
# MOTU, EXCELLENCE IN ECONOMIC RESEARCH AND THE CHALLENGES OF 'HUMAN DIMENSIONS' RESEARCH

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# 1 INTRODUCTION

Economics as a 'trade' does very well in New Zealand. Economists are taken relatively seriously in government policy processes. For better or worse, economic ideas were major drivers of the reforms in the late 1980s and early 1990s. Plenty of well-paid job opportunities exist in the private sector and in government. Large numbers of economics undergraduates mean that economics departments in Universities are not under threat.

Economics as a science doesn't necessarily do so well. This article discusses some of the opportunities and challenges ahead in creating a vibrant economic research community in New Zealand that can usefully contribute to public policy. We bring particular attention to the challenges of producing good interdisciplinary work. Nearly all policy problems are multifaceted and cannot be understood using insights from one discipline alone. Motu is a non-profit research institute that has been set up specifically to address these challenges. At the end of the article we outline our vision of how we are becoming part of the solution and give some suggestions for how the government and researchers could facilitate our and others' efforts.

## 1.1 Why do public policy related economic research?

Public decisions on issues relating to the allocation of resources are made every day – understanding how individuals, firms, governments and other organisations make decisions about their allocation is the meat of economics. Economics is both a positive and normative science. Its ability to explain a portion of human behaviour and the internal consistency of its theoretical basis make it useful for predicting qualitative and sometimes quantitative responses to different policy options. Of course economic motivations are only a small part of the story. Many other social science disciplines, including political science, psychology, sociology, demography and geography are needed to understand human behaviour. All of these fields face the same difficulties as economics in separating opinion and advocacy from science when considering the outputs of research. Economists often tell a more theoretically-consistent and empirically-backed story, and so can have more credibility in policy debates. Despite the many jokes about economists who disagree, there is actually a very high level of agreement among economists on microeconomics, which is the basis of most public policy analysis. This does not make economists 'right' but it can make them useful.

If economics is going to have policy influence it is important that it is soundly based. Research needs to be focused on areas where we can make real progress on issues of public

concern. Some issues are important but economics has little to contribute. Some economic questions are unanswerable however much research is put into them, because the natural experiments needed to test them simply do not exist. For ethical (and financial) reasons economists often cannot do controlled experiments, so our research agendas are often guided by the possible as much as by the important.

That said, research is a waste if it does not address issues of concern and is not communicated to those who can use it. End-users need to be involved in framing questions and the research results need to be explained to them in such a way that they understand their implications and limitations. This does not imply 'participatory research'. We ideally want our subjects to be unaware that they are studied to avoid strategic or other responses.

## 1.2 Opportunities and challenges for policy-related economic research in New Zealand

New Zealand has many advantages for economic research on public policy issues. Since the mid-1980s, policy-makers and the public at large have been very open to economic ideas and to fundamental analysis of public institutions. Economists have had significant influence on policy and institutional design. In addition, we have been through a period of major change driven by both internal and international pressures. One result of this is that many interesting policies can be studied. Some, such as the fisheries' Individual Transferable Quota system, have been designed pretty much according to the textbook approach. This allows us to empirically test the effectiveness of these policies. This research is of international interest and sometimes attracts international funding.

In addition, because we are such a small country, we have relatively complete detailed geographic datasets on many things whereas in larger countries these data are often collected at a regional level or a higher level of aggregation. As a small country, we cannot influence international prices, and we can regard international changes as exogenous shocks that can be the basis of economic 'natural experiments'. Finally, and as other fields must find, both the interest of our economic policies and the attractiveness of our country makes it relatively easy to attract foreign visitors to alleviate our intellectual isolation.

Some of the problems economic researchers face in New Zealand will be familiar to all researchers. Isolation from international debate, high teaching loads in universities and difficulties in buying-out time for research are common issues. In some ways economic researchers are different. Economists do not require large amounts of expensive equipment.

We tend to work in groups of at most three and often alone. We do not need to do expensive fieldwork. When we do empirical work, most of our raw data comes from existing Statistics New Zealand surveys or administrative databases (e.g. data on fisheries management or unemployment beneficiaries). Rather than having one large multi-year project with a single major outcome we tend to do multiple related pieces of work to gain insight on a problem from different perspectives.

These are some of the reasons why economists do not have, and possibly do not need a CRI of their own. The decentralised approach to research creates needs of its own however. Although we rarely collect our own original data we do need considerable resources to clean up and organise the datasets that others collect so they are useful for our purposes. Where there are issues with data confidentiality it can be a considerable investment to find secure ways to allow the data to be used. No single researcher can do these tasks alone. If data development is not coordinated and supported, it will advance slowly if at all. When new surveys are required to meet research programmes, we need to coordinate our advocacy for those surveys and provide input so they are optimally designed for economic research. In contrast to statisticians' requirements for surveys (excellent estimates of a few key variables), economists seek datasets that can address a range of research questions. This demands consistency across time and in variable definitions across surveys. A key problem for all social researchers in New Zealand is the shortage of longitudinal research datasets where you can track the same person over a number of years.

Another problem that arises from institutional and geographic dispersion is simply that of communication. Many researchers do not know about related research by others in New Zealand. A competitive attitude in some universities makes this even worse. Some researchers are not making work available until it is published (often a one to two year lag). Worse, much research remains unpublished because it is perceived to have commercial value or political sensitivity. Even where it is made public, the lack of effective networks often means research is not widely known. The New Zealand Association of Economists provides useful services here but there is no obvious central point for finding out about research. CRIs provide some of this service in other applied fields.

For an 'economist' the value of economics in government and commercial uses means that lucrative consulting is available. For 'economics' this can be a problem. It is harder to attract good people into research and more expensive to pay researchers. Many of the most

highly- trained economists in New Zealand work in government or consulting. Some try to do research within those constraints but they are always under pressure to provide short-term policy or commercial advice. Quite a lot of funding is available from government departments for economic research but it tends to be short-term and ask very large questions that cannot realistically be addressed with the time and funding scales provided, if at all. The contracting and consultation costs involved in each project often overwhelm the actual research costs. Researchers tend to become generalists rather than specialists because they cannot predict a long-term commitment to an area of research so don't invest in their knowledge. This type of funding usually leads people to produce consulting reports rather than true research. While consulting reports serve as a valuable and important input into the policy process, they are not a substitute for long-term research investment. Furthermore, the quality of consulting reports can be greatly enhanced if they are able to draw on an established body of evidence and thinking built up by past research. Short-term funding, even if repeated, also reduces incentives to find solutions to the longer-term coordination and database-building issues.

Anyone with an undergraduate degree in economics can call themselves an economist. Some of these people are very smart and well-trained but others are not. To an outsider it is difficult to distinguish between those who have high-level research capabilities in economics and those who are simply capable economic practitioners. Much New Zealand economic/public policy research is in the grey literature where quality is difficult to judge. Poor-quality research is often of no value because it involves conceptual ideas that might be misapplied, or misinterpretation of existing data. It can be dangerous because end-users might not recognise the problems. It is also hard to draw the line between 'research' that involves advocacy and scientific economic research. Both have their place but they should not be confused. The political saliency of most of the issues public policy economists deal with makes this distinction more difficult than in many scientific fields (obvious exceptions are the GM debate or the climate change debate). This makes peer review and close attention to the quality of the research process even more important.

### 1.3 Motu: Economic and Public Policy Research Trust

Motu is a Charitable Trust dedicated to public policy and economic research. Motu has three basic goals: excellence, objectivity and dissemination. We seek to carry out our own excellent research and to provide some of the missing infrastructure to help make other

researchers more productive. We primarily do long-term research and have a strong emphasis on building research databases and on linking our work with that of other New Zealand researchers through an affiliate programme, subcontracting and workshops. We work to recruit excellent New Zealand economists by providing a stimulating environment with good resources and few bureaucratic demands so they can focus on what they do best.

We strongly believe that a healthy democracy needs access to high-quality objective (or at least disinterested) research on key policy issues. We choose research topics that we believe will provide insight into long-standing policy problems, rather than responding to specific short-term needs. We are careful to separate our research findings from our interpretation of those findings for policy purposes. We often distance ourselves from consulting with the attendant risks of pressures to meet client desires or hush up research with unwelcome findings.

We do some consulting work because we find that an effective way to disseminate the results of our research and learning, or as a means of funding worthwhile research projects on topics where our own areas of interest and expertise overlap with those of 'clients'. The gap between academic research and its application to specific problems is considerable so we try to bridge that gap where possible. All our work is made public and we try to present it both verbally and in writing in ways that are accessible to lay people and policy analysts as well as to meet the demands of an academic audience. We see ourselves as responsible not only for disseminating our specific results but also for raising the level of debate on issues of interest to us more generally. Both to introduce new ideas and to strengthen the research community, we encourage and facilitate foreign visitors in our areas of expertise.

We are now in our third year as a charitable trust. We currently have major work programmes on 'Adjustment and Inequality', 'Land use, climate change and Kyoto', fisheries management, and 'Is New Zealand an economic state of Australasia?' The positive response of academics, policy makers and funders to our efforts has been extremely gratifying. It makes us believe that the will and talent needed for effective synergistic research is there and simply needs careful fostering.

### 1.4 'Human dimensions' research – the interdisciplinary challenge

Public policy issues that relate to the natural sciences are inherently multifaceted. Their resolution requires a multidisciplinary approach. This creates additional challenges. Motu is trying to bring human dimensions more effectively into analysis of some science-

based issues. We have some experience in this from a multidisciplinary, multinational, multiyear project on deforestation in Costa Rica. We are trying to apply the lessons from that project and learn more in our FRST-funded project on Land use, climate change and Kyoto.

We have found a high level of enthusiasm and cooperation for this project in New Zealand, which is gratifying. People do want to address the policy issues and are open to how economics can complement New Zealand's considerable natural science expertise. It is easy to underestimate the difficulties in a process of this type however. Different disciplines are like different cultures and without an awareness of our own cultural biases and habits, misunderstandings can become sources of offence or misdirection of effort. We must be ever vigilant. The other key risk is 'fluffiness'. A project that tries to do everything across many fields risks doing nothing well. Many 'interdisciplinary' projects are a collection of disparate parts where the whole is no greater than the sum. Others end up with low-quality input from some or all of the relevant disciplines. We have found so far that the keys to success are choosing the right people, defining their roles appropriately and fostering a team environment that ensures genuine, constructive interaction. We haven't got this completely sussed – any suggestions welcome!

Choosing whom to work with is key but also hard. In our first project we went blithely in search of a 'biologist' to provide us with input on carbon sequestration. Luckily we met some excellent people who helped us understand that we needed both field ecologists specialising in carbon measurement, and ecological process modellers. Similarly people often seem to seek an 'economist' or even worse a 'social scientist' when there are many different social sciences with very different strengths and few similarities in methodology. Even within economics, there are many specialisations, even when you know the exact skill set you seek. It is hard to assess the quality of a researcher in a field you do not understand. In New Zealand this is sometimes exacerbated because peoples' CVs are either unavailable or uninformative about peoples' academic experience and credentials (e.g. what publications have they produced and not only whether the person has a PhD but what in and from where). We now try to find a few excellent people in the field and cross-check reputations and suggestions with several people to find a consensus. Clearly personality and commitment matter too.

One curious and frustrating aspect of being asked to engage in interdisciplinary work is that often the role you are assigned to is predefined. This might work if defined by an

expert in your field but often it is based on what other researchers understand of your field. For example economists are often asked to contribute cost-benefit analyses when they might have much greater value in other ways. I'm sure this applies in the other direction so we try to be open in the evolution of the project to allow people to define their roles as their understanding of the overall goals of the project deepen. This makes project planning difficult but generates a fertile creative environment that can produce surprising and valuable results.

We have concluded that one of the best ways to foster true communication among disciplines is to jointly construct an empirical model. These models have value on their own but they also force concrete discussions and maintain focus on joint goals. The improved understanding of how components interact within the model that is gained from the painstaking process of building and testing it, may be as useful as the specific outputs. It is much easier to build a model by playing the role of expert in others' fields and choosing parameters or data from the literature. Working with people until they fully understand what you are trying to do and you understand what they can contribute, and then having them produce material that allows you to integrate their knowledge into the model, is a slow process. Luckily it is also personally rewarding. We get to work with experts passionate about their areas of research and learn fascinating new conceptual ideas and facts and there is no exam at the end! The quality of the outputs and the commitment of key experts to the results justifies the effort.

## 1.5 How could economic research on public policy issues be made more productive?

Motu and others are doing their best, but economic research on public policy issues in New Zealand is still under-performing. Here are some suggestions on how we could improve. They apply to both economic and interdisciplinary 'human dimensions' research. Some of these efforts are underway and should be applauded and enhanced. Others are weak and need to be encouraged.

### 1.5.1 The quality of research should be a prerequisite for funding.

Once that is established, other criteria such as choice of topic, method of outreach, effects on capacity etc. should be considered. Much-publicised bad research, even on good topics, is certainly useless and possibly dangerous.

### 1.5.2 More funding needs to be long term.

Long-term funding allows databases to be built and people to develop expertise. This could then be complemented by shorter-term, more focused research on specific policy needs. Often what policy-makers need in the short term is not fundamental research but interpretation of existing research. This would be more effective with a solid long-term research base. More funding is also always welcome.

Government departments need to avoid asking researchers to answer impossible questions. If policy-makers want to have a stock of research knowledge to draw on when they are faced with difficult choices, they need to provide funding on time scales and through processes that allow good, carefully-planned research. Someone will always volunteer to answer their impossible questions but the outputs may of necessity be based more on the judgements of the answerer than on any basis in fact. Short-term gain through visible outputs and rapid spending of residual resources before the end of the financial year is surely outweighed by the longer-term undermining of research capacity and genuine policy debate.

### 1.5.3 Researchers should be encouraged to seek peer review for their work.

The peer-review process is slow and flawed but there is no alternative quality control process. Policy input based on peer-reviewed research findings and from researchers with a history of peer-reviewed research should be taken more seriously than other research input.

### 1.5.4 The balance between talking about research findings and doing research needs to be adjusted.

Currently there are many meetings and conferences where researchers speak on public policy issues but few researcher workshops focused on research methodology rather than policy implications. Many government departments require such frequent feedback even early in a project, that reporting on research takes precedence over doing it. Focus on end-users is most valuable when there is good research to be used. More time and resources aimed at ensuring the quality of research and less resource intensive and more carefully thought-out dissemination processes might create a better balance.

The choice of research questions needs to be made in conversation with end-users but once the questions are chosen, dissemination of research outputs should not happen until research has progressed significantly. Researchers need space to work effectively.

### 1.5.5 Databases and database access need to be improved

Relatively little empirical research is done in New Zealand despite the great potential. Statistics New Zealand is addressing this to a certain extent through a range of projects to make their databases more useful (e.g. geographically specific) and more accessible (improved access to unit record data). They are also working with other departments to link databases. The new longitudinal database (SOFIE) will be a valuable research tool. Stats are constrained by complex issues regarding confidentiality but are finding constructive and responsible ways to protect confidentiality while also allowing the data to be used to enhance policy debates. We applaud and encourage their ongoing efforts! Long-term funding for projects that have specific data-building and sharing components, and networks among researchers that encourage use and development of common databases will also help.

### 1.5.6 Economic researchers need to communicate more among themselves.

Individual researchers can contribute by making more effort to make their research visible to other researchers by publishing their work in progress in web-accessible working paper series. They can also provide clear information on their expertise and areas of active research interest so that other researchers can more easily find potential collaborators and comment on and build on research. This could be facilitated by the creation of common web pages in specific research areas with links to relevant research and researchers and through small, focused workshops to build closer, more trusting working relationships.

### 1.5.7 Good research has to be valued and used.

Once the good-quality research is produced, policy-makers need to actively and intelligently use it. Researchers need to reciprocate by alerting key people to their findings and by offering their knowledge to explore with analysts who have specialised skills in practical policy design, the implications for current policy issues.

If high-quality research is produced it will provide more constructive policy guidance, it should be less controversial and hence more readily accepted, and it will be unnecessary to duplicate it. Future research can move forward from a firm basis.