minute proportion went from 'Comprehensive' schools to places like Bristol and Oxford. Having got to university, I wasn't going to waste my only chance, so I worked very hard.

I can also say that in a roundabout way I was stimulated by our A-level text book, by Cairncross. It would be hard to imagine a more dreadful and dull book. But the good thing was that it drove me into the library where I took books from the shelves simply if they looked as if they might be relevant. That's what led me to read decent books, and set the pattern for the way I studied all through university – that is, almost independently in various libraries. When I was interviewed in Oxford for an Economic and Social Research Council grant, I was horrified to find that Cairncross was on the interview panel. He gave me a really hard time.

1 O-Level and A-Level stand for 'Ordinary' and 'Advanced' level examinations then used in English schools, generally taken at ages 16 and 18 respectively. University entrance depended on performance in these examinations.

Q. You are probably best known, in research terms, for your contributions to labour economics, public economics and the history of economic thought. Which of those initially stimulated your research interest in economics and how did the others develop?

A. In my final year at Bristol the course in international trade was jointly taught by Richard Lecomber and Esra Benathan, who had just arrived. They were, in their very different ways, very stimulating indeed. Richard, who later died at what we would consider to be a very young age, was especially encouraging. So I expected to do research on a trade topic, particularly as Max Corden was at Oxford, and I've always been a huge fan of Max. But, by an amazing stroke of luck, Alan Brown moved from Bristol to Oxford at the same time, and he suggested that I might like to look at the model of the changing distribution of income with age, which was summarised in less than a paragraph in *The Lognormal Distribution*. He gave me some notes on estimating the model by maximum likelihood using Fisher's 'method of scoring', and I just 'ran with it'. That started my work on income distribution, aggregation, life cycle modelling and mobility which I suppose you could say set the foundation for my later work. The 'consumption function' was still a big topic at that time, and one aim was to apply the model in that context: that took me a bit longer. I was for a while worried that it was narrowly technical, but then I found that Friedman and Solow, to name just two, started their economics research with an income distribution topic, so I stopped worrying.

Then later, through Peter Hart - after I went to Reading - I got involved in analysing some of the first longitudinal income data available in the UK and in Sweden. I thought at the time, and still do, that I was incredibly lucky to get the lectureship in Reading. I found myself in a splendid department, as a very young lecturer with superb colleagues. It was a really good collegial environment. Apart from Peter, who was a great mentor to so many of us, the outstanding star of the department was, and still is, Mark Casson. Mark is such an amazingly creative person, as well as being a real scholar, and his conversation on any economics topic is second to none. He tackles big questions in such insightful ways.

As a result of my life-cycle modelling, I was perfectly placed to work on the State Earnings Related Pension Scheme (SERPS), introduced in the UK in the mid-to-late 1970s, for which I produced a cohort simulation model. People in the Government Actuary's Department were not pleased when I reported that their cost estimates were much too low, but they subsequently revised their figures in line with mine. Hardly anyone was working on pensions in the UK at that time. From then on, much of my work has been stimulated by practical policy questions, which is what I really like. I suppose you could say there's been an emphasis throughout my career on economic modelling of various kinds. In all this, the influence of Alan Brown is unmistakable. I like to think so anyway.

Regarding the history of economic thought, I've never made any separation between the study of a subject and its history. I can't think of one without the other. As an undergraduate I read more on the history of economic analysis, and more of the work of the 'pioneers', than the modern texts which I've always found dull. I was both horrified and confused one day when I found that one of my lecturers had not actually read Chamberlin's book on monopolistic competition. Don't get me started on that person! But of course it wasn't really unusual: a 'classic' is now sadly a book that is widely cited and never read. All my independent reading was not at all systematic, and I didn't expect to do serious research in the area, until Denis O'Brien asked me to write a chapter on Edgeworth for a book he was editing on pioneers of modern economics. Denis's knowledge of the whole literature of economics is, as you know, staggering and profound, so this gave me the confidence to do some serious and more focussed work.[2] Confidence is such a big ingredient in doing research, but in addition I wanted to strive to write something he would consider worthy of publishing. But of course it would have been impossible without all my earlier reading, and I had by then the solid beginnings of a decent research library. Starting with such a difficult figure as Edgeworth opened up a big research agenda that I managed to keep going along with my other work for some years. But it's simply not possible for me to do serious historical work in economics these days.

Q. With 36 books, 17 edited books, 58 book chapters, and about 275 journal articles since your first published paper in 1973, your publication record is immense. Have you worked every waking hour, or been much more productive per hour than mere research mortals, or both?

A. Well, my Mother always used to say (or perhaps I should say, complain) that I had two speeds only - stop and full ahead. She was right. I don't think it is a matter of the input of time, but of concentration. Of course, next to concentration, we need curiosity. I like Dorothy Parker's comment that, 'The cure for boredom is curiosity. There is no cure for curiosity'. Outside academia, people often mistake curiosity for criticism, but without it we might as well give up.

I've never been good at holidays, but since being a student, and for a few years after then, I have not put in long work hours. And I've spent a lot of time with other interests. Indeed, in the mid-1990s I deliberately cut the length of my working days and found that my productivity, as well as quality of life, went up. However, from before my undergraduate days I have been well organised, and I hate wasting time. Also, I have a really strong aversion to not finishing anything I start. William Shockley, the co-inventor of the transistor, had some interesting things to say about research productivity. He produced a list of necessary characteristics and, on the argument that they operate multiplicatively, suggested that productivity is lognormally distributed. I won't argue with that.

Q. Among your professional peers or mentors, who would you say has most influenced your approach to economics, and why?

A. Well, it's very easy to answer that question regarding mentors - the three people I've already mentioned: Alan Brown, Peter Hart and Denis O'Brien. They all, in their very different ways, are extremely impressive and I've been so fortunate to have benefited from their help, encouragement and friendship. They provide ideal role models, not only regarding their economics, but their personal qualities and their broad interests.

I could talk for ever about Alan Brown, but perhaps I can just urge people to read my brief memoir of him, which is

2 A brief summary of Denis's work up to the late 1990s is in: http://www.hetsa.org.au/historyeconreview/hetsaback.html

available as a Melbourne University Discussion Paper.[3] It's no exaggeration to say that if I can produce something that I feel I could show to Alan, and which he would like, I'm sufficiently pleased. Importantly, I knew that he would never be impressed by technique for its own sake, but if the problem demanded a technique, he'd simply expect you to learn and use it. He was very kind and encouraging but, despite his great modesty, I was always conscious of his brilliance and knew I had to reach a certain standard before presenting anything to him. Of course I haven't actually been able to show Alan anything for a long time. He died shortly before my book on the *Dynamics of Income Distribution,* which I dedicated to him, was published. But his influence persists. I studied his papers - you might say 'deconstructed them' - really closely, and the same is true of all Denis's work. I learned so much from them.

As a student, there's no doubt that my favourite economist was Harry Johnson and of course he was one of the most famous living economists at the time. For a while I even fell into the trap of trying to imitate his writing style, with long elegant sentences full of subsidiary clauses. It can be done superficially, with hard work, but the imitations quickly became much too allusive and affected. In my final year in Bristol, I saw him give a lecture and was utterly astonished when he spoke without notes in exactly the same way he wrote, and he was taking 'snuff' throughout. I've already mentioned Max Corden who was always a joy to hear. Every week while I was a graduate student I looked forward to going to the research seminar series he organised, and especially his graduate seminar series in international trade. I was astonished several years ago, when we were talking about those seminars, that in less than three minutes he found a copy of an essay I wrote for a presentation. I hadn't even kept a copy myself. I think that shows, among other things, how much he cared about his students – it's no wonder we're all so fond of him.

The real highlights were the graduate seminars on welfare economics that he shared with Hicks. I was lucky enough to attend the last one he ran, and was frightened stiff when I gave a presentation, although Hicks was actually quite kind to us. I recently wrote a memoir of Hicks for the British Academy and, among other things, it brought back those days clearly.[4] I wish I had thought to ask him to sign my copies of his books. The seminar involved a great partnership and Max 'brought out' Hicks brilliantly. It's hard to imagine anyone else doing it so well. Apart from anything else, Max exemplifies clarity of thought and hence of expression. He goes straight to the essentials and writes, and speaks, beautifully.

There are other economists from an earlier generation, such as A.L. Bowley, whom I've obviously never met, but they have in many ways been influential. I have a huge admiration for his work and, strangely, I can trace quite a few close connections with him, through places where I've worked and people I've known.

Q. Do you believe that future generations of economists will look back on our generation and revere their best contributions to research knowledge in the same way that 'greats' of the past like Marshall, Edgeworth and others stand out?

A. I think it would be impossible. Economists these days are much too specialised and have of course given up writing anything like treatises that would have lasting value. To my mind, there's nothing like seeing the great pioneers grappling with fundamentals and creating new approaches. It's so much more stimulating to see great minds at work - people like Jevons, Wicksell, or Irving Fisher, to name just a few other contemporaries or near contemporaries of Marshall and Edgeworth. Jevons is a particular favourite of mine. And it also becomes clear that these pioneers paid a great deal of attention to those, particularly the great classical economists, who went before them. We can still learn so much from them, as well as being stimulated to think about basics.

Q. You've worked with nearly 80 joint authors. Do you have any reflections on joint authorship?

A. It's interesting to observe the changes that have taken place. I once suggested to Peter Hart, after we had exchanged notes on a problem, that we might write a joint paper. He said it would be much better for me if I wrote it on my own. That shows Peter's generosity of course, but it is true that sole authorship carried more weight then. Incidentally, Peter also advised against writing books until I got a chair - advice I took seriously. These days joint authorship is not only encouraged but is often necessary, given the many skills that go into papers. It's also a good way for young researchers to learn from a more senior author. I can say I've learnt a huge amount from my joint authors and it is often a very enjoyable process. Research is a hard and often lonely activity, and referees in economics can be brutal, so it's really good if your joint author is your strongest critic and also the most sympathetic. Of course, bad joint authors can be a huge pain and can waste a lot of time and energy, but I've been very lucky.

Q. Do you believe that young economic researchers have insufficient training in the history of economic thought, and hence are more likely to 'reinvent the wheel'? Or are research methods, topics and available datasets changing so much that historical contributions are of limited relevance to advancing today's economic research?

A. Well, that question contains many parts and we could include economic history and philosophy, which were once considered essential to the training of an economist! I'm reminded of Keynes's famous statement of what makes an economist. I never had any formal training in the history of economic thought, and I don't think it's mainly a question of avoiding reinventing the wheel, though of course there is so much neglect of past insights. A familiarity with the history of the subject also generates some necessary humility. I'm reminded here of Denis O'Brien's suggestion that economists should, 'read more, think more, and claim less'. The sad thing is that young researchers have no interest in these things and by and large they can only see disincentives. Mind you, looking back, as a student, I wasn't able to share my interests with other students. It was like being keen on jazz – who was there to discuss it with?

There's been a huge change in undergraduate and graduate training, which is probably inevitable given the vast number of university students these days. The emphasis is on regurgitation of simple text-book models which are considered the 'end point' rather than merely basic pedagogic exercises. It would be impossible to set the kind of exam questions,

3 Available at: http://fbe.unimelb.edu.au/__data/assets/pdf_file/0007/802699/1027.pdf

4 See the British Academy web site at: http://www.britac.ac.uk/memoirs/12.cfm

or essay assignments, we faced, many of which began with 'critically evaluate ...'. The hard part was working out how to tackle the question, while the mechanical content was the easier part. Having said that, I've been very lucky to have spent most of my career teaching really good and highly motivated students and when I didn't have good students I had great colleagues.

Q. A regular plea I have heard from you is for economists to be more explicit about the value judgements that underlie their models or policy recommendations. Inequality measurement and optimal taxation are obvious examples. Would you hope that this is one of your enduring contributions – to encourage economic researchers and policy advisers to devote more critical attention to appropriate value judgements?

A. Well, Robbins said it in 1932 much better than I ever could! But it still amazes me that it is still necessary to stress their role. A reviewer of my book with Richard Disney, on social insurance, wrote that it was 'a model of rational policy analysis', and I'm still very pleased by that description. I'd just like to see more rational policy analysis.

Q. If you could go back and make one or more strategic changes to change the direction that your career has taken, what would they be?

A. I've been very lucky indeed, particularly as there were very few jobs available when I started my career and I've made some changes which involved virtual leaps into the dark. There hasn't really been a strategy. And I've been able to work on a range of areas rather than ploughing one narrow furrow for years. There are some things I might prefer to have avoided - being head of department in Durham is one of them - but then there are always useful lessons from those experiences. Mind you, I'm often reminded of the song lyric, 'I wish I didn't know now what I didn't know then'. I'm bound to say that we can't know the counterfactual, so I don't think about it.

Q. Though your career has predominantly been within academic institutions, you have spent quite some time working as an economist in the public service. Comparing the two institutions, do you see any particular strengths or weaknesses of the latter?

A. And of course I had the time, thanks again to Peter Hart, in the National Institute of Economic and Social Research in London, which was a very important stage in my career. And that reminds me, in thinking about influences, that I should have mentioned Sig Prais, whose room was next to mine. I learned a huge amount from him, particularly when we worked on a joint report – that was quite an experience! He was brilliant and had a very sharp sense of humour. He had been a colleague of Alan Brown at Cambridge and was also close to Peter Hart (who was more 'at home' at the National Institute than anywhere else), so I suppose that's why Sig seemed to accept me quite quickly.

Returning to your question, I have a great deal of respect for the people I've met in the public service who, with an extensive knowledge of important details of present and past policy, are able to provide good policy advice at short notice. And they are able to communicate it clearly and directly. Fortunately, there are impressive people like that in the public service. It's something I wouldn't be able to do. I'd always want to be adding qualifications, such as the need for more empirical information or modelling work or, as you've mentioned, I'd probably end up stressing the role of value judgements somewhere. But there can be a danger of thinking that policy advice produced 'on the run' is enough, and of becoming impatient with people who raise qualifications. The capability to provide more extensive evidence-based and modelling work then gets eroded. So I think there is a role for people like us, coming into the public sector with an academic background and an abiding interest in policy problems, to make a contribution to modelling, empirical work, critical thinking and 'capability building'. People with academic experience have leadership experience too, in terms of leading research teams, not simply as pedagogues. So there are great synergies, to use a popular term, to be had. But of course, it requires the right environment and management structure ... and that's another story for another time.

Q. You've been a 'full professor' in four countries on three continents – in the UK, the US, Australia and now New Zealand. What led to your moves and do you have any thoughts on the differences?

A. It would take too long to explain what led to the moves, but I can say I've found the experience of very different systems interesting and valuable. One thing about moving is that it always leads us to question those things that we can too easily take for granted. For me, day-to-day routine is very important, but now and again I've also wanted to make big changes, and these of course involve risks. Too much mobility is of course not good. Sometimes I think it might be very pleasant to have 'deep roots' somewhere, but I've valued the ability to work in different places. Max Corden has stressed this advantage that an academic career can bring – he exemplifies it more than anyone, I think.

Q. It is sometimes said that, though the average quality of university economic research produced in New Zealand is below that in countries such as the US or UK, the best New Zealand research is up there with the best internationally. Do you agree with that?

A. Well, thanks for placing that minefield in front of me! I can only say that I have met very many of those considered on the usual metrics to be the 'best internationally', but there are people in NZ who are just as impressive and who I feel extremely privileged to know. We have to remember that the 'centre of gravity' is obviously the US, where people generally take a very insular view of the rest of the world. And in comparison, work here is done 'on a shoestring'.

Q. Finally, is there anything left that you would like to achieve in your career?

A. Well, the only time I set myself a target was when I started. I decided to give myself a year to find out if I could do the job, and in fact my first lectureship was strictly a one-year contract. I don't want to create any hostages to fortune at this stage, so really I just hope I can continue making some kind of contribution and, naturally, I have in mind another couple of books that I'd like to produce, if time permits.

THE FIVE-MINUTE INTERVIEW WITH... ROGER PROCTER

1. When did you decide that you wanted a career in economics?

To be honest, I more or less fell in to it. My first degree was in physics. During the course of completing that degree, I decided that although I thoroughly enjoyed it, I wanted to do something with a more direct link to people's well-being.

Although I had read the standard definitions about what economics was about, I can't say I really understood it. However, some friends who I respected – people like Paul Carpinter and Howard Fancy – were studying economics, so I thought I would give it a go.

2. Did any particular event or experience influence your decision to join the Treasury after leaving university?

Bert Brownlie, the Professor of Economics at the time I was at Canterbury University, advised my honours year that "if you want to do economics in New Zealand, you should go to the Treasury."

I also went to an interview with Unilever, who suggested that after 5 or so years with them, I might be in charge of my own brand of soap.

That decided it. I went to the Treasury.

3. Did any teachers, lecturers or supervisors play a significant role in your early education?

The Treasury showed the remarkable foresight to send a few of us – people like Rob Cameron and Bryce Wilkinson – to top American Universities to study economics and bring the latest thinking back to New Zealand. I went to MIT, where I was lucky enough to study under people like Robert Solow, Rudi Dornbusch, Stanley Fischer, Larry Summers, Paul Krugman and Paul Samuelson. They had a remarkable ability to present complex material quickly and clearly.

One insight remains vivid in my head. In our very last lecture of two semesters of studying rational expectations new classical macroeconomics, one of the Ph.D. students asked Stan Fischer "Do you really believe this stuff?" Fischer's response was "Well, it takes out a free variable, doesn't it?" In other words, in order to model expectations, you must make some modelling assumption. Rational expectations is not a bad modelling assumption, but it is no more than that.

The next lecture was by Solow, whose first comment was something like "Your last two semesters have been a complete waste of time. New classical macroeconomics has two key assumptions. The first is that expectations are rational, and that is a reasonable modelling assumption. The second is that markets clear, and they don't".

The important lesson I learned from this is that models can give you useful insights into the real world, but you treat them as gospel at your peril. As the statistician George Box said, "All models are wrong. Some are useful".

4. What do you regard as the most significant economic event in your lifetime?

Within New Zealand, it has to be the economic reforms of the 1980s and early 1990s. To my mind, they were instrumental in transforming New Zealand from a developing basket-case to a (relatively low income) first world economy. The hope of being able to contribute to reforms like that is the reason I joined the public service. They were exciting times.

Of course there were some mistakes. For example, I don't think the government did enough to support people whose lives were disrupted by the reforms. As well as the human cost, that gave "reform" a bad name, which has stunted subsequent attempts at reform. I think the reforms also failed to give sufficient weight to the fact that economies take time to evolve. Just like biological systems, if you hit them with a shock that is too big, that can undermine development.

5. How have your views of economics changed over the years?

Like many others, including the OECD [in their publication 2003 Economic Survey: New Zealand], I thought the economic reforms of the 1980s and 1990s would result in our catching up with the top half of the OECD. While the reforms certainly helped, at best they stopped our slide down the OECD rankings.

That led me (along with others like Geoff Lewis) to question why this was. I decided to look at the actual historical experience of economic growth. What I found undermined some of my long cherished beliefs. I had thought that one could broadly depend on the Arrow-Debreu proof of existence and uniqueness of market optimality – ignoring the obvious contradictions with reality, such as uncertainty, incomplete markets, asymmetric information and non-convexities.

This review of history led me to view evolutionary economics as a much more realistic model of economic growth and development than neo-classical economics. Economies evolve and develop through the accumulation of knowledge in all its forms and its embodiment in new and improved goods and services, as well as in people and institutions. Several authors (including for example Haussman and Hidalgo) suggest that differences in per capita incomes are associated with differences in economies' economic complexity.

As Stiglitz and Greenwald (in *Creating a Learning Society*) and many others have pointed out, because knowledge is non-rival and partially excludable, there is good reason to believe that in a free market, its accumulation will be sub-optimal.

As an economist, I of course viewed private enterprise competing in free markets as being the most effective form of organising human activity. From studying the actual historical experience of growth, I came to the conclusion that governments had supplemented markets by actively promoting the accumulation of knowledge and had been instrumental in fostering economic development. There had of course been many failures,

but as Josh Lerner has pointed out (in *Boulevard of Broken Dreams*), many of those failures were completely predictable. Governments that took steps to align social and private returns and to limit rent seeking – for example, by using international competition to promote innovation and as a test of efficiency – were more likely to be successful.

6. Are there particular books which stimulated your thinking about this?

Many. Four good ones are:

- *Economic Transformations* by Lipsey, Carlaw and Bekar
- *Understanding the Process of Economic Change* by Douglas North
- *The Rise of the Rest* by Alice Amsden
- *How Asia Work*s by Joe Studwell

7. What do you like to do when you are not doing economics?

Outside economics, I am a plebeian. My family is the most important thing to me. Pauline, my wife is a locum nurse and our three children are also into medicine – two vets and a paramedic. So economics doesn't get much airing at home. Our son (or his partner really) has just had twins, much to the delight of their 3 year old big sister – so that is a big focus. And Pauline and I like to travel. We went to Japan earlier this year and thoroughly enjoyed it. We are off again next month.

NZIER ECONOMICS AWARD FOR 2015 CITATION

The New Zealand Institute of Economic Research Economics Award for 2015 is given to Dr Alan Bollard for his outstanding work in economic research and application, and for his successful leadership of New Zealand's two major economic policy institutions, The Treasury and The Reserve Bank of New Zealand, particularly for his achievements in relation to banking stability, regulation and protection.

After completing a PhD at the University of Auckland on the development of Atiu in the Cook Islands, Alan worked for the South Pacific Commission in New Caledonia, and at the Intermediate Technology Development Group and the Policy Studies Institute in London. He returned to New Zealand in 1984 to join the New Zealand Institute of Economic Research, becoming its Director in 1987. While at the NZIER, he researched, wrote and led many reports on the implications of the then rapidly deregulating New Zealand economy, including the restructuring of the electricity and gas industries, the tariff reviews, other industry-specific regulation, the telecommunications break-up, labour market changes, and the Commerce Act 1986. He published several co-edited books and articles documenting and broadening international understanding of the wide-ranging economic reforms taking place in New Zealand. During this time, the NZIER recruited and trained many talented economists, some of whom went on to be the core of New Zealand's bank economists.

In 1994, Alan was appointed as Chairman of the Commerce Commission. At that time, business in New Zealand was shedding the constraints of import licensing and regulatory controls, and was subject much more to "the market". The Commerce Commission had to grapple with the question of what competition trade-offs would work for a small open economy. New Zealand faced the dilemma of allowing large companies to dominate industries and exploit economies of scale, while also wishing to exploit the benefits of competition and open entry. The Commission, and the Courts, had to adjudicate on cases involving meat companies, port services, acquisitions and mergers, health, electricity, gas, and, in particular, telecommunications.

Alan was then appointed Secretary to the Treasury in 1998, a position he held for five years. He brought a pragmatic approach to this role, and concentrated on trying to make the organisation work better in challenging political and economic environments, while strengthening the organisation's research capability in productivity, growth, macroeconomics, taxation and comparative studies. Under his leadership, The Treasury had to cope with events as varied and unexpected as the financial troubles at Air New Zealand and the attack on the World Trade Centre in New York in September 2001.

In 2002, Alan accepted appointment as the Governor of the Reserve Bank, a position he held for ten years. In that role, he made perhaps his most important contribution to the operation of the New Zealand economy, particularly in steering the Reserve Bank through regulatory changes that helped position the financial system to cope with the Global Financial Crisis of 2007-8. This was not simply a matter of cool-headed management. He built up a first-class team, had excellent relations with The Treasury, and initiated a review from first principles of banking regulation. He responded to a challenge from the Australian banks which predominated in New Zealand, and which wanted a single trans-Tasman regulator to control banking in New Zealand. He accepted the need to host foreign-owned banks, but thought it critical that New Zealand should insist on its own policy tools, so that large banks in New Zealand could continue to provide core liquidity, payment and transaction services in the event of system or bank failure. His insistence on improving New Zealand's ability to minimise the impact of a large bank failure on the economy was shown to be right by the Global Financial Crisis, though he was always conscious of the risk that New Zealand could become over-regulated in response to such fears.

In 2012, Alan became the Executive Director of the Asia Pacific Economic Co-operation (APEC) Secretariat in Singapore. In this role, he has helped coordinate APEC's focus on growth and livelihoods through economic integration in the Asia-Pacific region.

Dr Alan Bollard has made many distinguished contributions to New Zealand economics and to the well-being of New Zealanders. It is indeed fitting that he should receive the NZIER Economics Award for 2015.

NZIER ECONOMICS AWARD 2015

Acceptance Speech by Dr Alan Bollard

Delivered by video from Singapore at the NZIER Annual General Meeting, Wellington, 2 September, 2015

Good evening friends and colleagues. It is my great pleasure to receive the Institute of Economic Research's Economics Award. It has been my good fortune to have been able to work in a range of economic policy areas over the last couple of decades, and to be working in a country and in institutions and with people who have wanted to ensure that they get the very best from economics and from economic theory to help New Zealand prosper and grow.

My experience dates back to 1984 when I joined the Institute of Economic Research under Brian Easton. It was a time when New Zealand was going through an intense period of rapid structural change and adjustment, following the structural problems we had encountered during the OPEC Crisis and our Think Big policies. It was a time when we were coming to terms with new microeconomics thinking, principle-agent theory, property rights theory, transaction cost theory, associated with names like Coase and Williamson. They demonstrated that concepts like ownership and governance actually make a big difference to efficiency and allocative outcomes. As a result, we started to understand that firms could achieve more internally and that markets could govern more externally than we had understood in the past.

I had the chance sometime after that in the early 1990s as Chair of the Commerce Commission to play some role in helping these markets actually work in New Zealand, particularly as the reforms around corporatisation, and privatisation were implemented. I worked at the Commerce Commission with our Chief Economist Mike Pickford where we were able to explore traditional structure-conduct-performance theories in industrial organisation, and also some of the new thinking around contestability theory associated with names like Baumol and Willig. We framed trade practices in the context of consumer surplus and producer surplus, estimating static and dynamic efficiencies, and aiming for appropriate efficiency/competition trade-offs which for a small open country like New Zealand is an acute issue. Using this framework we encouraged the judicial system (which didn't naturally take to some of these ideas) to adopt a more economic approach to outcomes.

It was a few years later in the late '90s when I was approached to head up the NZ Treasury - I was probably almost the only economist around the Wellington scene who had not worked for Treasury. That was a time when fiscal policy and Crown balance sheets looked in good shape. But corporate New Zealand was finding it hard to compete. Our growth record was volatile; we had a poor external account; there were negative private savings, and we were uncompetitive against some of our trading partners. We did interesting research helped by economists like Bob Buckle, Grant Scobie and David Skilling. We did not always agree with one another but our disagreements were constructive, leading us into developments like new growth theory, associated with Romer and others. We also looked for answers in early behavioural economics, and of course we paid a lot of attention to the OECD and IMF diagnoses of the New Zealand economy. As a result we carried out many studies comparing New Zealand with Finland, with Holland, with Singapore, and other quite different economies. What we learned was that scale and location are very important, and these features are missing in New Zealand. We also learned that you can have good government accounting and macroeconomic policy but if the private sector is unbalanced, then there are problems.

Five years later, having survived the East Asia crisis, I was appointed Governor of the Reserve Bank of New Zealand. The Bank had already done a lot of the heavy lifting on inflation policy, but for five years we implemented tight monetary policy trying to suppress prices. During the second five years we faced a different problem, struggling with the global financial crisis that exposed critical weaknesses in the financial system. Luckily for me, I had people like Grant Spencer and Arthur Grimes to help with regulation of the banks, and with developing a new macro-financial policy. We had to integrate macro-financial policy to monetary policy, we had to integrate financial sectors into macroeconomic real-time models, and we also had to combine micro behavioural economics with macroeconomic modelling. We were learning to deal with a world that was moving in a jerky disequilibrium way. Researchers were thinking on their feet, led by economists like Charles Goodhart, and Reinhart and Rogoff, by the participants at conferences of the Bank of International Settlements, and by discussions at Jackson Hole. We started to design and implement macro-financial policy for New Zealand, we tried to predict financial instability, and we tried to mitigate it. Of course that is something that the Reserve Bank continues with until this day.

In the meantime I have left New Zealand for Singapore to become Executive Director of the APEC Secretariat. Here we are confronting a new economic scene where, after several decades of strong trade growth and very high economic growth, the Asia-Pacific economies have slowed considerably since the global financial crisis. We are trying to understand new growth drivers and new models of globalisation. This leads us to the new trade theory work of Krugman and others, and to another phenomenon - the vertical disintegration of international production, work led by economists like Richard Baldwin. Economists at McKinsey and elsewhere have been mapping not just merchandise trade flows but also services, capital flows, people movements, and data - the whole picture of regionalisation, connectivity and mobility is changing. That leaves us asking new questions about how New Zealand should position itself in this new global balance.

Colleagues, I end by thanking the Institute of Economic Research for this Award, and congratulating them on its implementation over the last two decades. In doing that, they recognise and incentivise good economic thinking and good economic policy for New Zealand.

BLOGWATCH

By Paul Walker (psw1937@gmail.com)

The awarding of the Nobel Prize in economics to Angus Deaton has generated much comment in the blogosphere. Just a few examples: Kevin Bryan at the 'A Fine Theorem' blog <https://afinetheorem. wordpress.com/>: "Angus Deaton, 2015 Nobel Winner: A Prize for Structural Analysis?" <https://afinetheorem. wordpress.com/2015/10/12/angus-deaton-2015-nobel-winner-a-prize-for-structural-analysis/>. Alex Tabarrok at 'Marginal Revolution' <http://marginalrevolution.com/> : "Angus Deaton wins the Nobel" <http://marginalrevolution.com/marginalrevolution/2015/10/ deaton.html>. Tyler Cowen also at 'Marginal Revolution': "The Economics Nobel Prize winner is Angus Deaton" <http://marginalrevolution.com/marginalrevolution/2015/10/nobel-prize-winner-is-angus-deaton.html>. Ian Vásquez at the 'Cato at Liberty' blog <http://www.cato.org/ blog/>: "Nobel Laureate Angus Deaton on Human Progress, Poverty and Aid" <http://www.cato.org/ blog/nobel-laureate-angus-deaton-human-progress-poverty-aid>. Timothy Taylor at the 'Conversable Economist' blog <http://conversableeconomist. blogspot.co.nz/>: "The 2015 Nobel Prize: Angus Deaton" <http://conversableeconomist.blogspot.co. nz/2015/10/the-2015-nobel-prize-angus-deaton.html>. Justin Wolfers at 'The Upshot' <http://www.nytimes.com/2015/10/13/upshot/>: "Why Angus Deaton Deserved the Economics Nobel Prize" <http://www.nytimes.com/2015/10/ 13/upshot/why-angus-deaton-deserved-the-economics-nobel-prize.html>. Ana Swanson at the 'Wonkblog' <http://www.washingtonpost.com/news/wonkblog/>: "Why trying to help poor countries might actually hurt them" <http://www. washingtonpost.com/news/wonkblog/wp/2015/10/13/why-trying-to-help-poor-countries-might-actually-hurt-them/>.

At the 'Digitopoly' blog <http://www.digitopoly.org/> Joshua Gans notes passing of the economic historian Nathan Rosenberg <http://www.digitopoly.org/2015/08/24/nathan-rosenberg-and-the-innovation-system/>. Gans writes, "If Rosenberg was known for one thing, it was to bring economics, real economics, into the study of the history of technological change. To be sure, Marx was not unaware of how capitalism promoted technology and Schumpeter certainty saw competition and technological change being intimately linked. But it was Rosenberg who identified where, in the thinking of so many, circa 1970, they had failed to appreciate the endogeneity of technological change". An obituary by Joel Mokyr is available at EH.net <http://eh.net/in-memoriam/nathan-rosenberg-1927-2015/>.

"Donald Trump: Leader of the Mercantilist Zombie Apocalypse"<http://streetwiseprofessor .com/?p=9532>. How can you not love that title?!! It's from Craig Pirrong at the 'Streetwise Professor' blog <http://streetwiseprofessor.com/>. He goes on to say "But alas, mercantilism is a like a zombie. It has no brain, and has proven impossible to kill. Which means, I guess, that in Donald Trump, it has found its perfect advocate".

At 'Bloomberg View' <http://www.bloombergview.com/> Noah Smith reports that Japan's government has, essentially, ordered all of the country's public universities to end education in the social sciences, the humanities and law <http://www.bloombergview.com/articles/2015-09-20/japan-dumbs-down-its-universities-at-the-wrong-time>.

Economist, and author of five books, Tim Harford, writes about "Copyrights and wrongs" <http://timharford.com/ 2015/10/copyrights-and-wrongs/>. Harford asks, How long should copyright last? The current answer for many countries is 70 years after the death of the author, which in Harford's view is absurd. He argues that the truth is that 10 years of copyright protection is probably sufficient to justify the time and trouble of producing most creative work, be it newspapers, films, comic books or music. Thirty years would be more than enough.

At 'VoxEU.og' <http://www.voxeu.org/> Jacques Melitz ponders "The profitability of early coinage" <http://www.voxeu.org/article/profitability-early-coinage>. It turns out that minting small change was a big, expensive problem in the ancient world. Melitz argues that the ancient Lydian government and Greek city-states absorbed the cost of producing an extremely wide array of denominations of coins as a political strategy. Governments had much to gain from the spread of coinage in managing budgetary affairs. If it subsidised the mint, an ancient government would make savings in terms of transaction costs.

According to George Selgin at the 'Alit-M' blog <http://www.alt-m.org/> "In Switzerland, Tolerating Deflation isn't Cuckoo". Not all deflation is created equal and there is "good" deflation, that is, deflation driven by price changes due to changes in productive efficiency. In Switzerland evidence of deflation's pernicious side effects—recession, weak employment, rising debt burdens—is pretty much nonexistent <http://www.alt-m.org/2015/10/20/tolerating-deflation-isnt-cuckoo/>.

A troubling fact about the developing world is the notoriously low female-to-male sex ratios, a phenomenon that has been described as 'missing women'. It has been argued that this is driven by parental preferences for sons, sex-selective abortion, and different levels of care during infancy. In another article at 'VoxEU.og' <http://www.voxeu.org/> Siwan Anderson and Debraj Ray look at the phenomena of "Missing unmarried women" < http://www.voxeu.org/article/missing-unmarried-women>. They show that higher rates of female mortality continue from childhood into adulthood. They argue that being unmarried, especially through widowhood, can have substantial effects on relative rates of female mortality in the developing world.

Noah Smith writes at the 'Noahpinion' blog <http://noahpinionblog.blogspot.co.nz/> on "Lazy econ critiques" <http://noahpinionblog.blogspot.co.nz/2015/10/lazy-econ-critiques.html>. He takes aim at a recent attack on economics by Joris Luyendijk in The Guardian. Smith critiques 5 points Luyendijk makes: "Econ isn't a real science", "Social science isn't science", "Economics caused the financial crisis", "Econ uses too much math" and "Economics tries too hard to be value-neutral. In fact, it's always ideological".

At the 'Offsetting Behaviour' blog <http://offsettingbehaviour.blogspot.co.nz/> Eric Crampton writes on "O-Ring models and NZ productivity". The long low-productivity tail of firms isn't just a New Zealand problem he says. The gap between frontier firms and everyone else is becoming huge in many countries around the world. Where the highest valued stuff requires having zero screw-ups at any point down the line, the returns to having no screw-ups start increasing hugely. Importantly the top firms pay the most across all tasks, even the low value tasks, because they can't afford to have anything go wrong <http://offsettingbehaviour.blogspot.co.nz/2015/10/o-ring-models-and-nz-productivity.html>.

Donal Curtin asks, at the 'Economics New Zealand' blog <http://economicsnz.blogspot.co.nz/>, "Who's been 'buying up' New Zealand?" There's a huge interest in foreign investment in New Zealand, and one country overshadows everybody else. Australia has more invested here ($51.4 billion) than the rest of the world put together ($48.2 billion). And what about all those farms being sold out from under the feet of our own farmers? Total FDI in 'agriculture, forestry and fishing' is $5.9 billion, a small proportion (5.9%) of the total investment, and roughly on a par with foreign investment in the retail trade ($5.7 billion) <http://economicsnz.blogspot.co.nz/2015/09/whos-been-buying-up-new-zealand.html>.

At the 'Croaking Cassandra' blog <http://croakingcassandra.com/> Michael Reddell asks is it "1876 revisited?" He notes that The New Zealand Initiative has a report out, "In the Zone: Creating a Toolbox for Regional Prosperity". Their proposal is that local authorities should be able to seek approval from central government to run policy experiments in their own areas. But in Reddell's view this is a solution in search of a problem <http://croakingcassandra.com/2015/10/22/1876-revisited/>.

PERFORMANCE EVALUATION OF RESEARCH PROGRAMMES: THE MARSDEN FUND

By Adam Jaffe

The effect of public funding on research output: the New Zealand Marsden Fund is a Motu Economic and Public Policy Research Working Paper 15-12 by Jason Gush#, Adam Jaffe+, Victoria Larsen+^, and Athene Laws+.

Summary Haiku

We should fund research.
But trying to choose the best
Doesn't work too well.

Governments grant funding to advance human knowledge, but there is little systematic evidence as to the effectiveness of funding mechanisms. Funding organizations evaluate proposals, and attempt to award funds to those they judge most likely to be successful, which introduces selection bias into any evaluation of the subsequent success of researchers. Further, there is little empirical evidence as to the effectiveness of these selection mechanisms, which themselves consume public resources and researcher time.

We measure the effect of funding receipt from the New Zealand Marsden Fund while controlling statistically for selection bias. We also test the efficacy of the selection process itself, using a unique dataset of funded and unfunded proposals that includes the evaluation scores assigned to all proposals. The funding mechanism we studied is similar in important ways to those in other countries, such as the European Research Council.

We found that Marsden grants increased the publications of funded research teams by 3-15 percent relative to what would otherwise have been predicted based on their previous research trajectory, and increased citations to those publications by 5-26 percent. Surprisingly, however, we found that evaluation scores were not predictive of subsequent success. Our results confirm that public funding has a quantitatively and statistically significant impact on subsequent research output, but suggest the public and private resources consumed in the selection process may not be being used effectively, at least in contexts where the best proposals from disparate research areas are evaluated by broadly composed review panels.

Background

Evaluating the performance of public research funding requires measuring the performance of funded researchers relative to some baseline or counterfactual performance in the absence of funding. Randomized control trials, which provide the most definitive measure of the "treatment effect" of receiving funding, have not been widely used in the research-funding context. Comparison of group outcomes is therefore a biased measure as funding presumably is assigned to the most promising proposals. An alternative, if the funding agency retains the quantitative evaluation scores generated by the selection process, is to use ex post statistical analyses to measure the treatment effect by comparing the performance of funded researchers to unfunded, using evaluation scores to control for the selection bias.

The New Zealand Marsden Fund was established in 1994 to support New Zealand scholarly research (including mathematical, physical, biological, and social sciences, and humanities) on a competitive basis.[1] It funds blue-skies research on an unrestricted national basis. In 2014, $56 million was awarded to 101 research projects chosen from among 1222 applications from researchers at universities, Crown Research Institutes and independent research organizations. The government delegates the administration of the programme to the Royal Society of New Zealand (RSNZ).

The RSNZ appoints assessment panels of between 5 and 10 members and allocates a budget to each panel. The panels are rather broad in coverage; for example "Physical Sciences and Engineering" and "Biomedical Sciences."

There are two types of Marsden Fund grant. The standard grant is for any research team, and can run for up to three years. The maximum budget has been in the order of NZD 300,000 per year. Applicants within 7 years of their PhD award have the option to apply for a "Fast-Start" ("FS") grant, which is limited to NZD 100,000 per year. FS proposals are ranked against other FS applicants rather than the general pool. Each panel decides how to allocate its budget for FS and standard grants.

The Marsden Fund uses a 2-stage review procedure, under which 60-80% of the intitial proposals are rejected before the remainder are evaluated in more detail. We focus on 2nd-stage proposals, which represent approximately the best 25% of the proposals. Each panel chooses a cut-off that ensures successful proposals fit within the allocated budget.

To compare the scholarly performance of researchers, we used Scopus to collect the proposal participants' publications, and all of the citations to those publications, for 1996-2012. Increasing publications and citations is not the explicit goal of the programme, and in individual cases these metrics vary for idiosyncratic reasons. We assume that if the stated goals to "Enhance the quality of research" and "Support the advancement of knowledge" are being met, that publication and citations rates for funded researchers would be higher than they would otherwise have been. Note that we make no attempt to identify publications specifically connected to the funded research: we are capturing the effect of the Fund on researchers' overall scholarly performance.

1 http://www.royalsociety.org.nz/programmes/funds/marsden/about/background/

+ Motu Economic and Public Policy Research; #Royal Society of New Zealand; ^University of Otago

Intrinsic publication/citation rates and the fraction of these metrics captured by Scopus vary over time and across disciplines. Our estimation methods allow for this, normalizing citation counts by year and discipline and calculating the proportional effect of funding on the base performance.

We compare researchers' performance through two distinct but related lenses. First, we look at the overall cumulative performance of the research team, before and after submitting a Marsden proposal. Second, we take all of the New Zealand-based researchers and look at each individual's yearly research output, looking for an effect of having received a Marsden grant in the previous five years. Looking at individuals allows us to consider the dynamic effects of researchers' multiple interactions with the Fund over time. The disadvantage is that for any given proposal, the members of the team differ in the significance of their involvement; in effect each is receiving a "treatment" of differing magnitude (and both anecdotal evidence and statistical results suggest that the stated full-time equivalent (FTE) fraction for each individual does not capture these differences). This would bias the measured effect downward in the individual researcher approach. With the team approach the variations across researchers is averaged out, which mitigates any bias due to measurement error.

We control for a possible selection effect by including in the model an evaluation score from the RSNZ review process. We have investigated several different evaluation variables, including the preliminary panel score, the average referee score, and the final panel score. Our preferred evaluation metric is the scaled final ranking from the proposal, (N-R)/N, which is zero for the worst proposal and approaches unity for the best proposal in any given panel.

Results

We estimate models in both log-log form and using ML estimation of a model in which the performance measures are assumed to have a negative binomial distribution, which allows for the integer nature of publications and citations. In the simplest regression of post-proposal performance on pre-proposal performance and a funding dummy, funding is associated with an increase in publications of about 6% and citations about 12%. The coefficient on previous performance is approximately 0.75, indicating that there is significant persistence in success but with some regression to the mean. When looking at the full model for teams, the treatment effect associated with funding is increased to 15% for publications and 26% for citations. FS teams are associated with about 16% greater research output (controlling for pre-proposal performance), consistent with these younger investigators being, on average, on a steeper upward output trajectory than other researchers. However, FS applicants receive no different effect from funding; the effect of FS *per dollar* is higher but this difference is not statistically significant.

We expect that the post-proposal performance of a given cohort might be increased if a member receives a Marsden grant from a different proposal at some future time. The results confirm that teams with one or more members who received funding in some subsequent funding round received about 17% more publications and 35% more citations than those that did not.

The surprising result in this model is that the coefficient on scaled rank is negative. Proposal teams that were highly ranked by the RSNZ panels actually performed worse than those that were ranked lower, with the highest ranked teams receiving 20-30% fewer publications and citations than the lowest ranked team (after controlling for previous performance). We tested various non-linear transformations of rank, and also other metrics such as referee scores. The relationship between performance and evaluation is sometimes negative and sometimes zero, but never positive in the presence of the control for previous performance. Panels and referees correctly anticipate that teams with better pre-proposal performance are likely to perform better in the future, but beyond this effect they do not effectively identify those with greater potential in terms of these success metrics.

When looking at results for the individual-year model, the results are qualitatively similar to the team results, but the estimated funding effects are smaller: publications are increased by about 3.4% for each contract received, and citations 5.6% per year for five years. The effect of panel rank is now negative but insignificant in publications but positive and insignificant for citations. Professional age has a small but statistically significant independent effect, with older researchers producing slightly fewer papers but receiving slightly more citations, after controlling for other effects.

Conclusion

We find that funding increases citations more than it increases publications, suggesting that funding allows more research output that has a greater impact. Because of the heterogenous treatment effect issue discussed above, we believe that the estimated team effect of 6-15% for publications and 12-26% for citations may be more indicative of the true average treatment effect than the estimated individual effects. Finally, we find no evidence that second-round Marsden panels effectively distinguish relative likely success, after controlling for other observables. It seems likely that once the worst proposals are screened out in the first round, it is very difficult effectively to differentiate among the broad multidisciplinary range of proposals assigned to each panel.

CYCLICAL CHANGES IN WORKFORCE SKILL AND FIRM PRODUCTIVITY MEASURES

By David Maré, Dean Hyslop and Richard Fabling

Motu Economic and Public Policy Research

Business cycles are not skill-neutral. The employment sensitivity of different types of workers differ over the business cycle, possibly reflecting both labour demand and labour supply effects. In particular, employment of less educated and other lower-skill workers varies considerably more over the business cycle than does the employment of high-skilled workers (Hoynes, 1999). Such variation leads to important changes in the skill composition of the workforce over business cycles, causing strong downward bias in the cyclicality of wages (Solon, Barsky and Parker, 1994). Similarly, ignoring compositional change overstates the cyclicality of employment, and understates the cyclical productivity variation.

Most analyses of labour and multi-factor productivity *(mfp)* measure labour inputs in firm production functions using pure quantity measures, such as the (total) number of workers, a weighted average of full-time and part-time workers, or the total number of hours worked. Such analyses implicitly assume the quality of labour is constant over time. This assumption is open to question over the business cycle, during which employment fluctuations may be skill-biased, and in the context of strong secular increases in training and qualifications of younger cohorts of workers, as has occurred in New Zealand over the past decades.

In a recent Motu working paper funded by the Productivity Hub's Longitudinal Business Data Research Partnership, we examine changes in the skill composition of the workforce in New Zealand over the period 2001–2012, and the relationship between changes in skill and the measured *mfp* growth across firms.[1] The analysis uses rich longitudinal firm productivity data from Statistics New Zealand's Longitudinal Business Database *(LBD)*, combined with estimates of worker skill derived from linked employer-employee data in Statistics New Zealand's Integrated Data Infrastructure *(IDI)*.

The paper first develops a proxy for skill that is derived from workers' estimated full-time equivalent *(FTE)* earnings. This approach differs from Szeto and McLoughlin's (2008) labour quality-adjusted approach based on observed age and qualifications, on which Statistics New Zealand's (2008) labour-quality adjusted official productivity series is based. The approach here is used partly because typical observable measures of skill such as educational qualifications provide only partial measures of relevant skills, and also because the *IDI* does not provide coverage of such observable skill measures for the full population of workers throughout the sample period. This skill measure for each worker consists of an *observable* component reflecting the average labour market experience associated with life cycle patterns of earnings, and an *unobserved* component reflecting their average earnings premium relative to the life cycle.

Associated with disproportionate employment growth of lower than average skill workers over the period, the estimated average skill of workers declined 1.8%. This net decline consisted of a 3.6% decline in unobserved skill that outweighed a 1.8% increase in observed skill. The cyclical patterns of skill changes are strongly correlated with the business cycle over the period, and are broadly consistent with Maré and Hyslop's (2008) finding. Figure 1 shows the strength of skill dilution, and illustrates how closely it follows

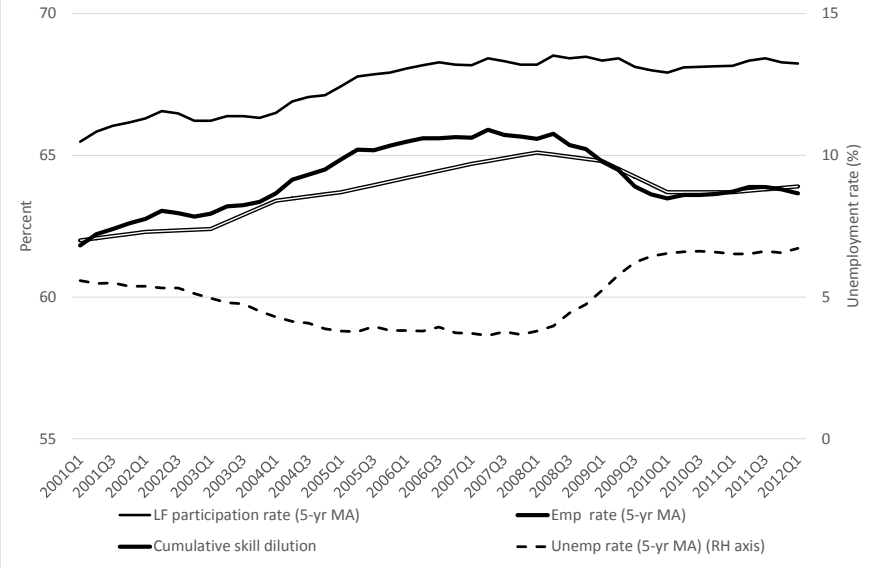


Figure 1: Skill dilution and the employment rate

1 Maré, David C., Dean R. Hyslop, and Richard Fabling. 2015. "Firm Productivity Growth and Skill." Motu Working Paper 15-18. Wellington: Motu Economic and Policy Research. Also available at: http://www.motu.org.nz/our-work/productivity-and-innovation/firm-productivity-and-performance/firm-productivity-growth-and-skill/.

changes in the employment rate. For example, there was a net 3.0% decline in average skill during the business cycle upswing from 2001 until the global financial crisis *(GFC)* struck in 2008, followed by a 1.4% increase during the sharp contraction over the next two years, and a further mild 0.2% decline over the final two years of the sample period.

The paper then uses these observed and unobserved measures of skill to derive skill-adjusted measures of labour input and *mfp* for each firm, which adjust the firm's labour quantity and *mfp* measures for changes in the average skill of workers employed by the firm. Compared to the estimated 15.0% growth in *FTE* employment over the period, the 1.8% decline in average skill means that estimated skill-adjusted labour input grew by 13.3%. Also, mirroring these patterns of skill-diluted labour input over the period, skill-adjusted *mfp* growth was stronger than unadjusted growth, as shown in figure 2. Over the full period, the estimated growth of skill-adjusted *mfp* was 2.7% (0.24% pa) compared to growth in unadjusted *mfp* of 1.5% (0.14% pa); while, over the 2001–2008 pre-GFC period growth was substantially stronger: adjusted and unadjusted *mfp* grew 4.0% (0.57% pa) and 2.9% (0.42% pa) respectively.

Finally, the paper analyses the effect of changes in skill on *mfp* growth over the sample period. To do this, we compare decompositions of skill-adjusted and unadjusted *mfp* growth into contributions from firm entry and exit, reallocation of inputs between firms within and between industries, and from *mfp* growth within firms that operate throughout the period. From this analysis we find that the impact of skill adjustment is almost entirely accounted for by changing skill composition within continuing firms that operate throughout the period. This implies that the changes in skill, and hence skill-adjusted impacts on *mfp,* occur mainly for continuing firms. Adjusting for cyclical changes in skill composition has minimal impact on the size of estimated productivity improvements associated with firm entry and exit or the reallocation of inputs to more productive industries.

Overall, skill adjustment provides an improved view of cyclical labour market and productivity change, but the impact is not large enough to account for much of New Zealand's relatively weak productivity growth since 2001.

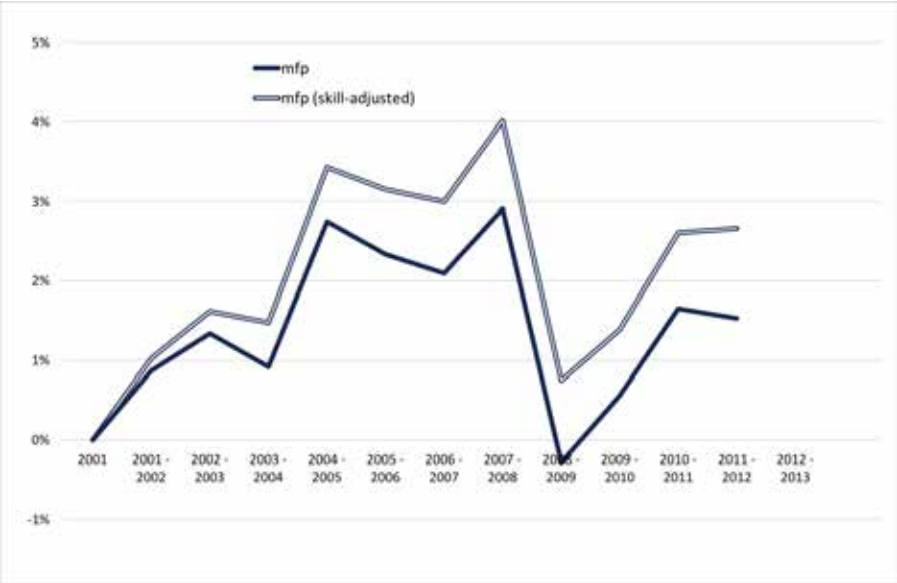


Figure 2: The impact of skill adjustment on productivity growth

References

Hoynes, Hilary. (1999). *The employment, earnings, and income of less skilled workers over the business cycle.* National bureau of economic research, No. w7188.

Maré, D. C., & Hyslop, D. R. (2008). *Cyclical earnings variation and the composition of employment.* Wellington: Statistics New Zealand.

Statistics New Zealand. (2008). *Accounting for changes in labour composition in the measurement of labour productivity.* Wellington, N.Z.: Statistics New Zealand. Retrieved from http://www.stats.govt.nz/reports/developments/accounting-changes-labour-composition-measurement-labour-productivity.aspx.

Solon, Gary, Barsky, Robert and Parker, Jonathan A. (1994). *Measuring the cyclicality of Real Wages.* Quarterly Journal of Economics, Vol. 109(1), pp. 1-25.

Szeto, K. L., & McLoughlin, S. (2008). *Does quality matter in labour input?: the changing pattern of labour composition in New Zealand* (Treasury Working Paper No. 08/01). New Zealand Treasury. Retrieved from http://treasury.govt.nz/publications/research-policy/wp/2008/08-01/twp08-01.pdf.

DEVELOPMENT OF NEW BALANCE SHEETS AND FINANCIAL FLOW ACCOUNTS

By Lindsay Beck (Statistics New Zealand)

In the post-GFC era there is increasing interest in explaining the linkages between the financial sector and the 'real' economy. There is also a need to understand the links between stocks and flows. New statistics are being developed to meet these needs. These statistics should give us a much clearer understanding of New Zealand's economic sustainability and how risks and shocks could be transmitted between the various sectors in the economy and the financial system. They should also give us a broader base for linking hot topics such as wellbeing and inequality into the macroeconomic context.

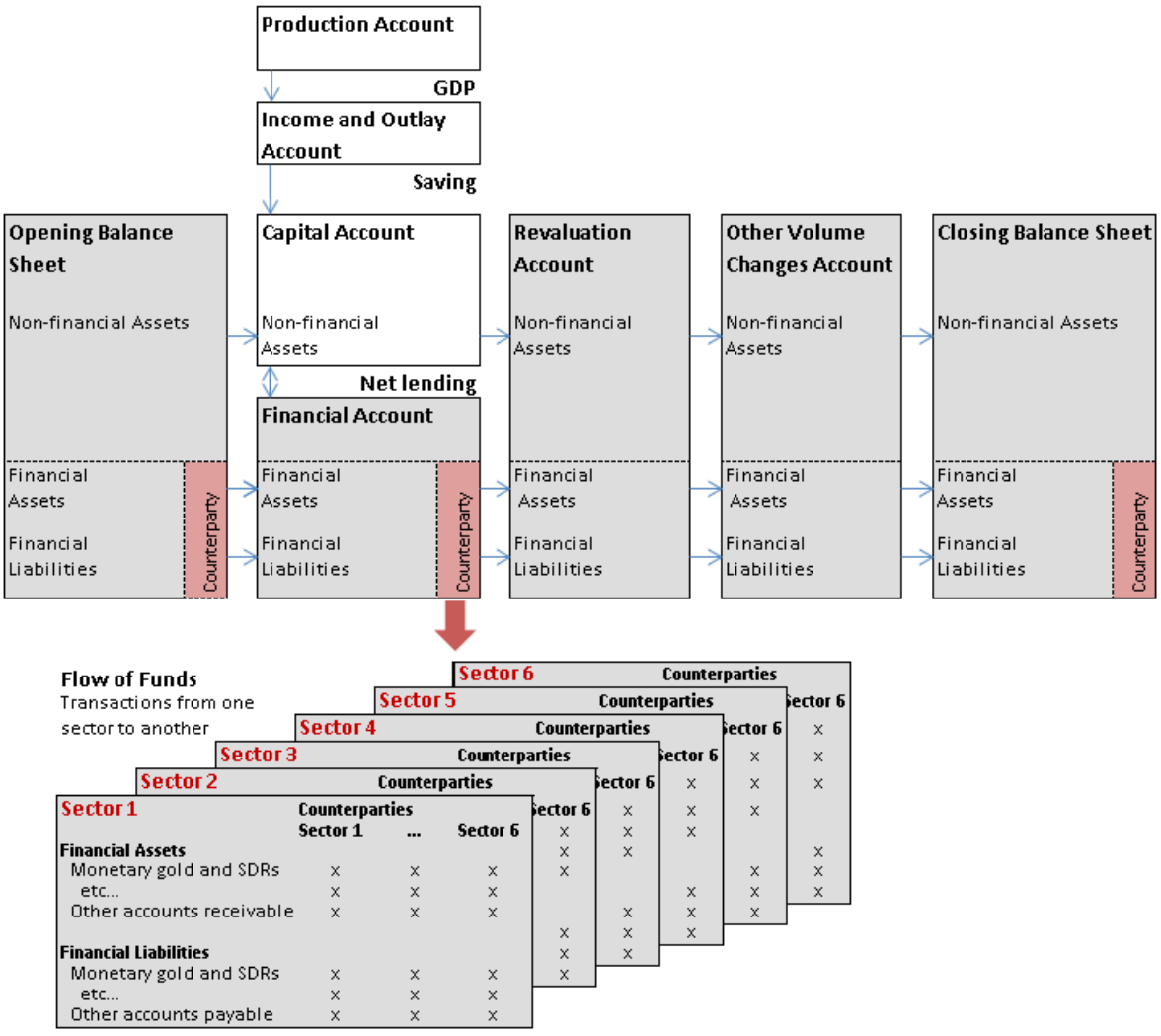
Statistics New Zealand has commenced a project to complete the full set of national accounts, in accordance with the international standard contained in the System of National Accounts manual of 2008 (2008 SNA). This is an extension of the existing suite of accounts for New Zealand, which have adopted the 2008 SNA standards already (refer Asymmetric Information, Issue No. 51).

The full sequence of sector accounts

Figure 1 summarises the new statistics to be developed, with existing accounts shown in white boxes being supplemented by new accounts in grey boxes.

Most readers will be familiar with the Production Account, which derives Gross Domestic Product. Then, in the Income and Outlay Account, income flows from the factors of production are offset by expenditures to derive a flow estimate of Saving. This provides funds to be invested in capital assets in the Capital Account, where any shortfall in funding is met by Net Lending. In the Financial Account the creation and expiration of financial assets and liabilities are recorded, providing an independent estimate of Net Lending. Then the links between stocks and flows can be read across the accounts, from Opening Balance Sheet stocks, adding transactions of the Capital and Financial Accounts, plus price effects in the Revaluation Account and other volume changes such as debt write-offs in the Other Volume Changes Account, to result in Closing Balance Sheet stocks.

Figure 1: SNA Sequence of Accounts



This sequence of accounts will be produced for each institutional sector, such as central government, households, financial business enterprises, rest of the world, etc. And whereas some existing accounts are produced on an annual basis only, we aim to compile the complete suite of accounts quarterly.

Flow of funds accounts

The core accounts show the assets, liabilities and transactions for each sector. However the financial account and balance sheet can be further elaborated to show which other sectors are counterparties to the various financial instruments. The Flow of Funds analysis shows these more detailed relationships between sectors, detailing the sources and uses of funds by instrument. These additional links are especially useful for showing how the impact of a financial shock in one sector might be transmitted to another.

A staged development

The expected timeframe for publication of these accounts is as follows:

- Annual Balance Sheets - March 2017
- Annual Financial Account, Revaluation Account and Other Volume Changes Account – June 2018
- All accounts, on a quarterly basis – March 2020
- Flow of Funds analysis – September 2021

Most required input data already exist, and a substantial part of the project is to reconcile around 12 key data sources into a coherent picture of the economy. This includes data already collected by Statistics New Zealand, the Reserve Bank of New Zealand and Treasury, plus some administrative data sources. In addition, Statistics New Zealand is developing a new data collection covering quarterly business profits. Not only will this provide the data needed to produce the sector accounts on a quarterly basis, but it will also allow the long overdue development of a quarterly income measure of Gross Domestic Product.

The reconciliation phase involves conceptually aligning each data source as far as is practicable. International organisations such as the OECD, IMF and UN have written several manuals to guide statistics on various aspects of a country's economy, including the 2008 SNA. The Reserve Bank of New Zealand's monitoring of the financial sector follows the Monetary and Financial Statistics manual. This manual, along with others, are in the final stages of being aligned to the 2008 SNA. In fact, the Reserve Bank is already redeveloping its financial data collections to anticipate this alignment, including the completed redesign of the Managed Funds Survey and a review of the current Standard Statistical Return.

Central and local government financial accounting records can be reconfigured to be consistent with the standards, as can existing Statistics New Zealand collections which have already been updated to the new standards.

By integrating a range of government data collections and administrative data sources within one statistical framework a comprehensive and coherent picture of the economy should be achieved. This will give economists and policymakers a broad context within which they can fit their analyses and areas of interest.

Statistics New Zealand welcomes any views on this development and how the results can be made accessible in a way that is most useful to economists.

For further detail on this project, contact
Lindsay.beck@stats.govt.nz

NEW MEMBERS

(CALENDAR YEAR 2015 TO DATE)

Athene Laws, Eyal Apatov, Nathan Chappell (Motu); Patrick Nolan, Simon Wakeman, Geoff Lewis (New Zealand Productivity Commission); Chris Parker, Olga Romadanova (Auckland Council); Brett Stawinski; Natalia Fareti (BERL); Angela Mellish, Emily Irwin (Treasury); Kelvin Davidson, Juan Tesolin, Nicholas Brunsdon, Thomas Thomson, Steven Perdia (Canterbury Development Corporation); Fong Yao, Christopher McDonald, Evelyn Troung, Ross Kendall, Amy Wood, Jed Armstrong, Nikki Kergozou (Reserve Bank of New Zealand); Yiting Huang (Ministry of Transport); John Polkinghome (RCG Limited); Ada De Camasca (Ray White - Mission Bay); Matthew Gibbons; Charlotte O'Dea (Castalia); Nick Davis (Martin Jenkins); Robert Kirkby (Victoria University of Wellington); Sharon Pells (MBIE); Laksmi Devi (Auckland University of Technology); Steven Knight (Blackwell Global Investments); Simon Hall (Tertiary Education Commission); Christopher Money (Ernst & Young); Zhongwei Xing (Massey University); Rodney Yeoman (Market Economics); Sini Miller (Lincoln University).

REPORT FROM GEN

For the past five years GEN has been promoting the better use of economics in the public sector in New Zealand. We cater to economists and non-economists through a range of seminars and training opportunities focused on using economics in policy advice.

GEN Seminars

So far in 2015, GEN has held 14 seminars on topics as diverse as whether today's policy settings unfairly favour the baby boomer generation, the New Zealand economy in a changing Asia Pacific and whether the Christmas extravaganza is a waste of time and money. While most of these events were held in Wellington, we are striving to cater for a wider audience. Three seminars were held in Auckland. If you have a topic you would like to present to a GEN audience, we would love to hear from you.

The GEN committee would like to take this opportunity to thank those speakers who gave their time to speak to our network this year and also Professor Norman Gemmell and Libby Wight for their collaboration on the public finance debates.

GEN Annual Conference

The GEN annual conference is an important event and attracts a large number of participants each year. This year we had over 210 delegates attend the conference, held on 30 November 2015 at the Intercontinental Hotel in Wellington. The programme covered a wide range of topics: including economic thinking, inequality and tax, regulation of markets, population demographics, business environment, health, transport and social policy.

The conference was opened by David Smol, Chief Executive of the Ministry of Business, Innovation and Employment. The keynote addresses included two well-known international speakers - Sir David Ramsden (Chief Economic Advisor, HM Treasury) and Professor Robert Wade (London School of Economics). Keynote presentations were also given by Hon Steven Joyce MP and Laurence Kubiak of NZIER, and the audience heard from a number of other high caliber domestic speakers. The conference highlighted the challenges facing by the public sector over the next 5 years and the key skills that economists will need as they do their work. The skills and tools discussed to assist policy development and planning include choice modelling, micro-data using Statistics New Zealand's integrated data infrastructure, scenario planning and the investment approach to social policy. The slides for the conference are available from the GEN website.

GEN Training Courses for 2016

Looking for professional development opportunities in 2016? Here are a few training courses being planned:

Course title	Lecturer	When
Introduction to Microeconomics	Veronica Jacobsen	February 2016
Behavioural Science	Marcos Pelenur	March 2016
Productivity	Patrick Nolan	May 2016
Regulatory Practice	Peter Mumford	June 2016
Introduction to Economic Evaluation	George Rivers	October 2016

GEN Membership

It is free to join GEN. GEN members receive updates on seminars, events and training.

If you would like to join our mailing list to keep up to date with training and upcoming events, please email info@gen.org.nz.

RESEARCH IN PROGRESS...

Continuing our series on the research projects currently underway in Economics Departments and Economics Research Units throughout New Zealand, in this issue we profile the research currently being undertaken by economists at Department of Economics, Waikato Management School, University of Waikato. The objective of this section is to share information about research interests and ideas before publication or dissemination - each person was invited to provide details only of research that is new or in progress.

Sayeeda Bano

Sayeeda Bano has research interests in international trade and international finance. Topics include economic integration, and closer economic relations, trade policy issues, intra- and inter-industry trade, trade in services, trade modelling and estimation, exchange rate volatility and balance of payments issues.

Michael Cameron

Michael Cameron's current research interests include population, health and development issues (including the social impacts of liquor outlet density, the economics of communicable diseases especially HIV/AIDS, health applications of non-market valuation, and health and development project monitoring and evaluation), population modelling and stochastic modelling, financial literacy and economics education.

Graeme Doole

Graeme Doole's works with MfE and MPI to identify how sediment loads from urban and rural environments can be cost-effectively reduced and to identify how decision making by communities can be supported, especially with regards to supporting economic assessment. Graeme's current research includes work with Waikato, Bay of Plenty and Northland Regional Councils on policy analysis with a view to improving water quality.

John Gibson

John Gibson is working on impacts of migration to New Zealand on health and wealth of immigrants, and their left behind family in the Pacific, (with David McKenzie at the World Bank, Steve Stillman at Otago and Halahingano Rohorua at Waikato and supported by the Marsden Fund).

Daniel Gregg

Daniel Gregg is currently working on issues associated with natural resource utilisation in agricultural production including aspects of decision making in complex, uncertain environments, drivers of productivity, consideration of limits to optimal decision making and obtaining maximum sustainable yields from natural renewable resources. Daniel is also undertaking research with international collaborators on sustainability and welfare for poor farming communities in India, Africa and South East Asia.

Gazi Hassan

Gazi Hassan is currently researching effects of education on economic growth, growth volatility and remittances with regards to whether they diminish social violence and whether they facilitate sustainable current accounts.

Mark Holmes

Mark Holmes current and recent research include remittances and the current account balances of less developed countries (with Gazi Hassan), wealth effects, asymmetries and the average propensity to consume (with Xin Shen) and international capital mobility and interest rate pass-through (with Jesus Otero).

Steven Lim

Steven Lim is currently working on research on happiness (subjective well-being) and its relationship with relative income and relative health. This research involves collaboration with Vietnamese and Japanese academic counterparts.

Dan Marsh

Dan Marsh is Chairperson of the Department. His research focuses around reduction of the environmental impact of agriculture in New Zealand and Europe. Recent research projects include investigation of catchment nitrogen trading using experimental methods and analysis of the benefits of improved water quality in the Rotorua lakes using revealed preference data.

Susan Olivia

Susan Olivia is currently working on a research project using satellite data to model socio-economic activity at sub-national levels in Indonesia. She is also involved with a research project that examines whether social capital enhances the effectiveness of a community-led sanitation program in rural Indonesia.

Les Oxley

Les Oxley is currently working on, among other things, measures of long-run well-being and environmental sustainability collaborating with researchers from St Andrews, Scotland and Motu, Wellington.

Jacqueline Rowarth

Jacqueline Rowarth (Professor of Agribusiness) is working on sustainable agricultural systems balancing nitrogen and carbon flows through the environment. The work is funded by the New Zealand Agricultural Greenhouse Gas Research Centre and involves collaboration with Massey University.

Ric Scarpa

Ric Scarpa's research mainly focuses on the development of methods to value non-market goods, especially in the field of environmental goods, such as quality of sites used for outdoor recreation and the rural landscape. Ric is currently dividing his time between the University of Waikato and the Durham Business School.

Frank Scrimgeour

Frank Scrimgeour has ongoing research in the areas of agricultural and resource economics, regional economics and financial economics.

Anna Strutt

Anna Strutt has research interests primarily in the area of global computable general equilibrium modelling and policy analysis. She is currently working on a number of projects with Kym Anderson (University of Adelaide and Australian National University).

John Tressler

John Tressler is currently working on research relating to the evaluation of academic research and national research exercises including PBRF. This research is undertaken in collaboration with Professor David Anderson from Queen's University, Canada and others in the Department of Economics.

Steve Tucker

Steve Tucker is working in a variety of areas, but his main research agenda at the moment is focused on the effect of institutions and trader sophistication on the formation of asset market price bubbles.

ABOUT NZAE

The New Zealand Association of Economists aims to promote research, collaboration and discussion among professional economists in New Zealand. Membership is open to those with a background or interest in economics or commerce or business or management, and who share the objectives of the Association. Members automatically receive copies of New Zealand Economic Papers, Association newsletters, as well as benefiting from discounted fees for Association events such as conferences.

WEB-SITE

The NZAE web-site address is:
http://nzae.org.nz/
(list your job vacancies for economists here).

MEMBERSHIP FEES

Full Member: $130 ($120 if paid by 31 March)
Graduate Student: $60 (first year only)
If you would like more information about the NZAE, or would like to apply for membership, please contact:
Maxine Watene - Secretary-Manager,
New Zealand Association of Economists
PO Box 568, 97 Cuba Mall.
WELLINGTON 6011
Phone: 04 801 7139 | fax: 04 801 7106
Email: economists@nzae.org.nz

MEMBER PROFILES WANTED

Is your profile on the NZAE website? If so, does it need updating? You may want to check...

Economic Modelling using MATLAB

Access Your Free Interactive MATLAB Kit Today!

Financial Analysts and Economists worldwide use MathWorks computational finance products to accelerate their research, reduce development time, improve model simulation speed, and automatically create components to integrate models into desktop and production systems. With MATLAB and its companion products, they analyse data and create forecasts, measure risk, develop optimisation strategies, calculate prices, determine cash flows, and more.

By using the MATLAB environment to quickly develop customised models that can be integrated easily within existing systems, investment professionals can take full advantage of market opportunities.

Access your interactive technical kit loaded with financial product demos and webinars, data sheets for computational finance and economics products, plus a range of user stories and articles to learn how you can use MATLAB for your economic research project.

Access your Free MATLAB Kit today by visiting:

www.hrs.co.nz/3081.aspx

The screenshot to the left shows a contour plot of a log-likelihood function for a GARCH(1,1) model fitted to a typical equity return series.

The Econometrics Toolbox lets you perform Monte Carlo simulation and forecasting with linear and nonlinear stochastic differential equations (SDEs) and build univariate ARMAX/GARCH composite models with several GARCH variants and multivariate VARMAX models.

MATLAB® & SIMULINK®

Call 0800-477-776

HRS Hoare Research Software Ltd