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New Zealand Association of Economists Inc.

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EDITORIAL

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This issue of AI begins with the sixth in our series of interviews with eminent New Zealand economists: Brian Silverstone interviews Grant Scobie. Regular contributions follow from Grant Scobie ('2B Red'), Stuart Birks ('Frames') and Paul Walker ('Blogwatch'). In this issue, 'Fine Lines' is contributed by Stephen Knowles. Arthur Grimes, from Motu, summarises four lectures delivered in London on banking issues. Bex Sullivan and Lynsey Hayes, from Statistics New Zealand, introduce the new Integrated Data Infrastructure. Sholeh Maani is the subject of the 'Five Minute Interview'. The economists at Auckland University of Technology provide this issue's report of Research in Progress.

AN INTERVIEW WITH GRANT SCOBIE

By Brian Silverstone



Grant Scobie (NZAE Life Member and Past President and NZIER Economics Award recipient) has had an extraordinarily wide-ranging, outstanding and inspiring career as an academic, researcher, national and international public servant, private consultant and community leader.

Q: You have had a 50-year career in economics, Grant. Were there any motivating influences, such as family, friends, teachers, books or events that led to your career?

A: I think there was one very critical point and, like many of these things, largely serendipitous. In my second year undergraduate studies, I had to take a compulsory economics course. It was taught by Professor Brian Low, subsequently Chair of the Monetary and Economic Council. He had been a tutor at Canterbury University and tutored my father when he was taking economics. They also had common war experience - they were in the same unit in the Second World War. So together with a very close friend of mine, Murray Hill, whose father also knew Brian Low very well, we felt obliged to uphold the honour of the family name and do well in economics. While I had muddled through some of my other courses, Murray and I worked really hard in economics and received good passes. I enjoyed economics and that was really the turning point that led me to continue.

As far as the family is concerned, I enjoyed debates with my father who was a true socialist through-and-through; he had been a member of the Fabian Society at Canterbury University. His outlook and values were very shaped by the Depression years when his family (recent Scottish migrants) struggled and he had to work part-time over many years to complete his university training (which did result eventually in BA, BComm, Dip Ed and Dip SocSci). He always used to enjoy telling the story that Muldoon was a private in his platoon in Italy during the Second World War and that he promoted Private Muldoon to Lance Corporal - that is, gave him his first stripe. He reckoned that this put Muldoon on the road to the rest of his career and Dad always regretted that, from that moment on.

You mentioned books. There was one book in particular that I read later on that I found extremely influential and that was *The Calculus of Consent* by Buchanan and Tullock (1962). I thought it was a marvellous book on the application of economics to the voting system and democracy. It opened my eyes that standard economic analysis could be applied to a wide range of human behaviour.

Q: As economics was not taught in schools in your day, were there any other university options, apart from economics, that appealed to you?

A: The old system was that if you were doing agriculture or medicine or dentistry, in your first year at university you undertook a standard curriculum called 'science intermediate'. So my first year at Massey was essentially science intermediate. I had harboured some aspirations of doing well enough to go on into medicine at Otago. It turned out that I muddled through my first year with bare passing grades. As there was no hope of getting into med school, I stuck with the agricultural science degree, but majoring in Economics.

Q: Your formal economics education took you from Massey University and then to the University of New England for a masters degree with agricultural economics as your major; and finally to North

Carolina State University for your PhD. Why were you attracted to an agricultural major as opposed to an economics major in your first degree?

A: I had a farming background, not that I came from a farm but very close family friends had a farm and I spent all my childhood holidays on their farm; and all through high school I worked on farms on holiday jobs. In fact I even had aspirations of getting a farm, probably by having to marry into one, but that never worked out. Subsequently, as I moved from agricultural science to agricultural economics through to economics, I had the good fortune to get to know the Nobel Prize winner, T.W. Schultz. Schultz was originally an agricultural economist at the Iowa State University before he moved to Chicago. He always said we should think about the economics of agriculture and not agricultural economics.

Q: I may be wrong, but I believe important concepts in theoretical economics, and certainly in empirical economics, had their origin in agricultural economics.

A: I agree with you. Linear programming is a good example, and agricultural economists lead the way in empirical research on demand analysis.

Q: Your 1970s PhD thesis was on the effect of changes in the protective structure of the exchange rate with an application to New Zealand. This is a continuing debate, as the current exchange rate system can, in effect, also have protective and unprotective effects on exporters and importers. Are there any links between your earlier topic, which was a dominant theme in the 1970s, and the current debate on the consequences of exchange rate variability?

A: I think my thesis was a good example of being relevant at the time (but not for long!). There were very high tariff levels in New Zealand as you point out, but the world moves on and economists need to address contemporary policy issues. Growing out of that work, however, was a whole line of subsequent research that I undertook on the sectoral impacts of protection using concepts developed by Max Corden, Ken Clements and Larry Sjaastad. In particular, Sjaastad's 'incidence parameter' highlighted the cost of import tariffs shifted to the agricultural exporting sectors. This had immediate relevance to countries like Argentina, Australia, Chile and of course New Zealand - all countries that had adopted a Prebisch inspired set of protectionist policies which had disastrous consequences for their export sectors. The concepts of the incidence of the costs and benefits from policy changes are equally relevant today for analysing who gains and who loses.

Q: You are a fluent speaker of Spanish. Was this out of interest or necessity or both?

A: It was out of necessity in the first instance as I had to do two foreign languages for my Ph.D. That's how old I am, as this practice has long gone. So I did Spanish as one of those required languages. But when I took up positions in South America it was obligatory to be fluent. When I returned in 1995 as Director General of CIAT, the Board sent Veronica and me to a language school at the Pontificia Universidad

Javeriana in Bogota for a month's refresher course to polish our Spanish. We really enjoyed that time being students again - jeans and backpack and off to lectures.

Q: You would encourage scholars today to learn another language?

A: Yes. I have always felt that investment in learning a language has a long-run payoff. I guess Mandarin would be the smart choice now.

Q: The agricultural theme was the central component of your appointment as a Senior Agricultural Economist at the Ruakura Research Centre in Hamilton (between 1982 and 1986). Presumably you had some interesting assignments with actual or potential outcomes.

A: Economists were regarded as a strange and probably unnecessary breed of animal at a research centre staffed by several hundred plant and animal scientists. Initially it was a rather lonely existence professionally, at least until a couple more top economists were recruited. Incidentally, my affiliation with the Department of Economics at the University of Waikato began almost immediately upon taking up the role at Ruakura. This gave me access to both economists and the University library (no internet in those days!). The 'price' for my status as an honorary lecturer was teaching a graduate course in Development Economics which I did for many years. The most challenging task I undertook at Ruakura was to make an estimate of the long run rate of return to investment in agricultural research (the results of which cheered the scientists up and made me marginally more acceptable on campus). Surprisingly, there have been almost no other studies of this type in New Zealand, and the original paper is still cited quite often even today.

A: One incident did leave me rather less popular. Recognising that Ruakura occupied a large area of potentially valuable urban real estate on the very border of Hamilton, I estimated that the return to research could be greatly increased by selling the land and moving to a lower cost site 20km outside Hamilton. But what seemed to me like appropriate management of the Crown's balance sheet was not greeted with any enthusiasm by those whose lives and careers were bound up with the mythology of Ruakura.

Q: Your academic teaching and research career has included professorial positions first at North Carolina State University (1976-82), later at the University of Waikato as Professor and Chairperson (1990-95) and more recently as a Visiting Lecturer at Victoria University. What reflections do you have on these experiences?

A: I have been fortunate to have had the opportunity to combine being an academic with working in research centres on real policy issues. My ongoing role in the School of Government at Victoria forces me to read and to keep up with public sector policy issues some of which I might not otherwise had the self-discipline to undertake.

When I reflect on my time as Chairperson at Waikato, a couple of developments come to mind. In the first place, we converted the whole of our economics offering to the then modern semester system, well ahead of almost every other department in the University and I acknowledge the role that you played. We also introduced the first courses, both undergraduate and postgraduate, in law and economics in New Zealand. Above all, I was blessed as Chairperson with a loyal and supportive staff. I recall no trace of the internal squabbles that has characterised some academic departments.

Q: There are debates from time-to-time on the relevance of aspects of the economics curriculum, especially technical aspects and topic coverage. Do you have any thoughts on this theme?

A: I have long held the view that the way we choose to teach first year economics is designed to ensure that almost none of the victims will enrol ever again in any further economics classes. We need to turn introductory economics courses on their heads and make economics come alive by everyday examples and let the tools and the models follow. This is why I have always enjoyed teaching MBA students, especially those who come with little or no economics background and one is forced to make the courses real and relevant. So I think there is an enormous need for us to improve our introductory economics teaching to achieve exactly that. It takes considerable effort – teaching that the marginal cost curve cuts the average cost curve at its minimum point under competition is easy but about as boring and useless to an 18 year old Stage I student as one could imagine. Analysing the economics of student loans, migration or discrimination takes considerable skill and effort to make it relevant and intelligible to first year students.

Q: Over the years, you have received awards for teaching, best economic writing and outstanding policy papers. Could you tell me something about the themes and aspects of these outcomes that made them award-winning?

A: Writing on relevant policy issues in a clear and readable style were, I suspect, the key ingredients. A paper on New Zealand's experience with economic liberalisation I wrote with John Janssen (then my PhD student) won the award for the best economic writing in Australasia, an award named in honour of a colourful Australian MP, C.R. ('Bert') Kelly who convened the 'Society of Modest Members'.

Q: Between 1995 and 1999 you were based in Colombia as the Director General of the International Centre for Tropical Agriculture (CIAT) - with its 1200 staff in 14 countries across three continents - and earlier (1973-76) as a senior economist. What were the circumstances leading to your participation in this substantial organisation?

A: My appointment to CIAT in 1973 was largely serendipitous. I had studied in the US with a very small scholarship from the Australian Public Service Board. When the Whitlam Government came into office, all Commonwealth Bonds were abolished - hence any plans to return to my job in Canberra 'went out the window'. I had applied to the Reserve Bank of

New Zealand and Roderick Deane was keen to hire me. He was going to the IMF and wanted me to be in place to take over the role of Chief Economist. But in those days, a strong Bank Officers' Union was opposed to bringing in someone well up the ladder. One was supposed to start as a cadet on the bottom rung and work one's way up. As I understand it, the Bank had never hired anyone with a PhD to come in up the scale. Roderick fought for months to get me an offer. By the time I eventually did get an offer I had decided to go to CIAT in Colombia - a rather different career path to be sure, but one that led eventually to a very full and interesting life. Incidentally, Sir Roderick is generous enough to look back today and have a quiet chuckle about those events. I think the fact that I had an agricultural background probably helped in my subsequent appointment as Director General of CIAT in 1995. It may have been reassuring to the Board that I had some 'mud on my boots'.

Q: I note on their website that CIAT is dedicated to reducing poverty and hunger while protecting natural resources in developing countries. Do you think there is clear evidence of these outcomes compared, say, to having no organisation such as CIAT?

A: CIAT is one of the 16 centres of the Consultative Group on International Agricultural Research (CGIAR). The system brings the world's top scientists together to address problems of food production and resource management in developing countries. At the risk of being not totally independent, I can state that the pay-off to the investment in these centres has been massive. The contribution to poverty alleviation through the high yielding varieties of wheat, maize and rice alone has paid for the investment many, many fold. It is truly an example of an international public good. I subsequently spent nearly a year as a member of a World Bank team evaluating the impact of the CGIAR centres. The resulting book I co-authored (Anderson, Herdt and Scobie 1988) documented the very real contributions the research had made.

Q: Since your return to New Zealand in 1999, as a Principal Adviser in the Treasury, you have been involved in major research programmes and debates. I notice from this work, Grant, that you often take minority or non-mainstream views such as the current account being less of a problem than many think, the Kiwi Saver scheme being less of an incentive than many believe, and the possibility of savings adequacy rather than inadequacy (which we can discuss next).

A: I would like to think that I do not approach any problem with any preconceived position. I have tried throughout all my work to use economic frameworks and then appeal to the evidence. I would hope that in most of those cases you mention, the conclusions that I've reached have been based on pretty solid evidence; and in virtually all these cases the work has been subjected to peer review and to journal publication. Just to reiterate - rather than approaching any problem with a particular view in mind, I am completely agnostic on the potential outcome of a research question. I merely try and apply the best economic framework I know how, stand back and allow the evidence to speak for itself.

I had an opportunity to reflect on evidence-based research with New Zealand illustrations at a conference sponsored by the Australian Productivity Commission (Scobie 2010).

Q: The savings debate in New Zealand appears polarised between those who think it is optimal, given individual choice, and those who think it is inadequate given ongoing macroeconomic outcomes such as relatively large and persistent external deficits. Given your extensive study of savings, what is your position on this debate?

A: This is a challenging area for policy. We need to define the exact nature of the problem, address the complex questions of measurement, look closely at what the policy options might be to address the problem and study the evidence that they would make a material difference. I personally have been a bit of a Ricardian on the savings issue. The evidence is that there is quite a significant inverse correlation between government and private savings. If this historical pattern persists, then we might see some slowing down, at least in the household saving rate, as the government now moves to restore a budget surplus.

Q: Do you think superannuation contributions should be compulsory?

A: There are pros and cons on the questions of compulsion. A good starting point, I believe, is to ask: 'what problem is compulsion designed to address'. The evidence suggests that a large part of any compulsory savings is offset by reductions in voluntary savings that would have taken place anyway. A particularly challenging area for policy analysts is to assess the welfare implications of compulsion for different groups in society. And above all, we should not look at retirement income policy in isolation; it is one element of a raft of tax and spending policies and a full appreciation of the appropriate policy position needs to recognise the interactions with other parts of the policy spectrum.

Q: You have been in a position to see the results of your research implemented in either actual policy changes or, at the very least, influence debates. Could you give some examples of where you believe your work has resulted in either actual policy changes or has influenced debates? Are there any significant disappointments?

A: I think the answer to this question is really a matter for others to judge. But let me try and give a couple of examples of which I remain quite proud. In the 1970s, together with a very dear Colombian colleague, Rafael Posada, we evaluated the returns to investment in rice research. One dimension of the work was to estimate the distributional consequences of this research. The donors who funded the work of the International Centre for Tropical Agriculture (CIAT) together with its Board of Trustees were not at all keen on supporting rice research in Colombia. The reason for their concern was that 90 percent of the production came from very large holdings. They assumed that the benefits of the research would simply go to the wealthy land owners. CIAT, of course, had a focus on alleviating poverty. Our work showed in fact, that the majority of the benefits went to the poor urban

consumers. Their budget share of rice was high and with lower real prices, resulting from the increased production due to the new varieties developed by research scientists, they captured the majority of the benefits. As a result, the donors were convinced and support for international rice research was sustained throughout Latin America. The real incomes of millions of urban poor were lifted as a result.

In late October 1998, Hurricane Mitch devastated much of Central America. Without rapid action to restore food production, Nicaragua and Honduras would have faced not only serious nutrition and health problems, but also severe economic and social problems whose effects would have been felt throughout the region. Deprived of their livelihoods, thousands of subsistence farmers would be forced to migrate to nearby cities or countries. I immediately went to Washington and obtained USAID emergency funding to use CIAT's scientific capacity to rapidly multiply bean seed. As a result of this 'Seeds of Hope Programme', thousands of Honduran small farmers could plant again the following season. Months later, I stood in the field of one of those farmers – an elderly weather beaten, toothless peasant chewing on the stump of a cigar, explaining to me (he had no idea who I was) about how he had got seeds to replant and save his family. It was moments like that, that made one feel as if one might have done something in a small way to help one's fellow beings.

You asked about disappointments. We undertook considerable research on the role of New Zealand's statutory marketing boards and made a strong case for their abolition. Of course, there were entrenched interests opposed vehemently to this case. As Roger Kerr said of this issue: 'One just has to keep battering at the ramparts'. So the disappointment was that it took so long for the demise of the statutory boards. The saving grace was that the World Bank published our work and those bastions of monopsony power finally became extinct in New Zealand (Jacobsen, Scobie and Duncan 1995).

Q: Finally, on the research theme, I have a very broad question. Your research interests cover a wide range and include the economics of savings, retirement issues and population ageing, research and development, science policy, macroeconomics, agriculture and trade policies in developing countries and the economic analysis of public policy. What pleases you particularly from these interests?

A: Well, Brian, it's true that I have worked across a large number of areas. At times I have regretted this somewhat, as I have ended up being a bit more of a generalist rather than having a solid in-depth knowledge of a particular area. Having said that, the work on science policy - involving estimating the return to investment in research - is one area where I think I possibly made some contribution. Also the work I did in Jordan, Egypt, Tanzania and Ecuador all involved the impact of macroeconomics and exchange rate policies on the output and exports of their agricultural sectors.

In the case of the Egyptian project, I spent nearly a year looking at the consequences for the wider economy of very high levels of wheat subsidies. As a result of these subsidies, the retail price of bread was ridiculously low, at about one

US cent a loaf. Farmers are logical people and respond to incentives. So they would come in to Cairo with their pickup trucks, or with their donkeys and carts, and buy bread at retail to take home to feed their chickens because it was cheaper than buying chicken feed. It is not too difficult to suggest reforms when distortions reach such heights!

Q: The latter period of your career has included a significant public good and community service component. I would like to ask you about some of these contributions starting with the your time as President of the Association and your splendid initiative that the Association plan the 2008 Conference as an international symposium in honour of Bill Phillips and the 50th Anniversary of his famous 1958 *Economica* (Phillips curve) paper. What are your reflections on this event?

A: The Association felt that given the 50th anniversary of the Phillips curve paper, as it has come to be known, it would be appropriate to honour this very distinguished New Zealand economist. Many people in the international economics profession fail to realise that Bill Phillips was in fact a New Zealander, partly I suppose because he undertook his work in the UK.

The conference we organised was a very large undertaking. It had a budget of over \$700,000 and we had to raise something like \$350,000 from sponsorship. The Association had never undertaken anything on this scale previously. In fact, the Association was a little nervous about the exposure that this might create (not without some justification!). As a consequence, we formed a limited liability company - a registered company - with a formal Board of Directors to undertake this task and to isolate the risk from the Association. We combined the event with the Australasian Branch of the Econometric Society meetings, and in the end, we had over 500 registrations. It was by far the biggest single economics conference ever held in New Zealand with a very distinguished list of overseas speakers. We ended up with some funds left over; and importantly I was spared the ignominious outcome of being remembered for decades to come as 'that idiot who bankrupted the Association.'

One of the very real satisfactions I had was the fact that there were quite a number of the Phillips family present at the conference. Obviously Bill couldn't be there. It was, however, a real joy to be able to honour him in this way and to involve the family. It took an enormous amount of time and effort and I fear that if Treasury had realised how much of my time was being spent on organising the conference I may not be a Treasury employee today. But it was truly a team effort - so many were involved, but I would be remiss not to acknowledge my co-chair John Yeabsley and the tremendous support the whole venture had from Reserve Bank Governor Alan Bollard.

Q: Any other highlights during your time on the Council?

A: We introduced the Distinguished Fellow Award with the first Awards in 2004. Incidentally, when I was awarded Life Membership of the Association, I remember noting in my acceptance speech that I was somewhat ambivalent about

receiving such an award, because this was being made by an organisation of economists. Life Membership is a contingent liability on the books of the Association and clearly, in order to manage the risk, the Association would want to minimise that liability by only awarding Life Membership to those they did not expect to survive for too many years!

Q: Despite a somewhat crowded field, MOTU Economic and Public Policy Research has emerged as a most successful initiative. What were some of the programme highlights during your time as a Founding Trustee and Chairperson between 2000 and 2006, particularly projects with an actual or potential influence on public policy?

A: I am very proud indeed of having been associated with MOTU. Its success has rested on two fundamental pillars. First, the outstanding quality of its research staff and secondly its unyielding position as an independent think tank whose work is subject to international review and publication. Other players in the 'crowded field', as you mention, fill different niches. MOTU is unique in these particular aspects. The fact that five people associated with MOTU have received the NZIER Economics Award speaks to the quality of MOTU's human capital and the relevance of their work.

There is now a wide range of output from MOTU's work extending over 15 years. I think one recently recognised area was the work of Suzie Kerr on the whole question of resource management. I think she has made some very significant contributions in showing how market-based systems can address really complex problems of resource management and pollution and her NZIER Economics Award reflected that.

MOTU reports are taken very seriously and are in constant demand. MOTU have been quite adamant that they are not a consulting business so they have to draw a fine line when they are asked to do a particular job as to whether they would retain the intellectual property as opposed to consulting where typically the client owns the intellectual property.

Q: Your most recent outside-of-Treasury appointment has been your membership of the Marsden Research Fund since 2009 and in particular your Deputy Chair role and Convenor of the Economics and Human Behaviour Panel. Do you think the recent approach of funding relatively few projects relatively generously should continue?

A: Membership of the Marsden Fund has been a most rewarding experience and builds on my long-time interest in research and science funding. I think there are real strengths in the competitive bidding system and the intense international refereeing that all Marsden proposals receive in the final round. There is, however, an interesting economics question that you raise, namely, what is the optimal size of a grant. I think the answer is that there is no one size fits all and the funding should and does vary with the particular nature of the research. Could the Marsden funding make a larger contribution to adding to the stock of knowledge were each project to receive a smaller grant, and the funds

used to increase the number of projects we could support, remains an open question in my mind.

Q: Save the Children (NZ) has also had the benefit of your support and experience in several roles for some years now. Here is your opportunity, Grant, to do some PR for Save the Children and comment on your roles and the work of this organisation.

A: I spent some seven years chairing the Overseas Programme Committee of Save the Children (NZ) and latterly as a national board member. Of course one's term rightly and eventually reaches its constitutional limit, and so today I remain just as a supporter. The highlight of my time was a trip to the upper reaches the Sepik River in Papua-New Guinea (PNG) probably the remotest area I have ever been to on the planet. After flying 180km into the jungle from Wewak, we spent several days travelling by dugout canoe. The challenges for an NGO to deliver services in such difficulty areas were immense, but the difference the maternal and child health programme was making was palpable. The key element was the training of village women in rudimentary health care, an approach which helped the foreign aid to have a sustainable impact.

Q: And value for the donor dollar?

A: Not surprisingly, there is a whole set of issues surrounding evaluation. It is extremely hard to evaluate value for the donor dollar because you have got to compare different sorts of foreign aid projects. I tried to get them to build in some sort of baseline data for each project so we could have some measures, however imperfect, of each project's contribution. In this particular case, you are operating in an area where there were no health records - indeed, no birth records, generally. Yet these village women, who had been trained in a six-week course, could do some very basic things, such as giving injections for malaria or dealing with a limb that needed to be put in a sling. The alternative to this health assistance was that these villagers would have a five-to-six days' walk to get to the nearest point where they could hope to get any assistance. In my experience, all these assistance organisations strive hard to keep their overheads to a minimum and to use the money very directly and that Save the Children is as credible as any of them.

Q: You were a Member of the 1993-94 Ministerial Consultative Group - the Todd Group - on Funding Growth in Tertiary Education and Training which resulted in the student loan scheme. Two decades on, what is your response to the principle behind the scheme that emerged and what changes, if any, would you favour?

A: The essential element of the policy debate on this question should, in my mind, be the relative roles of public versus private benefits. Some members of the Todd Group, of which I was one, felt that the existing cost sharing did not really reflect the extent of the private benefits and argued for a shift towards greater user funding. I think there is still a very strong case for continuing with that very same principle today. Incidentally, my participation with the Todd Group led to students at the University of Waikato going to the Vice Chancellor and demanding that I be dismissed from the

University. You can imagine the Vice Chancellor's response.

Changes? I have not been close enough to this issue recently to know what changes, if any, should be made to the student loans scheme - but I would suspect that a starting point is still the principle of the relative split between private and public benefits. I recall dental students as being both the most heavily subsidised and having the highest lifetime earnings. The position that I and some of my colleagues took was that by requiring those students to make a greater private contribution, funding could be released to support greater participation for potential students from disadvantaged backgrounds.

Q: I believe you received a Warrant to be a Lay Member of the High Court of New Zealand.

A: You are correct. I did receive a Warrant but had to resign before I was involved in any cases in order to take up my appointment with CIAT in 1995. One of my disappointments in life is that I never got to sit on the bench of the High Court. It was a disappointment due partly to my enthusiasm for law and economics courses, my membership of the Law and Economic Association and for the knowledge that emerges from the law and economics relationship. I do, however, enjoy telling my lawyer friends that in a past life I was appointed a member of the High Court!

Q: You have been reviewing books in your '2B Red File' for this newsletter for some years now. What are some of the most memorable books that come to mind? Have any influenced your thinking as a Treasury Principal Advisor?

A: This has been a lot of fun. The biggest satisfaction comes from running into someone who claims to read and to enjoy the columns. It keeps me alert to new and interesting books. My bedside table perpetually groans with books I hope to read before the next copy deadline. The type of book I enjoy most is the economics of everything. I have felt - hopefully correctly - that they are books the wide audience of the newsletter readers would find the most appealing. So authors such as Tim Harford (2006), Diane Coyle (2012) and Steven Landsburg (2007) are all favourites. They follow in the tradition set by Harry Johnson (1973) with his volume entitled *The Daily Economist* published in 1973 and available on Amazon for 75 cents! Does this reading influence my Treasury thinking? Probably not; it is really just recreational reading more than anything else.

Q: While most of your career has been in the public and quasi-public sectors, you established your own consulting firm (SER Consulting) which operated between 1986 and 2000. What were among the most interesting assignments?

A: We undertook a wide range of consulting work, much of it in New Zealand. But the most noteworthy projects for me were the overseas ones. The country study work I alluded to earlier - in Jordan, Egypt and Tanzania - gave me very direct access to ministers. Our analysis and advice was not always what they wanted to hear but they always engaged meaningfully in discussions on, say, the effect of exchange

rate policy on grain smuggling over borders or the growth consequences of a subsidy scheme. In all cases, we tried to bring the best-known tools and models to develop rigorous analysis of a particular problem.

Q: A couple of 'broad-brush' questions to conclude this interview, Grant. First, the economic reforms of the mid-1980s were concerned primarily with the role that the government should play in the economy. As a follower of the market-based school of thought, you have wanted government out of the lives of people and firms. Is this still substantially your view and, if so, where, currently, do you think there is excessive central and local government?

A: I don't think there is any such concept as the right size of government in an economy. Certainly Adam Smith gave us a clear steer on what he felt government should do. The actual extent of government involvement depends on a myriad of issues peculiar to each country. In the final analysis, I think the debate is much more fruitful if we focus on the quality of government spending. Just the sheer quantity of government spending as a share of GDP is not really a very helpful indicator.

Q: Secondly, in your acceptance speech for the NZIER Economics Award in 2004, you remarked early in your speech that 'a good dose of standard economic theory could subsume anything sociology, and most other disciplines for that matter, could possibly offer'. By the end of your speech, you were more conciliatory seeing 'less imperialism [in the future] and the opportunity to enrich our economic models with judicious borrowings from other disciplines'. Any thoughts regarding this softening of your initial view?

A: I was trained in a pretty narrow neo-classical manner. On the eve of my departure for North Carolina State University from Canberra, Professor Fred Gruen of the ANU, who had just returned from a sabbatical at NC State, said to me: 'I assume you are aware you are going to a branch office of Chicago'; to which I responded: 'If I can get a Chicago economics training and live in North Carolina rather than on the south-side of Chicago I shall be very delighted!' This expectation was totally fulfilled. The professors in the Ph.D. core areas at NC State were almost all Chicago graduates, as were most of the members of my Ph.D. committee. So inevitably I have views - some would say biases - about the strengths of neoclassical economics. And this is not just in the narrow sense that some critics would have. The work of Becker, Stigler, Posner, Epstein and Buchanan has demonstrated amply that an economics framework can take us a long way on many of the issues we face as a society. It is the rigour, the internal consistency and the appeal to evidence that are the keys to the strength of the neoclassical view of the world.

Does this mean that other views are not relevant? Not at all. There are insights from other behavioural sciences from evolutionary biology, genetics, sociology and psychology that can all enrich our understanding of the world. We should, nevertheless, and in my judgment, adhere to the

fundamental principles that economics brings to the table. In the words of Steven Landsburg: 'Economics is all about incentives; the rest is commentary'. In my judgement, every economist should say these words three times every morning before starting work.

Q: Finally, assuming you have any spare time, Grant, what are your leisure interests?

A: I enjoy gardening with modest success; I play squash badly; I play the piano even worse and fly fish unsuccessfully! I plan to return to tutoring and teaching English as a second language to refugees. I had to put this volunteer role on hold due mainly to my commitments to the Phillips Conference, MOTU and Presidency of the Association. Both Veronica Jacobsen and I tutored for several years. It became more than just English as a second language, as one assumes the role of a mentor. It was much more difficult than I had imagined, although you are given 25 hours of excellent training. It was, however, most enjoyable and very satisfying.

The views expressed in this interview are those of Grant Scobie alone and do not necessarily represent, and should not be reported as representing, those of the New Zealand Treasury.

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THE FIVE-MINUTE INTERVIEW WITH... SHOLEH MAANI

Professor of Economics, Graduate School of Management, the University of Auckland

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

In the last two years of high school I was deciding between economics and medicine, since I liked many aspects of both. I finally chose economics for my undergraduate major. I decided it resonated closely with my interests, and I knew I wanted to pursue a PhD degree, early on.

2. Did any particular event or experience influence your decision to study economics?

As a child, I travelled to both higher and lower income countries, and I was intrigued by the differences in the standards of living across countries. I was very keen to understand what led to the prosperity of nations, and population groups within them. Of course I didn't know these economics terms then! But I was very keen to understand why. I also wanted to know how women's economic conditions could be advanced.

Therefore, at university, I became very interested in labour economics and economic development. In particular, I became interested in the determinants of earnings and the role of education, immigration, and labour market outcomes and policies. These also led me to applied econometrics.

3. Are there particular books which stimulated your early interest in economics?

Interestingly, some Victorian, and turn-of-the-century novels I read as a teenager, depicting differences in economic fortunes, also contributed to my interest in economics. Charles Dickens's *Great Expectations* was one of them! As a university student, I read widely and the work of Gary Becker, Robert Willis, Orley Ashenfelter, Glen Cain, Richard Freeman and Sherwin Rosen were among them.

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

Yes, several! I did my PhD studies at the University of Illinois, Urbana-Champaign. Francine Blau was my supervisor, and she, Koji Taira, Frank Shupp, Marianne Ferber, and Andrew Postlewaite were among my professors who were passionate about their work. They each demonstrated how academic and research-based evidence can effectively contribute to economic policy, or changing social views. This understanding had an influence on my ongoing career, as an economist.

I also developed a keener interest in applications of econometrics with survey data from working with my colleague and co-author, A.H. Studenmund, when I was an assistant professor in the U.S.



5. Do you have any favourite economists whose works you always read?

Yes, I follow certain research trends in economics, and I value reading research papers by colleagues. In recent years I have enjoyed reading the work of several, including George Borjas, David Card, Francine Blau, Daniel Hamermesh, Steve Machin, and Christian Dustmann.

6. Do you have a favourite among your own papers or books?

One of my favourites is my book: *Investing in Minds: The Economics of Higher Education in New Zealand*.

My two favourite papers are 'Academic performance, childhood economic resources and school leaving at age 16', published in *Economics of Education Review* (Vol. 26), and a paper on Maori educational outcomes and relative income levels, published in *Economic Record* (Vol. 80).

I am currently working on a new book on economics of education. So that is becoming my new favourite!

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

The major cost-push inflation of the mid 1970s is the biggest economics event in my lifetime. That inflation, caused by a jump in oil prices, changed how as economists we understand inflation and macro policy's role. It made the economics profession rethink its relevance and understanding. The recent global financial crisis is the second major event for our profession in that respect.

The inflation of the 1970s also gave me first-hand experience with petrol rationing and un-met demand in California!

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

I love spending time with my family, and that includes both my immediate family and keeping in touch, whenever possible, with my extended family that live across four continents! I like going to the movies, eating out, reading novels, visiting art galleries, and gardening.

FROM THE 2B RED FILE

By Grant M. Scobie

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Inequality is much in the airwaves lately. In some ways this might strike one as ironic. At the global level, inequality has fallen markedly – rising incomes among lower and middle income groups in China and India alone have been sufficient to drive the global measures down. And here at home inequality measures typically show almost no change since the early 1990s. In fact the GFC was associated with a decline in inequality in New Zealand; the higher income groups with income from interest, profits and dividends were the hardest hit, while the rise in unemployment was modest compared to many other countries.

But the Occupy movement and uprisings in Middle East are manifestations that all is not well. Here at home, the frightening statistics on child poverty create a sense of disquiet if not urgency.

The recent round of debate was in part stimulated by the work of **Richard G. Wilkinson and Kate Pickett (2009), *Spirit Level: Why More Equal Societies Almost Always Do Better* (London: Allen Lane)**. Their use of cross-country correlations to establish why most of societies' ills are associated with (caused by?) inequality has become a standard starting point for the debate. Unsurprisingly, the robustness of their methods has been questioned. Not holding "everything else constant" is a serious limitation for any analysis relying on cross-country correlations. In fact there is much debate about both the measurement and the evidence for the consequences of inequality.

On the measurement, there are a myriad of traps for the unwary. How is income to be defined? Should it be for individuals or households? How do we adjust for household size and composition? Does it include only market income or transfers as well? Are changes in net wealth adequately measured? Is it before or after tax income that is important? For an overview of these issues and New Zealand evidence, a recent piece by **Brian Easton (2013) *Economic Inequality in New Zealand: A User's Guide*** is a good starting point. The full report was published in *The New Zealand Journal of Sociology*, 28 (3):9-66. (<http://www.eastonbh.ac.nz/2013/12/economic-inequality-in-new-zealand-a-users-guide-summary/>)

On the question of evidence it is very easy to find data that apparently establish a particular point of view. Paul Krugman, writing in his *New York Times* column (26 January, 2014) noted:

*"Rising inequality has obvious economic costs: stagnant wages despite rising productivity, rising debt that makes us more vulnerable to financial crisis. It also has big social and human costs. There is, for example, **strong evidence** that high inequality leads to worse and higher mortality". (bold added)*

For careful and robust analysis of the evidence one cannot go past the work of Angus Deaton. He and Daniel Lubotsky (2003) *Social Science and Medicine*, 56(6):1139–1153 have indeed analysed in great detail the data on the relationship between inequality and health status and they conclude:

"Once we control for the fraction black, income inequality has no effect on mortality rates. This result is consistent with the lack of any relationship between income inequality and mortality across Canadian or Australian provinces, where race does not have the same salience. Our finding is robust; it holds for a wide range of inequality measures; it holds for men and women separately; it holds when we control for average education; and it holds once we abandon age-adjusted mortality and look at mortality at specific ages.

There are now also a large number of individual level studies exploring the health consequences of ambient income inequality and none of these provide any convincing evidence that inequality is a health hazard".

Have the New Zealand studies that find ethnicity is a critical component of health inequalities adequately controlled for gender, age,

income, education, occupation, personal behaviours, attitudes to risk, community effects, etc? Or would the Deaton findings apply here too?

Max Rashbrooke is making a career out of inequality. Here is his blog site: <http://www.inequality.org.nz/blog/>. He is the editor of a 2013 volume ***Inequality: A New Zealand Crisis* (Auckland: BWB Books)**. The very title is intended to startle and shock, even if the facts of constant or falling inequality would hardly seem to warrant a "crisis". Given that the significant changes in inequality occurred close to three decades ago, maybe this title would have been more apt at that time.

There is no shortage of policy prescriptions. Geoff Bertram, a former Victoria University of Wellington economist, would have the government stop awarding contracts (and knighthoods) to companies where the highest-paid manager earns more than three times the lowest paid worker. The New Zealand Treasury would be left unfunded by this rule – but this might just reflect my self-interest, rather than acknowledging a genuine route to greater equality. Mr Bertram did not speculate on the amount by which the Gini coefficient would fall as a consequence of his policy proposal.

For a rather more serious work on inequality one might turn to **Joseph E. Stiglitz (2012) *The Price on Inequality* (London: Allen Lane)**. It is a sweeping critique of the role of market forces which the author argues leads to the concentration of power and money in the "top 1 percent."

Is economic growth necessarily associated with worsening inequality? Readers will recall the Kuznets curve; a simple stylised plot of measures of economic development against income inequality leading to an inverted-U-shape. To the extent that economic growth for last two centuries has been accompanied by both a greater role for market forces and declining inequality, one might question the extent to which Stiglitz lays the blame for rising inequality (if in fact it has risen) at the feet of the market. A report from the **OECD (2012) *Going for Growth*** has a more upbeat view in Chapter 5 entitled "Reducing income inequality while boosting economic growth". The OECD has an extensive set of country profiles on inequality outcomes and policy measures – well worth a look at: (http://www.oecd.org/social/labour/lessincomeinequalityandmoregrowth-aretheycompatible.htm#policy_notes). The report concludes that investment in human capital is a critical element; but it can be supported by appropriate tax and transfer systems.

Stiglitz would agree – and he places much emphasis on restoring full employment. Chapter 9 I found particularly refreshing. Here the Nobel laureate takes a long hard look at macroeconomic policies especially those of the central banks. He worries that central bank independence might simply lead to a lack of accountability, and questions their focus on inflation targeting. Is the Fed captured by the banks and financial institutions that it is charged with monitoring? He reminds us that low interest rates do little to stimulate demand (other than for housing) in times of a recession induced lack of confidence; and furthermore, that there are distributional consequences of low interest rates for those on fixed incomes relying on investment earnings; "in this way there was a large transfer of wealth from the elderly to the government" (p.244). Your ageing columnist is increasingly sensitive to this matter.

Stiglitz notes that demand has been weak in the United States because the country imports so much and worse, "imports destroy jobs" (p.279). I suppose even Nobels can be forgiven for oversimplifying when penning popular polemics. But one wonders if this was just a tad too mercantilist.

How does inequality move with growth? What is the role of the state in reducing inequality? To what extent have government policies alleviated rather than reinforced inequality? Does the measurement of inequality at a point in time pay too little attention to the dynamics of income and wealth transitions over the life cycle? Are those at the bottom of the heap (eg students) tomorrow's dentists? And should we be more concerned with lifting those out of absolute poverty and less concerned that their position in the relative ranking has changed (up, down or little as the case may be)? From the breadth and diversity of the debate, it would seem as economists we still have some way to go.

“FRAMES”

S&D - HOW REALISTIC IS THIS?

By Stuart Birks, k.s.birks@massey.ac.nz

I find that I can get a good response from students when I describe some theory and then highlight its limitations. These indicate possible challenges for them to take up in furthering our understanding. This column illustrates the point by looking at one of our most basic building blocks, that of supply and demand. It also describes implicit assumptions that we sometimes make without thinking. In this case it is of particular significance for the sort of research which relies on quantitative analysis. The fundamental question here is, ‘what do the data represent?’ Many of us will have presented some of these points in lectures, but for research they fall under Keynes’ categorisation as additional ‘reserves, qualifications and adjustments’ that are needed but often overlooked.

So let’s look at this simple example. Economists use the concept of a market represented by supply and demand. Do we actually observe this? We really observe very little. There are problems defining a market. As presented, there are unstated issues of the extent of the market over time and space, and all items produced are assumed to be homogeneous. Even if we have a clearly defined market, is it a competitive market that can be represented by a supply curve and a demand curve (how many markets are like this, given imperfect competition)? If it is, can we then say “this is the demand curve”? What do we actually see? We are not going to see all the points on a demand curve at any one time. At best we will see one price-quantity point giving the quantity sold at the given price. We may not even observe that if suppliers are unwilling to reveal their sales information.

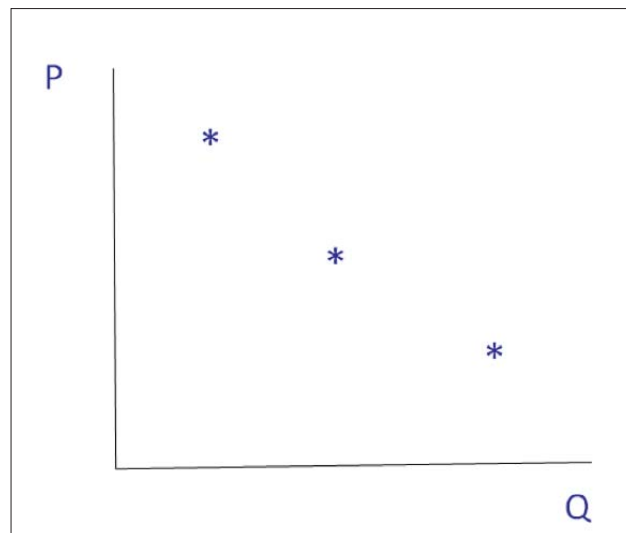
Consider now a commonly suggested operation of market forces. If the market is out of equilibrium, some people’s plans are not realised, so they have an incentive to change their behaviour. Where competition is based on price, this suggests some change in either the asking price or the price that buyers offer to pay. These options are not institutionally possible in many of today’s markets. Even when prices are flexible, the process is not one of general negotiation on price over the whole market until agreement is reached, after which trade occurs. So how many trades occur at a prevailing price before or during adjustment? Given these trades, can we then consider some final price as the equilibrium for the market? There would seem to be two alternatives within markets of this structure, either there are price rigidities and sustained disequilibria, or many trades occur out of equilibrium with no single price prevailing overall.

So how can we claim to observe an equilibrium point? At best, all we know is a price and the quantity that was traded. We don’t know if there is excess demand or excess supply that particular price. In reality, then, the information that we have is limited. As economists, we have our theories, but if we ask what is actually observed, we have to say, “Well, in fact very little”.

What does this say about our application of econometrics to such

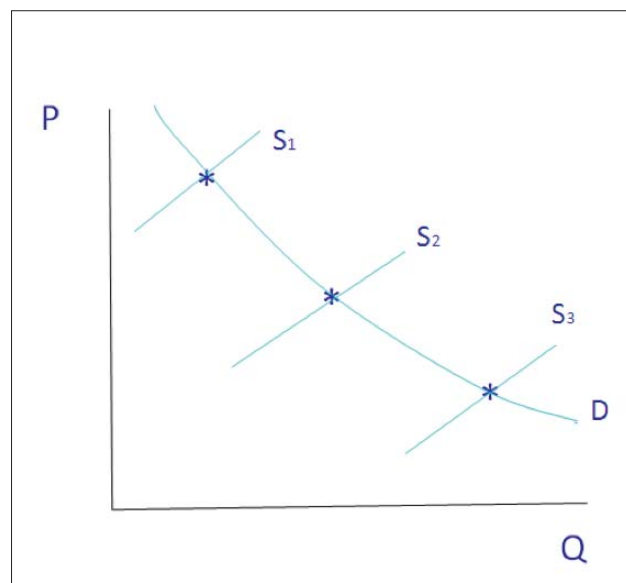
problems? There is a big question mark over the data. That aside, there are additional conventional criticisms such as the following. My apologies for labouring the point, but let’s spell it all, if only for our students. It is not even necessary to explain the identification problem to indicate possible difficulties. Assume that we are provided with some price-quantity points that we are prepared to use. They would give us a graph such as Figure 1 showing three such points.

Figure 1



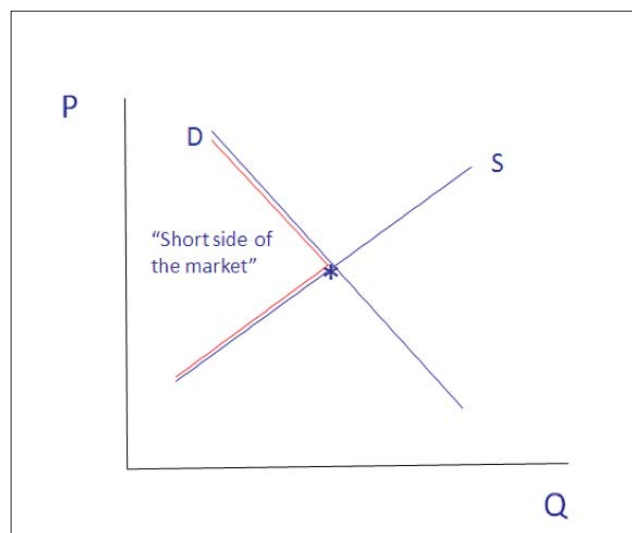
Is this a demand curve? Is it a supply curve? Many students assume that the points represent a demand curve because they give a downward-sloping line. However, these observations have to be at three different times. There is no reason whatsoever to assume that there is one fixed demand curve for all three observations. If there is, and the points are all on both supply and demand curves, then surely the supply curve must have shifted as shown in Figure 2, with supply curves S1, S2 and S3.

Figure 2



This assumes that the three points represent equilibria. However, all we observe is what is being traded. Assume standard downward sloping demand and upward sloping supply. With a price above the equilibrium level, there would be no purchases to the right of the demand curve, so there would be excess supply. With a price below the equilibrium level, nothing would be supplied to the right of the supply curve, so there would be excess demand. If we are observing points on one of the curves, then we are observing the “short side of the market”, as indicated by the red line on Figure 3.

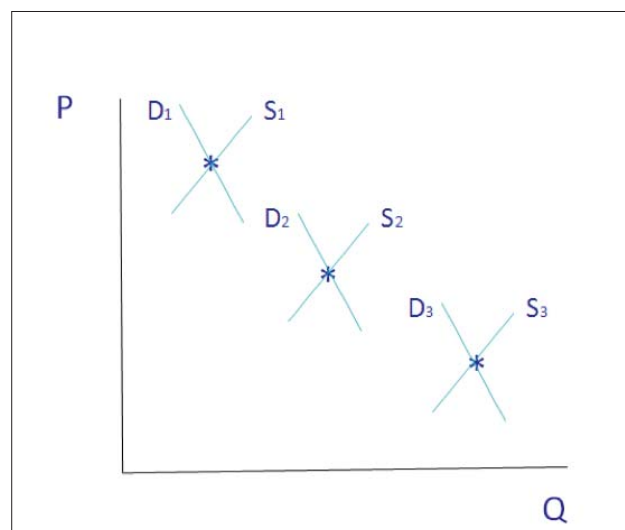
Figure 3



In a labour market there may be frictional unemployment, with people taking time to search while changing jobs, and prospective employers taking time to fill vacancies. We may then have the supply and demand for jobs being equal without the market clearing. This is not illustrated in static analysis because there is no time dimension, but a search process is the reality in many markets. Moreover, if search times on the demand side and supply side are not equal, then it is not enough just to compare numbers of prospective employers and employees involved in search. A steady state would require a larger number on the side with the longer search time.

So we have a real problem determining if any of the observed points actually represent a market equilibrium or even lie on one of the curves. What we actually observe in the real world is a lot less than is commonly assumed. A standard critique might present a structure such as Figure 4, with distinct supply and demand curves for each of the three observations. It assumes that the three points are equilibria and that there were shifts in both the supply curve and the demand curve. Even this may be wrong, and, if correct, we can say nothing about the slopes of any of the curves.

Figure 4



Assumptions are made in econometrics so that claims can be made as to the interpretation of lines that are estimated. Hence, with more observations and on the assumption that there is one stable demand curve, we could estimate a line such as in Figure 2 and claim that it is a demand curve. It is often claimed that demand or supply relationships have been estimated, or that, given the analysis, changes in price or some other determinant in a model can be expected to generate responses in demand or supply of a specific magnitude. This is based on simplified structures and assumptions which, on reflection, we may not be willing to accept. Many authoritative assertions are made on the basis of questionable reasoning such as this. The claims are consistent with commonly accepted conventions, but are they really justified?

I have not distinguished between short-run and long-run demand and supply curves, nor have I discussed the possible use of other available information, including numerous nuanced approaches to consumer behaviour such as those described in marketing texts (Schiffman et al., 2008). Collectively, these and the above suggest that there is a lot more that can be done to refine our understanding of this most fundamental economics construct, the market.

Schiffman, L., Bednall, D., O’Cass, A., Paladino, A., Ward, S., & Kanuk, L. (2008). *Consumer behaviour* (4th [Australian] ed.). Frenchs Forest, N.S.W.: Pearson Education Australia.

BLOGWATCH

By Paul Walker (paul.walker@canterbury.ac.nz)

On the international blog scene the creation of firms is being discussed. The reasons for firm formation is well-trodden ground in economics but what of the sociological constraints on the creation of firms, these are markedly less well known among economists. In an unusual turn for economists, at the 'Why Nations Fail' blog <<http://whynationsfail.com/blog/>> Daron Acemoglu and James Robinson take a look at the arguments of American anthropologist Clifford Geertz on the constraints on the formation of firms in two Indonesian towns, Tabanan in Bali and Modjokuto in Eastern Java, as detailed in Geertz's book *Peddlers and Princes: Social Development and Economic Change in Two Indonesian Towns*. The aim of the book is to show how social structure influences the possibilities for creating economic development and Geertz shows historically how and why these two towns ended up with very different social structures. By this Geertz means that even if the basic economic challenge was the same, the problems that stopped it being solved were very different <<http://whynationsfail.com/blog/2014/2/11/peddlers-and-princes.html>>. In Geertz's view the social structure of the towns is key to understanding their development potential and in particular whether modern firms could emerge. In two additional postings Acemoglu and Robinson discuss Geertz's view that the different social structures in Modjokuto <<http://whynationsfail.com/blog/2014/2/13/development-in-modjokuto-java.html>> and Tabanan <<http://whynationsfail.com/blog/2014/2/18/development-in-tabanan-bali.html>> are due to the very different colonial experiences each town faced.

Noah Smith writes that he has spent a lot of time griping about modern macroeconomics, but he now wants to take a minute to point out how quickly the economics profession has responded to many of the major criticisms levelled at it since the 2008 financial crisis. At his 'Noahpinion' blog <<http://noahpinionblog.blogspot.co.nz/>> he explains what he sees as the five attacks that macro has more or less fended off: 1) Macro didn't predict the crisis; 2) Macro doesn't include finance; 3) Macro thinks the economy is a representative agent with rational expectations. Ha!; 4) Macro models are too big and clunky to be useful in a crisis; and 5) Macro is too political. Smith argues that no matter what some critics say 'Macro definitely does not look like a dying research program, stuck in scholastic navel-gazing while the world passes it by' <<http://noahpinionblog.blogspot.co.nz/2014/03/how-macro-answered-its-critics.html>>.

On the theory of the firm front Nicolai Foss takes a look at "Relational Contracts and the Decline of General Motors". At the 'Organizations and Markets' blog <<http://organizationsandmarkets.com/>> Foss argues that recent contract theory research on relational contracts rejects a number of the conventional explanations for the comparative success of General Motors and Toyota over the last four decades. Foss notes that this research suggests that GM had difficulties understanding the nature and important role of the relational contracts that underlie Toyota's success and therefore struggled to implement similar contracts and has lost market share because of it <<http://organizationsandmarkets.com/2014/02/08/relational-contracts-and-the-decline-of-general-motors/>>.

In both the international and local blogospheres the question of saving elephants has been raised. At the 'Knowledge Problem' blog <<http://knowledgeproblem.com/>> Lynne Kiesling notes

that wildlife poaching is a moral, social, and political as well as an economic problem. It is a problem of institution-driven misalignment of incentives. The challenge is to have local community-based institutions that create long-run economic incentives to preserve, or even increase, the wildlife population <<http://knowledgeproblem.com/2014/03/03/saving-the-elephants-and-world-wildlife-day/>>. On the local scene Brendan Moyle at the 'Chthonic Wildlife Ramblings' blog <<http://sciblogs.co.nz/chthonic-wildlife-ramblings/>> writes that the wave of ivory destruction by a number of governments will do little to help stem the trade in ivory. The problem with the ivory-crush is that it is just being presumed that given the destruction of ivory buyers will perceive ivory to be less desirable. The risk, of course, is that it bolsters the rarity-value of ivory and thus the market will think it becomes even more valuable. Which only increases poaching.

On the local blogs Weshah Razzak has been discussing "Unemployment, wages, productivity and monetary policy in New Zealand". Razzak explains at his 'W A Razzak Economics Today' blog <<http://razzakw.blogspot.co.nz/>> that in the microeconomic neoclassical model firms hire more labour as long as the marginal product of labour (MPL) exceeds the real wage and hiring stops when the MPL equals the real wage. When the wage rate is higher than the MPL firms lay off workers and unemployment increases. He argues that while there are some issues with reconciling the microeconomic and the macroeconomics of wage dynamics it is possible to show graphically that the neoclassical theory is quite intuitive and empirically verifiable at the macro level <<http://razzakw.blogspot.co.nz/2014/02/unemployment-wages-productivityand.html>>.

One of the more recent policy announcements from the Greens is to shift some transport funding away from lower value roading projects towards bike lanes. The Greens are claiming that research shows such a move would produce up to \$4 billion of benefits over 40 years for a \$200 million investment - a 20 to 1 return. This claim gets the once-over from Eric Crampton at the 'Offsetting Behaviour' blog <<http://offsettingbehaviour.blogspot.co.nz/>>. Problems with this? For a start a bunch of the claimed benefits come from estimated future health improvements and mortality reductions where said future benefits have not been discounted and this refusal to "discount at standard discount rates kinda determines their results for them" <<http://offsettingbehaviour.blogspot.co.nz/2014/03/discounting-cycling.html>>. The Greens' Julie Anne Genter provided some comments on the cost-benefit assessment <<http://offsettingbehaviour.blogspot.co.nz/2014/03/discounting-cycling.html#comment-1289594727>> which Crampton also gives the once-over <<http://offsettingbehaviour.blogspot.co.nz/2014/03/gentner-on-cost-benefit.html>>.

Over at the 'Economics New Zealand' blog <<http://economicsnz.blogspot.co.nz/>> Donal Curtin graphs just over 50 years (1960-2012) of data on income inequality in New Zealand, as summarised by two versions of the Gini coefficient: one based on market incomes, and one based on net incomes after the impact of tax and transfers. As you would properly expect, the post-tax, post-transfer level of inequality is less than the pre-tax pre-transfer level because of the progressive nature of the combined tax and transfer system. Curtin writes "the only vaguely analytical comment I'd make is that the tax/transfer system didn't seem to be very strongly redistributive up to the mid 1980s [...] but it obviously had a much larger redistributive impact in the 1990s" <<http://economicsnz.blogspot.co.nz/2014/03/inequality-in-new-zealand-50-years-data.html>>.

FINE LINES: THE SOLOW MODEL OF ECONOMIC GROWTH

By Stephen Knowles

The growth model developed by Robert Solow (1956) provides two of my favourite diagrams. There was renewed interest in the model following Mankiw, Romer and Weil (1992), which extended it to include human capital (proxied by education) and obtained empirical estimates. The diagrams shown here are standard text book versions of the original model, rather than those from Solow’s article.

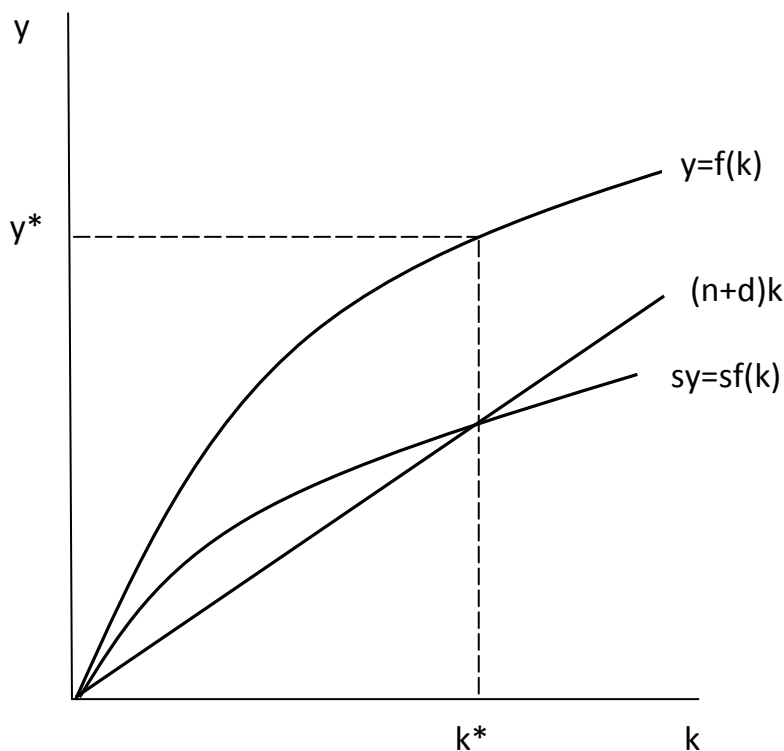
Figure 1 shows the version of the model explaining the level of output per worker, y . A key assumption is that there are diminishing returns to capital per worker, k . Hence the production function, showing the relationship between k and y , is concave. Assuming that a fixed proportion of income per worker is saved, and that savings is equal to investment, gross investment is equal to y multiplied by the savings rate. Thus gross investment is $sf(k)$ in the diagram. Capital per worker will be thinned out by both depreciation and labour force growth, with these effects being represented by $(n+d)k$, where n is the labour-force growth rate and d the depreciation rate. Hence, net investment is $\Delta k = sf(k) - (n+d)k$.

A key prediction of the model is that economies tend towards steady-state levels of capital per worker (and hence output per worker). If $sf(k) > (n+d)k$ the economy grows and if $sf(k) < (n+d)k$ the economy contracts. This might seem to imply that once countries reach the steady-state they no longer grow, but if technology is incorporated into the model the prediction is that economies grow at the rate of technological progress.

The model generates some other interesting predictions. Output per worker is higher in countries with higher savings rates and lower labour force growth rates. If the labour force participation rate is relatively stable, the policy prediction is that reducing population growth increases output per capita. Mankiw, Romer and Weil’s empirical results found these predictions are consistent with the real world data, with these two variables explaining 59% of the cross-country variation in output per worker. When they added human capital as an additional factor of production the explanatory power of the model increased to 78%.

If the equation for Δk is divided through by k , we get an equation for the growth rate of k , given by $\Delta k/k = sf(k)/k - (n+d)$. This equation is depicted in Figure 2. Here another interesting prediction of the Solow model emerges: countries closer to their steady-states grow more quickly. This prediction has become known as “conditional convergence”. Mankiw, Romer and Weil provided empirical evidence in favour of

Figure 1



conditional convergence, which led to a lively debate in the literature as to whether this prediction really was consistent with the real world data.

Why is the Solow model one of my favourite models? There are a number of reasons. The first is that it provides a nice introduction to models of economic growth in the third-year growth and development course that I teach at Otago. Once students have mastered the Solow model, it is reasonably easy to lead them through other models of economic growth such as endogenous growth theory. It is also a model that lends itself to tutorial questions on different policy experiments (e.g. what happens if the savings rate or labour-force growth rate changes?) and the implications of relaxing certain assumptions of the model (e.g. what would happen if we did not have diminishing returns to capital per worker, or what would happen if the savings rate was an increasing function of output per worker?). In fact, I'm writing this only a few hours after a lively tutorial discussion on the Solow model.

The model is also a useful starting point for thinking about why some countries have higher incomes per capita than others. Explaining the global distribution of income is a complex question and there are no simple answers. To think the Solow model provides all the answers would be rather naïve. However, there is evidence that differences in savings

rates and population growth rates are part of the explanation. It raises some other questions; for example, why are savings rates higher in some countries than in others?

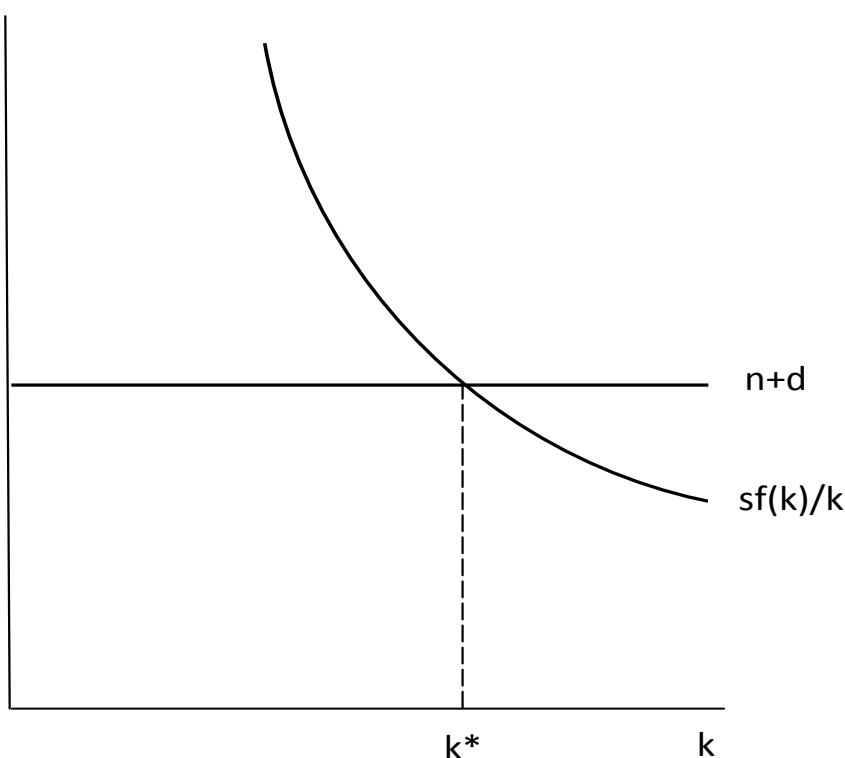
Another reason why I have a soft spot for this model is that it formed the basis of my PhD thesis back in the 1990s. Mankiw, Romer and Weil (1992) had extended the Solow model to include education as an additional factor of production. In my PhD thesis I broadened the definition of human capital to include measures of health as well as education, and found this further increased the model's explanatory power.

References

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Figure 2



FOUR LECTURES ON CENTRAL BANKING

By Arthur Grimes



I presented four lectures on central banking topics in London between September and December 2013. The lectures were delivered as part of my NZ-UK Link Foundation Visiting Professorship, based at the University of London's School of Advanced Study, and following my stepping down as Chair of the Reserve Bank of New Zealand in September 2013 after ten years in that role.

The four lecture topics have been gathered together in Motu Working Paper 14-02, "Four Lectures on Central Banking". The topics (with the institution at which they were delivered) are:

- *Inflation Targeting: 25 Years' Experience of the Pioneer* (Bank of England);
- *A Floating Exchange Rate is the Worst Exchange Rate Regime (except for all the others that have been tried)* (University College London);
- *How Prudent are Macroprudential Policies?* (London School of Economics);
- *Responsibility and Accountability in the Financial Sector* (Institute of Advanced Legal Studies).

A key theme across the four lectures is the importance of ensuring that central bank policies and actions are time consistent. Time consistency requires that a central bank can commit to implementing the policies that it says it will implement. For instance, if a central bank commits to delivering low inflation, it will not use its powers to deliver other goals at the expense of low inflation. Similarly, if it commits not to bail out banks in the event of failure, then it (and other official bodies) will not bail out a failed bank.

The first lecture, on inflation targeting, traces the history of inflation targeting in New Zealand, the first country to adopt this approach to monetary policy. It elucidates the theories that led to its adoption and analyses why an alternative approach, nominal GDP targeting (in levels or changes), was not adopted. The latter approach is shown to have a number of undesirable properties. Issues of time consistency are discussed in the post-GFC (Global Financial Crisis) context, and an extended theory of time consistency, relating to central bank interventions following asset price collapses, is proposed. A cross-country econometric analysis of the economic effects of inflation targeting shows that adoption of inflation targeting has been associated with a lift in GDP growth rates. It is also associated with a fall in inflation in countries that formerly had high inflation rates, and with a general convergence of inflation rates towards the OECD average. It finds no evidence that inflation targeting adoption has systematically increased or decreased persistence in real sector variables.

The second lecture, on exchange rate systems, discusses the range of exchange rate systems used by countries from a free float to a common currency. It briefly discusses the theory of how

various regimes affect macroeconomic outcomes, and discusses New Zealand's varied history of exchange rate regimes. An empirical analysis of comparative international macroeconomic performance under fixed versus floating regimes shows that the Euro countries have low real effective exchange rate volatility, but another country with a fixed exchange rate (Hong Kong) has a moderately volatile real exchange rate. Thus fixing an exchange rate does not guarantee low exchange rate volatility; trading patterns also matter. Countries with high real exchange rate volatility have tended to experience lower real GDP volatility than countries with low volatility in their real exchange rate. Using the same econometric approach as in the inflation targeting lecture, adoption of a fixed exchange rate is shown to lead to greater persistence in economic cycles; thus recessions (and booms) last longer in countries with a fixed exchange rate than those with a floating (but potentially more volatile) exchange rate.

The third lecture, on macroprudential policies, discusses the case put forward by the IMF and others for the use of macroprudential policies in the face of systemic risks to the macro economy. It analyses the arguments for macroprudential policies given the presence of externalities in which banks and other financial institutions do not internalise all the costs of financial collapse. These externalities may cause institutions to adopt excessively risky lending strategies. These risks, in turn, justify some regulatory interventions such as minimum capital, liquidity and funding requirements. However, central banks and governments need to address their own policies that contribute to excessive financial sector risk taking, especially the (time inconsistent) rescue of institutions which have failed after having made excessively risky investment decisions. The lecture discusses New Zealand's use of macroprudential and related policies prior to 1984, and presents the results of cross-country tests of the effects of loan to value ratios (LVRs) imposed on housing loans. A favourable impact of LVRs on real exchange rate and house price outcomes is shown in a limited number of instances, but LVRs show little or no impact on the two outcome variables in other cases.

The fourth lecture deals with microprudential policies relating to banks. A key theme is that policies need to be structured so as to internalise the risks undertaken by financial institutions within those institutions themselves; the risks should not be borne by outside bodies, often ultimately by the taxpayer. A number of methods of internalising risks are discussed, including the mandatory use of contingent convertible notes (CoCo's), mandated large subordinated debt holders and multiple shareholder liability. (The mediaeval practice of beheading bankers in the event of bank failure is discussed, but not explicitly advocated.) The importance of regular mandated disclosures by banks, with criminal and civil liability for directors in the event of incorrect disclosure – as occurs in New Zealand – is also highlighted. Consistent with this approach, bank directors and

senior management should be held legally accountable for malpractice within banks, in contrast to the observed use of settlements between regulatory authorities and banks in which shareholders bear the burden for prior bank wrongdoing.

The importance of time consistent policies and actions is shown to be crucial in all aspects of central banking. The analyses show that this feature is as important in microprudential and macroprudential policy-making as it is in monetary and exchange rate policy. Some central

bankers and international organisations, reacting to short term crises, have overlooked the importance of this fundamental aspect of central banking and these lectures stand as a reminder that central banks need to maintain a long-term perspective with regard to the effects of their actions.

“Four Lectures on Central Banking” is available for download from the Motu website at <http://www.motu.org.nz/publications/working-papers>.

THE POWER OF INTEGRATED DATA

By Bex Sullivan and Lynsey Hayes.



Statistics New Zealand's Integrated Data Infrastructure (IDI) is changing the landscape when it comes to providing data for evidence based policy evaluation and research. By integrating administrative and survey data collected from source agencies across government, the IDI enables analysis on pathways and outcomes that were previously not possible.

The IDI was delivered at the end of 2012. Expanded in 2013, it now includes tax, education, benefits, migration, student loans and allowances, justice sector, injury and a number of Statistics NZ survey data. Already significant work is underway to further expand the datasets in the IDI with a focus on data that will further enable research on social outcomes for individuals, families, and households. Statistics NZ has recently worked with Inland Revenue so that confidentialised tax data on individuals can now be securely accessed remotely and by non-government researchers.

In recent years data have become more readily available and government has recognised the need to use analytics to inform decisions. The valuation of the welfare system is an example of the shift towards an analytics driven approach. The systematic approach to the cost of benefit dependency highlighted not only where resources were most needed, but also how valuable data are to ensure the best interventions are being put in place. The potential of the IDI to examine the outcomes for population groups and the effects of interventions is vast.

Researchers from across government are already using the IDI to answer research and policy questions. The Ministry of Education's Moving on Up report looked at the effect of level and field of study on graduates' destinations and earnings. Researchers showed that level of study did relate to destination and earnings post study, with higher qualified graduates being more likely to be in employment and having higher median earnings than graduates with lower level qualifications. Field of study also affected whether graduates were likely to engage

in further study, and also related strongly to earnings. These findings have been used as the backbone of the CareersNZ interactive tool that gives prospective students the opportunity to compare study options and outcomes.

Research from the IDI has also affected policy change within New Zealand. The Ministry of Business, Innovation and Employment (MBIE) used linked tax and migration data to examine whether the employment of temporary migrants has negative effects on the employment opportunities available to New Zealanders. MBIE reported that overall the employment of temporary migrants has no negative effect on the wages and employment of existing workers in New Zealand. However, specific population groups, such as youth, may be more affected by temporary migrant employment than others.

Following the release of MBIE's report, The Minister of Immigration Hon Michael Woodhouse acknowledged that temporary migrants add to the New Zealand labour market by filling skill shortages gaps and that they actually encourage growth in particular industries. Migrants, particularly international students, also bring significant revenue to New Zealand's economy. The report's findings have led to a policy change relaxing the working rights of international students, allowing them to undertake more hours of employment while studying in New Zealand. See Integrated Data Infrastructure page on the Statistics NZ website for a comprehensive list of other research projects using the IDI.

Access to IDI data can be obtained by applying to the Microdata Access team at Statistics NZ, or by customised data requests. Tax data can now also be accessed via a confidentialised unit record file (CURF). Note that applications for microdata access must be for bona fide statistical and/or research purposes. See the Microdata Access Protocols page on the Statistics New Zealand website for more information.

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 Lincoln University. 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.

Contact details can be found at: <http://www.aut.ac.nz/study-at-aut/study-areas/business/research/research-areas/economics>

Professor Tim Maloney

Tim's research is in the broad areas of labour economics and public policy. He's currently working with AUT and several postgraduate students on a predictive risk model using detailed administrative data of poor student outcomes at this university. This will hopefully lead to evaluation work on interventions designed to avoid course failures and the subsequent dropout behaviour of these students. He has several ongoing projects related to the effects of minimum wages in New Zealand and other countries. Tim is currently working with others in establishing a research centre for urban economic and social analysis at AUT. He is also working with Rhema Vaithianathan and others on evaluating the effects of the Family Start programme on New Zealand families and children.

Professor Rhema Vaithianathan

Rhema is a health economist. Her current area of research interests is in the area of vulnerable children ; ageing and health care policy. She has been on a team which completed a project funded by MSD on whether the routinely collected administrative data could predict children at risk of maltreatment. They found that the data provided reasonably accurate predictions. She is also using the same data to undertake an evaluation of the impact of Family Start (a large scale publically funded home visiting program). Rhema has a position in Singapore (SMU) where she is working with a team looking at the economic implications of ageing. Singapore is one of the most rapidly ageing populations in the world.

Associate Professor Gail Pacheco

Gail's research agenda primarily utilises applied econometrics within the sub-fields of labour and health economics. Her current research projects include: (i) assessing the impact of higher minimum wages in New Zealand; (ii) investigating the relationship between non-permanent employment and mental health; (iii) evaluating the ability to predict hospital demand in NZ, and the impact on patient outcomes of unexpected demand; (iv) the role of cultural identity and discrimination on both labour market and health outcomes; and (v) various smaller projects around pedagogical research.

Associate Professor Sougata Poddar

Sougata's research interests are applied microeconomic theory, industrial organisation and applied game theory. He is currently working on several projects on copyright issues and intellectual property rights, innovation, economics of digital piracy, patent licensing and competition policy. He is also external reviewer of the research grant council of Hong Kong.

Dr Kevin Byard

Kevin is an astronomer and mathematician, lecturing in quantitative methods on behalf of the Department of Economics. He is interested in the imaging of objects in the high energy domain for both astronomical and medical purposes. He is also investigating fast decoding algorithms for these applications, specifically using the coded aperture imaging technique. He is also interested in the applications of number theory to these problems, including the discovery and use of combinatorial configurations such as difference sets and qualified difference sets. Kevin also has an interest in research regarding teaching and learning at all levels, particularly computers in education.

Dr Saten Kumar

Saten's current research interests are in (i) monetary policy (price setting behavior of firms), (ii) how agents form their expectations, and (iii) inflation measurement and the welfare costs of inflation. He is currently using primary quantitative surveys to investigate the price setting behaviour of firms and the way they form their expectations. In doing so, he is able to assess whether the price-setting decisions are consistent with the theoretical framework of workhorse New Keynesian models

Dr Stephanie Rossouw

Stephanie's research interests lie within analysing development issues especially as pertaining to developing countries. Currently her research in progress includes (i) determining whether or not regional non-economic quality of life converge over time; (ii) establishing the determinants of regional vulnerability and (iii) investigating the HIV phenomenon and its effects on regional growth.

Dr Rahul Sen

Rahul's primary areas of research are trade policy and economic development. His current research interests include: (i) Welfare Analysis of economic integration involving ASEAN+6 economies, (ii) Strategic Trade integration of small island economies and (iii) Role of trade agreements in Asian international production networks. He is also interested in analysis of economics of intellectual property protection on trade and growth with reference to developing economies.

Dr Geoffrey Brooke

Geoff's current projects are in the field of history of economic thought. He is working on two papers regarding Frank Knight: his relationship with Austrian economics, and his defence of the general competitive equilibrium as the ideal model of a capitalist economy. Geoff is also engaged in joint work aimed at a rehabilitation of Carl Menger's theory of the entrepreneur, as well as an ongoing interest in New Zealand's economic history and the rhetoric of economic history as a field.

Dr Lydia Pikyi Cheung

Lydia conducts empirical research in Industrial Organization and Applied Microeconomics. Her latest paper concerns the Upward Pricing Pressure (UPP) test, a new screen used by antitrust agencies to estimate price increase in proposed mergers. This research is the first that uses a large cross-section of different markets as a laboratory, to compare the UPP against structural merger simulation predictions. Lydia is also interested in using firm-level data for research in I.O. and other fields. In particular, she is actively looking into using New Zealand's Longitudinal Business Database for research in financial frictions.

Dr Nan Jiang

Nan's main research areas are productivity and efficiency analysis and the application of various econometric techniques to a range of micro analysis. Recent projects include predictive risk modelling for hospital readmissions and child maltreatment (joint work with Rhema Vaithianathan and Tim Maloney), investigating the impact of an unexpected surge in demand for hospital care (with Gail Pacheco), and the associations of R&D, innovation, intellectual property and NZ firms' performance (with Basil Sharp at the University of Auckland).

Dr Sadhana Srivastava

Sadhana's primary areas of research are in trade and foreign direct investment, with particular reference to developing economies. Current research projects are focused on the following three themes: (i) analyzing the role of FDI in developing production networks in the Asia-Pacific region (ii) the impact of regional trade agreements in Trade creation & Trade Diversion (iii) Outsourcing of services and the economics of intellectual property protection on trade and growth in developing economies.

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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.

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