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'You Say You Want a Revolution' ... The Next Stage
of Public Sector Reform in New Zealand

Peter Hughes and James Smart

3

Managing for Efficiency: Lessons from the
United Kingdom's Efficiency Agenda 2004–2010

Catriona Robinson

9

Living up to the Brand: Greening Aotearoa's
Marine Policy

Michael Vincent McGinnis

17

The Effect on Household Income of Government
Taxation and Expenditure in 1988, 1998, 2007
and 2010

*Omar Aziz, Matthew Gibbons, Chris Ball
and Emma Gorman*

29

Evidence-based Evaluation:
Working for Families

Susan St John and M. Claire Dale

39

The Embedded Temporality of Tools
for Managing the Future

Derek Wallace

52

Engaging End-Users in Telecommunication as
Complementary Assets: creating more spaces
at the policy table

Michael Bourk

59

Sir Frank Holmes: Public Economist

Gary Hawke

65

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Editorial Note

With the re-election of a National-led (centre-right) government in November 2011, there is now greater clarity over the likely medium-term direction of public policy in New Zealand. The Speech from the Throne, on 21 December, highlighted the government's priorities and objectives, which include building a 'more competitive and internationally-focused economy, with less debt, more jobs and higher incomes'. Important policy initiatives are likely in relation to the system of welfare benefits, primary health care, housing policy, educational underachievement, tertiary education and training, science funding, accident compensation, the management of fresh water resources, oil and gas exploration, asset sales, and the rebuilding of Christchurch. Fiscal constraints and global economic uncertainty mean that tight expenditure control will be inevitable during the current parliamentary term, as will the quest for more cost-effective public services.

With respect to the latter topic, the opening article in this issue of *Policy Quarterly* is both timely and relevant. Peter Hughes and James Smart consider how New Zealand's public management system must change in order to meet public demands not simply for greater efficiency, but also for better social outcomes. In their view, while the managerial reforms of the 1980s and 1990s led to improved responsiveness and innovation, they prioritised 'bottom-line' efficiency over a 'top-line' emphasis on better outcomes, sidelining a larger concern with public value. Moreover, the current public management system restricts the agency collaboration and the organizational arrangements needed to address complex societal problems; the present financial management model is also partially at fault. Accordingly, Hughes and Smart outline various ways to facilitate more flexible and cost-effective modes of service delivery. These include new approaches to accountability, financial management and performance evaluation. More details of the government's proposed reforms will be available when the report on *Building Better Public Services* is released.

New Zealand, of course, is not alone in its quest for greater public sector efficiency and effectiveness. Recent British governments have given such matters vigorous attention. With this in mind, the second article in this issue of *Policy Quarterly*, by Catriona Robinson, asks what lessons might be learned from the UK's efficiency agenda during 2004-2010. She focuses on four main aspects: central control of reform; targets as a performance management tool; the quality of performance data; and issues of leadership. The mixed results of the UK reforms, Robinson concludes, highlight the importance of balancing central oversight with granting agencies freedom to respond to local contexts.

Recent months have underscored the continuing significance of marine policy reform with the grounding of the *MV Rena* and the associated oil-spill—one of the country's worst maritime environmental disasters. Noting recent legislative developments and other activities likely to impact on future marine policy, and the inevitable conflict between resource use and biodiversity protection, Mike McGinnis contends that New Zealand currently lacks the institutional capacity and capability to address these

challenges. In his article (which draws on a detailed report he is preparing on New Zealand's ocean governance) McGinnis outlines a new framework for marine policy based on an integrative, ecosystem-based approach to planning and decision-making. Such a framework would incorporate a number of management principles, not least the public trust doctrine, maintaining ecosystem services, and the compatible use criterion.

In the next piece, Omar Aziz and his Treasury co-authors draw on new data to examine the extent to which government policies in New Zealand redistribute from high to low-income households, and how this has changed since 1988. As well as covering market outcomes and the effects of personal income tax and cash benefits on the disposable incomes of households, the authors calculate the distributional impacts of indirect taxes and government expenditure on in-kind social services. Their results – which deserve careful scrutiny – show how government affects the distribution of post-tax income received by households, when income is defined considerably more broadly than usual.

The following two articles both address matters of methodology as well as policy. Susan St John and Claire Dale offer a framework for analysing the appropriateness and limits of using research-based evidence to evaluate social policy. They then employ this framework to assess the Working for Families package, implemented by the former Labour-led government, focussing particularly on the controversial In-Work Tax Credit (IWTC). In short, they conclude that the IWTC is not merely discriminatory, but that such discrimination is harmful and unjustified. On a different tack, Derek Wallace draws on a recently published book to demonstrate the embedded temporality of instruments and techniques of strategic planning, including national conferences, computer modelling, application of free-market theories, and scenario construction. Evaluating the effectiveness of each, he concludes that these of such 'big picture' tools calls for conscious reflection on the history and temporal commitments of each, and requires their integration into an overall strategy for managing the future.

New technologies, such as ultra-fast broadband, continue to be a major component of government plans for economic growth, often accompanied by claims of significant returns on public investment. Such forecasts, Michael Bourk notes, are often very limited in scope and excessively speculative; he argues that government and state institutions need to factor in complementary assets in consumers and citizens, investing in these according to principles of open innovation, public value, and deliberative democracy.

Sir Frank Holmes, a distinguished economist and a co-founder of the Institute for Policy Studies at Victoria University of Wellington, died on 23 October 2011 aged 87. It is fitting, then, that we close this issue of *Policy Quarterly* with a tribute to Sir Frank by Emeritus Professor Gary Hawke (a close friend and colleague). Professor Hawke describes Sir Frank's extensive and varied career as a university academic, his important role as an economic and financial adviser, his significant contribution to many areas of public policy (not least a closer economic relationship with Australia, and Asia-Pacific trade and development), and his work in the private sector.

Finally, I would like to thank Dr John Dennison for his assistance with the editing of this issue of *Policy Quarterly* and the preparation of this editorial comment.

Jonathan Boston

Peter Hughes and James Smart

You Say You Want a Revolution ...

The Next Stage of Public Sector Reform in New Zealand

Over the past 30 years New Zealand's system of public management has seen a number of positive changes, both systematic and incremental. That process made New Zealand a world leader in public management. Despite this, it remains difficult to gain traction on some of the most complex problems in society. Further, citizens have begun to demand more from their public service than just outputs and efficiency. In order to continue the positive trend of the previous decades, the system must evolve to appreciate the importance of outcomes and effectiveness.

Peter Hughes is Professor and Head of the School of Government, Victoria University of Wellington and was previously Chief Executive of the Ministry of Social Development.

James Smart recently completed an honours degree in public policy at Victoria University of Wellington and has worked as a research assistant at the School of Government.

A brief look at the evolution of the public management system in New Zealand shows the need for further reform. Two periods in its history are highlighted: the emergence of a classic bureaucratic model in the early 20th century, followed by the managerial reforms in the 1980s and 90s. They laid the groundwork for future development, but also show the current constraints against which public servants are struggling.

Where the system has come from

In the early 20th century the bureaucratic model was seen as the most efficient system possible for any public service, notably by Max Weber (Gerth and Wright Mills, 1991). As this model became the norm for public services around the world, it proved effective in reducing patronage and corruption. In New Zealand, political patronage was a particular motivating factor in the adoption of the model,¹ a process that resulted in the Public Service Act of 1912 (Walsh, 1991). Prescribing a rigid set of processes, rules and hierarchies achieved equity, integrity and procedural due process in the public service.

In practice, this meant hard constraints on managers. Control was centralised at the top of a strict hierarchy, with input control as a strong focus (Norman, 2003). As the Treasury argued (1987, 58), 'the tendency [was] to keep managers' discretion to a minimum'. Strictly enforced procedures for the state sector to follow were set out in Treasury instructions and the Public Service Manual, which would sit alongside other procedural instructions. For example, the Department of Social Welfare had its own set of internal manuals for staff. Centralisation was so extensive that even simple tasks, such as approval for staff promotions, involved long delays.

By the 1980s the public service was seen as oversized and inefficient ... Customer service was poor, human talent was stifled and innovation was near zero.

By the 1980s the public service was seen as oversized and inefficient (Boston et al., 1996). Customer service was poor, human talent was stifled and innovation was near zero. The 'new public management'² reforms of the 1980s and 90s introduced managerialism to the public service. Notable legislation included the State Sector Act 1988 and the Public Finance Act 1989. The reforms retained core components of the bureaucratic model, such as the merit principle and due process, but added features such as:

- a performance management system aimed at improving efficiency and customer service
- redefined ministerial roles: the selection of outcomes, purchase of outputs from appointed chief executives
- chief executives having control over inputs within prescribed budgets to deliver outputs in the form of products and services
- structural change that clarified objectives, primarily by separating policy from operations, and encouraging competition where possible

- decision making pushed down closer to clients.

After the reforms of the late 1980s were implemented, state services became more efficient, productive and responsive. With the bureaucratic model's constraints largely discarded, human potential within the public sector was freed up, fostering creativity and innovation. New performance management methods delivered significant improvements in the services provided to New Zealanders. For example, in the newly-formed Income Support Service, one performance indicator was turnaround time: this combined with a new information technology system to reduce the average

processing time from 13 days to 24 hours within two years. Similar methods used at the New Zealand Employment Service increased job placements threefold between 1988 and 1992 (Norman, 2007). Two decades on, this model continues to be leading-edge around the world.

The case for reform

The managerial reforms were a resounding success in delivering outputs with high levels of efficiency. As a result, they continue to have enduring appeal. However, government is about more than simply providing good customer service and delivering products and services efficiently. If that was all, then in many areas the private sector could do the job. But governments get involved in service delivery because citizens demand that complex problems are resolved effectively. They want better results, or outcomes.

Outcomes have always been a part of the theory behind the current system. However, in practice the current system prioritises the efficient delivery of outputs to such a degree that in some cases it comes at the expense of better

outcomes. This is particularly true when public finances are tight (Ryan, 2011). Performance improvements since the 1980s have created the opportunity to evolve the system further by complementing managerial efficiency with effectiveness. Although not an academically robust concept, the difference between 'bottom line' and 'top line' demonstrates what efficiency and effectiveness look like in practice. This approach strongly resonates with frontline staff.

The bottom line is about delivering outputs as efficiently as possible and being accountable for that delivery. Work and Income case managers, for instance, work to get good job matches for their clients and make placements. Benefit payments should be of the right amount, made on the right day and to the right person. The top line, however, speaks to effectiveness and outcomes. From the Work and Income case manager's perspective, success at the top line depends on whether a particular job placement leads to sustained employment. Achieving that 'intermediate' outcome lets clients get on with life.

Moore's (1995) concept of 'public value' justifies attention to the top line. Legitimacy and support for public service activity comes from the value it provides to citizens and their representatives. Public value may be difficult to quantify, but we know it when we see it. For example, neighbourhoods appear safer, people move from welfare to work, or more children are immunised. The challenge for public managers is to establish what interventions are required to achieve those outcomes and then implement them.

Efficiency at the bottom line increases the public service's capacity to achieve better outcomes. If benefits are not paid on time, then it becomes harder to alleviate poverty. If individuals are not matched to jobs, then it becomes harder to reduce unemployment. At present, however, the importance of a top-line focus is not fully understood. Efficiency and customer service only go so far in ensuring that interventions are effective. A swift job placement that does not result in sustained employment cannot be considered a good outcome for that individual. Ensuring effectiveness requires

a longer-term view than the current system encourages. Solving complex societal problems often requires a range of interventions centred on a particular individual, family or community. This almost always requires collaboration between agencies.

At present the public management system restricts 'joined-up' work, that is, long-term initiatives involving the co-operation of two or more government agencies. To change this, the current output focus should be complemented by an equally strong focus on outcomes; efficiency should be complemented with effectiveness. This requires agencies to collaborate with each other while keeping the efficiency gains achieved through managerial reforms (see Figure 1). Doing that entails a change in the capabilities required in the public service. It is not only management along lines of vertical accountability that is needed, but also leadership across sectors where straight-line authority would otherwise be an impediment.

Agency silos and the bottom-line focus constrain public servants because they prevent effective collaboration. This prevents them from tackling complex problems effectively. Instead, they rely heavily on remedial interventions such as benefit payments. That means societal problems are not reduced in scale and demand ongoing government expenditure. These implications are demonstrated in the social sector, which includes health, education, justice, social security and benefits. Expenditure in this sector made up approximately 75% of core Crown expenditure in 2010-2011 (Treasury, 2011a), or around a quarter of overall GDP. A large proportion of this is targeted at servicing the symptoms of underlying problems. Often this does not address the causes of the problem, meaning that delivering those services even more efficiently is unhelpful beyond marginal gains. Surprisingly, little progress has been made in tackling social problems early in life.

Partially at fault is the incentive structure of the present financial model. It encourages a patchwork quilt of interventions from different agencies that are short term and remedial (for

example, building more prisons). Instead, longer-term sustainable gains can be achieved by investing early in the life of the person or the problem. To do this investment should be seen from a longer-term perspective. For example, the public service should think not only about more efficient ways of operating a prisons service (the bottom line), but about what measures are required to lower crime (the top line) and avoid having to build as many prisons in the first place.

The Integrated Service Response, an initiative operated under the responsibility of the Ministry of Social Development, applies a joined-up approach to deal with the problems affecting at risk individuals and families.

Implications for public management system design

Organisational design

Attempts to improve effectiveness have already been made in the social sector. The Integrated Service Response, an initiative operated under the responsibility of the Ministry of Social Development, applies a joined-up approach to deal with the problems affecting at-risk individuals and families. The response is operated through centres known as Community Links, which bring together a range of support agencies around a client. Community Links provide those agencies with a common view of the client's requirements, avoiding duplication and increasing intervention effectiveness.

The Integrated Service Response shows the benefits of cross-agency collaboration. However, it also demonstrates the constraints imposed by the current system. Parties do not have ownership of joint work, or a genuine shared stake. The integrated approach evident in Community Links is possible only because of the willingness of front-line staff to work together in this way. Ownership, and hence accountability, continues to reside within a single agency.

Through the social sector the government is also trialling a new joined-up approach to social service delivery. These trials let an individual or non-governmental organisation decide how best to use government funds to improve the outcomes of young people. In theory, this devolution should join up both funding and decision making across agencies, and they then improve outcomes that are the focus of other departments, such as Education or Justice. However, in practice all responsibility is transferred to a

single minister and a single appropriation in the Vote³ of a single agency. For social sector trials, that agency is the Ministry of Social Development. Any attempt to join up accountability has no legal grounding under the current system. This suggests a lack of organisational options.

Indeed, ministers face a binary choice: loose collaboration, or full structural integration. Loose collaboration is heavily dependent on the personal commitment of individuals involved, and ownership is seldom shared effectively. That issue is only crudely resolved by the current alternative, full structural integration. Effort spent merging and de-merging agencies is often out of proportion to the problems being addressed. Hard structural solutions also serve to reinforce the limits of vertical accountability.

The private sector does not face this dilemma. Where firms require other firms' expertise to achieve a shared outcome, they are able to turn to models such as joint ventures or consortia. They do not need to resort to mergers or sharing information. This ensures that risks and benefits are shared, and each firm's stake is proportionate to the level of collaboration required.

Achieving effective outcomes in the public sector requires similar flexibility. This requires, notably through amendments to the State Sector Act, the provision of a range of options ranging between the extremes of loose collaboration and full structural integration:

- loose collaboration
- mandated sectoral grouping
- joint venture
- semi structural integration
- full structural integration.

Loose collaboration describes most joint work currently undertaken in the public sector. This includes establishment of officials' groups and working groups.

[In the private sector] ... consortia and joint ventures allow for shared investment, risk and responsibility; boards enable collective legal accountability for the governance of the enterprise.

Information is shared between separate agencies, which allows for coordination, although their work remains separate. Accountability and priorities remain separate and remain with individual agencies and their respective ministers. This option is particularly useful where there is a clear lead agency and investment need not be shared.

Mandated sectoral grouping is an emerging new approach. This involves grouping individual agencies into sectors, with individual chief executives established as sector leads. Formal expectations and performance assessment set by the state services commissioner would include a specific reference to both their sector and their individual agency, encouraging collaborative work. The sector leader would be involved in the setting of expectations and reviewing the performance of other departmental heads within their sector.

Joint ventures would be possible where a greater level of integration is required. This option is currently unavailable in the public sector. Under this option, chief executives would join up ownership

and accountability through a legally-binding board structure. This would enable subsidiary departments, which could be 'real' (parent departments collectively funding a separate business arm) or 'virtual' (capacity provided jointly), pooling investment, risk and accountability. An ideal scenario for this model is one where the issues are interconnected, investment needs to be shared and the outcomes are shared by different agencies.

Semi structural integration involves establishing operational units under larger parent departments, with the operational units enjoying some degree of autonomy. Separate boards, including independent

directors, would have responsibility for governing those business arms. While this would be a new option for the New Zealand public service, in the United Kingdom such arms are known as executive agencies.⁴ This reduces fragmentation and improves economies of scale without sacrificing flexibility.

Finally, *full structural integration* would involve the structural merger of related functions into a new or existing department. This is warranted in situations where significant change is needed to bring different capabilities, leadership and expertise together for the foreseeable future.

Accountability

In the current output-driven system, accountability is based on vertical silos. Opening up to joined-up work calls for a change in the way accountability is approached. As these arrangements change incentive structures, a new model should encourage horizontal integration and collaboration.

This is evident in the private sector. Consortia and joint ventures

allow for shared investment, risk and responsibility; boards enable collective legal accountability for the governance of the enterprise. Yet in the public sector there is no such model; chief executives are solely accountable for their agency's remit, which encourages a singular focus. At present the State Sector Act does not provide for the adoption of other models, though access could be provided with the necessary amendments.

The current financial management framework acts as a further impediment to ownership of joint work (see Boston and Gill, 2011). The single agency Vote system over-emphasises bottom-line concerns and does not have the flexibility required for collective accountability. As the financial management system works along vertical lines, there is little incentive to work horizontally, particularly where it affects the production of outputs.

Funding on a short-term basis encourages agencies to focus only on the efficient production of outputs. A financial management system that takes outcomes equally seriously needs to recognise the longer-time horizon required to achieve effectiveness. Taking a multi-year approach is likely to highlight benefits missed under the current system. Agencies seeking funding for a suite of interventions should collectively be able to borrow in the short term against the downstream benefits that result when better outcomes are achieved.

Performance management

Performance frameworks inform accountability. A well-functioning framework ensures that all parties have clear expectations set and understand what is expected of them (Ryan and Walsh, 2004). Indicators of performance also inform decisions about resourcing and the scaling of activities. Currently the focus is on performance reporting; in an outcomes approach this would be complemented by evaluation.

Previous attempts at establishing an outcomes focus, such as 'managing for outcomes', were not sustained because performance measures were not as rigorous as measurements for output production. An outcomes approach will require a different kind of performance framework, incorporating the main

features of output measurement in an outcomes model. The key differences between the current system and outcomes-based performance management are elaborated in Table 1.

New ways of tackling performance management will require the public sector to:

- develop strategy across sector groups
- describe outcomes so they can be reliably measured
- improve the use of evaluation as a tool to inform performance frameworks and measure success.

This requires a change in the way success is understood at present. The outcomes currently presented in agency Votes are often lofty and seldom achievable. Examples from the 2011 Votes include: ‘a fairer, more credible and effective justice system’ (Justice), ‘improved quality of life for older people’ (Social Development), ‘dynamic and trusted markets’ (Economic Development), and ‘maximise the potential of all New Zealanders, by ensuring they have the skills and knowledge needed to succeed’ (Science and Innovation) (Treasury, 2011b). These remain well beyond the capability of any reasonable performance management framework.

‘Intermediate outcomes’, such as reducing truancy or youth offending rates, have practical meaning that allows them to be measured in real time across specified periods, complementing ex ante output specification with ex post evaluation. However, this forces public managers to change their understanding of why accountability is necessary and how it should work. This speaks to a wider issue in New Zealand public management.

Culture

System-wide reform is likely to meet resistance. It challenges beliefs that are deeply embedded in the current system: sirens and red lights go off, and the antibodies kick in. This is entirely understandable. A large number of people spent a considerable part of their careers advocating and implementing changes that created the current management system. The organisational culture in the core public service reinforces the

Table 1: Differences between output-based and outcomes-based performance management

Current system	Outcomes approach
Interested in outputs	Interested in outcomes
Measurement based on reporting	Measurement based on evaluation
Success can be measured by performance in short term (i.e. completion of output)	Success is better measured by performance over medium term (i.e. effectiveness of outcome)
Individual agency accountability for delivery of outputs	Shared accountability for delivery of outcomes

current system. At the middle level there is a reluctance to engage in joined-up work because of the incentive structures currently present: parties are averse to integrated working if it threatens agency output delivery, funding or autonomy.

There is good reason to fear a stalling of progress. The greater the attachment to the current system, the harder it becomes to see beyond it. ‘Reform’ becomes little more than buffing and polishing the current system. Progress on outcomes cannot be made if the public service is attached to vertical accountability, with a single individual in charge of individual agencies. That requires a cultural change, particularly in Wellington.

This concept is largely accepted by front-line public servants, and innovations such as the Integrated Service Response are a result of their motivation. Yet this is not being mirrored in Wellington, frustrating front-line staff. Stifling innovation at the front line impedes the customisation of services to clients and blocks progress on outcomes. Part of the cultural change needed can be achieved through legislative amendments that signal a change in accountability arrangements. While the current Public Finance Act supports funding across time periods, amendments would encourage public managers to think beyond annualised output delivery. State Sector Act amendments, as described earlier, would similarly change the incentive structure of public managers.

Making the most of technology

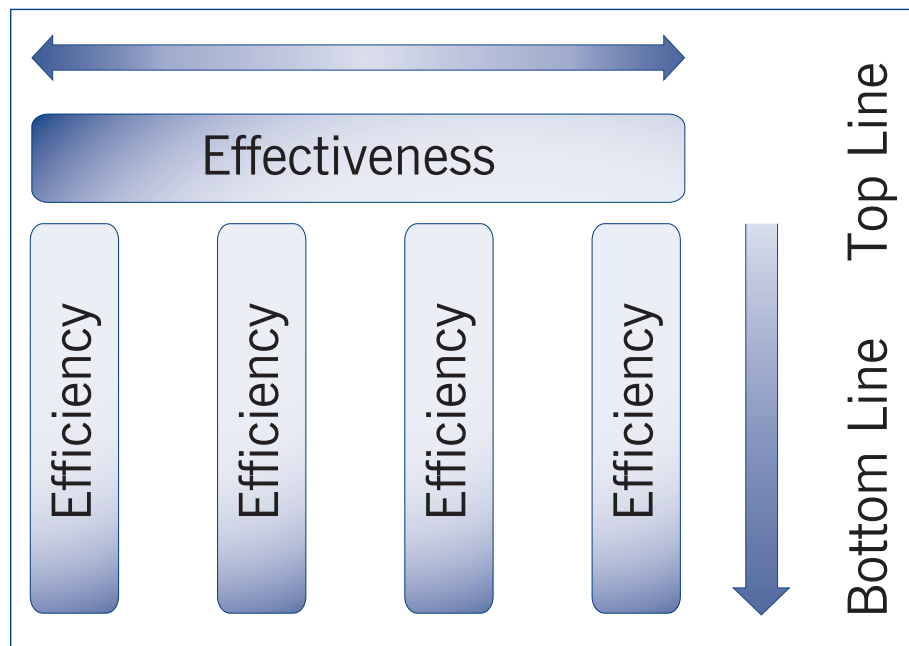
Horizontal integration is highly dependent on the information base from which it operates, and can only work if information is freely available. This requires information ‘pooling’ and using information and communication technology (ICT), which is a step up from the current information-sharing process.

Under the current model, the focus is on matching data for administrative efficiency and compliance. This approach is useful only if you already know what data you are looking for; hidden problems continue to go unknown and intervention effectiveness is reduced.

It is important in effective collaboration for involved agencies to share a common client view, which information pooling enables. Agencies would take information from other agencies’ data sets and apply it to their own needs, which provides managers with a more complete picture of a client, allowing for otherwise hidden problems to emerge. Good information is critical if long-term investment to solve complex problems is taken seriously; with it, interventions can be delivered earlier.

ICT will enable the transformation to joined-up working, but for two reasons its adoption at present is insufficient. First, while the focus of the Privacy Act supports the matching of data, which will still be necessary for administrative efficiency and compliance, a joined-up approach requires information pooling. Second, pooling of data is inhibited by a lack of common ICT standards across agencies. Addressing these issues will enable ICT to support a citizen-centred approach by creating virtual organisations centred on individuals, families and communities. In Community Links, off-the-shelf case management software was adopted and data from relevant agencies, including non-governmental ones, were put onto the software. Each of those agencies had the same view of the client, the plan and the interventions being applied. This shifted the problem to interfacing their legacy systems with that common system, a much better problem to have than the absence of a shared client view. Under this approach, ICT defines the boundaries of organisations, rather than their physical organisational structures.

Figure 1: Managing for the top line: effectiveness across agencies



The future

Implementing these changes will be difficult technically, managerially and individually. But there are good reasons to persevere with them. Ministers and citizens are demanding better services for less. Citizens are also demanding that they have a greater say in the services they receive. This does not mean more consultation; it means greater service personalisation and co-production. 'Efficiencies' and cost cutting, while sometimes necessary, do not address citizens' demands because that approach fails to remove barriers to effectiveness in the public service.

In many cases, joined-up working is far more effective than working in agency silos. This insight is already becoming accepted among front-line public servants, but to progress further it needs mandating from the centre in Wellington. Among other things, it requires a cultural change, possibly the toughest obstacle to overcome. Nevertheless, it will allow for greater front-line creativity and innovation, and build public value.

For social services, reform would let the public service act as a large network focused around clients. With a stronger information base, supported by ICT,

'virtual' organisations will be built around individuals, families and communities. When clients' needs change, the network will respond seamlessly. The social sector has already begun this transition. Community Links are integrating non-governmental organisations, schools, district courts and primary health care providers into a single, joined-up response. However, the public management system currently limits potential in this area.

The fruits that come from success will make the struggle worthwhile. It will unlock a huge amount of human potential and creativity in the public service that can be applied to problems in New Zealand that have long remained intractable. Progress on these issues will make a huge difference to tens of thousands of New Zealanders, their families and their communities. That makes it worth struggling with.

References

- Boston, J., J. Martin, J. Pallot and P. Walsh (1996) *Public Management: the New Zealand model*, Auckland: Oxford University Press
- Boston, J. and D. Gill (2011) 'Working across Organisational Boundaries: the challenges for accountability', in B. Ryan and D. Gill (eds), *Future State: directions for public management in New Zealand*, Wellington: Victoria University Press
- Gerth, H.H. and C. Wright Mills (1991) *From Max Weber: essays in sociology*, London: Routledge
- Moore, M.H. (1995) *Creating Public Value: strategic management in government*, Cambridge, MA: Harvard University Press
- Norman, R. (2003) *Obedient Servants? Management Freedoms and Accountabilities in the New Zealand Public Sector*, Wellington: Victoria University Press
- Norman, R. (2007) 'Managing Outcomes While Accounting for Outputs: redefining 'public value' in New Zealand's performance management system', *Public Performance & Management Review*, 30 (4), pp.536-49
- Review of the Centre (2001) *Report of the Advisory Group on the Review of the Centre*, Presented to the Ministers of State Services and Finance, Wellington: State Services Commission
- Ryan, B. (2011) 'Public Management in Difficult Economic Times', *Policy Quarterly*, 7 (3), pp.20-7
- Ryan, C. and P. Walsh (2004) 'Collaboration of Public Sector Agencies: reporting and accountability challenges', *International Journal of Public Sector Management*, 17 (7), pp.621-31
- Scott, G. (2001) *Public Management in New Zealand: lessons and challenges*, Wellington: Business Roundtable
- Schick, A. (1996) *The Spirit of Reform*, Wellington: State Services Commission
- Treasury (1987) *Government Management: brief to the incoming government 1987*, Wellington: Government Printing Office
- Treasury (2011a) 'Financial Statements of the Government of New Zealand for the Year Ended 30 June 2011', <http://purl.oclc.org/nzt/f-1414>
- Treasury (2011b) 'Historical Vote information', <http://www.treasury.govt.nz/budget/votehistory>
- Walsh, P. (1991) 'Pay-fixing Reform in the New Zealand public service, 1912-1948' *New Zealand Journal of History*, 25 (1), pp.18-40

- 1 However, patronage tended to be limited to lower levels of the New Zealand public service, such as in the Post Office and Railways, and was not systematic at higher levels (Treasury, 1987).
- 2 For a review of the New Public Management reforms, see Boston et al. (1996), Schick (1996), Scott (2001), Review of the Centre (2001) and Norman (2003).
- 3 Votes are groups of appropriations for individual agencies presented as part of the Budget process.
- 4 For example, the Department for Work and Pensions delivers its services through three Executive Agencies: the Pensions Service, Jobcentre Plus and the Disability and Carers Service.

Managing for Efficiency

Lessons from the United Kingdom's Efficiency Agenda 2004–2010

Introduction

The call for greater efficiency in public spending is not new, but today has additional force: how can we deliver more for (even) less? A combination of high public expectations about service quality and prolonged fiscal constraint requires New Zealand government departments to focus on the highest spending priorities, find more innovative ways to deliver services, and create efficiencies wherever possible (State Services Commission, 2010a, 2010b). The urgent need to refocus on providing smarter, better public services for less was a consistent theme over the past few years in public statements made by the previous secretary to the Treasury, John Whitehead. Whitehead identified developments in the

public sector in the United Kingdom as a potential model for New Zealand, particularly the speed with which 'new thinking [was] converted into action' in the pursuit of efficiency (Whitehead, 2010), and referenced in particular a programme launched in the UK in 2004 as an innovative public reform initiative from which New Zealand might learn (Whitehead, 2009a).

The dissertation on which this article is based (Robinson, 2010) considered some applicable lessons from the implementation of the efficiency agenda to which Whitehead referred.¹ The focus was on four major aspects of the reform agenda:

- central control of the reform programme
- targets as a performance management tool
- quality of performance data; and
- leadership issues.

Much further work could be done, for example on the use of e-government and

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other IT initiatives in securing efficiency savings, but these fall outside the scope of this article.

The Blair–Brown administration of 1997–2010 was strongly results-focused, and introduced a number of public sector financial management reforms, which put the UK among world leaders at the time (Scheers, Sterck and Bouckaert, 2005). Following a number of smaller initiatives to improve value for money incrementally, Sir Peter Gershon² was asked in 2003 to conduct a review of public sector operations across government and to make

which aimed to continue the impetus of the original efficiency reform agenda. This introduced a Value for Money programme (VfM), setting out new targets to be achieved between the end of Gershon programme and 2010–11 with the intention of achieving a further £35 billion in efficiency savings.

The Labour administration was replaced in May 2010 by a Conservative–Liberal Democrat coalition with its own efficiency agenda. The coalition announced an end to Labour's focus on centrally-mandated efficiency targets in favour of reducing waste and improving

what Wright described as an 'endemic tension' between the strong control exerted by the centre, as a means of enforcing progress towards a coherent and coordinated set of efficiency goals, and departments' concern that a too-controlling centre interfered unnecessarily with their capacity to run their own business in pursuit of those same goals (Lawson, 2009). This is broadly consistent with developments throughout the OECD during the period, where efforts in other jurisdictions to decentralise power had exacerbated problems of public sector coordination and coherence (Peters, 2008).

The extent to which central control was exerted varied as the efficiency programme progressed, with greater latitude for departments being permitted in the later VfM iteration. This was the result of a deliberate trade-off decision by the Treasury, to assuage departmental concerns that it had been interfering in 'every nook and cranny of every department' in their management of their efficiency targets (PAC, 2010b, Qq26, 34). Neither approach was ideal, however. The central control initially exerted by the Treasury had enabled much better coordination of the programme, albeit by significantly increasing the administrative and reporting burden on departments. VfM provided more scope for departments to manage their own affairs without Treasury involvement, but this meant that the Treasury now also had to rely on departments to ensure that published savings would stand up to scrutiny and that programmes were on track.

The efficiency agenda was taken extremely seriously by both the prime minister and the chancellor. This was emphasised by the comparatively rare combined approach to management of the programme by the two, who were more accustomed to running their priority objectives in parallel (Mandelson, 2010). Both insisted on being briefed personally and regularly on progress against efficiency targets. This close political attention can be expected to have created additional pressure for officials; it certainly would have been a strong motivator for department

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recommendations about expenditure and efficiency. His report (Gershon, 2004) proposed specific areas in which efficiency savings could be made, and urged that a culture of efficiency should be instilled throughout the public sector. A new efficiency programme, based on Gershon's findings, was announced to begin in April 2005. It aimed to achieve £21.5 billion of efficiency gains by 2007–08.³ Departments were each assigned an efficiency target and responsibility for apportioning the target across a range of projects.⁴ The programme was regarded as more broadly-based, and more ambitious, than any previous attempt to tackle efficiency in the British government sector. In the complexity of the reform agenda, in the universality of its aims, and in the close personal attention paid to it by both Prime Minister Tony Blair and Chancellor of the Exchequer Gordon Brown, this was a new, and unique, public management reform initiative for the UK (PAC, 2006, Q.15).

In 2007, Brown published a Comprehensive Spending Review,

procurement, and it set up a new Efficiency Reform Advisory Group. The close of the Labour era therefore provides a tidy end point to the efficiency reform issues considered in this article.

Central control

In initiating its efficiency programme, the Labour government was explicit about the need to incentivise the public sector towards greater efficiency (Gershon, 2004). Targets were already being used by the administration as a key tool to motivate the public sector to pursue its most highly prioritised objectives with the rigour desired (Mandelson, 2010). Using targets to reinforce the importance of the efficiency objectives would thus have been natural. According to the then chair of the PAC, Tony Wright, the prime minister firmly believed that it was wrong to have permanent secretaries operating independently, without strong central control, and that accountability and improvement of standards should be driven from the centre. The deployment of centrally-imposed targets to effect the efficiency agenda gave rise, however, to

heads to ensure that successes could be reported swiftly – and, doubtless, that failings did not lead to adverse attention. The National Audit Office (NAO) reported early on that the six-monthly progress reports to the prime minister and chancellor were ‘ensuring that efficiency remains a priority for senior management in departments’ (NAO, 2006, 7). But preparing regular briefs at this level represents a substantial burden for those from whom the data must be sourced; feedback from departments and central agencies alike suggested that finding the balance between appropriate levels of reporting to meet ministerial requirements and not overburdening departments was not easy.

Departments had not previously been involved in such a complex or wide-ranging programme, and looked to central bodies for guidance. An efficiency team within the Treasury was set up for this purpose but struggled, particularly early on. Frequent turnover of key personnel affected its ability to help departments grapple with the complexities of the new programme, and hindered the team in winning departments’ trust to allow operating as the ‘critical friend’ that had been envisaged (NAO, 2006, 6). Departments found themselves, for example, instructing their relationship managers instead of the other way round: ‘At the beginning it seemed they were coming and going every month ... [I]t would be really helpful to have someone with a consistent view of the old stories’ (NAO, 2006, 48). Had the importance of a stable efficiency team been recognised, more could perhaps have been done to prioritise forward planning by staff.

There was also a difference of opinion between the centre and departments about the use – and usefulness – of relevant guidelines. Departments complained that long delays in publishing guidelines jeopardised effective delivery (NAO and Audit Commission, 2006), and expressed concern that at least one Treasury-approved methodology for measuring savings was not robust enough to produce defensible reporting (NAO, 2010b). Central agencies, meanwhile, felt that formal guidance was often

disregarded. The Treasury, for example, had produced a ‘clear and comprehensive framework’ for measuring efficiencies, but assessed that departments were not applying it effectively and therefore remained weak in a number of key areas (PAC, 2007, 2008).

A good dialogue did develop at senior levels between the Treasury’s Office of Government Commerce and the permanent secretaries of key departments. This close dialogue was credited with the openness with which, for example, the Department for Work and Pensions had felt prepared to disclose to the Treasury certain shortcomings regarding the calculation

Professor Christopher Hood of Oxford University argues that the ‘element of terror’ involved in the targets in UK public sector management made it a ‘distant cousin’ of the system in the USSR (Hood, 2006, 515; Bevan and Hood, 2006, 517). According to Hood, those responsible for delivering against targets were incentivised to do so by strong concern about what would happen to under-performers. He notes regular gallows humour references to a ‘hanging admirals’ culture,⁵ or to ‘P45 targets’,⁶ and posits widespread expectations among senior officials that the penalties for failing to meet targets would be severe, perhaps even entailing job loss

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of its efficiency baseline, thereby enabling swift action and rectification (PAC, 2007). There is evident value in building relationships which facilitate this degree of trust, although of course they require resourcing, commitment and time if they are to develop effectively.

Targets and incentives

The use of targets and performance indicators to steer the behaviour of the public sector and assert control had been much advocated in Western countries from the 1980s onwards (see, for example, Pollitt, 1986 and Carter et al., 1995). In the UK, the implementation of the efficiency agenda primarily used the same quantitative, time-limited targets for controlling and monitoring departmental performance as had been a key factor of UK public management since the late 1990s.

This approach obviously relies for its effectiveness on the extent to which departments are motivated to comply

(Hood, 2006, 2007; Hood, Emmerson and Dixon, 2009).

These assumptions were probably exaggerated. The summary dismissal of senior officials is generally not easy to accomplish, and, despite seeming agreement about a ‘P45 targets’ system, there is no evidence to suggest a significant increase in the incidence of sackings or other similarly severe forms of punishment among senior UK civil servants at any stage after targets were introduced – such as should certainly have been expected if the penalties for failure were as harsh as popularly supposed. Nor, in fact, were there any formal or legal sanctions available to ministers or to the Treasury if departments did not fulfil their objectives (Hood 2006; Norman, 2008). To an extent, though, whether or not officials’ belief in the willingness of their masters to ‘hang’ those who failed them had any basis in reality is not important. What matters is that the *belief* in the threat was genuine enough to have incentivised behaviours in a certain way, so that achievement of

the targets did indeed become the highest priority of senior officials.

One of the problems in a target approach to performance management is determining whether, as well as motivating the pursuit of certain desired objectives, it is at the same time having a perverse or unintended effect by incentivising *unwanted* behaviours, or by disincentivising work towards non-targeted outcomes. There is a degree of risk in relying too heavily on targets to motivate performance, in that an organisation may start to treat the achievement of its targets as its *raison*

The Treasury and the NAO both reported that departments were consistently planning for efficiency-related changes that could be delivered within a three-year reporting period, rather than anything more innovative, because the latter might have taken longer than three years and would not be rewarded (see NAO, 2010b, 7, 27–9.) The efficiency programme was thereby judged to have failed to incentivise departments to take a long-term approach to tackling the efficiency challenge by focusing them too intently on their targets (PAC, 2010a).

The NAO did not find evidence of deliberately dishonest gaming. It did, however, raise questions about calculations of efficiency gains, particularly the use of estimates and projections rather than hard data to record efficiencies, and the use of projected rather than real figures to report headcount reallocations (NAO, 2007). Meanwhile, a study of senior officials' attitudes to targets concluded that ratchet effects and other similar forms of gaming were common. The officials interviewed for the study felt that some departments would 'play the targets game to their advantage' by negotiating undemanding targets that were hard to miss. They condemned the production of fictional performance data as dishonest, but felt that achieving reportable performance improvements by redistributing service was acceptable (results reported in Hood, 2006). The responses point to a feeling, at least among senior Whitehall officials, that gaming was not insignificant; while deliberate dishonesty seems unlikely, it may be assumed that creative use of performance data and other gaming techniques may have contributed to the startlingly successful results claimed against the first tranche of the efficiency targets.

Departments appeared to struggle to realise similar levels of performance under the VfM tranche of targets as had apparently been achieved under the Gershon programme. By March 2010, two years into the programme, only £15 billion of the £35 billion total had been reported, leaving £20 billion for the final year. A key difference between the former and VfM had been that, although there was more direct involvement of the central agencies under Gershon, the reporting requirements themselves were comparatively more relaxed and less complex. This was recognised and tightened up during VfM. Without being simplistic, it could be suggested that the strong pressure on departments to demonstrate quick wins against the Gershon targets, coupled with a relatively relaxed reporting environment, may have had some bearing on the disproportionately good results which departments were able to report.

Devising good performance indicators, particularly to measure quality of service provision, is difficult; certainly harder than measuring financial data.

d'être and, as a result, disregard or abandon activities which do not contribute directly to them. Outcome-focused management thereby loses ground to the output-focused, where activity can be more easily quantified.

Naturally there are circumstances where targets offer the most direct and effective way of achieving a goal. For example, it seems unlikely that a dramatic reduction in waiting times for hospital treatment in England would have come about without extremely specific targets (Hood, 2007). But there are also many UK examples of unintended consequences: such as training which was started but not necessarily completed because the target measured only commencement. Studies also suggested that departments overly focused on efficiency targets did not evaluate the impact of efficiency-motivated changes on service provision quality as experienced by clients. For example, an initiative which measured improvements in the time taken to answer ringing telephones in a customer contact centre was not able to confirm whether customers' problems were actually *resolved* during their first contact (PAC, 2007; for further details, see Robinson, 2010).

Spectacular results were reported for the initial tranche of efficiency targets. Against an original target of £21.5 billion in savings over three years, the public sector achieved an impressive £26.5 billion, an over-delivery of approximately 23%. Every department reported that it had not only met, but in almost every case exceeded, its target. The Department for Business Enterprise and Regulatory Reform claimed efficiency savings of 71% over its original target (HM Treasury, 2009). The original targets were admittedly intended to be realistic rather than stretch goals; this may go some way to explaining why departments seem to have found it so easy not just to meet but to exceed them. But that alone cannot satisfactorily explain such a preponderance of success stories. Either the targets allocated were so easily achievable that they were meaningless, or the performance reporting was suspect (or, perhaps, both). Whatever the case, the suspicion that, as so often in an environment of high-pressure expectations, an element of gaming may have played a part in the initial selection of the targets, or in the selection and interpretation of the data used to report results, cannot be dismissed.

Performance information

Devising good performance indicators, particularly to measure quality of service provision, is certainly harder than measuring financial data. Effective performance measurement for efficiency programmes can be particularly elusive (Griffiths, 2006). But good performance measurement is crucial in effective performance management. Representing new territory, the efficiency agenda involved complicated reporting and accountability parameters. Accurate performance measurement, while important, was difficult, not least because departments were attempting to use long established information systems designed for other purposes to collect and analyse new and more detailed forms of data. (NAO, 2006; PAC 2006, 2010a).

Ongoing concern was expressed by the NAO, by independent commentators and by the PAC about the quality of the UK public sector's performance data (see Robinson, 2010 for details). The impact of generally poor performance information on stakeholders' capability to accurately assess the progress of the efficiency programme was frequently identified as a major issue. Indeed, the PAC repeatedly queried whether any reliance could be put on any of the efficiency claims made by departments, or by Treasury on their behalf (PAC, 2006, 2010).

Despite the highly controlled way in which the programme was run, it must have been difficult to accurately gauge the real success of the efficiency projects given a lack of robust performance data. It is hardly a surprise, however, noting the high political importance assigned to success, that where performance data was unreliable or incomplete there should be strong motivation to put the best possible reflection on whatever data was available. It also seems likely that decisions in managing the programme must sometimes have been made on the basis of old or unreliable data.

Many efficiency projects were not stand-alone initiatives, which made it more difficult to capture the overall benefits brought about by changes in one area. For example, in its service improvement project, the Department of Health set out to measure efficiency gains from certain improvements in patient care. Accurate

performance reporting would have had to take account of the complex network of relationships within the National Health Service, the continuous changes to the various patient services offered, and the requirement for ongoing new investment. Attempting to capture accurately the real relationships between inputs and outputs proved complicated and hard to quantify for several departments. In some cases, efficiency gains were being realised only after many years of investment in complex programmes with many benefits, some not associated with the efficiency projects themselves (NAO, 2007).

Leadership

Some of the deficiencies identified in implementing the efficiency agenda were linked with issues of institutional capacity, such as internal capability weaknesses (especially financial expertise); poor knowledge and information management; and problems with inspiring commitment to the programme. Effective and engaged leadership is critical in building institutional capacity and making a difference in the public sector.

The efficiency agenda was introduced into a public management environment characterised by political impatience,

The goal was never just to save cash, but rather to instil such a commitment to efficiency in public sector culture that it became 'absolutely embedded in the DNA of how departments do their business' ...

Management by targets or performance indicators can at times have an unintended impact on the quality of service provision. An initial sharp rise in performance may be followed by flatlining, or distortions may become evident as non-incentivised outputs receive less attention than those to which performance indicators have been assigned (Hood, Emmerson and Dixon, 2009). Organisations may be so focused on ascertaining whether they are achieving their objectives that they fail to collect useful data on what their clients actually want, or whether they are meeting their needs. In the UK, departments were in many cases not able to provide assurance that service quality had not deteriorated as a result of their efficiency-related reforms. Additionally, there seemed to be little or no ability to correlate the impacts of the efficiency programme across the government sector; it was hard to tell whether the activities of one department in pursuit of efficiency were undoing the work of another (by transferring demand) (NAO, 2007).

pressure on departmental resources, and an anxiety on the part of the public sector leaders to produce swift success (Amman, 2006). Major change in organisational culture usually requires an incremental, cumulative approach. The prevailing culture in Whitehall at the start of the 21st century, however, does not seem likely to have rewarded a slow-and-steady approach to change. This may go some way to explaining the felt pressure to meet targets as quickly as possible, and also the lack of success in getting real culture reform to stick.

The efficiency initiative had introduced a change programme as complex as any seen before, anticipating both structural and cultural change (NAO, 2006). The goal was never just to save cash, but rather to instil such a commitment to efficiency in public sector culture that it became 'absolutely embedded in the DNA of how departments do their business' (PAC, 2006). There was a consensus that efficiency had not been the driver that it could have been, and that minds and hearts needed to change (PAC, 2010b).

Strong strategic leadership was intended to be a key factor in changing this.

A distinct change in attitude at senior levels was certainly evident. Senior departmental officials contributed meaningfully, and demonstrated an active interest and involvement in the programme, thereby confirming to staff that this initiative was different (NAO, 2006). It may be surmised that this noticeable change in attitude may have been due, at least in part, to the prime minister's strong interest:

translated as cuts or job losses (Office for Public Management, 2007).

The same study found that agencies which demonstrated high performance in achieving efficiencies were characterised by regular communication with all staff groups; openness to new ideas; and a devolved approach which allowed individual areas to come up with their own strategies within broad parameters. This was seen as being critical in winning the backing of middle managers and more junior staff. Lower-performing

or to harness the energy and insights of operational staff (Haldenby et al., 2009). Targets and indicators promote adherence to established routines and organisational processes. Motivating staff to effect comprehensive culture change had been a key factor in the efficiency reform narrative, but evidently more needed to be done in enabling staff to engage more creatively with the programme for themselves, thereby beginning to embed the desired orientation towards efficiency more decisively into the culture.

The ambitious attempt to combine a long-term public management reform programme with a series of short-term resource re-allocation projects essentially did not work.

Two years into the programme, I cannot go into any Department in Whitehall without finding that efficiency is discussed frequently, regularly and at main Board level. It is a key topic on the agenda and an essential part of the business planning process of every Department. Two or three years ago you would not have seen that in most Departments in Whitehall; it is a significant shift in attitude and culture ... All Departments are on a journey that they were not on before the Gershon Report was written. ... We would not have achieved that without an efficiency programme. (PAC, 2007, Qq14, 79)

But senior officials' engagement with the efficiency reform project was not alone sufficient to effect the fundamental changes expected in their departments. Departments reported mixed results in securing full engagement in the efficiency programme, and there was evidence that many staff viewed it as just another economy drive. A 2007 set of case studies found that frontline local government staff felt that the efficiency programme had only added to their bureaucratic burden, while efficiency to them

entities, on the other hand, had generally adopted a more centralised and top-down approach, which was predominantly concerned with ensuring tight control over key efficiency-related funding and prioritisation decisions.

The culture changes which it was imagined the efficiency programme would establish will not, paradoxically, flourish under the sort of management strategies deployed to ensure that the programme demonstrated quick wins. Creativity flourishes when there is a free flow of ideas around the organisation, when there is a culture of listening and engaging with new suggestions, and when people are encouraged to join up their thinking with that of others in different parts of the organisation (Bichard, 2000). But the environment into which the efficiency agenda was introduced tended to reward performance by recognising those who had completed tasks or met targets. The task-oriented way of acting that such a system encourages is generally not conducive to fostering creativity or risk-taking (Bichard, 2000), and has been criticised for detracting from attention needed to improve the overall performance of people and organisations

Conclusion

New Zealand and the UK are ordinarily considered to have been among the leading examples of the reforms of the 1980s and 1990s, and the UK experience in introducing a comprehensive and pan-government efficiency reform agenda was specifically referenced by the secretary to the New Zealand Treasury as a valuable lesson for New Zealand (Whitehead, 2009a). Although different in scale, the two nations share some important institutional characteristics in executive government. New Zealand does not, perhaps, have the same degree of strong central control over the public sector as was evident during the Blair–Brown administration: central agencies are described as having rather to 'cajole, nudge [and] inspire' departments into implementing new initiatives (Norman, 2006). As in the UK, however, the variable quality of performance information and reporting (which has already been identified as an issue on which firm action must be taken (State Services Commission, 2009, 2010a, 2010b)) would have to be addressed. Were New Zealand to follow the UK lead, meanwhile, energetic commitment from internal leadership would be very important, and thus confidence that senior officials had the necessary support for a certain amount of risk-taking in pursuit of the desired objectives (Ryan et al., 2008) would be as significant in New Zealand as in the UK context.

Efficiency reform is challenging for any administration. The Labour government in the UK made a sustained effort to make a real difference in the efficiency of the management of the UK public sector during its period in office. Its efficiency

agenda was comprehensive in approach and complicated in operation. Progress was undeniable. Financial management capacity in public sector departments improved; some savings were certainly achieved; and improvements to both quality of services and efficiency in their provision were recorded. A genuine focus on and attention to the aims of the efficiency agenda were also noticeable (at least at senior levels).

But many of the spectacular early gains reported against efficiency targets were later dismissed as implausible. Quality of performance data was so poor that it proved unreliable in achieving the required reforms; concerns about goal displacement, gaming and other dysfunctional effects of a highly target-focused performance management regime were also an issue. The right balance between maintaining a level of central control while permitting operational latitude in the pursuit of efficiency goals seems rarely to have been achieved.

The ambitious attempt to combine a long-term public management reform programme with a series of short-term resource re-allocation projects essentially did not work. The use of targets to achieve the programme's aims may have been a suitable approach to the latter objective, but could not incentivise the former; if anything, it stifled rather than encouraged culture change. While Gershon had initially envisaged steady rather than rapid progress towards efficiency goals as the way to ensure sustainability, this was overtaken by the political importance assigned to the programme, resulting in pressure to produce rapid wins. Ultimately, this strongly directive central oversight – which wanted to ensure that the programme was a success – was a major factor in its failure.

Coherent direction and robust oversight from the centre is of course extremely important. The UK experience teaches, however, that balance and proportionality are critical. The desire to

strengthen central control cannot become so pervasive that it becomes restrictive. Flexibility and freedom extended to operational agencies will enable them to pursue efficiency objectives in a way which is relevant to local contexts, even if this involves taking risks. Achieving the right balance represents a complex set of relationships and is tricky to achieve; but is important to get right.

References

- Amman, R. (2006) 'The Circumlocution Office: a snapshot of civil service reform', *Political Quarterly*, 77 (3), pp.334-59
- Bevan, G. and C. Hood (2006) 'What's Measured is What Matters: targets and gaming in the English public health care system', *Public Administration*, 84 (3), pp.517-38
- Bichard, M. (2000) 'Creativity, Leadership and Change', *Public Money and Management*, 20 (2), pp.41-6
- Carter, N., R. Klein and P. Day (1995) *How Organisations Measure Success*, London: Routledge
- Gershon, P. (2004) *Releasing Resources to the Frontline: independent review of public sector efficiency*, London: HM Treasury
- Griffiths, D. (2006), 'Some Puzzles and Paradoxes of the Efficiency Agenda – and a way forward', *Public Money and Management*, 26 (5), pp.313-18
- Haldenby, A., P. Nolan, L. Parsons and G. Rosen (2009) *The Front Line*, London: Reform, <http://www.reform.co.uk/portals/0/Documents/Front%20line%20FINAL.pdf>
- HM Treasury (2009) *2009 Value for Money Update*, London: HM Treasury
- Hood, C. (2006) 'Gaming in Targetworld: the targets approach to managing British public services', *Public Administration Review*, 66 (4), pp.515-21
- Hood, C. (2007) 'Public Service Management by Numbers: why does it vary? Where has it come from? What are the gaps and the puzzles?', *Public Money and Management*, 27 (2), pp.95-102
- Hood, C., C. Emmerson and R. Dixon (2009) *Public Spending in Hard Times*, Oxford: University of Oxford Economic and Social Research Council, Public Services Programme, <http://www.publicservices.ac.uk/wp-content/uploads/public-spending-in-hard-times.pdf>, accessed 7 Jan 2010
- Lawson, D. (2009) 'At Whose Service?', *Sunday Times*, 6 December
- Mandelson, P. (2010) *The Third Man: life at the heart of New Labour*, London: Harper Press
- National Audit Office (NAO) (2006) *Progress in Improving Government Efficiency*, report by the Comptroller and Auditor-General, HC802-1, session 2005-2006, 17 February 2006, London: The Stationery Office
- NAO (2007) *The Efficiency Programme: a second review of progress*, report by the Comptroller and Auditor-General, HC156-1, session 2006-2007, 8 February 2007, London: The Stationery Office
- NAO (2010a) *Progress with Value For Money Savings and Lessons for Cost Reduction Programmes*, report by the Comptroller and Auditor-General, HC291, session 2010-2011, London: The Stationery Office
- NAO (2010b) *Taking the Measure of Government Performance*, report by the Comptroller and Auditor-General, HC284, session 2010-2011, London: The Stationery Office
- NAO and Audit Commission (2006) *Delivering Efficiently: strengthening the links in public service delivery chain*, London: The Stationery Office
- Norman, R. (2006) 'New Governance, New Dilemmas: post-reform issues in New Zealand's public sector', *Policy Quarterly*, 2 (3), pp.24-31
- Norman, Z. (2008) 'Performance Budgeting in the United Kingdom', *OECD Journal on Budgeting*, 8 (1)
- Office for Public Management (2007) *Local Government Efficiency: case studies and literature review*, London: Office for Public Management
- PAC (House of Commons Committee of Public Accounts) (2006) *Progress in Improving Government Efficiency: 55th report of session 2005-06 – report, together with formal minutes, oral and written evidence, 19 June 2006*, London: The Stationery Office
- PAC (2007) *The Efficiency Programme: A Second Review of Progress: 48th report of session 2006-07 – report, together with formal minutes oral and written evidence, 9 July 2007*, London: The Stationery Office

- 1 The dissertation was submitted to the School of Government, Victoria University of Wellington, in part-fulfilment of the requirements of the Master of Public Management degree, and was awarded the 2011 Holmes Prize for Public Policy. It is available from the author.
- 2 Then the head of the Office of Government Commerce, an independent office of the Treasury.
- 3 This equated to a saving of approximately 2.5%.
- 4 Targets had mostly been discussed and agreed between departments, the Gershon review team and the Treasury prior to the launch of the efficiency programme.
- 5 Voltaire famously joked in the mid-18th century that in the British Navy at the time, 'From time to time they kill one of the Admirals, to encourage the others' – an indirect reference to Admiral John Byng, executed in 1756 for negligence in the performance of his duty to the Royal Navy.
- 6 The P45 form is issued by an employer when an employee leaves their service; the term is often used to refer to termination of employment by the employer, i.e. sacking.

PAC (2008) *Managing Financial Resources to Deliver Better Public Services: 43rd report of Session 2007-08 – report, together with formal minutes, oral and written evidence*, 23 June 2008, London: The Stationery Office

PAC (2010a) *Progress with Value for Money Savings and Lessons for Cost Reduction Programmes, 4th report of session 2010-11 – report, together with formal minutes, oral and written evidence*, 27 October 2010, London: The Stationery Office

PAC (2010b) *Uncorrected Transcript of Oral Evidence: National Audit Office resources estimate for 2010*, <http://www.publications.parliament.uk/pa/cm200910/cmselect/cmpublic/uc476-i/uc47602.htm>, accessed 21 July 2010

Peters, B.G. (2008) 'Debate: the two futures of public administration', *Public Money and Management*, 28 (4), pp.195-6

Pollitt, C. (1986) 'Beyond the Managerial Model: the case for broadening performance assessment in government and the public services', *Financial Accountability and Management*, 2 (3), pp.155-70

Robinson, C. (2010) 'Managing for Efficiency: lessons for New Zealand from the UK's efficiency agenda 2004-2010', Master of Public Management dissertation, Victoria University of Wellington

Ryan, B., D. Gill, E. Eppel and M. Lips (2008) 'Managing for Joint Outcomes: connecting up the horizontal and the vertical', *Policy Quarterly*, 4 (3), pp.14-21

Scheers, B., M. Sterck and G. Bouckaert (2005) 'Lessons from Australian and British Reforms in Results-oriented Financial Management', *OECD Journal on Budgeting*, 5 (2), 133-62

State Services Commission (2009) *Delivering Better Public Services*, Wellington: State Services Commission

State Services Commission (2010a) *Next Steps in Improving State Services Performance*, Wellington: Office of the Minister of State Services

State Services Commission (2010b) *Lifting the Performance and Service Delivery of State Sector Agencies*, Wellington: Office of the Minister of State Services

Whitehead, J. (2009a) 'Public Sector Performance', speech to Victoria University School of Government, 20 July

Whitehead, J. (2009b) 'Public Sector Financial Management: stepping up to the challenge', speech to the Public Sector Financial Management conference, 10 December

Whitehead, J. (2010) 'Public Sector Performance', speech to public sector financial directors, 19 August

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*Nā Tāne I took, ka mawehe a Rangi rāua ko Papa, nāna I tauwehea ai,
ka heuea te Pō, ka heuea te Ao.*

It is by the strength of Tāne, that sky and earth were separated,
and light was born.

Introduction

The recent oil spill in the Bay of Plenty along the east coast of New Zealand has intensified debate over the future of marine activities in the exclusive economic zone (EEZ). An estimated 350 tonnes of oil has leaked from 775-foot vessel *Rena*, which struck the Astrolabe Reef in the Bay of Plenty on 5 October 2011. The vessel subsequently broke in two and much of it is now under water. Large numbers of containers have been washed up on the shore or have sunk. Well over 1,300 birds have died as a result of the spill, but this number of marine life casualties is an estimate at best. The spill is New Zealand's worst environmental disaster in decades. Yet these are the types of impacts that can occur when marine

areas are developed or used in areas of close proximity to sensitive island and coastal marine ecosystems of high biodiversity value.

As New Zealand continues to explore marine resource development, a concerted effort to strengthen and improve the marine governance framework in New Zealand to better reflect international best practice is needed. New Zealand's green brand of 100% Pure is a double-edged sword: it represents an opportunity for the country to create the marine policies and programmes that support the brand, and a vulnerability or liability with respect to the potential economic fallout if the country fails to live up to the brand. With respect to the importance of tourism to

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the New Zealand economy, the country has an opportunity to learn from the international community and to become a world leader in the area of ecosystem-based marine governance.

Future marine policy in New Zealand is likely to be based on how well the country resolves three general institutional issues and concerns. First, the existing marine governance framework is highly fragmented, and is based on a sector-by-sector approach to marine resource use. There are 18 main statutes, 14 agencies and six government strategies for marine management and planning in New Zealand (Vince and Haward, 2009). Further, marine planning and decision

Law of the Sea (Rothwell and Stephens, 2010; Parliamentary Commissioner for the Environment, 2011; Oceans Policy Secretariat, 2003a, 2003c). Every coastal state is granted jurisdiction for the protection and preservation of the marine environment of its EEZ. For example, coastal states have the obligation to control, prevent and reduce marine pollution from dumping, land-based sources or seabed activities subject to national jurisdiction, or from or through the atmosphere. While New Zealand has access to and the right to use the marine resources of the EEZ, this use is predicated on the protection of marine life in accordance with international obligations. The management of resource

approach to marine governance can contribute to a more comprehensive and integrated approach to marine ecosystem protection and integrated resource use across diverse management sectors. Policy innovation in the area of land-use and catchment planning are examples of New Zealand's capacity to lead the world in environmental management. Yet in the area of marine governance of the EEZ the country has yet to embrace the principles of management and the planning tools that are being used across the world to better protect marine life, and to resolve resource-based conflicts.

With these primary concerns in mind, this article describes a number of management principles and planning tools that can support the development of an ecosystem-based approach to marine governance in New Zealand. The article begins with a general overview of the changing socio-ecological context in New Zealand. It then provides a summary of recent legislative developments and other activities that are likely to influence the country's future marine policy. Conflicts over resource use and biodiversity protection are likely to develop in the EEZ. New Zealand lacks, however, the institutional capacity and capability to address these types of conflicts and other management challenges. Accordingly, the article focuses on the need for the central government to support several principles of integrative, ecosystem-based marine management and planning. The management principles are the public trust doctrine; the maintenance of ecosystem services; and the compatible use criterion.

New Zealand should be considered a 'Noah's ark' of species diversity; the abundant marine life is sensitive to human activities and impacts that occur at diverse scales, including the impacts of climate disturbance

making are made more complicated by the fractured framework of laws, regulations and practices that have been developed in New Zealand over the past 30 years.

Second, New Zealand is not meeting its international obligations when it comes to marine resource management and biodiversity protection (Parliamentary Commissioner for the Environment, 2011, 6). New Zealand has not created marine reserves within the EEZ that can protect ecosystems from human impacts. As the parliamentary commissioner for the environment notes, 'It is over nine years since the First Reading of the Marine Reserves Bill. Given the growing pressure to exploit marine resources, this legislation [the Environmental Effects Bill] should be urgently advanced' (ibid., 13).

With respect to the management of the EEZ, the protection of marine life is an important requirement in international conventions and treaties, such as the United Nations Convention on the

use and human impacts, including the need to develop adaptive strategies to address climate disturbance of coastal marine ecosystems, are fundamental issues facing the country. Existing international treaties, such as the Convention on the Law of the Sea, require that resource use of the EEZ includes countries developing protective measures for marine life (Parliamentary Commissioner for the Environment, 2011). National policy that supports the value of marine biodiversity protection has not been fully developed for New Zealand's EEZ, and the current marine reserve designations fall short of international agreements (Parliamentary Commissioner for the Environment, 2011).

Third, the country remains far behind international best practice in marine policy and ecosystem-based programme development and planning (Peart et al., 2011). Marine policies should be based on internationally recognised principles of management and planning. The adoption of an ecosystem-based

Setting the stage: the changing socio-ecological context

When compared to other developed countries, New Zealand has a relatively small population. Yet the country is responsible for the management of one of the most biologically important parts of the world's ocean. As with other Pacific island countries, New Zealand faces a problem of scale, which has both a political and ecological dimension. The institutional resources (e.g. professional capacity, fiscal resources) needed to manage the marine environment across multiple marine sectors are lacking.

Management of and planning for New Zealand's EEZ represents a particular challenge because of its biophysical scale. With its declaration of an EEZ in 1978, New Zealand's jurisdiction spanned over 3 million square kms of the ocean, and the country's coastline is in excess of 15,000 km. Its EEZ is the fifth largest in the world, with an area about 15 times that of the land mass (or 5.7% of the world's EEZ) (Ministry for the Environment, 2007). With the legal continental shelf extensions, New Zealand's current ocean area jurisdiction is more than 20 times its land area, or 1.2% of the earth's surface area. Thus, a country about the size of a major city overseas is responsible for managing and sustaining a large marine area. This responsibility is based on international obligations set forth in treaties and conventions.

New Zealand should be considered a 'Noah's ark' of species diversity; the abundant marine life is sensitive to human activities and impacts that occur at diverse scales, including the impacts of climate disturbance (Kingsford and Watson, 2011). New Zealand's marine areas contain endemic species, many of which are unique to New Zealand (Ministry for the Environment, 2005; Gordon et al., 2010). The country's EEZ includes diverse coastal marine habitats, and is recognised as one of the top hot spots of threatened biodiversity in the world (Kingsforce et al., 2009, 834). Over 17,000 species of marine life have been identified in New Zealand's seas, including over 4,000 that have been collected but have yet to be described. This comprises just over 30% of all known biodiversity associated with the country (Gordon et al., 2010, 9). The number of identified fishes, for example, has doubled over the past 15 years, and is increasing at a rate of 15 species per year, while the number of undiscovered marine species in New Zealand waters is likely to exceed the number of species that have been identified (ibid., pp.9, 12). New Zealand also hosts a very high diversity of seabirds and marine mammals. Almost three quarters of the world's penguin, albatross and petrel species, and half of the world's shearwater and shag species are found in the islands and coastal areas of the country. In addition, nearly half the

world's species of whales and dolphins have been sighted in New Zealand waters, including nine species of baleen whales, 17 members of the dolphin family and 12 species of beaked whales (ibid., 10).

There are a range of both instrumental and non-instrumental values associated with the EEZ, including the values of biodiversity and resource use. Few people dispute the intrinsic values of the marine environment. They are often reflected in maritime stories, ritual, and other ceremonies of maritime peoples. While we often focus on the economic values of the ocean, we also recognise the non-instrumental values associated with the marine environment, such as

relation to natural and physical resources, and includes the ethic of stewardship' (Resource Management Act 1991, s2); and 'The exercise of guardianship; and, in relation to any fisheries resources, includes the ethic of stewardship based on the nature of the resources, as exercised by the appropriate tangata whenua in accordance with tikanga Māori' (Fisheries Act 1992, s2). Article two of the Treaty of Waitangi guaranteed that iwi and hapu would retain the authority of rangatiratanga to continue to exercise kaitiakitanga.

With respect to consumption values, there are a range of marine uses that may be developed in New Zealand's EEZ. The

There is no existing requirement to assess the effects of the exploration and development of offshore mining and oil and gas activities: leases were granted without a comprehensive environmental assessment.

aesthetic, scientific, recreational, spiritual and sacred values. Certainly the world's oceans carry life-giving values that are beyond an instrumental value orientation or 'development ethic': for instance, a sea in a wild storm is valuable beyond the human capacity to understand it, while the sanctuary of a coastal estuary for shorebirds feeding embodies spiritual and sacred significance.

Marine resources have been used and valued by Māori for hundreds of years. The maritime heritage of New Zealand is diverse, including various diverse iwi and European belief structures and values. Marine management should reflect this diversity of cultural epistemology, understanding and knowledge. For example, kaitiakitanga is recognised as an important part of environmental management and planning. It is defined in legislation as follows: '[T]he exercise of guardianship by the tangata whenua of an area in accordance with tikanga Māori in

government has leased parts of the EEZ for the exploration of marine mining and offshore oil and gas development. There is no existing requirement to assess the effects of the exploration and development of offshore mining and oil and gas activities: leases were granted without a comprehensive environmental assessment. Within the territorial sea, the current National-led government is interested in significantly expanding aquaculture production, which may include future finfish and mussel farming. New aquaculture development may take place in nearshore coastal waters for such new species as sea cucumbers. There is also the potential for significant new renewable energy development in marine areas (Boisvert, 2011).

Biophysical scale and the scope of conflict
Conflict between contending interests and multiple values associated with marine areas is shaped by two interdependent

factors: the level of marine resource use, and the proximity and/or access of users to coastal marine areas. It is important to recognise that the scale and the scope of conflict often shape the politics of marine planning and decision making (McGinnis, 2012). For example, the scope of conflict is shaped by different political contexts associated with marine life protection, and includes conflicts between users (e.g. commercial versus recreational fishing interests) and user–marine ecosystem conflicts (e.g. fishery interests versus interests in marine mammal protection). The larger the scale needed to sustain resource use and protect marine life, the more politically contentious the decision-

- government shifts the focus from multi-sector or multi-scale governance to single-sector or single-scale governance (e.g. a shift away from integrated, ecosystem-based planning to a resource-based mentality)
- government shifts the focus from multi-stakeholder decision making to client-based decision making.

The problem is that a traditional reliance on a sector-based approach to marine management rarely captures the range of issues, interests and values that are often associated with marine ecosystems. Lester et al. (2010, 577): '[T]here is a historical legacy of piecemeal management that has

number of institutional challenges, such as:

- a spatial and temporal overlap of human activities and their objectives, causing conflicts (user–user and user–ecosystem conflicts)
- a lack of connection between the various authorities responsible for individual activities or the protection and management of the environment as a whole
- a lack of connection between offshore activities and resource use and onshore communities that are dependent on them
- a lack of protection of biologically and ecologically sensitive marine areas.

As governments continue to encourage development of marine areas, the socio-ecological context will inevitably expand to include more diverse interests and values. Value-based conflict between competing interests, international jurisdictions and within-state government jurisdictions will expand as do the scale and level of resource use. It will be difficult to resolve conflict over marine resource use and biodiversity protection without a more comprehensive and integrative approach to marine planning and decision making (McGinnis, 2012).

Sustainable marine governance requires the institutional capacity to deal with socio-ecological systems that are complex, heterogeneous, dynamic, and prone to non-linear and often abrupt changes

making and planning process becomes (ibid., 2012). As the biophysical scale of the management concern expands, the political scope of conflict between values also expands.

Social scientists have shown that a government's response to an expanding scope of conflict between diverse interests and values often includes an attempt to control the conflict by limiting the range of voices, values and interests in the planning process (ibid.). Governmental control of conflict can also lead to support of a sector-based approach to marine planning and decision making, rather than the more difficult and potentially contentious multiple-sector approach to management and governance, which includes more interests and values. There are three main forms of institutional conflict management:

- government shifts the focus of decision making from multiple issues to single issues (e.g. a shift from biodiversity considerations to fishery issues)

largely focused on single sectors of activity and failed to consider marine ecosystems as interconnected wholes.' As Rosenberg and Sandifer (2009, 13) maintain, '[u]nder sector-by-sector management, trade-offs within a sector may be considered, but those among sectors are largely ignored and often remain unaccounted for'. Similarly, Norse (2010, 184) argues: 'This situation was hardly problematic when ample distance remained between swinging fists and noses, but in the face of today's increasing demands, a system of ocean governance less likely to give us healthy oceans and sustainable economies would be difficult to design. Without strong interagency coordination, sectoral management *cannot* work.'

To date, the existing marine governance framework in New Zealand emphasises a traditional approach to resource management and planning. This governance framework contributes to a

The need for a proactive approach

Sustainable marine governance requires the institutional capacity to deal with socio-ecological systems that are complex, heterogeneous, dynamic, and prone to non-linear and often abrupt changes (Young et al., 2007). There are synergistic and cumulative impacts from human use of coastal marine ecosystems, including the impacts of land-use activity such as farming and ranching (Halpern et al., 2008). The synergistic and cumulative impacts of multiple use of coastal and marine resources should be addressed in a governance framework that includes a comprehensive assessment of environmental effects, the mitigation of effects, and the protection of important marine (Miles, 2009).

Identifying the primary threats to New Zealand's marine areas is the subject of several studies. In a recent Ministry of Fisheries report entitled *Assessment of Anthropogenic Threats to New Zealand*

Marine Habitats, MacDiarmid and colleagues characterise the primary threats and pressures on the country's coastal marine ecosystems (MacDiarmid et al., 2010). These scientists used a model developed in the United States (Halpern et al., 2008) that is also being used by the United Nations Environmental Program. Their important study shows that the two top threats and vulnerabilities in New Zealand stem from human activities associated with climate disturbance, which are driven by the continued reliance on fossil fuels across the world, and human activities in coastal areas, including dairy production. The highest-scoring threat, by a considerable margin, was ocean acidification, a consequence of higher CO₂ levels in the sea. The second-highest scoring threat was rising sea temperatures resulting from global climate change. These results indicate the importance of international threats to New Zealand's coastal marine ecosystems.

The marine environment has biophysical limits that are influenced by natural and climate-related changes in the oceans and other ecological features of marine ecosystems and biology (Kingsford and Watson, 2011). When these limits are exceeded in terms of the level of impact, ocean ecosystems can reach 'tipping points', where the function, structure and complexity of an ecosystem changes dramatically. Lubchenco and Petes (2010, pp.115-16) warn, 'Many ocean ecosystems appear to be at a critical juncture. Like other complex, nonlinear systems, ocean ecosystems are often characterized by thresholds or 'tipping points', where a little more change in a stressor can result in a sudden and precipitous loss of ecological functionality.'

The importance of biodiversity protection

To avoid tipping points, scholars have developed tools that can be used in marine planning and decision making that include important information on ecosystem services and the values associated with these. Biodiversity is an important contributing factor that influences the services provided by marine ecosystems. The Royal Society of New Zealand in a recent working paper on the subject of ecosystem services notes:

Biodiversity is often valued for providing resilience to environmental change. More biodiversity generally leads to more resilience, but the relationship is rarely simple. Ecosystem functions, such as nutrient regulation, are provided by the traits of organisms within that ecosystem. Greater genetic diversity provides a greater reservoir of traits that can replace traits lost if particularly important species are lost. More diversity also provides more opportunity for functions to operate across a broader range of conditions. In this way, biodiversity provides the insurance value that future environmental changes will not reduce services. Biodiversity

marine reserves that can be shown to protect key components of coastal marine ecosystems and the services they provide. New Zealand has thus far designated less than 10% of its marine area as MPAs (Pande et al., 2008). By the end of 2010 only 0.3% of the EEZ and 7.6% of the territorial sea was protected in some type of MPA, and most of this protection exists in the Kermadec Marine Reserve and the Auckland Islands Marine Reserve: these two areas represent approximately 99% of the total existing area protected in New Zealand marine waters. The benthic protected areas in the EEZ are of low habitat value for biodiversity protection (Leatherwick et al., 2008, 96-9).

The primary reason for the stalling of the development of a new oceans policy framework was the debate over Māori rights to coastal and marine resources in 2003.

itself provides existence value and option value (in this case, the value of preserving the benefits of unknown future uses of currently unused species and the opportunity for current use of those species). The past fifty years have seen a 'substantial and largely irreversible loss' of biodiversity. New Zealand's unique endemic biodiversity has similarly seen serious decline – an unknown but large loss of common wealth and natural heritage. (Royal Society of New Zealand, 2011, 5)

The setting aside of marine protected areas, or MPAs, is one of the best ways to conserve biodiversity (Taylor et al., 2011). The scientific literature on the benefits of MPAs also shows that the expansion of reserve networks is needed as a climate adaptation strategy (Kingsford and Watson, 2011, 276). With respect to biodiversity protection, New Zealand has not set aside the level of representative marine habitat within a network of

A brief history of marine policy reform

Since the late 1990s New Zealand has continued to support the development of a comprehensive marine governance framework (Helm, 1998; Risk, 2002; Foster, 2003; Peart and Mulcahy, 2005; Bess and Rallapudi, 2007; Andrews, 2008; Vince and Haward, 2009). A concerted effort began in 1999 to develop a more integrated, comprehensive and ecosystem-based approach to marine policy across all resource sectors. Despite the early development of a national oceans policy, the process stalled in 2003, only to be revived to some degree in 2005. The primary reason for the stalling of the development of a new oceans policy framework was the debate over Māori rights to coastal and marine resources. An additional reason was that the move towards a more comprehensive approach to marine governance requires political will and leadership, because major policy innovation in this domain is difficult given the current institutional culture: multi-

sector policy innovation can threaten institutional cultures. The then Labour-led government took the view that issues regarding ownership of the foreshore and seabed between Māori and the Crown needed to be resolved before further development of new oceans policy.

There are a number of marine-related bills and events that will influence future policy:

- In August 2007 the first step towards a legislative component to the oceans policy was explored through the release of the discussion paper *Improving Regulation of Environmental Effects in New Zealand's Exclusive Economic Zone*. Instead of an 'umbrella act',

to improve alignment of the RMA with existing legislation. The second phase also aims to improve the management of infrastructure, urban design, aquaculture, including improved allocation of coastal space, and water, including both quality and allocation.

- The Aquaculture Legislation Amendment Bill (No 3) was introduced into Parliament in November 2010. This is an omnibus bill which implements the government's decisions on reforming legislation governing aquaculture. Four separate acts – the RMA, the Fisheries Act 1996, the Maori Commercial Aquaculture Claims Settlement Act 2004 and the

Māori Land Court had jurisdiction to determine claims of customary ownership to the foreshore and seabed in. The MCAA repeals Crown ownership of New Zealand's foreshore and seabed in order to replace it with a regime that will enable Māori-only ownership and control (Makgill and Rennie, 2011).

- The establishment of a new Environmental Protection Authority in 2011.
- The Exclusive Economic Zone and Continental Shelf (Environmental Effects) Bill was introduced on 24 August 2011 and referred to a select committee. This bill would put in place an effective consenting process for oil and gas exploration, deep sea aquaculture and marine energy projects. The bill gives new functions to the Environmental Protection Authority, which will be responsible for consenting, monitoring and enforcement. It establishes a framework for regulations that will classify activities as permitted, discretionary or prohibited; sets out decision-making criteria that recognise biological values; and requires decision makers to take a precautionary approach when information is limited. Any significant proposals will be subject to full public hearing, before the bill is set to become law in July 2012.
- The *Rena* tanker spill in the Bay of Plenty in October 2011.
- Over the last ten years governments have granted licences and permits to explore offshore oil and mineral resources. These include: two permits for mining petroleum; 21 permits for exploring for petroleum; a prospecting licence for phosphate on the Chatham Rise; and a prospecting licence for iron sands off Taranaki.

National's approach to environmental governance is based on the following Bluegreen objectives: fostering a sense of commitment to a shared national interest in sustainable development ...

the discussion paper recommended two options: the establishment of legislative mechanisms focused on filling key gaps in EEZ environmental regulation and promoting a consistent approach across statutes, including the assessment of cumulative effects; or the development an entirely new regime for managing all activities in the EEZ.

- The Resource Management (Simplifying and Streamlining) Amendment Act 2009 sets out several amendments which make up the first phase of the review of the Resource Management Act 1991 (RMA). In the minister for the environment's view, this first phase improves the resource consent process by, among other things, restricting occasions for frivolous, vexatious and anti-competitive objections, and having projects of national significance considered at a national level. Work has begun on the more complex second phase of review, which aims to have central government provide better direction for regional councils and

Aquaculture Reform (Repeals and Transitional Provisions) Act 2004 – will be amended. It is intended that the bill will be divided into four separate bills during the committee of the whole House stage of the legislative process. The bill incorporates provisions in the Aquaculture Legislation Amendment Bill (No 2) as reported by the primary production select committee in September 2009, where those provisions remain relevant. The bill's purpose is to provide an efficient legislative and regulatory framework that enables the sustainable development of aquaculture within the coastal marine area.

- The passing of the Marine and Coastal Area (Takutai Moana) Act (MCCA) on 24 March 2011 established a new regime for recognition of customary rights and title over the foreshore and seabed. The act may be viewed as the latest step in a chain of events which started with the Court of Appeal finding, in *Ngāti Apa v Attorney-General* [2003] 3 NZLR 643, that the

The Environmental Effects Bill: the question of striking a balance

The focus of this section of the article is the Environmental Effects Bill and its emphasis in 'balancing' competing uses of the marine environment. The bill's purpose is to fill the existing gap in policy with respect to a requirement for environmental assessments of proposed

marine resource use in the EEZ. The bill reflects the philosophy of the current National-led government as reflected in the Bluegreen agenda, developed while National was in opposition. To quote Nick Smith, minister for the environment, at the annual meeting of the Environmental Defence Society in 2011:

National's approach to environmental governance is based on the following Bluegreen objectives: fostering a sense of commitment to a shared national interest in *sustainable development*; effectiveness in getting results; long-term consistency; reducing delay and cost; better use of technical information ... New Zealand's marine environment is an integral part of our national identity and contributes significantly to our economy – including fishing, aquaculture, oil and gas, tourism, transport and telecommunication links. However, our systems for managing environmental impacts fall under different statutes and regulations. *Consistent standards and restrictions are not applied across all activities.* It's not only the environmental risk we run – these factors could also constrain further economic growth from New Zealand's extensive marine resources. The Government will explore ways to improve environmental management in the EEZ, *which will enable us to benefit from the economic potential of New Zealand's EEZ while protecting the environment ... To lift the long-term performance of the economy, we need to reduce red tape and remove the barriers that prevent resources from being used most productively.* Stage Two of the reforms will continue the focus on managing our resources more effectively and efficiently *to deliver both economic and environmental benefits.* (Smith, 2010, emphasis added)

The Environmental Effects Bill represents an 'effects-based' approach to assessing environmental impacts. One problem with the bill at present is that the management goal of striking a balance between competing interests and values is not consistent with international obligations. As the Parliamentary

Commissioner for the Environment notes:

The purpose of the Bill is stated in clause 10 as achieving 'a balance *between* the protection of the environment and economic development'. This is not consistent with the Law of the Sea which states: 'States have the sovereign right to exploit their natural resources pursuant to their environmental policies and in accordance with their duty to protect and preserve the marine environment.' The right to exploit resources (and profit from royalties) in the EEZ and the Extended Continental Shelf (ECS) has thus been granted *conditional* on environmental protection. Clause 11 in the Bill requires consistency with

When compared to other countries it is evidence that New Zealand has fallen behind international best practice.

the Law of the Sea, so this conditional relationship is critical: we can pursue economic development, but we must protect the environment. The former – economic development – is optional. The latter – environmental protection – is not. (Parliamentary Commissioner for the Environment, 2011, 5, emphasis in original)

Peart and colleagues of the Environment Defence Society note:

Overall, it is clear that New Zealand is in breach of its current international obligations for management of the EEZ. ...[T]hese include the requirement to protect and preserve the marine environment, to protect threatened marine species and populations, to require environmental impact assessment of activities which are likely to have significant adverse effects on marine biodiversity, and to establish a representative system of marine reserves.

In addition, when compared with other countries ... it is evident that New Zealand has fallen far behind international best practice. Unlike these countries, New Zealand lacks an integrative framework or management body for the EEZ, a legal framework for marine spatial planning and a legal framework for the creation of marine protected areas within the EEZ. (Peart et al., 2011, 33)

Based on international best practice and the obligations under international law, future programmes and initiatives should be developed in New Zealand which include new planning tools and policy instruments that support an ecosystem-based approach to biodiversity protection and resource use.

Marine life protection: the importance of marine ecosystem-based planning

The idea of marine ecosystem-based planning is generating a considerable amount of interest across the disciplines, and includes the use of new planning tools such as marine spatial planning (MSP), marine zoning strategies, and the designation of marine reserves (Foley et al., 2010). There is a burgeoning literature in support of MPAs – marine protected areas – and MSPs as tools that can address intergovernmental fragmentation and conflict between contending interests and uses, and facilitate integrated strategic and holistic management across diverse sectors of marine areas (Ehler and Douvere, 2007; McLeod and Leslie, 2009; Halpern et al., 2010).

National and international organisations and governments are realigning marine governance frameworks to reflect the values of the maintenance of ecosystem 'health and integrity', adaptation, sustainability and precaution

(Ehler and Douvere, 2007; McGinnis, 2012). These values are the new pillars of marine ecosystem-based planning. Coastal marine ecosystem-based planning includes a range of programmatic developments including: integrative marine policy making; ocean zoning; large marine ecosystem programmes; integrative coastal zone management; and MSP. National ocean frameworks in France, the US, England, Canada, Vietnam, Japan, Australia, Brazil, China, Germany, Jamaica, the Russian Federation, the Netherlands, Norway, Portugal, India, Mexico and the Philippines embrace these principles of marine ecosystem-based planning (Ehler and Douvere, 2007;

coastal marine system. Oceans have very different characteristic scales (function, time, space) than terrestrial systems. For instance, the abundance and distribution of marine life is influenced by subtle changes in sea surface temperature, and oceanographic processes such as currents and eddies. Our human perceptions and values are shaped by the fact that we inhabit landscapes. Our understanding of the spatio-temporal features and processes of marine systems is poor, and shifts over time with new insights into history, evolution and scientific data (e.g. paleoecological, archeological and ecological). It is difficult for human beings to deepen our social,

reliance on MSP that deploys techniques to rationalise nature and to render the oceans predictable, to replace their self-sustaining, ecological function and structure with well-managed industrial, commercial and recreational spaces or boundaries. While MSP may resolve the potential conflicts between the uses of coastal marine areas, ecological thinking is integral to the planning enterprise. Maintaining the life-giving values of coastal marine ecosystems will require that we overcome the limits of the 'multiple use' mentality that is pervasive throughout government, and which makes impossible a collective experience with the oceans.

The values of the maintenance of ecosystem health and integrity are the new pillars of marine-system eco-based planning.

McLeod and Leslie, 2009).

MSP can also be used in conjunction with MPAs and other planning tools (Halpern et al., 2010). The promise of an integrative, ecosystem-based approach to MSP is that human beings can cooperate to plan for the large-scale spatial complexity and variability of ecosystems, and resource managers can resolve the inevitable conflicts between social, economic and political interests that are often associated with marine spaces (Ehler and Douvere, 2007). MSP can also support participatory and collaborative processes which broaden the planning effort so that it is not limited to those who receive direct economic benefits from marine resource use (Foley et al., 2010).

One cautionary note is needed with respect to the use of planning tools such as MSP. Advocates of MSP often point to land-use planning and zoning in terrestrial settings. But there are problems with relying on terrestrial models of land-use planning: terrestrial models may be inappropriate to emulate because of the dynamic scale and complexity of

conceptual, perceptual and psychological understanding of what it means to live in the multidimensional and fluid medium of the dynamic and complex marine environment. Biophysical processes and conditions in the oceans fluctuate greatly over time scales that extend from decades to millennia. The use of terrestrial models for marine governance needs further investigation, because of the complexity and limited amount of scientific information on the natural history of marine ecosystems.

In addition, to be successful MSP should be more than a technical or scientific mapping exercise: marine ecosystem-based planning requires more than the formulation of zonal plans for particular uses of marine space. MSP must be more than a bureaucratic or technocratic exercise. As a tool for decision making and planning, it requires a strategic and forward-looking ecological approach to manage human behaviour and multiple uses of coastal marine ecosystems. As with all tools or technologies, the use and application of MSP may not represent an ecological panacea. There are pitfalls in a

A way forward: the place of principles in marine governance

International best practice has shown that the following institutional characteristics can contribute to successful integrative, marine ecosystem-based planning and decision making:

- clear regulatory authority and enabling legislation in support of integrated ecosystem-based planning;
- the accountability of regulatory agencies and departments that are charged with coastal and marine governance
- the use of formal planning activities that integrate different forms of knowledge (scientific information, local knowledge and traditional ecological knowledge) into decision making
- the cultivation of decision-making processes that are legitimate and that do not favour one interest or value over another
- the use of adaptive planning strategies to learn from new information and data
- the establishment of dependable and sufficient sources of funding for each stage of the planning and policy-making process including collaborative activities, monitoring, enforcement and evaluation
- the use of well-structured stakeholder-based public processes
- the development of clear decision-making rules, objectives and directives at the national level for regional,

collaborative marine planning. (Caldwell et al., 2010)

For the strengthening and improving of marine governance in New Zealand, this section describes three management principles that ought to be embraced: the public trust doctrine; maintaining ecosystem services; and the compatible use criterion.

Restoring the public trust

Though the public trust concept is found in the legal systems of many countries, it is most robust in the United States and the Commonwealth countries (Turnipseed et al., 2009), where it has historically protected the public's rights to fishing, navigation and commerce in and over navigable waterways and tidal waters. In its most basic form, the doctrine obliges governments to manage common natural resources, the body of the trust, in the best interest of their citizens across generations, who are the beneficiaries of the trust. Public rights over the foreshore and seabed are recognised in common law as the rights of navigation and fishing (Makgill, 2011). In New Zealand, private rights to the foreshore and seabed frequently relate to use and occupation rather than ownership, and the foreshore and seabed is seldom alienated by the Crown.¹ Today the public trust doctrine is integral to the protection of coastal ecosystems and beach access.

Securing the place of the public trust doctrine in New Zealand oceans management would be valuable, given the interest in developing the resources of the EEZ and continental shelf. The public trust doctrine can provide the missing catalyst for national marine governance in New Zealand; it can also provide a unifying concept for the country's marine governance framework. Bringing public trust law into the national ocean management discussion helps clarify that, ultimately, the controlling duty of the governmental trustee is to act as a long-term steward of the public trust. Protecting public uses of trust resources ultimately requires protecting ecosystems. In turn, protecting ecosystems often requires limiting access to and use of sensitive and unique marine areas. Under a public trust mandate, national ocean

managers could allocate access to marine resources as long as the corpus of the trust was not substantially impaired. A clear extension of the public trust doctrine to the EEZ would help the government manage the oceans in a more cohesive, sustainable way.

Ocean waters, coastal waters and ocean resources should be managed to meet the needs of the present generation without compromising the ability of future generations to meet their needs. The most robust public trust doctrine for ocean resources could be established through recognition of a national public trust doctrine via statutory codification of a strong suite of public trust principles.

The extension of a public trust doctrine to the country's EEZ policy would help government manage the ocean in a more cohesive, sustainable way

Joseph Sax, a legal scholar in the United States, defines the public trust principles as follows:

[T]he idea of a public trusteeship rests upon three related principles. First, that certain interests – like the air and the sea – have such importance to the citizenry as a whole that it would be unwise to make them the subject of private ownership. Second, that they partake so much of the bounty of nature, rather than of individual enterprise, that they should be made freely available to the entire citizenry without regard to economic status. And, finally, that it is a principal purpose of government to promote the interests of the general public rather than to redistribute public goods from broad public uses to restricted private benefit. (Sax, 1971, 165)

The establishment of statutory laws could enable citizens, ocean management agencies, and courts to best apply

the public trust doctrine to the long-term stewardship of ocean resources. Embracing the public trust concept in marine policy is one way to support existing international obligations as well.

The maintenance of ecosystem services: new planning tools

An important part of maintaining ecosystem services is to strengthen and improve the various tools to assess the cumulative effects of proposed marine activities in the EEZ (Halpern et al., 2008, 2010). The protection of biodiversity is recognised by scientists as a primary factor that influences the maintenance of marine ecosystem services (as briefly

discussed above) (Royal Society of New Zealand, 2011). New planning tools are available that can quantify the values of ecosystem services (ibid.). For example, a decision-making tool developed at Stanford University is InVEST. InVEST can be used to support environmental impact assessments in so far as the non-consumptive values associated with ecosystem services can be integrated into comprehensive environmental assessments. InVEST is a family of tools to map and value the ecosystem services that are essential for sustaining and fulfilling human life. It enables decision makers to assess the trade-offs associated with alternative choices and to identify areas where investment in natural capital can enhance human development and conservation in terrestrial, freshwater and marine ecosystems.

InVEST and other planning tools can be used in a more comprehensive decision-making approach so that managers can better respond to the multiple threats and pressures associated with human use

and associated impacts. In addition, a number of tools are available to evaluate and address cumulative impacts. Such tools have been in use for decades in many countries around the world. The United Nations is currently involved in a programme to better assess the health of oceans by developing an Ocean Health Index (OHI), which will include an assessment of multiple pressures or stressors on coastal marine ecosystems, including an analysis of the impacts which contribute to a decline in the ecosystem services that all life depends on.

New Zealand should establish an Ocean Health Index (OHI). It may be one useful tool for better understanding

the success of remedial actions through data-driven outcomes assessment.

Accordingly, the creation of an OHI could be a valuable tool in New Zealand, as it seeks to develop performance-based standards to measure and evaluate the success of marine governance across time and space.

Compatible use and kaitiakitanga

The values of intergenerational sustainability and intergenerational equity are important aspects of marine governance. These values are consistent with the traditional ecological knowledge of iwi and the importance of kaitiakitanga (Roberts et al., 1995). In a review of the relationship

iwi/hapu may 'own' only a percentage of the total marine farming space in a region under existing law, they still hold kaitiaki responsibilities over the whole area in accordance with tikanga

- seamless and all-encompassing; making no distinction between moana and whenua
- given effect at whanau and hapu level
- expressed in ways that are appropriate to the place and to the circumstances, according to tikanga
- enabled through rangatiratanga, which includes the authority that is needed to control access to and use of resources, and to determine how the benefits will be shared. This means that it can be expressed in part through the concepts of 'ownership', 'property', 'title' or 'stewardship'; however, it is much wider than any these.

Compatible use is a management principle that in many ways reflects the cultural epistemology of kaitiakitanga. The challenge is to establish best practices in marine planning and decision making that can assist managers in determining whether a proposed use is compatible with the maintenance of ecosystem services and with the cultural values of kaitiakitanga. When an increased level of current use becomes 'incompatible' with, for instance, a cultural value, managers and planners will need to prioritise resource protection.

To further support the value of kaitiakitanga in marine policy, a system of standards or framework to determine whether or not a use should be allowed if it has not already been categorically prohibited or restricted should be developed. Statutory language in support of the multiple goals associated with a compatible-use criterion could be adopted and these goals determined on a case-by-case basis, using planning tools to manage uses based on a set of standards for acceptable resource use developed under the new EPA and in consultation with iwi. For example, an activity's compatibility may depend on the following issues and concerns:

- the activity maintains the natural biological communities in the national marine sanctuaries, and protects

Today, the wild ocean is reflected in the brand of New Zealand 100% Pure – a brand that New Zealanders embrace and that is celebrated abroad.

the cumulative and synergistic impacts of marine resource use over time. An OHI can also be based on recognition of thresholds or tipping points that should be key considerations in ecosystem-based planning and decision making. The OHI is a new quantitative way to measure whether the ocean's health improves or declines over time. It is a composite index based on indicators drawn from international agreements, intergovernmental panels and other high-level recommendations regarding marine conservation and resource use. Its indicators measure the most critical ocean stressors (e.g. climate change, fisheries, habitat destruction, pollution and invasive species) as well as their effects on the ocean's ability to provide ecosystem services and to support human well-being. Trends in the OHI and its indicators stimulate deliberate, performance-based ocean improvement by helping managers and the public to (1) identify unfavourable ocean trends; (2) select the most strategic goals and actions to reverse them; and (3) evaluate

between management integration and iwi values and traditional knowledge systems, Kier Volkerling (2006) describes the many elements of kaitiakitanga, as follows:

- mahi tapu: god-given and handed down through our tipuna
- founded in whakapapa
- the relationship between everything and everybody in the natural world: there is no distinction between people and their environment
- exercised on behalf of and for the benefit of all who are related through whakapapa
- a set of inalienable responsibilities, duties and obligations that are not able to be delegated or abrogated
- a web of obligations: to the taonga, to the atua and to ourselves and our uri: kaitiaki have a responsibility to provide for everyone and ensure everyone benefits
- independent of 'ownership' in a European sense: kaitiaki responsibilities are independent of others who hold 'ownership' or use rights under the law. For example, although as kaitiaki,

and, where appropriate, restores and enhances natural habitats, populations and ecological processes

- the activity enhances public awareness, understanding, appreciation and wise and sustainable use of the marine environment, and the natural, historical and cultural resources
- the activity supports, promotes and coordinates scientific research on, and long-term monitoring of, the resources of marine areas
- the activity facilitates (to the extent compatible with the primary objective of resource protection) all public and private uses of the resources of these marine areas not prohibited pursuant to other authorities
- the activity assists in the development and implementation of coordinated plans for the protection and management of important cultural areas
- the activity will not substantially injure sensitive resources and qualities.

Overall, the range of values associated with a compatible-use criterion could be used as part of an environmental impact assessment to carefully consider unique and sensitive cultural and natural areas within the EEZ. For example, the criteria do not emphasise the use of an area, but support a proposed resource use or activity's compatibility with the maintenance of ecologically and culturally significant areas .

Restoring maritime heritage

This article has argued that clear management principles are needed to support the use of integrative planning tools and has described the relevant principles of the public trust doctrine,

a compatible-use criterion, and the maintenance of ecosystem services. Such principles should be embodied in law. These governing principles are part of a range of marine policies and programmes that are developing and being implemented in a number of countries, and are reflections of international best practice in the US and various Commonwealth countries.

Ultimately, marine governance depends not only on the capacity and capability of institutions to address the synergistic impacts and pressures of multiple impacts and uses, but on the cultivation of a broad ocean constituency in the public realm that supports a more sustainable ecological approach to planning, decision making and policy making. This is where a hope for change resides. All the peoples of New Zealand arrived by boat or waka. Māori have inhabited Aotearoa for over 800 years. New Zealand's rich indigenous history in combination with the maritime cultures of the country represents a foundation for the establishment of a restored ocean constituency. Accordingly, translating the principles and multiple values that are associated with marine ecosystems into a comprehensive and holistic governance framework should be an important part of future marine planning and decision making in New Zealand.

Historically, the geography of hope that led to the migration across the wild ocean to New Zealand is a shared value that is part of the country's rich and diverse maritime heritage. Policy innovation is part of the history of New Zealand environmental governance. Risk-taking, experimentation and adaptation

are required traits of island cultures. Today the wild ocean is reflected in the brand of New Zealand 100% Pure – a brand that New Zealanders embrace and that is celebrated abroad. But as the grounding of the *Rena* showed, it is a very vulnerable brand. Living up to the brand requires a renewed responsibility to live up to and adapt to the changing, life-giving blue planet.

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¹ For a detailed review of how the public trust is addressed in The Marine and Coastal Area Act 2011, see Makgill and Rennie (2011).

References

- Andrews, K. (2008) *Governing the Exclusive Economic Zone: the ocean commons, cumulative impacts and potential strategies for improved governance*, Wellington: Fulbright New Zealand
- Bess, R. and R. Rallapudi (2007) 'Spatial Conflicts in New Zealand Fisheries: the rights of fishers and protection of the environment', *Marine Policy*, 31 (6), pp.719-29
- Boisvert, I. (2011) *Lifting the Looking Glass: tradable occupation could facilitate ocean renewable energy in New Zealand*, Wellington: Fulbright New Zealand
- Caldwell, M. et al. (2010) 'Key Considerations for Establishing a Framework for Effective Marine Spatial Planning in the United States', submitted to the US Interagency Ocean Policy Task Force, February
- Ehler C. and F. Douvère (2007) *Visions for a Sea Change: report of the first international workshop on marine spatial planning*, Intergovernmental Oceanographic Commission and Man and the Biosphere programme, IOC manual and guides, 46; ICAM dossier, 3, Paris: UNESCO
- Foley, M.M. et al. (2010) 'Guiding Ecological Principles for Marine Spatial Planning', *Marine Policy*, 34 (5), pp.955-66
- Foster, A. (2003) 'New Zealand's Oceans Policy', *Victoria University of Wellington Law Review*, 34 (3), pp.469-6
- Gordon D.P. et al. (2010) 'Marine Biodiversity of Aotearoa New Zealand', *PLoS ONE*, 5 (8), e10905. doi:10.1371/journal.pone.0010905
- Halpern, B.S. et al. (2008) 'A Global Map of Human Impact on Marine Ecosystems', *Science*, 319 (5865), pp.948-52

- Halpern, B.S. et al. (2010) 'Placing Marine Protected Areas onto the ecosystem-based management seascape', *PNAS*, 107, pp.18312-17
- Helm, P. (1998) 'New Zealand's Ocean Future: opportunities and responsibilities', in *Sea Views: marine ecosystem management – obligations and opportunities, conference proceedings*, Wellington: Environment and Conservation Organisations of New Zealand
- Kingsforce, R.T. et al. (2009) 'Major Conservation Policy Issues for Biodiversity in Oceania', *Conservation Biology*, 23 (4), pp.834-40
- Kingsford, R.T. and J.E.M. Watson (2011) 'Climate Change in Oceania: a synthesis of biodiversity impacts and adaptations', *Pacific Conservation Biology*, 17, pp.270-84
- Leatherwick, J. et al. (2008) 'Novel Methods for the Design and Evaluation of Marine Protected Areas in Offshore Waters', *Conservation Letters*, 1, pp.96-9
- Lester, S.E. et al. (2010) 'Science in Support of Ecosystem-based Management for the US West Coast and Beyond', *Biological Conservation*, 143 (3), pp.576-87
- Lubchenco, J. and L.E. Petes (2010) 'The Interconnected Biosphere: science at the ocean's tipping points', *Oceanography*, 23, pp.115-16
- MacDiarmid, A. et al. (2010) *Assessment of Anthropogenic Threats to New Zealand Marine Habitats*, final project report, Wellington: Ministry of Fisheries
- Makgill, R. (2011) 'Feeling Left Out at Sea? Navigating no ownership, customary rights & resource management,' available at http://www.nsenvironmentallaw.com/resources/MCAA_Robert_Makgill.pdf
- Makgill, R. and H. Rennie (2011) 'The Marine and Coastal Area Act 2011', *Resource Management Journal*, April, pp 2-7
- McGinnis, M.V. (2012) 'Learning from California's Experience in Marine Life Protection', *Coastal and Ocean Planning and Management*, 26 (forthcoming)
- McLeod, K. and H. Leslie (2009) *Ecosystem-Based Management For The Oceans*, Washington DC: Island Press
- Miles, E.L. (2009) 'On the Increasing Vulnerability of the World Ocean to multiple stresses', *Annual Review of Environment and Resources*, 34, pp.17-41
- Ministry for the Environment (2005) *The New Zealand Marine Environment Classification*, Wellington: Ministry for the Environment, <http://www.mfe.govt.nz/publications/ser/marine-environment-classification-jun05/html/index.html>
- Ministry for the Environment (2007) *Improving Regulation of Environmental Effects in New Zealand's Exclusive Economic Zone*, Wellington: Ministry for the Environment, <http://www.mfe.govt.nz/publications/oceans/nz-exclusive-economic-zone-discussion-paper-aug07/html/index.html>
- Norse, E.A. (2010) 'Ecosystem-based Spatial Planning and Management of Marine Fisheries: why and how?', *Bulletin of Marine Science*, 86 (2), pp.179-95
- Oceans Policy Secretariat (2003a) *Setting the Scene: New Zealand's oceans-related obligations and work on the international stage*, working paper 1, Wellington: Ministry for the Environment
- Oceans Policy Secretariat (2003b) *Adapting to Future Challenges*, working paper 9, Wellington: Ministry for the Environment
- Oceans Policy Secretariat (2003c) *International Ocean Issues*, working paper 11, Wellington: Ministry for the Environment
- Pande, A. et al. (2008) 'Marine Reserves Increase the Abundance and Size of Blue Cod and Rock Lobster', *Marine Ecology Progress Series*, 366, pp.147-58
- Parliamentary Commissioner for the Environment (2011) 'Exclusive Economic Zone and Continental Shelf (Environmental Effects) Bill', submission to the Local Government and Environment Select Committee, December
- Pearl, R. and K. Mulcahy (2005) *Managing the Marine Environment: an EDS community guide*, Auckland: Environmental Defence Society
- Pearl, R. et al. (2011) *Governing Our Oceans: environmental reform for the exclusive economic zone*, EDS policy paper, Auckland: Environmental Defence Society
- Risk, C.M. (2002) 'An Oceans Policy for New Zealand: why, what, how?', New Zealand Petroleum Conference proceedings, Wellington: Ministry of Economic Development
- Roberts, M. et al. (1995) 'Kaitiakitanga: Maori perspectives on conservation' *Pacific Conservation Biology*, 2, pp.16-30
- Rosenberg A.A. and P.A. Sandifer (2009) 'What Do Managers Need?', in K. McLeod and H. Leslie (eds), *Ecosystem-Based Management For The Oceans*, Washington DC: Island Press
- Rothwell D.R. and T. Stephens (2010) *The International Law of the Sea*, Oxford; Portland: Hart
- Royal Society of New Zealand (2011) 'Ecosystem Services: emerging issues', Ecosystem Services in Policy workshop, July, pp.1-6
- Sax, J.L. (1971) *Defending the Environment: a strategy for citizen action*, New York: Vintage Books
- Smith, N. (2010) 'The Next Steps in the Bluegreen Agenda', <http://www.voxy.co.nz/politics/speech-smith-next-steps-bluegreen-agenda/5/50837>
- Taylor, M. et al. (2011) 'What Works for Threatened Species Recovery? An empirical evaluation for Australia', *Biodiversity and Conservation*, 20, pp.767-77
- Turnipseed, M. et al. (2009) 'The Silver Anniversary of the United States' Exclusive Economic Zone: twenty-five years of ocean use and abuse, and the possibility of a blue water public trust doctrine', *Ecology L.Q.*, 36, pp.1-70
- Vince, J. and M. Haward (2009) 'New Zealand Oceans Governance: calming turbulent waters?', *Marine Policy*, 33 (2), pp.412-18
- Volkerling, K. (2006) 'Kaitiakitanga and Integrated Management', unpublished manuscript
- Young, O.R., et al. (2007) 'Solving the Crisis in Ocean Governance: place-based management of marine ecosystems', *Environment*, 49, pp.8-19

Omar Aziz, Matthew Gibbons,
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The Effect on Household Income of Government Taxation and Expenditure in 1988, 1998, 2007 and 2010

Introduction

Governments change the resources available to households through both spending and taxation. This article examines the extent to which the government redistributes from high- to low-income households, and how this has changed since 1988. As well as covering market outcomes and the effects of personal income tax and cash benefits on the disposable incomes of households, the distribution of indirect taxes and of government expenditure on in-kind social services is calculated. The results reveal how government affects the distribution of post-tax income received by households, when income is defined considerably more broadly than usual. This article extends Treasury's previous fiscal incidence study of 1988 and 1998 using 2007 and 2010 data.¹

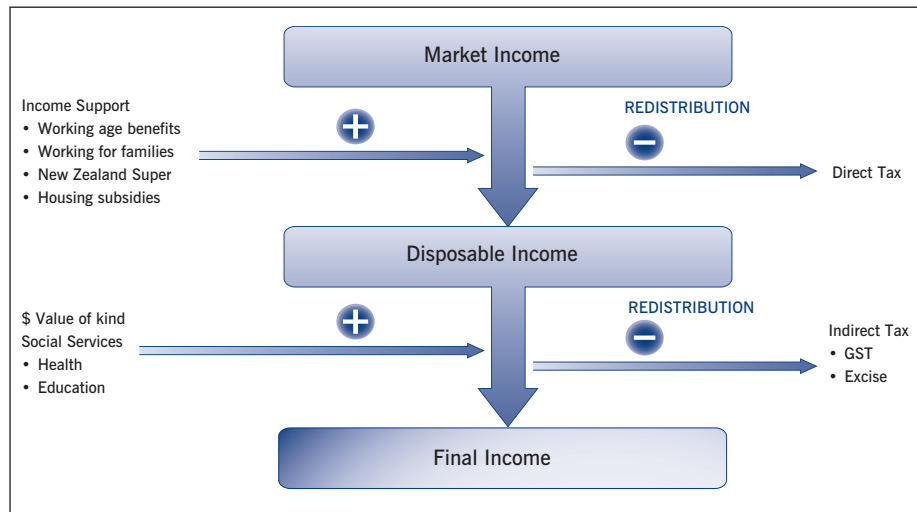
The following section defines the three concepts of income discussed in this article. Some of the main demographic, economic and policy changes that have affected household incomes and government expenditure since 1988 are then summarised. The data and methods are then outlined. The focus then switches to the distribution of different types of household income and the incidence of government expenditure and taxation. The final section calculates the net fiscal impact of government expenditure, and the redistributive effects of this expenditure on the Gini coefficient.

Three concepts of income

Figure 1 outlines the three concepts of household income included in fiscal incidence studies. *Market income* is income from wages and salaries, investments, self-employment, and from other forms of taxable income earned by private means. *Disposable income* is market income plus cash benefits, housing subsidies and pensions, but less income tax payments. However, studies of market and disposable income exclude the important distributive effects of in-kind provision

Omar Aziz, Matthew Gibbons, Chris Ball and Emma Gorman are employed by the New Zealand Treasury.

Figure 1: Three definitions of household income



of government services and the effects of indirect taxes. Fiscal incidence studies therefore investigate the distribution of *final income*.

Final income is disposable income plus the cost of subsidised or free health and education services, but less indirect tax payments (Harding, Lloyd and Warren, 2006, 178). By including a higher proportion of government expenditure and taxation than disposable income, fiscal incidence studies provide a broader and more comprehensive picture of the economic situation of households and of a society's resource distribution. Usually about 60–70% of government expenditure and taxation are included, with company tax and many types of government expenditure being excluded (Australian Bureau of Statistics, 2007; Barnard, 2009).

Because of the information provided on the distributional impact of government spending and taxation, statistics agencies in Britain and Australia conduct regular fiscal incidence studies. Increasingly governments are also using the results when making taxation and spending decisions.

Fiscal incidence was first quantified in New Zealand during the 1980s (Department of Statistics, 1990; Snively, 1986). In a Treasury study, Crawford and Johnston in 2004 found that for all income deciles the real final incomes of households were, on average, at least the same in 1998 as in 1988, and in most cases had increased. Government intervention, through taxes, cash benefits and social

services, had maintained the incomes of households in less well-off deciles over a period when market incomes had become less equal (Crawford and Johnston, 2004, 30). Because no studies of fiscal incidence in New Zealand using survey data have been undertaken since, there is no up-to-date information on final income distribution.

Changes in the fiscal incidence of government expenditure can occur for a number of reasons, including policy and demographic reasons. The next section outlines some of these reasons.

Changes in New Zealand's economy, population structure and government policies

Fiscal incidence research in New Zealand has taken place against a background of changes in the economy, labour market, population structure, technology, people's expectations and government policies. For instance, changes in the rate of unemployment and benefit receipt have affected income distribution and government expenditure. The number of people receiving the unemployment benefit was 87,000 in 1988; grew to 158,000 in 1998, following a period of economic restructuring; fell to 39,000 in 2007 after a period of sustained economic growth; but then increased to 76,000 in 2010 because of an economic downturn (Ministry of Social Development, 2011, 13-14). The number of people receiving sickness and invalid's benefits and the domestic purposes benefit has increased. Nevertheless, the proportion of New

Zealanders receiving working-age benefits was lower in 2010 than during the high plateau that occurred between about 1990 and 2000 (Welfare Working Group, 2011, 43).

Market and disposable income, and to a lesser extent consumption of market goods, are less equally distributed in New Zealand now than in the mid-1980s (Perry, 2011, 167; Stillman et al., 2011, 6). An increase in income inequality has occurred in almost all developed countries since the 1980s. However, lower unemployment and greater targeting of income transfers and income tax have sometimes stabilised or reversed this trend in some countries (OECD, 2008, 27-34).

Partly because of greater demand for skilled workers, the percentage of New Zealand's population aged 15 and over who were participating in some form of tertiary education more than doubled between 1988 and 2010. Participating in further education temporarily depresses people's income, but usually has a long-term pay-off for them. Similarly, usage of early childhood education services has grown, reflecting greater participation by women with young children in the workforce, the wider availability of services and changed attitudes towards these services (May, 2009).

The New Zealand population has been gradually ageing, with the proportion of people aged over 65 growing from 10.7% of the population in 1988 to 13% in 2010 (Statistics New Zealand, 2010a). An ageing population can increase demand for health services, although increased expectations of service coverage, more conditions being treated, higher prices and improved technology have been more important drivers of health spending (Byrant et al., 2004, 27-8).

The priorities of political parties and governments can change over time, and policy makers can respond to demographic and economic changes by modifying policy settings. For instance, during the 1980s housing expenditure became more targeted towards lower income deciles, and this continued during the 1990s. New Zealand Superannuation was income-tested between 1986 and

Table 1: Percentage of households in each household type

Household type	1988	1998	2007	2010
Single	20.6%	21.9%	22.6%	22.6%
Couple no children	24.4%	25.8%	25.8%	26.3%
Couple with children	36.1%	31.4%	27.9%	28.4%
Solo parents	7.8%	8.1%	9.5%	10.1%
Other family types*	6%	8.4%	7.3%	6.1%
Multi-family households**	5.2%	4.2%	6.9%	6.5%

*Other family types include one-family households where 'other' related and unrelated people are present.

**Multi-family households include two- or three-family households and any other multi-person households (e.g. flatmates).

Source: Statistics New Zealand Household Expenditure Survey and administrative data. Calculations by the Treasury.

Table 2: Government revenue and expenditure included in fiscal incidence research and attribution methods

Government revenue and expenditure areas	Attribution method
Personal income tax	HES surveys people on their income and Taxwell models tax payments
Goods and services tax	HES survey data on consumption
Alcohol, tobacco and fuel excise duty	HES respondents who reported consuming these products were attributed the average amount of excise duty
Pensions and benefits	Taxwell models New Zealand Superannuation and six core income support benefits using HES data. Other income support transfers were also attributed
Income-related rents	HES and HNZA data on household characteristics, income and region
Education expenditure	HES data on use of early childhood and tertiary education services. Compulsory education expenditure was largely attributed to those age-eligible. Self-reports were used for income from student allowances. Those who reported receiving an allowance were attributed lower student loan write-offs
Health expenditure	Ministry of Health data on its funding of health boards according to the age, gender, ethnicity and deprivation index of their population

1998 (Preston, 2008, 16-19). During the early 1990s core benefit levels were reduced and the universal Family Benefit abolished. In addition, during the 1990s the age of eligibility for New Zealand Superannuation was gradually increased to 65 (Boston, 1999, 9, 13-15).

Data and methods

Data from the Household Economic Survey (HES) provide comprehensive survey information about income and expenditure by New Zealand's normally resident population living in private dwellings. The HES surveys several thousand households, and asks respondents to report their income over the previous 12 months.² Sharing of resources by household members

and economies of scale in household consumption are assumed. Normally a household is all people living in a single residence, irrespective of whether or not they are related, who share consumption of food or some household expenses. A household does not include adults who are living in another city while at university (Statistics New Zealand, 2010b, 12, 13, 16).

There has been a gradual increase in the proportion of single-person, couple with no children, solo-parent and multi-family household types (Table 1). In contrast, the proportion of households with children has fallen. Table 1 indicates, however, that multi-family households, such as flatmates, remain relatively uncommon. Only 6.5% of households in 2010 were people who were flatting. Average household sizes have

slightly declined from 2.8 people in 1988 to 2.6 in 2010.

Treasury's micro-simulation model, Taxwell, uses HES data to calculate how income taxes and cash benefits affect household income. Market and disposable income is equivalised to allow for the tendency for household expenses to grow with household size, but also for households to benefit from economies of scale. Households were placed into income deciles according to their equivalised household income, with decile 1 being the lowest income decile and decile 10 the highest.

To maintain comparability with Treasury's previous research, this study used a square root equivalisation scale. This gives a higher weight to children and to household economies of scale than were implicit in how New Zealand's income tax and cash transfers system modified market outcomes between 1995 and 2001. In other words, New Zealand's income tax and benefits system has made less allowance for children and for larger households than the equivalence scale used (Creedy and Sleeman, 2005, 9). Although household averages are shown, individuals are ranked by equivalised disposable income and then collected into ten equal sized groups of households.

Weighting HES data ensures that the sample data accurately match key characteristics of New Zealand's normally resident population. Examples of the characteristics used in the weighting are age, sex, ethnicity, household composition, home ownership and benefit status. However, the weighted HES data provided by statistics New Zealand is reweighted for use with Taxwell to ensure accurate understanding of the distribution of taxes and benefits expenditure.

Table 2 summarises how this study attributed government spending to households, and calculated the incidence on households of direct and indirect taxes. The 'cost of service' approach taken assumes that the value delivered to a household equals the cost of providing the service. The social insurance approach taken for health attributes expenditure is based on demographic data in the Ministry of Health's population-based funding formula for health boards.

Figure 2: Average household market income by decile (\$2010)

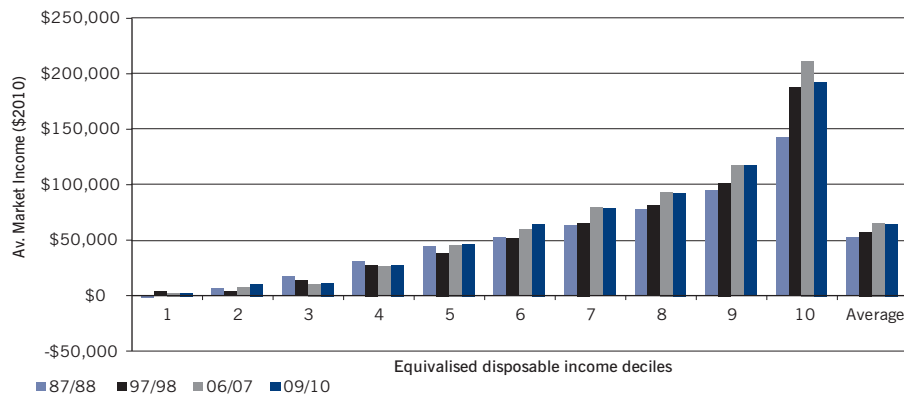
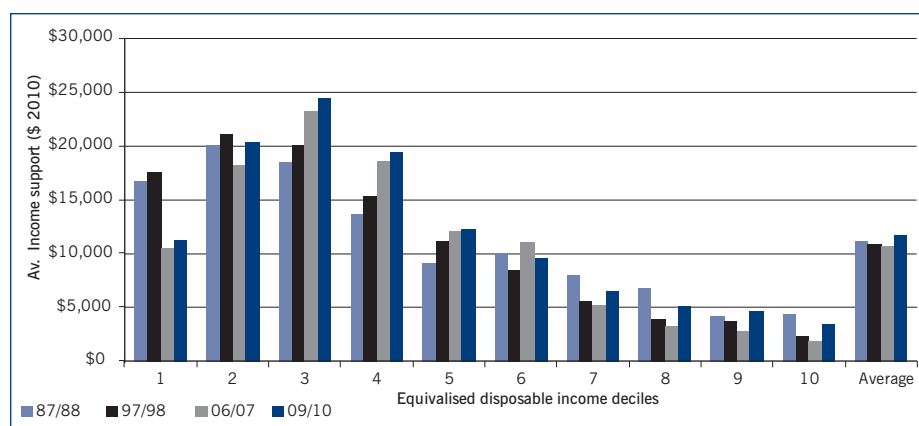


Figure 3: Average cost of income support received by a household in each decile (\$2010)



Approximately 70% of core Crown tax revenue and 67% of core Crown expenses in 2010 were included. Both percentages were slightly higher than in 2007, but comparable to the previous fiscal incidence study (Crawford and Johnston, 2004, 10) and to recent fiscal incidence studies in Australia and Britain. Some expenditure is excluded because there is no clear theoretical basis for allocating government spending on public goods such as defence, law and order, and the environment. Since their incidence is unclear, corporate taxes are also usually excluded from fiscal incidence studies (Harding, Warren and Lloyd, 2006, 5). Because survey data are used, small changes in distributions are usually not statistically significant.

The decile 1 results need to be cautiously interpreted because, as in many other countries, reported income is ‘not a reliable indicator’ of these households’ material living standards. This is because some households report implausibly low incomes or expenditure well above their income (Perry, 2011, 22).

Besides measurement problems, because people’s incomes frequently fluctuate from year to year households sometimes draw on savings or borrow to smooth their consumption over time (Stillman et al., 2011, 3)

Market income

The market income results (Figure 2) are the first stage in analysing household income. Average real household market income was \$64,400 in 2010, compared to \$52,700 in 1988. Because of losses from self-employment, some households in the bottom decile have negative income. Between 1988 and 2007, the market incomes of deciles 1 to 5 were broadly static in absolute terms. However, there were substantial increases in market income for higher income deciles, and for decile 10 in particular. Between 2007 and 2010, market incomes for deciles 7 to 9 were largely unchanged. In contrast, decile 10 (down \$19,000 or 9%) experienced a substantial decline in income. This was mainly due to lower self-employment earnings, probably resulting from the economic downturn

and the associated global financial crisis. The decline in market incomes for the top income decile in 2010 appears to have reversed a shift towards greater market income inequality in New Zealand. In 2010, the top income decile received 30% of market income compared to 27% in 1988, 33% in 1998 and 32% in 2007.

Income support expenditure

Income support expenditure includes New Zealand Superannuation, income replacement benefits for working-age people, family assistance, housing subsidies and some additional assistance. Average per-household income support expenditure showed little change between 1988 and 2007 (Figure 3), before slightly increasing to \$11,700 in 2010. However, between 1988 and 1998 households in deciles 1 to 5 received higher income support expenditure, while absolute expenditure on deciles six to ten fell. Key factors included superannuation expenditure falling, but becoming more redistributive; greater targeting of housing assistance; and increased numbers of people on some means-tested income replacement benefits. The lowest household income decile has consistently received lower income support payments than deciles 2 and 3, and this difference has considerably increased since 1998. However, households in the lowest income decile often receive student allowances (which are counted here as education expenditure) or untaxed incomes (which have also been excluded), or under-declare their incomes.

Because of the value of New Zealand Superannuation, in 2007 and 2010 no superannuitant couples or superannuitants living alone who received their full entitlement should normally be in decile 1. The relative economic position of superannuitants improved between 2007 and 2010 (Figure 4), with indexing arrangements, tax cuts, increased labour market earnings and the economic downturn resulting in more superannuitants being in higher income deciles. Unlike in 1988 or 1998 there was no means-testing of superannuation in 2007 and 2010, although the age of eligibility was 65 compared to 60 in 1988, and about 63 in 1998. In 2010, 66% of

New Zealand Superannuation went to households in the bottom five deciles, compared to 76% in 2007. In contrast, in both 2007 and 2010, 82% of expenditure on income replacement benefits went to people in households in deciles 1 to 5. Working for Families, and increases to these tax credits, have also primarily benefited lower income deciles, with 89% of this expenditure going to decile 1 to 5 households in 2010. The movement of superannuitants into higher income deciles in 2010 has slightly eroded the greater targeting that was evident in 1998, with the bottom five deciles receiving 70% of total income support expenditure in 1988, 78% in 1998, 77% in 2007 and 75% in 2010.

Income taxation

Market income and many forms of income support are subject to income tax. Income tax rates fell and tax thresholds increased during the late 1980s and the 1990s. These income tax reductions, together with the static market incomes of deciles 1 to 6, resulted in the average amount of income tax paid by deciles one to nine falling between 1988 and 1998 (Figure 5). However, the substantial increase in the market income of decile 10 resulted in this decile paying more income tax. The increase in the top marginal tax rate from 33% to 39%, which came into effect in 2000, together with subsequent economic growth and fiscal drag contributed to some higher income deciles paying more income tax in 2007 than in 1998.

There were reductions in income tax thresholds from October 2008, followed in April 2009 by a decrease in the top marginal tax rate from 39% to 38%, an increase in the second-band threshold, and the introduction of the independent earner tax credit. These income tax changes and the economic downturn reduced per-household income tax payments between 2007 and 2010, particularly for the top income decile. Although the results precede the October 2010 reductions in income tax, the average amount of income tax paid per household was \$15,600 in 2010, compared to \$17,600 in 1988. The top income decile paid 34% of income tax in 2010, compared to 29% in 1988.

Figure 4: Average cost of different types of income support received by households in each income decile in 2007 and 2010 (\$2010)

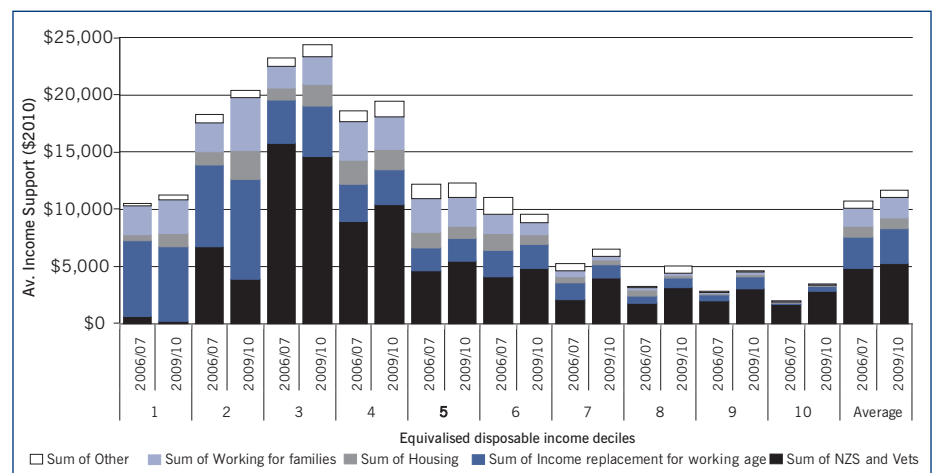


Figure 5: Average income (personal) tax paid by a household in each income decile (\$2010)

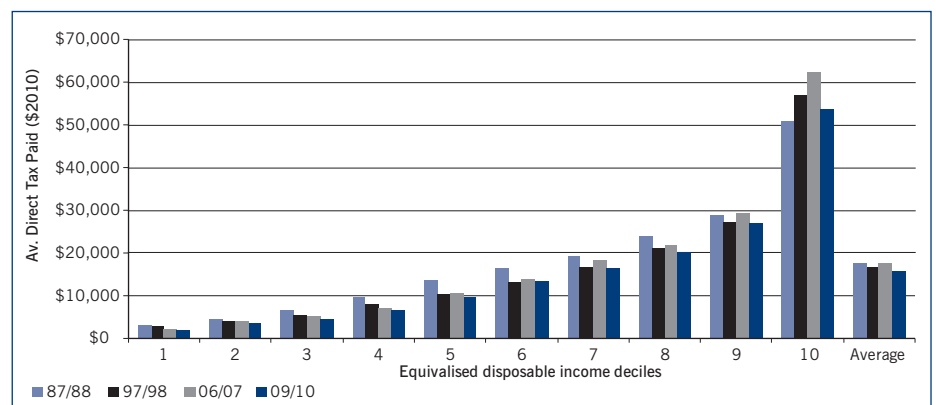
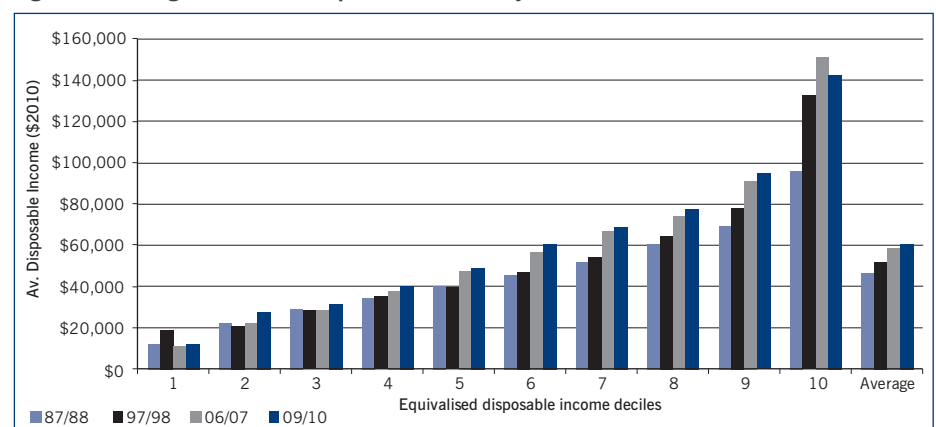


Figure 6: Average household disposable income by decile (\$2010)



Disposable income

Disposable income is market income plus income support, less direct tax payments. Because of the redistributive effects of income support expenditure and direct taxes, disposable income is more equally distributed than market income. Average disposable household income in New Zealand has increased over time and was \$60,500 in 2010 (Figure 6). Although the biggest increases have been for the top

decile, all deciles except decile 1 had higher disposable incomes in 2010 than in both 1988 and 1998. Between 2007 and 2010 the average disposable household income of deciles 1 to 9 increased because of income tax cuts and higher income support expenditure. The decline in the average disposable income of the top income decile between 2007 and 2010 reflected the substantial decline in market income received by this decile.

Figure 7: Average cost of health services received by a household in each decile (\$2010)

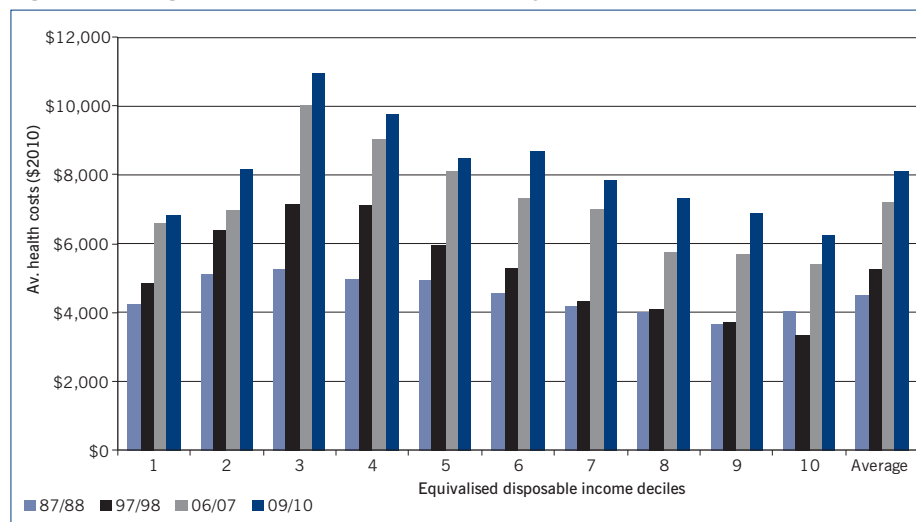
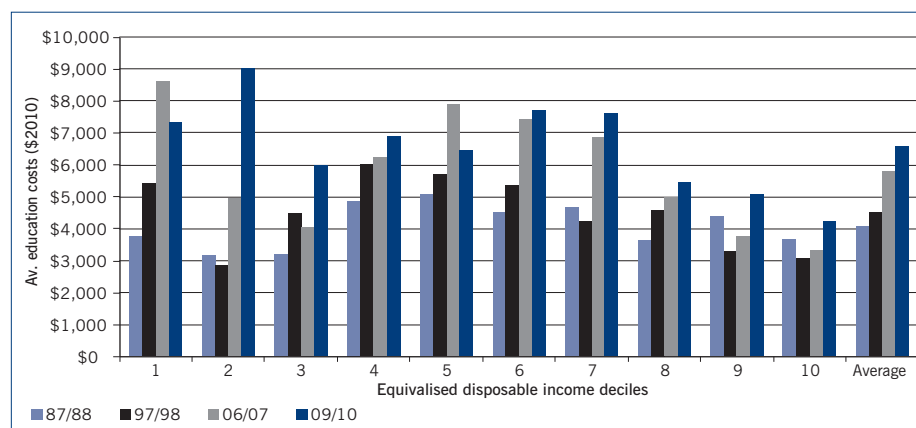


Figure 8: Average cost of education services received by a household in each income decile (\$2010)



Most studies of household income cover only market and disposable income. However, this article now goes beyond these measures to study the distribution of health and education expenditure, and the incidence of indirect taxation.

Health expenditure

Health expenditure is attributed using the Ministry of Health’s population-based funding formula, which is primarily based on age, but also includes gender, ethnicity and socio-economic status. This attribution assumes people benefit from having the right to use services, irrespective of whether they actually need to access them. Because health funding is highest for older age groups, the distribution of households containing superannuitants heavily influences the distribution of health expenditure. In 1988 and 1998, superannuitants were primarily in deciles 2 and 3, but in 2007 and 2010 the biggest concentrations were in deciles 3

and 4. Health expenditure has consistently increased since 1988, and the average per-household government subsidy of \$8,100 in 2010 was 80% higher in real terms than in 1988.

The share of health expenditure received by deciles 1 to 5 increased from 54% in 1988 to 60% in 1998. As with the income support results, this reflected greater targeting and a higher proportion of people from older age groups being in these deciles (Crawford and Johnston, 2004, 17). However, since 1998 health expenditure on higher income deciles has increased more quickly than health expenditure on lower income deciles. This has occurred because of higher expenditure on less targeted initiatives, such as the Primary Healthcare Strategy (launched 2001) which emphasises community health and health prevention, and because more older people are in higher income deciles. As a result, the combined share

of spending on households in deciles 1 to 5 fell to 57% in 2007 and to 54% in 2010.

Education expenditure

The main recipients of education services are households containing children and young adults. The greatest concentrations of these households are at the beginning and middle of the income distribution. Most education expenditure is not targeted to particular income groups in New Zealand. Because most people directly benefit during childhood from compulsory education expenditure, this expenditure redistributes resources across people’s lifetimes (Redmond, 2007, 12-13). Substantial increases in real education expenditure since 1988, to an average per-household subsidy of \$6,600 in 2010, reflect a mixture of participation and cost increases.

The share of education expenditure received by households in deciles 1 to 5 increased from 49% in 1988 to 54% in each of the three following periods. The spike in education expenditure on decile 2 in 2010 reflects the movement of households containing couples with children from higher income deciles to lower income deciles since 2007. Education expenditure on deciles 3 and 4 was relatively low in 2007 and 2010 because superannuitants dominate these deciles.

Nevertheless, despite some tertiary students living away from their parents, 56% of tertiary education expenditure on providers and 58% of student loan initial fair-value write-down in 2010 went to students living in households in the top five income deciles. This partly occurs because the parents of tertiary students are often in their peak earning years (OECD, 2008, 231). In contrast, 64% of expenditure on student allowances in 2010 went to households in the bottom five income deciles. Because only student allowances to those aged under 24 were means tested against their parents’ incomes in 2010, it is not surprising that some students in higher income households report receiving an allowance. Some low-income tertiary students also live in multi-family households with high household income.

Indirect taxation

Figure 9 shows the average indirect tax paid by households in each decile. GST is the biggest source of indirect tax revenue, but indirect tax also includes excise duties on fuel, alcohol and tobacco. On average, households in higher income deciles pay a higher level and proportion of indirect tax than lower income households. Partly because of the 1989 increase in GST from 10% to 12.5%, average per-household indirect tax payments increased from \$5,900 in 1988 to \$6,400 in 2010.³

Indirect tax payments reflect consumption patterns, and the results for the bottom three deciles suggest they have broadly similar levels of consumption of market goods and services. Indirect tax payments by the bottom three income deciles in 2010 were about 60% of the average for all households. This indicates that households in deciles 1 to 3 were able to purchase market goods and services at levels that were more similar to those of the average household than suggested by their disposable incomes (Figure 6).

Final income

Final income is disposable income plus the cost of in-kind social services received, but less indirect tax paid. It can be interpreted as a proxy for the economic resources available to households, and is a more complete measure than disposable income of the redistributive effects of government. Final income is more equally distributed than market and disposable income. For instance, whereas average market income for decile 10 in 2010 was approximately \$193,000, the average final income for this decile was about \$142,000. In contrast, whereas decile 4 had an average market income of about \$27,500 in 2010, the average final income of decile 4 was almost \$25,000 higher at \$52,200. Similarly, whereas decile 1 households reported an average market income of \$2,900 in 2010, their average final income was \$22,700, due to the effects of government intervention through taxes and spending.

Figure 10 indicates that final income was higher for all deciles in 2010 than in 1988. With the exception of decile one, all deciles had higher average final income

Figure 9: Average indirect tax paid by a household in each income decile (\$2010)

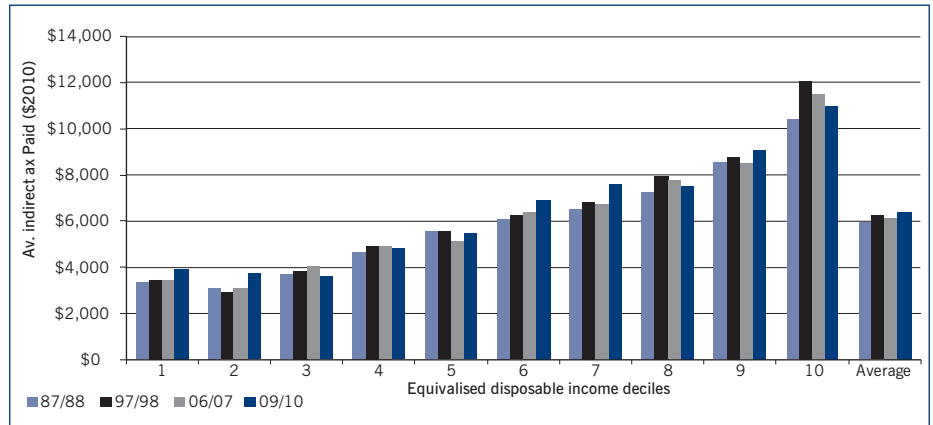


Figure 10: Average household final income by decile (\$2010)

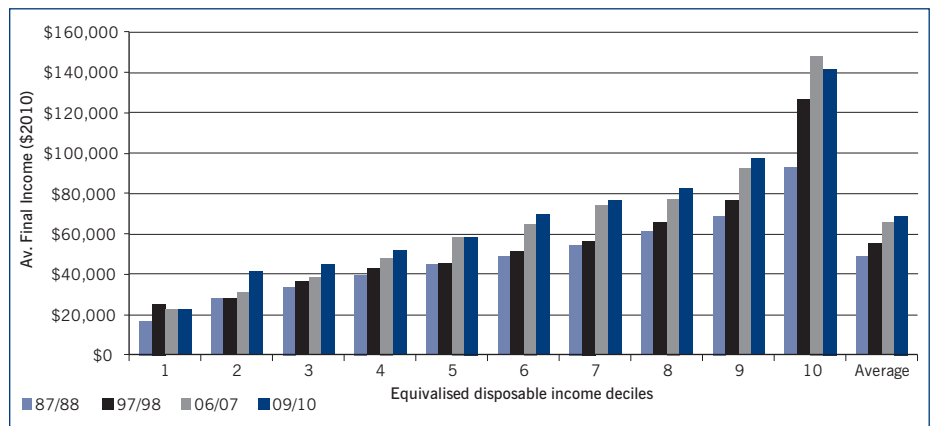
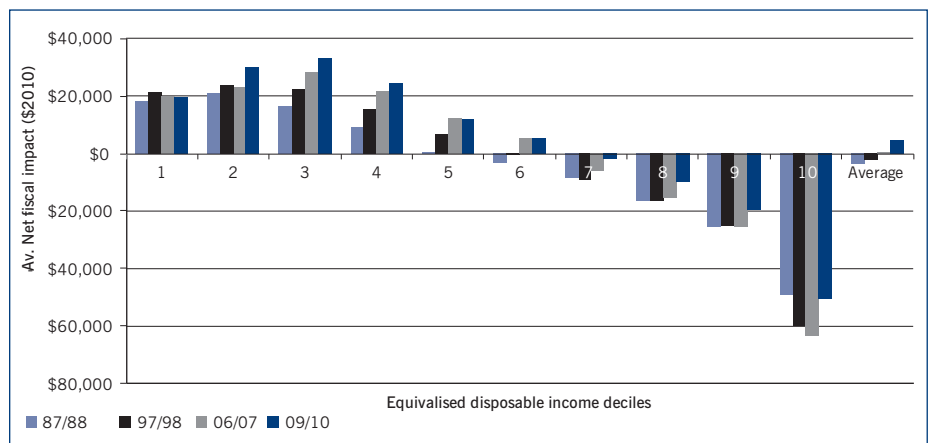


Figure 11 Net Fiscal Impact Average receipt of income support and social services less tax payments per household (\$2010)



levels in 2010 than in 1998. Between 2007 and 2010, decile 10 stands out for being the only decile to receive substantially lower final incomes. This occurred because decile 10 experienced a much larger loss of market income than it gained from changes in taxes and spending. Higher final income for deciles 2 to 9 reflect a mixture of static market incomes, lower taxes, higher income support payments, and increased health and education expenditure.

Net fiscal impact

Figure 11 shows the average cost of income support, health and education expenditure less tax payments per household for each decile. This reveals the net impact of government redistribution on households' economic well-being. In all four time periods, deciles 1 to 5 received more government spending on the social services included in this study than they paid in taxes, while since 1998 decile 6 has also become a net fiscal recipient. In

Table 3: Gini coefficient for different measures of household income

	1988*	1998*	2007	2010
Market income	0.42	0.49	0.54	0.52
Disposable income	0.30	0.35	0.38	0.36
Final income	0.27	0.30	0.35	0.33

Source: Statistics New Zealand Household Expenditure Survey and administrative data. Calculations by the Treasury

*Crawford and Johnston's (2004) calculations

contrast, households in deciles 7 to 10 were consistently net contributors as they paid more tax, on average, than they received in social services.⁴ Similar net fiscal impact results occur in other countries, such as the United States (Chamberlain and Prante, 2007, 31).

Increases in the net fiscal gains for deciles 2 to 6 reflect the static market incomes, lower taxes, and higher income support, health and education expenditure these deciles experienced. Between 2007 and 2010, the average net fiscal impact increased from being about zero to \$4,400, because of lower taxes and higher health, education and income support expenditure.

Impact on inequality measures

The Gini coefficient measures inequality over an income distribution, with a higher Gini indicating higher inequality. Rows in Table 3 show the Gini coefficients for market, disposable and final income over time, while columns show the Gini coefficients in a particular year for each type of income.

Table 3 shows market income inequality grew between 1988 and 2007, with the Gini coefficient increasing from 0.42 in 1988 to 0.54 in 2007. Growing market income inequality, which increased by more in New Zealand than in most developed countries (OECD, 2008, 26-7), was a key cause of the increases in disposable and final income inequality that also occurred. However, between 2007 and 2010 the Gini for market income decreased from 0.54 to 0.52, with this reflecting the substantial fall in market income experienced by decile ten. Partly because of the decline in market income inequality, the disposable income Gini decreased from 0.38 in 2007 to 0.36 in 2010, while the final income Gini similarly fell from 0.35 to 0.33.

The results confirm that income inequality is always lower for disposable than for market income, and that inequality is consistently lower for final income than for disposable income. For instance, Table 3 indicates that in 2010 the Gini coefficient for market income of 0.52 fell by 31% to 0.36 for disposable income, and by a further 9% (37% compared to market income) to 0.33 for final income. This demonstrates the higher redistributive effects of the tax and transfers system than of in-kind transfers and indirect taxes.

Comparisons with results for other countries are difficult because of differences in the methodologies and coverage of fiscal incidence studies, and in what counts as government expenditure. For instance, Australia heavily relies on its tax system to redistribute money to middle- and upper- income families with children, to fund health and education expenditure, and to encourage retirement savings (Stebbing and Spies-Butcher, 2010). In contrast, New Zealand counts Working for Families tax credits and KiwiSaver subsidies as appropriated government expenditure, and has few other tax credits (Fookes, 2009, 3, 21-3; New Zealand Treasury, 2011). Nevertheless, the available data suggest that in all developed countries income tax and income support expenditure has more progressive redistributive effects on the Gini coefficient than in-kind health and education services (OECD, 2008, 42-4). Fiscal incidence studies for Australia, the United Kingdom and the United States also indicate that final income is also distributed more equally than disposable income in these countries (Chamberlain and Prante, 2007, 29; Harding, Warren and Lloyd, 2006, 16).

Limitations, caveats and further research

While this article provides fresh insights into the distributive effects of government taxation and expenditure, there are also several limitations. Because HES collects data on people over 12 months, the results provide only a static and partial picture of a household's standard of living. Income dynamics are obviously important, with lifetime earnings equality being higher than equality at a point in time (Barker, 1996, 5, 18). For example, many working-age New Zealanders (and for some age groups the majority) have been dependent on a benefit at some stage, although a minority of beneficiaries account for most time spent on benefits (Welch and Wilson, 2010, 4, 18-19). Today's high-income households will frequently have received substantial benefits, such as education services, from the government in earlier years and will receive substantial health services and superannuation payments when household members are retired.

Externalities, such as the gain to society from having a healthy and well-educated population, have also not been considered (OECD, 2008, 226). In addition, expenditure on public goods such as defence and the environment has not been included. Similarly, some types of income are excluded. For instance, superannuitants often own substantial housing assets, and consumption-based measures of living standards indicate that relative few elderly New Zealanders experience hardship (Perry, 2010). Statistics New Zealand is currently investigating the quantification of economic benefits derived from owner-occupied housing.

The 'cost of service' approach used means that increases in social services expenditure may not have always resulted in commensurate improvements in people's well-being. This is because our method measures inputs rather than quantifying in-kind service outputs. For instance, higher teachers' salaries may only gradually improve teacher quality. Similarly, health costs per output for medical and surgical services, which are a measure of efficiency, increased by 27% in real terms between 2002 and 2008 (Ministry of Health, 2009, 116). Because of our input approach,

a reduction in education and health expenditure could affect the final income Gini coefficient, but would not decrease people's well-being providing efficiency gains maintained service levels. Statistics New Zealand is currently exploring ways of better quantifying public sector output in New Zealand (Statistics New Zealand, 2010c, iii).

Finally, the causes of changes in income distribution, government expenditure and taxation are complex, and identifying them is difficult and limited by data availability. While the reasons for some changes can be identified this is not always possible. Only some changes result from policy changes.

Conclusion

This article has used new data from 2007 and 2010 to compare the redistributive effect of government expenditure and taxation on the economic position of New Zealand households in 1988, 1998, 2007 and 2010. As well as including results on standard measures of market and disposable income, this article has also examined changes in the effect of in-kind social spending and of indirect taxation on households' circumstances. While

using the most up-to-date data available, the results precede the October 2010 reductions in income tax and increase in GST.

Market incomes have increased for deciles six to ten, although between 2007 and 2010 the economic downturn and the global financial crisis reduced market incomes for the top income decile. Usually only decile 10 has experienced an increase in its tax burden, although the fall in market income for decile 10 in 2010 meant that this decile was also paying less tax. Income support expenditure has benefited lower income deciles most, although the redistributive effects of spending have varied and been affected by the level of targeting, the age of eligibility for superannuation, and the mix of spending. Disposable income, which is market income plus income support but less direct taxation, was higher in 2010 than in 1988 and 1998 for all deciles except decile 1.

Health and education expenditure have substantially increased since 1988, and have increased the consumption possibilities of all household income deciles. Final income, which is disposable income plus health and education

expenditure but less indirect taxation, has been considerably more evenly distributed than market income, and has increased for almost all income deciles. Over the years covered, households in deciles 7 to 10 have consistently paid more in tax than they have received in income support payments and in health and education services. Nevertheless, income inequality increased in New Zealand until 2007, irrespective of the income measure used, although the economic downturn since 2008 seems to have reduced this tendency.

- 1 Access to data used in this study was provided by Statistics New Zealand under conditions designed to give effect to the security and confidentiality provisions of the Statistics Act 1975. Results presented in this study are the work of staff at the New Zealand Treasury and not Statistics New Zealand. The views, opinions, findings and conclusions of this article are strictly those of the authors and do not necessarily reflect the views of the New Zealand Treasury.
- 2 The full HES, which includes expenditure, is currently conducted triennially.
- 3 The results precede the October 2010 GST increase.
- 4 The results will vary for individual households. This is particularly true for government education and health expenditure because entitlements in these areas are not usually linked to household income.

References

- Australian Bureau of Statistics (2007) *Government Benefits, Taxes and Household Income*, Canberra: Australian Bureau of Statistics
- Barker, G. (1996) *Income Distribution in New Zealand*, Wellington: Institute of Policy Studies
- Barnard, A. (2009) 'The Effects of Taxes and Benefits on Household Income, 2007/08', *Economic and Labour Market Review*, 3 (8), pp.56-66
- Boston, J. (1999) 'New Zealand's Welfare State in Transition', in J. Boston, P. Dalziel and S. St John (eds), *Redesigning the welfare state in New Zealand: problems, policies, prospects*, Auckland: Oxford University Press
- Byrant, J., A. Teasdale, M. Tobias, J. Cheung and M. McHugh (2004) *Population Ageing and Government Health Expenditures in New Zealand, 1951–2051*, working paper 04/14, Wellington: The Treasury
- Chamberlain, A. and G. Prante (2007) *Who Pays Taxes and Who Receives Government Spending? An analysis of federal, state and local government tax and spending distributions, 1991–2004*, Washington: Tax Institute
- Crawford, R. G. and Johnston (2004) *Household Incomes in New Zealand: the impact of the market, taxes and government spending, 1987/88–1997/98*, Wellington: New Zealand Treasury
- Creedy, J. and C. Sleeman (2005) 'Adult Equivalence Scales, Inequality and Poverty', *New Zealand Economic Papers*, 39 (1), pp.51-83
- Department of Statistics (1990) *The Fiscal Impact on Income Distribution 1987/88*, Wellington: Department of Statistics
- Fookes, C. (2009), *Spending Through the Tax System: tax expenditures*, Wellington: New Zealand Treasury
- Harding, A., R. Lloyd and N. Warren (2006) 'The Distribution of Taxes and Government Benefits in Australia', in D.B. Papadimitriou (ed.), *The Distributional Effects of Government Spending and Taxation*, Basingstoke: MacMillan
- Harding, A., N. Warren and R. Lloyd (2006) *Moving Beyond Traditional Cash Measures of Economic Well-being: including indirect benefits and indirect taxes*, Canberra: NATSEM: National Centre for Social and Economic Modelling
- May, H. (2009) *Politics in the Playground: the world of early childhood in New Zealand*, Dunedin: Otago University Press
- Ministry of Health (2009) *Annual Report for the Year Ended 30 June 2009*, Wellington: Ministry of Health
- Ministry of Social Development (2011) *The Statistical Report for the Year Ending 30 June 2010*, Wellington: Ministry of Social Development
- New Zealand Treasury (2011) *2011 Tax Expenditure Statement*, Wellington: New Zealand Treasury

- OECD (2008) *Growing Unequal? Income distribution and poverty in OECD countries*, Paris: OECD
- Perry, B. (2010), *Non-Income Measures of Material Wellbeing and Hardship: first results from the 2008 New Zealand Living Standards Survey with international comparisons*, working paper 01/09, Wellington: Ministry of Social Development
- Perry, B. (2011) *Household Incomes in New Zealand: trends in indicators in inequality and hardship 1982 to 2010*, Wellington: Ministry of Social Development
- Preston, D. (2008) *Retirement Income in New Zealand: the historical context*, Wellington: Retirement Commission
- Redmond, G. (2007) *Changing Patterns of Resource Transfers Across the Lifecycle: Australia since the 1980s*, Sydney: University of New South Wales
- Snively, S. (1986) 'Evaluating the Budget's Distributive Influence on Household Incomes', MA thesis, Victoria University of Wellington
- Statistics New Zealand (2010a) 'Demographic trends: 2010, 2011', http://www.stats.govt.nz/browse_for_stats/population/estimates_and_projections/demographic-trends-2010.aspx
- Statistics New Zealand (2010b) *Household Economic Survey: year ended June 2010 – hot off the press*, Wellington: Statistics New Zealand
- Statistics New Zealand (2010c) *Measuring Public Sector Productivity in New Zealand: a feasibility study*, Wellington: Statistics New Zealand
- Stebbing, A. and B. Spies-Butcher (2010) 'Universal Welfare by "Other Means"? Social tax expenditures and the Australian dual welfare state', *Journal of Social Policy*, 39 (04), pp.585-606
- Stillman, S., T. Le, J. Gibson, D. Hyslop and D. Mare (2011) *The Relationship Between Individual Labour Market Outcomes, Household Income and Expenditure, and Inequality and Poverty in New Zealand from 1983 to 2003*, Wellington: Statistics New Zealand
- Welch, D. and M. Wilson (2010) *Lifecourse Factors Associated with Time Spent Receiving Main Benefits in Young Adulthood: full report on early findings*, Wellington: Ministry of Social Development
- Welfare Working Group (2011) *Reducing Long-term Benefit Dependency: recommendations*, Wellington: Welfare Working Group

FUTURE STATE

Directions for Public Management in New Zealand

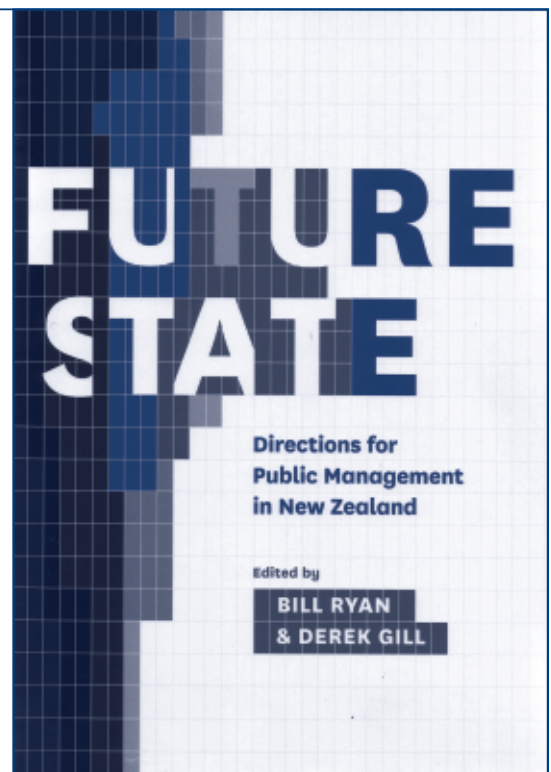
Edited by Bill Ryan & Derek Gill

New Zealand's public sector has consistently rated well internationally on a variety of measures of comparative government performance. In the 1980s New Zealand achieved a step change in public sector reform when it introduced a distinctive and widely applauded model of public management. Despite attempts at continuing improvement, however, New Zealand has struggled over the past decade to keep developing the frameworks and tools that public managers require to manage efficiently and effectively in the public sector. New Zealanders are becoming more diverse in their needs, ethnicities and lifestyles, and more demanding their expectations, and the weight of these expectations increasingly impacts on government. In the face of these changing circumstances, it is tempting to stick with the current model and continue to refine and adjust it. But tweaking is no longer enough – another step change is required.

In 2001 the chief executives of several public sector organisations commissioned

a group of researchers associated with the School of Government at Victoria University of Wellington to undertake a project looking at the 'future state' – to consider present trends that would impact on public management in coming years. *Future State* pulls together the results of the work, covering emerging trends in governance, from both New Zealand and international perspectives: issues, options and policy implications of shared accountability; experimentation and learning in policy implementation; agency restructuring; skills and capability; the authorising environment; and e-government. It contains valuable insights into how New Zealand's public sector currently operates, and how it might operate in the future.

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Evidence-based Evaluation Working for Families

Introduction

One of the most important functions of the discipline of economics is to provide a rational basis for policy making. The role of evidence is at its heart, yet the scientific approach to social matters may also blind us to fundamental normative issues that must be faced before we can answer the question: does this policy make us better off?

This article first outlines the background to 'evidence-based' or 'evidence-informed' policy, sometimes called 'what works', and then suggests a simple framework for policy analysis that highlights the points at which research-based evidence may, could, or should have an impact. The framework may also be adapted to provide a basis for a critique of existing social policy.

Major policies like Working for Families (WFF) are implemented with large budgets for evaluation; however, in practice such evaluations may take a

narrow focus. This article uses the policy framework to critique WFF with an emphasis on the component designed to incentivise work called the in-work tax credit (IWTC). The conclusion of our analysis is that quantitative measurement of employment outcomes of the work incentive part of WFF became an end point of the policy process and appeared to provide an 'evidence-based' endorsement. The official evaluations largely ignored qualitative factors, unintended consequences, normative

assumptions and trade-offs, ex post questioning of the economic models, and meta-analysis. As a result there was little broader critical analysis that might have suggested improvements to this policy.

Evidence-based policy

The 1999 UK white paper *Modernising Government* proposed that being evidence-based was one of several core features of effective policy making, a theme developed in subsequent government publications (Bullock, Mountford and Stanley, 2001; Strategic Policy Making Team, 1999). As in the UK, evidence-based approaches to social policy became popular in New Zealand. The theme of the 2003 Social Policy Research and Evaluation conference convened by the Ministry of Social Development was the incorporation of research and evaluation into evidence-based policy and service delivery. Subsequent conferences strengthened the belief that objectivity and hence better policies would result from taking an evidence-based approach.

The concept of evidence-based policy has an intuitive common sense logic, which partly explains how it has become naturalised in a diverse range of policy settings. (Marston and Watts, 2003, 144)

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Box 1: Policy development framework

1. Clarify the problem.
2. Set clear objectives (aims) for policy; note trade-offs.
3. Make aims measurable or quantifiable.
4. Select policy criteria: e.g. cost-effectiveness, economic efficiency, equity, administrative simplicity; outline theories or models that inform policy development.
5. Assess a full range of policies that might achieve the objectives.
6. Select and design the best policy; project expected costs and outcomes.
7. Implement policy.
8. Measure outcomes against clearly stated, measurable objectives.
9. Review unintended consequences.
10. Evaluate policy against criteria; confirm that the problems and the underlying economic model have been properly conceived; and suggest improvements.

Source: revised from St John and Dale, 2010

Table 1: WFF changes, alignment with objectives and the change in annual expenditure

WFF changes	Objectives of WFF changes			Change in annual expenditure (2004–2008) ¹
	Make work pay	Ensure income adequacy	Delivery supports people into work	
Increases in family tax credit rates (1 April 2005 and 1 April 2007)		✓		+\$1,087m ²
Changes to the abatement regime of WFF tax credits from 1 April 2006	✓	✓		
Introduction of the in-work tax credit (1 April 2006)	✓	✓		+\$485m ³
Annual adjustment of the minimum family tax credit ⁴	✓	✓	✓	+\$5m
An increase in the accommodation supplement thresholds and rates	✓	✓		+\$177m
Increased child care assistance for those eligible	✓	✓		+\$93m
Removal of the child component of main benefits ⁵	✓		✓	-\$297m
Replacement of the special benefit with temporary additional support ⁶			✓	-\$3m
Total change in expenditure				+\$1,548m
Systems to support delivery of WFF changes			✓	+\$108m

Source: adapted from Centre for Social Research and Evaluation, 2010c, p.2

1. Tax years ended March.

2. Expenditure on family tax credit and parental tax credit.

3. Expenditure on in-work tax credit and child tax credit.

4. Ensures no reduction in income when moving off benefit into paid work.

5. Estimated, assuming every sole parent receiving domestic purposes benefit with one child would have received \$27 child component a week, and those with two or more children would have received \$54 child component.

6. Temporary additional support is targeted at beneficiaries with higher financial costs.

As Nutley, Davies and Walter (2003, 29) argue, it became fashionable to emphasise the role of evidence and analysis, thus making social science and policy making appear 'objective' and 'scientific'. However, statistical methods designed for an idealised world may rely on some assumptions that make the results questionable. Also, unless the samples are large, and a wide range of factors are included, statistically teasing apart aspects that usually occur together is difficult. The process may obscure other evidence essential to developing the deeper understanding that policy makers (and others) need (see Wylie, 2006, 8-9).

In this environment there are many caveats around most evidence-based evaluations of social policy. Adopting 'what works?' as a slogan can be simplistic and dangerous. Intervening in children's lives, especially, as discussed in Roberts (2005), is 'not just a research, policy and practice issue ... it is also a rights issue for children and young people' (p.34). When assessing a social policy such as WFF, where the work behaviour of parents was intended to be modified by a payment to achieve poverty objectives for children, the role of quantitative evidence may be limited.

The WFF policy has been subject to a number of official and unofficial appraisals and evaluations, as set out in the appendix below. The first official evaluation was delivered at a Victoria University tax conference in Wellington in February 2009, and published online (Ministry of Social Development and Inland Revenue, 2009). A further iteration (Dalgety et al., 2010a) and a technical report (Dalgety et al., 2010b) were further updated in the final evaluation report, *Changing Families' Financial Support and Incentives for Working: the summary report of the Working for Families package* (Centre for Social Research and Evaluation, 2010c), with several annexes looking specifically at technical issues, such as effective marginal tax rates.

Various researchers have been interested in evaluating whether WFF increases or decreases other kinds of social behaviour apart from working, such as partnering or having children (for example, see Fitzgerald, Maloney and

Table 2: Tax credits in Working for Families

Tax credit	Cost (\$m) year ended June 2011	Nature of payment (2011)
Family tax credit (FTC)	\$2,200	Child-related weekly supplement: \$88 per week for the first child, \$61 for subsequent children, higher rates for children over 13. Abated at 20% from \$36,860 joint income.
In-work tax credit (IWTC)	\$592	Child-related weekly supplement, work requirement: 20 hours sole parent, 30 hours couple; and off-benefit. \$60 per week for 1-3-child families, increasing to \$75 per week for a 4-child family, \$90 for a 5-child family, and for a 6-child family \$105 a week. Abated after the FTC.
Minimum family Ttx credit (MFTC)	minor	Minimum family income top-up (net \$22,204). Requires same hours of work as the IWTC and off-benefit. The MFTC is abated at 100% for additional income.
Parental tax credit* (PTC)	minor	Paid \$150 a week for 8 weeks for new child. Abated after the IWTC.

Source: IRD, <https://interact1.ird.govt.nz/forms/famcalc2008/>

* The PTC is paid for a small number of families with a new baby and while providing design issues of its own (St John and FAMILTON, 2011) is not further discussed here.

Pacheco, 2008). These issues, however, are not further explored here.

The policy framework

An economics framework for policy analysis can be set out in a number of ways. In the suggested sequence shown in Box 1, evidence has a role at each step, but is itself capable of manipulation. There are also normative disagreements that should be made explicit but which may instead be subsumed in the political process.

The objectives and normative values of politicians may influence each step of the policy process, and the choice of criteria and their weighting may be different from those of the policy analysts. Thus, each step has the potential for confusion and loss of clarity, with a large element of subjectivity in the selection of the kinds of evidence to be used. As always, the 'question' determines the possible 'answer'. For there to be a quantitative evaluation, the aims of policy must be measurable. The process of measuring may lose sight of the underlying social policy outcomes judged on broader considerations, including whether the problems have actually been addressed, whether the underlying economic model was properly conceived, or how policy may be improved (for a discussion of

measuring the success of social policy see St John, 1997).

How should a good result be measured? Does it 'work' if it meets the objectives of the policy? Or should it be assessed according to a set of higher order principles capable of transcending political ideologies and good intention? (Durie, 2004, 2)

Case study: Working for Families, the role of the in-work tax credit

The above framework is useful for the development of new policy, and can also be adapted to analyse existing policy. The WFF financial assistance package, implemented between October 2004 and April 2007, and summarised in Table 1, was a major policy change for the support of New Zealand's children (St John, 2006, 2011). This case study examines the role of the tax credits, described in more detail in Table 2, with a particular focus on the IWTC which was introduced on 1 April 2006, and, as can be seen from Table 1, had a dual focus on income adequacy and making work pay.

Table 2 shows that all low-income families with children are entitled to a per-week, per-child family tax credit (FTC). If they are not in receipt of a

benefit, and meet the work test, they may also be entitled to the IWTC. This is a child-related payment of \$60 for one-three children, rising by \$15 per child for the fourth and subsequent children. These two main tax credits recognise the extra costs of children and are usually paid fortnightly to the caregiver, with the amount dependent on the combined annual family income and the number and age of dependent children. The total amount is abated from a household income of \$36,860 at a rate of 20%, with the IWTC abated last.

In 2011 the IWTC and the FTC cost a total of \$2.8 billion, with 21% for the IWTC. For low working income families, the value of the IWTC is significant: for example, for a one-child family it is around 40% of total family assistance.²

The minimum family tax credit (MFTC), designed to encourage an exit from the benefit system, is a flat-rate top-up that guarantees a minimum level of income for working families.³ For example, a sole parent on the domestic purposes benefit (DPB) working 20 hours could be shifted off the benefit and have net wages topped up with the MFTC. Families with children may receive the FTC and the IWTC in addition to the MFTC. The MFTC replaces, in effect, their part-benefit and ensures that they are not worse off. However, it abates at 100% for every extra dollar earned, providing a maximum work disincentive.

What was the problem to be addressed?

By the early 2000s family income assistance had fallen markedly in real terms through neglect and a lack of inflation indexing. The key WFF policy document from the Cabinet policy committee (2004) noted that 'the declining real value of family income assistance has been a key factor contributing to inadequate family income' (p.1).

The political context for the development of WFF was that the government had vowed to eliminate child poverty (Ministry of Social Development, 2002). There was nothing to suggest in the conceptualisation of the problem that the concern was not about all children in poverty. Child poverty was described as having 'negative effects on the well-being

and development of children over time' (Cabinet Policy Committee, 2004, 1).

In addition to the acknowledgement of unacceptable levels of child poverty, existing social assistance was seen to 'act as a barrier to people moving from benefit to employment' and the returns to work as needing to be improved both for beneficiaries and working families:

Families with dependent children are a priority because ... many low income families with children are no better off in low-paid work once work-related costs, benefit abatement and tax are taken into account. (ibid., 2)

Were the objectives (aims) for policy clear?

The high-level objective of the WFF policy was to improve the lives of families with children. The three specific objectives set out by the Cabinet Policy Committee (2004) and again outlined in the evaluation reports (Centre for Social Research and Evaluation, 2010c; Dalgety et al., 2010a) were to:

- make work pay by supporting families with dependent children so they are rewarded for their work effort
- ensure income adequacy, with a focus on low- and middle-income families with dependent children to address issues of poverty, especially child poverty
- achieve a social assistance system that supports people into work, by making sure they get the assistance they are entitled to, when they should, and with delivery that supports them into, and to remain in, employment.

Thus, at this point there was no acknowledgement of the criteria of cost-effectiveness, efficiency or the value of administrative simplicity. Nor was there any suggestion that the child poverty to be addressed was for working families only.

Were the aims measurable or quantifiable, and were trade-offs acknowledged?

The WFF package entailed a substantial increase in the value of the FTC, the introduction of the IWTC, which

replaced and extended the former child tax credit, and an expansion of child care subsidies,⁴ designed to achieve all three stated objectives of the policy including reducing child poverty.

The official evaluation (Centre for Social Research and Evaluation, 2010c) claims that 'the WFF changes aimed to strike a balance between the 'income adequacy' and 'make work pay' objectives' (p.3). While the second bullet point above might be taken as a concern for all poor children, the design of the IWTC specifically excluded children of sole parents who were not working at least 20 hours a week, and of couples not working at least 30 hours a week:

[T]he introduction of the in-work tax credit would improve the financial incentive for families to be in paid work as well as improve incomes and reduce poverty among working families. (ibid., v)

While the FTC increases in 2005 went to all children on the same basis, for children in benefit families these increases were offset by core benefit reductions and hardship provision changes, as shown in Table 1. The final FTC increment in 2007 of \$10 per week per child was, however, received by all low-income children.

To use one instrument, the IWTC, to achieve two goals was going to compromise at least one of the objectives. To 'make work pay' using a tool designed to reduce child poverty inevitably meant that some children would be treated differently from others, and would be 'left behind', as was pointed out at the time (St John and Craig, 2004) The work incentive was primarily supposed to move sole parents off the DPB.⁵ Employment rates among sole parents were considered low by international standards, and the majority of children in benefit households were in sole-parent households. It was expected, however, as outlined below, that the work effect would be modest at best.

The poverty objective was to be measured by changes in the numbers of children below two poverty lines: 60% and 50% of the before-housing-costs equivalised median income (Perry,

2005). Data for 2004 showed that 15% of children fell below the OECD-defined 50% before-housing-costs line. WFF was expected to reduce this statistic by 70%, thereby lowering child poverty rates in New Zealand to 4%, a level similar to that enjoyed by Scandinavian countries. The drop in the numbers below the 60% line was expected to be a more modest 30%, a fall from 29% in 2004 to 20.5% in 2007 (Perry, 2004, 19).

What policy criteria, theories or models were important in policy development?

In any policy, political considerations underpin the selection, definition and interpretation of criteria. In the development of WFF, vertical equity considerations stressed income adequacy for working families. Horizontal equity concerns were ignored, in particular the principle that all children in low-income households should be treated the same, irrespective of the source of parental income. There was little or no discussion of broader criteria, such as principles of social justice or citizenship rights; nor did it appear that the criteria of cost-effectiveness or administrative simplicity were of great concern.

The economic theory driving policy design was that incentives that increase the return to work for those on welfare benefits are both necessary and effective ways to encourage work. With respect to sole parents, child care costs were also seen as important, but paid work was seen as both the way out of poverty and of inherent value for the person and their children. Conditioned by the recent experience of strong economic growth, it was expected that financial incentives and more child care would be effective, without a need to consider demand factors for labour.

Was a full range of policies examined that might achieve the desired objectives?

One political attraction of in-work benefits is their apparent ability to concurrently achieve employment and distributional goals (Pearson and Immervoll, 2008, 2). Also, there may be a stronger political constituency for the fiscal cost of supporting people in paid work as opposed to supporting them on welfare.

However, the WFF policy development process did not include an examination of other ways by which workforce participation can be encouraged: examples are transitional payments; generic tax reductions; changes to benefit levels or their abatement which reduce effective marginal tax rates;⁶ minimum wage legislation; ‘welfare to work’ case management; and labour market regulations. It also ignored Australia’s approach, where only minor targeted use has been made of in-work benefits (ibid. 2008). Australia has never had a child-related work incentive and all low-income children are treated the same for family assistance (St John, 2011; St John and Craig, 2004).

New Zealand’s IWTC was, instead, influenced by the UK working tax credit and the earned income tax credit in the United States. However, the design of these work incentives is quite different to that of the IWTC (as shown in Table 3). Since 2003 the UK has separated the child-related weekly payment, the child tax credit (CTC), from the work incentive tax credit (WTC). The CTC is paid for all children on the same basis, regardless of the source of the parents’ income (Millar, 2008, 23). The WTC, paid to the worker, provides a work incentive aimed only at the transition to work, abating from a low level of income at a high rate.

The US’s earned income tax credit (EITC) is also aimed at the transition to work, and paid to the worker, not the caregiver. The EITC offers a subsidy to low earnings and operates over three ranges of income. In the ‘phase-in’ range, the credit increases as income increases; the credit remains constant in the second, ‘plateau’ range; it is abated over the third, ‘phase-out’ range (Ellwood, 2000; Pearson and Immervoll, 2008). It is not restricted to parents, although a stated objective in 1993 was to lift lone parents in full-time, low-wage employment out of poverty (Pearson and Immervoll, 2008, 31). It has some unintended consequences, including the incentive not to partner, as discussed in Meyer (2007).

Evidence gathered in buoyant economic times suggests that the UK’s WTC and the US’s EITC had a positive effect on the labour force participation

Table 3. Comparing in work tax credits: UK, US and New Zealand

UK WTC	US EITC	NZ IWTC
Minimum hours worked required. Adult-based	No minimum hours required. Adult-based	Minimum hours worked required. Child-based
Paid to worker	Paid to worker	Paid to carer
Abates from very low income level. Affects transition to work	Phased in over low income and then phased out	Abates from a relatively high level of income after the FTC
Abates quickly	Abates moderately quickly	Abates slowly

Source: St John, Dale and Littlewood, 2009

rate of sole parents (Dickens and Ellwood, 2004; Gregg, Harkness and Smith, 2007). This evidence was clearly influential in the development of the WFF policy, even though the IWTC policy was to be very differently designed.

Was the best policy selected and what were the expected outcomes?

Fiscal affordability

At the heart of WFF was the theory that ‘work is the way out of poverty’. The choice was made to implement the IWTC, an extensive, cash-based, child-related tax credit designed to also have an impact on poverty levels. When the original package was announced in the 2004 budget, the government was criticised for leaving out the poorest children (St John and Craig, 2004), but the government claimed to have no money left to help beneficiary families. Then, pre-election 2005, an additional annual \$500 million was found to augment the WFF package. The abatement threshold was raised from \$27,500 to \$35,000, and the abatement rate reduced from 30% to 20%. Because the IWTC is abated last, the effect was to extend it to relatively high-income families,⁷ where a payment to ‘make work pay’ was clearly not needed. With different choices, this \$500 million could have been spent on the poorest families, thus addressing the poverty objective directly.

The policy process

Lacking, at both the policy development stage and at the point when the IWTC was expanded prior to its introduction, was a critique of how the policy would achieve the objectives of improving income adequacy and enhancing work incentives in the most cost-effective, equitable, efficient and administratively

simple manner. On the same day the WFF package was announced in the 2004 Budget, the legislation was introduced in the House and passed. There was no select committee process, nor did any green or white paper canvass views about the proposed changes.

In 2008 a case was taken by the Child Poverty Action Group alleging that the IWTC discriminated against the poorest children (as discussed below). The judge found the lack of consideration of citizens’ and children’s rights along with obligations under international conventions ‘surprising and unfortunate’. In 2011, in a subsequent hearing Judge Dobson was

similarly troubled by the absence of any analysis of the potential discrimination, particularly in light of the commitments made by signing international instruments such as the International Covenant on Economic, Social and Cultural Rights (ICESCR) and the Convention on the Rights of the Child (UNCROC) which address such matters. (High Court, 2011)

Work incentives: theory and practice

By the time the WFF package was fully implemented in 2007 there was no clear connection between the original rationale for the IWTC and its final form. The basic theorising was that work provides the route out of poverty, but requires work incentives. An effective work incentive, generically an in-work benefit, would ‘make work pay’ by creating an income gap between those in paid work and those not in paid work.

Despite the theory, the IWTC is a most unusual in-work benefit. It does not reward each extra hour of work, but

provides a lump sum to families who reach the minimum number of required hours of 20 for a sole parent and 30 for a couple. The justification appeared to be that being in part-time work on a benefit was undesirable and the IWTC was needed to incentivise a complete escape from the benefit system. Yet the evidence that part-time work is always inferior to full-time work, especially for sole parents of small children, is lacking. Moreover, 20 hours is not full-time work and, unless the sole parent is well paid or has other income, such as from child support, even with the IWTC it will not be enough to live on, as discussed below.

Is work in and of itself the way out of poverty, or is it so only because the state makes it pay with sufficient subsidies? Recent research in Canada (Card and Hyslop, 2005) and Minnesota (Gennetian, Miller and Smith, 2005), not taken into account in the IWTC development, has thrown into doubt the value of work incentives for achieving long-term benefits, including attachment to the labour force, future opportunities for well-paid work, and eventually a path out of poverty.

The IWTC policy development was informed by 'evidence' from simulation exercises. For example, a March 2004 report to ministers on the expected impacts of WFF advised:

there may be a small increase in labour market participation amongst both beneficiaries and non-beneficiaries ... this may lead to a small increase in employment ... In the event of an economic downturn, employers are less likely to absorb any increase in labour supply generated as a result of improved work incentives. Families already engaged in work ... may, depending on the structure of assistance, reduce the work effort of second earners in dual-income households. (Ministry of Social Development, 2004, paras 89-92)

A micro-simulation (Kalb, Cai and Tuckwell, 2005) found that an increase in the probability of working was largest for one-child families because the increase in the IWTC over the previous child tax credit was largest for them. For couples,

only 8% in the sample observations worked fewer than 30 hours a week and for these, higher incomes could induce a reduction in labour supply of one or both partners. 'For married women, the most popular choice is to reduce labour supply to zero' (ibid., 2005, 13). Around 1.8% of lone parents were expected to enter the labour force, 2.4% were expected to work less, and about 1.9% were predicted to increase average weekly working hours, but by less than an hour (ibid., 24).

Other analyses (Dwyer, 2005a; Nolan, 2004; St John and Craig, 2004) also concluded that the WFF package was unlikely to have much net positive effect on aggregate employment, and provided no encouragement for secondary income earners to seek employment once the family qualifies for the IWTC. Moreover, there would be a disincentive to work above the abatement threshold (Nolan, 2002), and the Ministry of Social Development expressed concern over consequences for other labour market policies:

Should there be an increase in labour supply, any downward pressure on wages would reduce the returns to work for people without children and make these workers increasingly reliant on minimum wage provisions. (Ministry of Social Development, 2004)

Was the policy implemented as intended with efficiency and timeliness?

The implementation of WFF was largely seen as a success in terms of numbers, especially the take-up by those not on benefits:

Original forecasts have been met or exceeded, and there are high levels of awareness and receipt of WFF. In particular, there have been dramatic increases in the number of working families receiving WFF components ... The 2005/2006 tax year has exceeded the forecast of 260,000 families benefiting from WFF ... The increase among non-beneficiaries is especially pronounced. (Centre for Social Research and Evaluation and Inland Revenue, 2007, 1)

It was not clear that the complex package was always well understood, or that people knew what the component parts were designed to achieve. What was clear was that the 2005 expansion ensured a higher take-up by better-off families.

Measuring outcomes: what is the evidence that the policy is working to achieve its stated objectives?

It is difficult in a real-world analysis to disentangle the effect of any single measure, as numerous exogenous factors may change simultaneously. In the case of WFF, the components are supposed to work together and it is difficult to analyse them separately. Nevertheless, the work incentive was clearly to come from the IWTC,⁸ not the FTC, while the poverty reduction was to come from both the IWTC and the FTC.

Work incentives

Policies designed to incentivise work effort may appear to work well when *labour* is scarce, but appear ineffectual when *jobs* are scarce.

The first Ministry of Social Development evaluation of WFF acknowledged the difficulty of assessing the work incentive aspect of the IWTC, but stated:

since WFF has been implemented, New Zealand has experienced the largest fall in numbers receiving DPB since the benefit was introduced in 1973 ... (from 109,700 at August 2004 to 97,200 at August 2007). (Centre for Social Research and Evaluation, 2008, 40)

However, the faster pace of exits from the DPB between 2004 and 2007 is not evidence of the efficacy of the work incentive provided by the IWTC. Firstly, the labour market was exceptionally buoyant in this period and as expected some sole parents found work. Secondly, the IWTC was not brought in until 1 April 2006, near the end of the analysis period. Thirdly, the WFF threshold was much higher and the abatement rate was lower than prior to WFF, especially with the 2005 extension. This would of itself improve returns from working. Fourthly, other policy shifts would have increased work

Table 4: Number of DPB recipients with and without income in addition to benefit (\$).

DPB Recipients at end of August	No other income	With other income (\$ per week)					Total
		All with other income	\$1-80	\$81-180	\$181-300	>\$300	
2005	80,000	26,400	8,900	9,000	5,900	2,600	106,400
2006	78,000	23,600	8,200	8,200	5,200	2,000	101,500
2007	75,600	21,600	7,300	7,500	4,800	2,000	97,100
Change							
2005-2006	-2,000	-2,800	-700	-700	-700	-600	-4,800
	-3%	-11%	-8%	-8%	-12%	-25%	-5%
2006-2007	-2,400	-2,000	-900	-700	-300	0	-4,400
	-3%	-8%	-11%	-8%	-7%	-1%	-4%
2005-2007	-4,400	-4,800	-1,600	-1,400	-1,100	-700	-9,200
	-6%	-18%	-18%	-16%	-18%	-25%	-9%

Source: Centre for Social Research and Evaluation, 2008, p.40

incentives during this period, including increased child care subsidies, enhanced case management of beneficiaries, and an increase in the minimum wage from \$9 to \$12 (33%) between 2004 and 2008.

Finally, exits from benefits may not have entailed a significant increase in hours of work. Between 2005 and 2007, 4,800 of those who came off the DPB had income from paid employment. Of these, 'some would have been already working sufficient hours to qualify' for the IWTC (ibid.).⁹ In other words, a significant number counted as a 'success' were already working significant hours on the DPB (see Table 4).

In WFF it is largely the IWTC that provides the direct work incentive, but for those who achieve the qualifying number of hours a further top-up of the MFTC may be required to 'make work pay'. Between 2006 and 2007, the period of the introduction of the IWTC, the numbers on the MFTC more than trebled to 2,900 (Centre for Social Research and Evaluation, 2010c, 12). This means that the IWTC alone was not sufficient to make work pay for many of the sole parents who came off the DPB. Ironically, it was possible to show that a sole parent on the DPB working around 20 hours could cost the government less than if she was shifted onto the MFTC and the IWTC (St John, 2011).

Poverty

With regard to the child poverty objective, the Ministry of Social Development identified a fall in rates on the 60% line

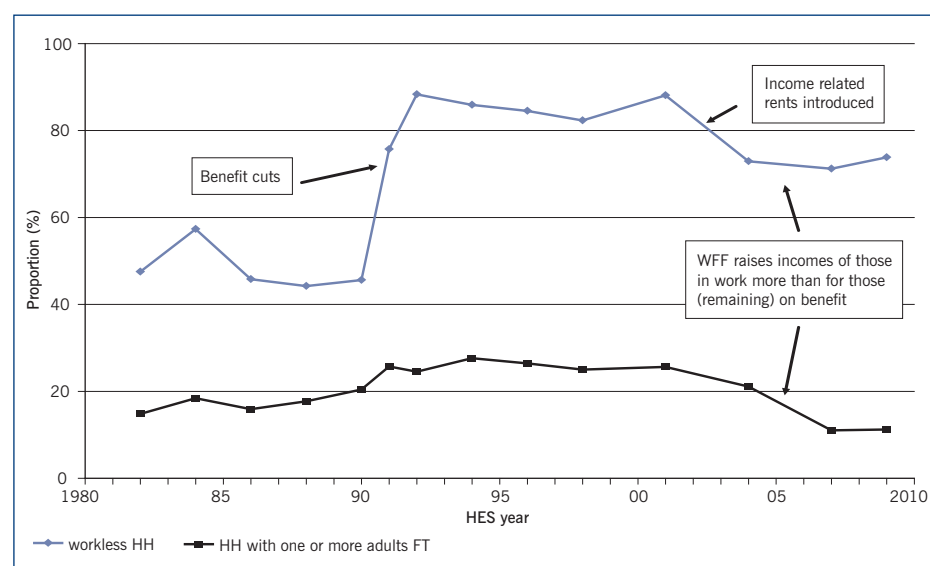
from the whole WFF package (Perry, 2009), both before housing costs and after housing costs, and using both a fixed line and a moving line, but the predictions of a 70% reduced child poverty based on the 50% line, however, did not materialise, 'reflecting the greater support from WFF for the working poor than for the beneficiary poor' (Perry, 2010, 84).

Approximately 80% of children in workless households are from sole-parent families, and Figure 1 shows that poverty rates for children in 'workless' families on the after-housing-costs 60% line hardly fell at all between 2004 and 2007. This is explained by the offsets for beneficiaries as shown in Table 1, and by their exclusion from the IWTC.¹⁰

It is indisputable that WFF represented a real redistribution to low- and middle-income working families with children. But, as Perry (2010, 109) states categorically, 'WFF had little if any impact on the poverty rates for children in workless households'.

Evidence of continuing severe family poverty was identified in June 2007 (Centre for Social Research and Evaluation, 2007). The 2008 Living Standards report (Perry, 2009a) revealed that, while there had been a drop from 26% of children living in severe or significant hardship, 19% remained in that category. While, as Perry (2009b, 57) notes, around half of children in hardship are from working families, the gains from WFF 'were mostly from

Figure 1: Poverty rates for children in 'workless' and 'working' households ('after housing costs' 60%, fixed line)



Source: Perry, 2010, 109

Table 5: Numbers of working-aged clients receiving main benefits, end of December 1999-2009

End of quarter	Unemployment benefits	Domestic purposes benefits	Sickness benefits	Invalids benefits	Other main benefits	All main benefits
December 2004	65,969	109,339	45,648	72,543	26,200	319,699
December 2005 WFF introduced	51,426	106,302	46,862	74,500	22,993	302,083
December 2006 IWTC	38,796	100,309	48,650	76,816	22,070	286,641
December 2007 WFF fully implemented	22,748	98,154	49,093	80,082	19,655	269,732
December 2009	66,328	109,289	59,158	85,038	25,663	345,476

Source: Ministry of Social Development, 2009

low to middle income working families, with little change in hardship rates for children from beneficiary families’.

While this evidence, along with corroboration of social distress from social agencies, might have suggested the need for a review of the policy, no attempt was made to query the IWTC’s efficacy or justify leaving the children in benefit-dependent families out of a poverty-alleviation measure.

Evidence-based statistical evaluations

The methodology used to evaluate WFF was a difference-in-differences study based on data from the Household Labour Force Survey, the Income Survey, and a survival analysis of DPB recipients using Ministry of Social Development/Inland Revenue linked data (Dalgety et al., 2010a, 2010b). The survival analysis looked at the speed with which sole parents returned to the benefit, and, given the impact of the recession which rendered the analysis somewhat redundant, is not further examined here. The difference-in-differences methodology took sole parents as the ‘treatment’ group and single people aged 18 to 65 years as the ‘comparator’ group and examined their respective employment rates for 2004 to 2007. The expectation that the work incentives for sole parents would cause their employment to grow at a faster rate than that of the comparator group was confirmed:

the percentage of sole parents meeting the eligibility threshold for the in-work tax credit requirement increased from 35.9% in June 2004 to 47.5% in June 2007, an increase of 11.6 percentage points. Difference-in-Differences analysis suggests that

around three-quarters (9.2 pp \pm 4.5 pp) of this increase was due to effect of the policy changes. (Dalgety et al., 2010a, 207)

The evaluation is careful to talk about the package as a whole, which makes it difficult to judge the success or suitability of component parts; but the ‘statistically significant’ increase in sole parents working 20 or more hours by 2007 beyond what may have been expected from market conditions is clearly associated with the IWTC, even though it did not apply until 2006. Moreover, the evaluation implies that ‘statistical significance’ proves the success of this policy in meeting its objectives. But, as McCloskey and Ziliak (2008) point out, it is inappropriate to use ‘statistical significance’ to infer ‘social significance’.

More fundamentally, there are occasions when a difference-in-differences methodology may be valid, but there are important caveats. The approach typically considers the policy reform itself as an experiment and tries to find a naturally occurring comparison group that can mimic the properties of the control group in the properly designed experimental context. Dalgety et al. compare two groups that differ vastly in age, gender structure, social responsibilities and macro conditions. To discourage the choice of part-time work and a part unemployment benefit in favour of full-time work, single unemployed people in New Zealand face a much higher abatement of their earnings from part-time work (89.5%¹¹ after 6.2 hours at the minimum wage) than sole parents; and childless single people are ineligible for the MFTC.

In addition, these two groups may be competing for the same jobs. As Bryson et al. (2006, 9) note:

financial inducements to parents with children to enter the labour market may increase their chances of employment at the expense of adults without children.

Ironically, the work incentives of WFF provided an income effect that reduced work effort for some caregivers:

Although not an objective of the reforms, the WFF changes gave couple parents greater choice about working and caring for their children by making it easier to manage on less income from the labour market. ... 9,300 fewer second earners in couple parent families were in paid employment in the quarter ended June 2007 due to the WFF changes. (Centre for Social Research and Evaluation, 2010c, vii)

Specifically, the IWTC operated to reduce the work effort of partnered women, but allowed them to receive the additional income for their children even though they were not in paid work. If the partner was to leave, however, they would immediately become ineligible for the IWTC whether or not they went on a benefit, because the rules say that if she is on her own she has to work at least 20 hours a week (St John, 2011).

Time-frame issues

Political justification requires early reports of success. The Dalgety evaluation was first published in 2009, and the time was too short to determine if employment increases were sustained. Between December 2007 and December 2009, as New Zealand’s GDP declined as a

consequence of the global financial crisis, combined benefit numbers rose by around 76,000, and DPB numbers increased by around 11,000, more than reversing the previously reported gains (see Table 5).

By September 2011, DPB numbers had risen to 114,147. While these may not be the same people, this suggests that the IWTC did not help sustain employment for sole parents in the economic downturn.

What were the unintended consequences?

The changes also led to greater complexity in the tax system. The National-led government elected in late 2008 acknowledged the problems faced by high levels of taxation of some childless lower-income groups (ineligible for the IWTC). In response, a compensating policy, the independent earner tax credit, introduced yet more complexity and took New Zealand further from the path of simple, low-rate, broad-base, comprehensive income taxation (St John, 2007).

Further problems arise for in-work benefits such as the IWTC that are designed with no thought of what might happen in a recession:

Because severe economic downturns can have marked effects on the earnings distribution, policymakers should review whether the eligibility conditions and payment profiles of existing IWBs are appropriate or should be adapted in order to exploit their potential as a measure that cushions income losses during a recession. (Immervoll and Pearson, 2009, 46)

In 2009, as a response to the recession, the government recognised that families were losing their jobs through no fault of their own and announced under the ReStart Package that families made redundant could retain the IWTC for 16 weeks.¹² ReCover was a stopgap quick fix creating two classes of unemployed, the deserving and the undeserving, and was phased out in January 2011 despite the protracted nature of the recession. Families hurt by recession or the effects of the Canterbury earthquakes are no longer entitled to retain the IWTC once they do not meet either the hours of work or off-benefit requirements.

Overall evaluation: was Working for Families successful?

With respect to the poverty objective, success was implied by the statistical 'evidence':

The percentage of children living in poverty, using a 60% measure relative to 2004, dropped by 8 percentage points [by 2008] due to WFF. Without the WFF package, New Zealand's child poverty rate would have continued to climb from 2004, most likely reaching around 30% in 2008. (Centre for Social Research and Evaluation, 2010c, viii)

There was little concern, however, that child poverty was not addressed for those on benefits. Reliance on tools to get such families into work clearly did not work, even in the good economic times, except perhaps temporarily for a small number of sole parents. There was no questioning of the nature of the remaining child poverty, nor of the disconnect between the child poverty problem as identified in step 1 and the outcomes of step 8 of the framework of Box 1.

The quantitative 'measurement of outcomes' (step 8), appeared to be the end point of the official evaluations. There was no qualitative evidence collected as to the actual experiences of either the sole parents or their employers. Were the lives of these sole parents and their children enhanced? What was the circumstantial evidence of social distress, such as shown by the demand for food banks and social services? The success of the policy was implied by its impact on sole-parent employment alone:

The policy changes ... increase the numbers of sole parents working 20 or more hours in 2007 and therefore meeting the requirements of the in-work tax credit. (Dalgety et al., 2010a, 211)

Later, the final version of the evaluation recognised that employment outcomes were not sustained in the recession, but it was still claimed that WFF met its top two objectives:

- The WFF changes met the 'income adequacy' objective as low and middle income families received the bulk of

the increased expenditure, and child poverty rates were reduced for lower income families with at least one adult in paid work. However there was no significant change in hardship rates for beneficiaries with children.

- The WFF changes met the 'making work pay' objective as they were effective in supporting 8,100 sole parents into paid work and enabling them to remain in paid work, though some barriers to work still remain for sole parents. (Centre for Social Research and Evaluation, 2010c, ix)

In the meantime, the IWTC has been subjected to sustained attack by child rights advocates.¹³ A 2008 Human Rights Tribunal decision upheld the Child Poverty Action Group's claim of discrimination against 230,000 of the poorest children in New Zealand who do not benefit from the IWTC:

We are satisfied that the WFF package as a whole, and the eligibility rules for the IWTC in particular, treats families in receipt of an income-tested benefit less favourably than it does families in work, and that as a result families that were and are dependent on the receipt of an income-tested benefit were and are disadvantaged in a real and substantive way. (Human Rights Tribunal, 2008, para 192)

The judge went on to find the discrimination to be 'of a kind that is justified in a free and democratic society' (ibid., 4). The Child Poverty Action Group appealed this finding to the High Court, but the declaration sought – that the IWTC was inconsistent with human rights legislation – was not achieved. This decision appealed to the Court of Appeal, is expected to be heard in 2012.

While not part of the case, discrimination could also describe the disproportionate disadvantage experienced by Māori and Pacific Island populations excluded from the IWTC because they have a younger demographic structure and a lower socio-economic status than the general population (Friesen et al., 2008).

Discussion

The perception of the well-being of sole parents ‘incentivised’ into work – whether it was good for them or their children – or how employers were affected were unexplored in the official evaluations. Do sole parents really need carrots and sticks, or is it more a question of suitable work, suitable hours, training opportunities, and adequate transport and child care? What are the economic gains from shifting sole parents with child-rearing responsibilities into paid work that requires tax-funded subsidies for child care and work incentives? What of the children of beneficiaries whose hardship rates were left unchanged? Were there serious design problems with the IWTC? Where, for example, was an examination of the validity of the minimum 20/30 hours requirements?

As noted by the OECD, in-work benefits are not a magic bullet. They are ‘costly and must be financed by increased taxes elsewhere or cuts in government spending’ (Pearson and Immervoll, 2008, 3). The annual cost of the IWTC is approximately \$600 million, with much of it paid to higher-income families for whom it may be welcome as a payment to help with the costs of their children, but not is necessary to ‘make work pay’. If initially effective in moving 2,000 beneficiaries into equivalent full-time work, the per-beneficiary cost was \$250,000. If the extra employment disappears in a recession, the cost remains, and the cost per extra job becomes infinite.¹⁴ If poverty alleviation was the other objective, was this a cost-effective approach?

The IWTC and the MFTC opened up a bigger gap between families ‘in work’ and those not ‘in work’, but were not designed to consider the possibility of an extended period of either negative or low growth such as has eventuated. With a loss of work or work hours, WFF assistance falls rather than rises, and thus fails to provide the cushion that might be expected from a targeted payment, compounding the very low adult benefit levels available to parents.

The criterion of simplicity was largely ignored, and the complex arrangements are hard to understand and difficult to monitor fairly (Dale et al., 2010a; St John, 2011).

Proposals for improving WFF

The limited achievements of WFF in light of the problem initially identified suggest that many aspects of the current policy framework should be revisited. The implicit normative judgement was that work incentives were more important than the rights of all poor children to an adequate standard of living. However, it was known at the outset that the work incentives were only ever going to affect a small portion of the poorest children in sole-parent households. Even then, whether the lives of even these children were enhanced when their parents found at least 20 hours of work is a question unanswered in the official evaluation.

The acknowledgement that most of the gains in employment had been eroded by 2009 (Centre for Social Research and Evaluation, 2010c, vi) might suggest, at the very least, that a different approach to work incentives is needed in a recession.

It is worth noting that in the approach to the 2011 election Labour, the Greens, the Māori Party and the Mana Party all pledged to extend the IWTC to the children in beneficiary families who are currently excluded.¹⁵ This adjustment would greatly simplify WFF and have an important impact on the degree of hardship experienced in benefit-dependent households. It would enable the child poverty objective to be met in a way that respects the rights of all children to be free of discrimination and to enjoy an adequate standard of living.

Meeting the 20 hours requirement consistently is often unattainable in a casualised labour market, but is required for both the MFTC and the IWTC. Not only does the MFTC have a worse work disincentive effect than a welfare benefit, it is in fact a substitute for a part-benefit. As the Ministry of Social Development’s deputy chief executive of social policy acknowledged, when work is precarious, people may have more income security on a part-benefit (Gray, 2008, 105). The MFTC should be abolished, the IWTC be absorbed into the FTC and provided to all children irrespective of their parents’ income source or hours of work, and returns to part-time work enhanced for parents on the DPB.

Other advice may need to be revisited. For example, the Treasury suggested that the policy should distinguish between sole parents with low wage-earning potential and costly child care challenges, and those for whom full-time work is an attainable goal (Hurnard, 2007). Another Treasury document (2005, para 7) recommended careful evaluation of proposals to lift labour force participation among young women aged 20 to 34 because early childhood education is expensive and there is a risk of low value for money from such spending. Part-time work while on a benefit may be the only feasible work for many sole parents while their children are young.

There are other possible approaches to helping the transition to full-time work. It is worth noting a proposal from the 2002 Children’s Agenda, for example:

smoothing the transition to work for beneficiaries with children by making a payment available of up to the equivalent of two weeks’ benefit when they enter work. (Ministry of Social Development and Ministry of Youth Affairs, 2002, 22)

Any attempt to improve family assistance and enhance the work incentive aspect of the policy would also need to consider the weaknesses in the current model of primarily privately provided for-profit child care provision. For example, the needs of rural and low-income communities are not being met because they are not profitable locations for private providers. The consequence is that the disadvantages experienced by these communities, and their children, are compounded.

Conclusion: what works?

Using the framework set out in Box 1 for Working for Families, there was a fundamental slippage between the problem identified at step 1, the objectives at step 2, and what was measured as success at step 8. The normative objectives as set out at step 2 implied that all poor children were of equal concern but this was subverted in a quantitative evaluation process that had no moral or ethical dimension.

If the IWTC is judged against the criteria of efficiency, equity and administrative simplicity, and for cost-effectiveness in addressing the identified problem, the available empirical evidence suggests that it has been a failure. It only marginally increased employment for sole parents, and that increase has not been sustained. It has not, therefore, provided a path out of poverty, and it has met the poverty objective for only a subset of poor children.

Furthermore, the policy is inherently discriminatory. Discrimination may of course be justified in certain circumstances. In this instance, however, the case for discriminating against the children of beneficiaries who fail to work 20 hours or more is unjustified. First, the available evidence suggests that any benefits from such discrimination have been very modest. Second, and more importantly, the harm caused and the injustice perpetrated has been significant.

Nothing in this paper can be taken to imply that 'evidence' should not inform

policy. However, in the case of the IWTC, quantitative evidence-based studies have been of limited use in assessing whether the policy 'worked'. Social significance requires a much broader range of tools and thinking, including use of other types of evidence, including qualitative data, circumstantial evidence of social distress, and the voices of those whose lives are affected.

Questions such as, 'did this policy make work pay?' should not be substituted for broader policy questions such as, has the problem actually been addressed?, was this a cost-effective policy?, and have we honoured our obligations as a society to all children?

- 1 The authors would like to thank the peer reviewers and editor for their helpful and constructive comments on earlier versions of this paper.
- 2 Because it abates last, the IWTC can be 100% of total family assistance for higher-income families.
- 3 This is \$22,204 net for 2011, approximately 51% of net average wage.
- 4 The increase to child care subsidies is not further examined here.
- 5 This is implied in the literature, and evidenced in the official evaluation, where the focus is squarely on those beneficiaries in receipt of the DPB.
- 6 The effective marginal tax rate is the combined loss from

tax and benefit abatement when an extra dollar is earned. A poverty trap for low-income people may occur when earning extra income does not materially increase disposable income (St John and Rankin, 2009).

- 7 Indexation took the abatement threshold to \$36,860 by 2011. A family with five children can still access some part of the IWTC up to an income of \$145,042 (<http://www.ird.govt.nz/wff-tax-credits/entitlement/>).
- 8 And to a minor extent from the MFTC.
- 9 A confounding factor not addressed in any analysis to date is the role of child support (payment from the non-custodial parent), which may have profound work incentive implications. Child support payments offset the DPB and many lone parents prefer a part-benefit even when working so that their income is effectively secured.
- 10 They had, however, gained from the introduction of income-related rents prior to WFF, as shown in Figure 1, illustrating the importance of housing costs.
- 11 Tax, 17.5%, ACC 2%, benefit abatement, 70%.
- 12 See <http://www.beehive.govt.nz/release/restart-assistance-package-redundant-workers>.
- 13 The Child Poverty Action Group claimed the IWTC constitutes unlawful discrimination under part 1A of the Human Rights Act 1993 and breaches New Zealand's obligations under the United Nations Convention on the Rights of the Child. See www.cpag.org.nz.
- 14 This calculation attributes the entire cost of providing income assistance to move people on the DPB to the objective of increasing employment by making work pay, and does not take into account distributional objectives.
- 15 For Labour's policy, see <http://www.labour.org.nz/node/2727>; for the Greens, see <http://www.greens.org.nz/endchildpoverty>; for the Maori party, see <http://www.maoriparty.org/index.php?page=cms&id=130&op=election-policy.html>; and for the Mana party, see http://www.nzherald.co.nz/maori/news/article.cfm?_id=252&objectid=10763960.

Appendix

Year	Title And Author
2004	<i>Cut Price Kids: does the 2004 'Working for Families' budget work for children?</i> (St John and Craig, 2004)
2005	<i>The Impact of Economic Policy on New Zealand Children</i> (St John and Wynd, 2006)
2005	<i>Dissecting the Working for Families Package</i> (Dwyer, 2005b)
2007	<i>Pockets of Significant Hardship and Poverty</i> (Centre for Social Research and Evaluation, 2007)
2008	<i>Receipt of the Working for Families Package</i> , 2007 Update (Centre for Social Research and Evaluation, 2008)
2008	<i>Child Poverty Action Group Briefing to the Incoming Government</i> (Wakim, St John and Wynd, 2008)
2008	<i>Left Behind: how social and income inequalities damage New Zealand children</i> (St John and Wynd, 2008)
2009	<i>Employment Incentives for Sole Parents: labour market effects of changes to financial incentives and support</i> (Ministry of Social Development and Inland Revenue, 2009)
2009	<i>Escaping the Welfare Mess</i> (St John and Rankin, 2009)
2010	<i>What Work Counts? Work incentives and sole parent families</i> (Dale, Wynd, St John and O'Brien, 2010b)
2010	<i>Employment Incentives for Sole Parents: labour market effects of changes to financial incentives and support</i> (Dalgety et al., 2010a)
2010	<i>Employment Incentives for Sole Parents: labour market effects of changes to financial incentives and support: technical report</i> (Dalgety et al., 2010b)
2010	<i>Changing Families' Financial Support and Incentives for Working. Annex Report 1: effective marginal tax rates for Working for Families recipients</i> (Centre for Social Research and Evaluation, 2010a)
2010	<i>Effective Marginal Tax Rates for Working for Families Recipients</i> (Spier, 2010)
2010	<i>Changing Families' Financial Support and Incentives for Working. Annex Report 2: employment incentives for couple parents: labour market effects of changes to financial incentives and support</i> (Centre for Social Research and Evaluation, 2010b)

Year	Title And Author
2010	<i>Changing Families' Financial Support and Incentives for Working: the summary report of the Working for Families package</i> (Centre for Social Research and Evaluation, 2010c)
2010	<i>Working for Families: integrity issues and removing indexation of the abatement threshold</i> (Inland Revenue and The Treasury, 2010)
2011	<i>Left Further Behind: how policies fail the poorest children in New Zealand</i> (Dale, O'Brien and St John, 2011)
2011	<i>NZIER Insight 27: Is Working for Families working for families?</i> (NZIER, 2011)

References

- Bryson, A., M. Evans, G. Knight, I. La Valle and S. Vegeri (2006) *New Zealand Working For Families programme: methodological considerations in evaluating Working for Families*, London: Policy Studies Institute
- Bullock, H., J. Mountford and R. Stanley (2001) *Better Policy-Making*, London: Cabinet Office, Centre for Management and Policy Studies, <http://www.cpms.gov.uk>, accessed 7 June 2002
- Cabinet Policy Committee (2004) *Reform of Social Assistance: Working for Families package*, <http://www.msd.govt.nz/documents/about-msd-and-our-work/work-programmes/policy-development/working-for-families/rep-04-3-229.pdf>
- Card, D. and D.R. Hyslop (2005) 'Estimating the Effects of a Time-Limited Earnings Subsidy for Welfare-leavers', *Econometrica*, 73 (6), pp.1723-70
- Centre for Social Research and Evaluation (2007) *Pockets of Significant Hardship and Poverty*, Wellington: Ministry of Social Development
- Centre for Social Research and Evaluation (2008) *Receipt of the Working for Families Package: 2007 update*, <http://www.ird.govt.nz/about/ir/reports/research/report-wfftc-update/>
- Centre for Social Research and Evaluation (2010a) *Changing Families' Financial Support and Incentives for Working. Annex Report 1: effective marginal tax rates for Working for Families recipients*, Wellington: Inland Revenue and Ministry of Social Development
- Centre for Social Research and Evaluation (2010) *Changing Families Financial Support and Incentives for Working. Annex Report 2: employment incentives for couple parents: labour market effects of changes to financial incentives and support*, Wellington: Inland Revenue and Ministry of Social Development
- Centre for Social Research and Evaluation (2010c) *Changing Families' Financial Support and Incentives for Working: the summary report of the Working for Families package*, Wellington: Ministry of Social Development/Inland Revenue
- Dale, M.C., M. O'Brien and S. St John (2011) *Left Further Behind: how policies fail the poorest children in New Zealand*, Auckland: Child Poverty Action Group
- Dale, M.C., D. Wynd, S. St John and M. O'Brien (2010a) *Does Working for Families Work in Today's Labour Market?*, Auckland: Child Poverty Action Group
- Dale, M.C., D. Wynd, S. St John and M. O'Brien (2010b) *What Work Counts? Work incentives and sole parent families*, Auckland: Child Poverty Action Group
- Dalgety, J., R. Dorsett, S. Johnston and P. Spier (2010a) 'Employment Incentives for Sole Parents: labour market effects of changes to financial incentives and support', in I. Claus, N. Gemmell, M. Harding and D. White (eds), *Tax Reform in Open Economies*, Wellington: Edward Elgar.
- Dalgety, J., R. Dorsett, S. Johnston and P. Spier (2010b) *Employment Incentives for Sole Parents: labour market effects of changes to financial incentives and support: technical report*, Wellington: Ministry of Social Development and Inland Revenue
- Dickens, R. and D.T. Ellwood (2004) 'Whither Poverty in Great Britain and the United States? The determinants of changing poverty and whether work will work', in D. Card, R. Blundell and R.B. Freeman (eds), *Seeking a Premier Economy: the economic effects of British economic reforms, 1980-2000*, Chicago: University of Chicago Press
- Durie, M. (2004) 'Race and Ethnicity in Public Policy: does it work?', paper presented at the Social Policy Research and Evaluation conference 2004, <http://careers.massey.ac.nz/massey/fms/Te%20Mata%200%20Te%20Tau/Publications%20-%20Mason/M%20Durie%20Race%20and%20ethnicity%20in%20Public%20Policy.pdf>
- Dwyer, G. (2005) *Dissecting the Working For Families Package*, Wellington: New Zealand Business Roundtable
- Ellwood, D.T. (2000) 'The Impact of the Earned Income Tax Credit and Social Policy Reforms on Work, Marriage and Living Arrangements', *National Tax Journal*, 53 (4), pp.1063-1105
- Fitzgerald, J., T. Maloney and G. Pacheco (2008) 'The Impact of Changes in Family Assistance on Partnering and Women's Employment in New Zealand', *New Zealand Economic Papers*, 42 (1), pp.17-57.
- Friesen, M.D., L.J. Woodward, D.M. Fergusson, L.J. Horwood and A. Chesney (2008) 'Living Standards and Material Conditions of Young New Zealand Families', *Social Policy Journal of New Zealand*, 33 (March), pp.47-69
- Gennetian, L.A., C. Miller and J. Smith (2005) *Turning Welfare into Support: six-year impacts on parents and children from the Minnesota Family Investment Program*, Minnesota: Manpower Demonstration Research Corporation, www.mdrc.org
- Gray, D. (2008) *Statement of Evidence: CPAG v Attorney General*, Wellington: Human Rights Review Tribunal
- Gregg, P., S. Harkness and S. Smith (2007) *Welfare Reform and Lone Parents in the UK*, Bristol: Centre for Market and Public Organisation, Bristol Institute of Public Affairs, University of Bristol
- High Court (2011) *Child Poverty Action Group Incorporated v Attorney-General*, reserved judgement, hearing: 2 to 9 September 2011
- Human Rights Tribunal (2008) *Child Poverty Action Group Inc v Attorney General: the decision*, Wellington: Human Rights Review Tribunal
- Hurnard, R. (2007) *Roger's Option*, Wellington: The Treasury.
- Immervoll, H. and M. Pearson (2009) *A Good Time for Making Work Pay? Taking stock of in-work benefits and related measures across the OECD*, social, employment and migration working paper 81, Paris: OECD
- Inland Revenue and The Treasury (2010) *Working for Families: integrity issues and removing indexation of the abatement threshold*, Wellington: Inland Revenue/The Treasury

- Kalb, G., L. Cai and I. Tuckwell (2005) *The Effect of Changes in Family Assistance: allowing for labour supply responses*, Wellington: The Treasury
- Marston, G. and R. Watts (2003) 'Tampering with the Evidence', *The Drawing Board: An Australian Review of Public Affairs*, 3 (3), pp.143-63
- McCloskey, D.N. and S.T. Ziliak (2008) *The Cult of Statistical Significance: how the standard error costs us jobs, justice, and lives*, Chicago: University of Michigan Press
- Meyer, B.D. (2007) *The U.S. Earned Income Tax Credit, its Effects, and Possible Reforms*, Chicago: University of Chicago and NBER
- Millar, J. (2008) 'Making Work Pay, Making Tax Credits Work: an assessment with specific reference to lone-parent employment', *International Social Security Review*, 61 (2), pp.21-38
- Ministry of Social Development (2002) *New Zealand's Agenda for Children*, Wellington: Ministry of Social Development
- Ministry of Social Development (2004) *Future Directions: Working for Families Impacts*, Wellington: Ministry of Social Development
- Ministry of Social Development (2009) Benefit factsheets, <http://www.msd.govt.nz/about-msd-and-our-work/publications-resources/statistics/benefit/2009-national-benefit-factsheets.html>
- Ministry of Social Development and Inland Revenue (2009) 'Employment Incentives for Sole Parents: Labour Market Effects of Changes to Financial Incentives and Support: 6', <http://www.ird.govt.nz/resources/4/5/45d274804d0d688a8c5abf54fec26cb2/sole-parents-impact-of-wff.pdf>
- Ministry of Social Development and Ministry of Youth Affairs (2002) *New Zealand's Agenda for Children*, Wellington: Ministry of Social Development
- New Zealand Institute for Economic Research (2011) NZIER Insight 27: *Is Working for Families working for families?*, Wellington: New Zealand Institute for Economic Research
- Nolan, P. (2002) *New Zealand's Family Assistance Tax Credits: evolution and operation*, working paper 02/16, Wellington: The Treasury
- Nolan, P. (2004) 'When Work Does Not Pay: family structures and poverty traps in New Zealand's social security system', paper presented at the New Zealand Association of Economists conference, Wellington
- Nutley, S., H. Davies and I. Walter (2003) 'Evidence-based Policy and Practice: cross-sector lessons from the United Kingdom', *Social Policy Journal of New Zealand*, 20, pp.2-48
- Pearson, M. and H. Immervoll (2008) *Statement of Evidence: CPAG v The Attorney General*, Wellington: Human Right Review Tribunal
- Perry, B. (2004) 'Working for Families: the impact on child poverty', *Social Policy Journal of New Zealand*, 22, pp.19-54
- Perry, B. (2005) *Social Report Indicators for Low Incomes and Inequality: update from the 2004 Household Economic Survey*, <http://www.msd.govt.nz/work-areas/cross-sectoral-work/indicators-for-low-incomes-and-inequality.html>
- Perry, B. (2009a) *Household Incomes in New Zealand: trends in indicators of inequality and hardship 1982 to 2008*, Wellington: Ministry of Social Development
- Perry, B. (2009b) *Non-Income Measures of Material Wellbeing and Hardship: first results from the 2008 New Zealand Living Standards Survey, with international comparisons*, Wellington: Ministry of Social Development
- Perry, B. (2010) *Household Incomes in New Zealand: trends in indicators of inequality and hardship 1982-2009*, Wellington: Ministry of Social Development
- Roberts, H. (2005) 'What Works?', *Social Policy Journal Of New Zealand*, 24, pp.34-54
- Spier, P. (2010) *Effective Marginal Tax Rates for Working For Families Recipients*, Wellington: Centre for Social Research and Evaluation and Ministry of Social Development
- St John, S. (1997) 'The Measure of Success for Beyond Dependency: aims, methods and evaluation', *Social Policy Journal of New Zealand*, 8
- St John, S. (2006) 'Child Poverty: lessons from New Zealand', *European Journal of Social Security*, 8 (3), pp.299-316
- St John, S. (2007) 'Farewell to Tax Neutrality: the implications for an aging population', *Economic and Labour Relations Review*, 18 (1), pp.27-52
- St John, S. (2011) 'Working for Families', in M. Dale, M. O'Brien and S. St John (eds), *Left Further Behind*, Auckland: Child Poverty Action Group
- St John, S. and D. Craig (2004) *Cut Price Kids: does the 2004 'Working for Families' budget work for children?*, Auckland: Child Poverty Action Group
- St John, S. and M.C. Dale (2010) 'Evidence-based Evaluation of Social Policy', paper presented at the New Zealand Association of Economists annual conference
- St John, S., M.C. Dale and M. Littlewood (2009) *An Evaluation of 'In Work Benefits' in New Zealand: use of the in work tax credit to encourage labour supply: implications for an ageing population*, Auckland: Retirement Policy and Research Centre, University of Auckland
- St John, S. and A. Familton (2011) *Paid Parental Leave in New Zealand: catching up with Australia?*, CPAG backgrounder, 2011-1
- St John, S. and K. Rankin (2009) *Escaping the Welfare Mess*, working paper 267, Auckland: Department of Economics, University of Auckland
- St John, S. and D. Wynd (2006) 'The Impact of Economic Policy on New Zealand children', *Children's Issues*, 10 (1), pp.13-17
- St John, S. and D. Wynd (eds) (2008) *Left Behind: how social and income inequalities damage New Zealand children*, Auckland: Child Poverty Action Group
- Strategic Policy Making Team (1999) *Professional Policy Making for the Twenty First Century*, London: Cabinet Office, <http://www.cabinet-office.gov.uk/moderngov/policy/index.htm>, accessed 7 June 2002
- Treasury (2005) *This Year's Critical Issues: issues that relate primarily to labour utilisation*. Wellington: The Treasury
- Wakim, J., S. St John and D. Wynd (2008) *Child Poverty Action Group Briefing to the Incoming Government*, Auckland: Child Poverty Action Group
- Wylie, C. (2006) 'Making the Most of Research in Policy Making', paper presented at NZCER seminar, http://www.nzcer.org.nz/default.php?cpath=139_133andproducts_id=1737

Derek Wallace

The Embedded Temporality of Tools for Managing the Future

A strong focus in political and policy circles on ‘managing’ the future – most visible during the latter half of last century in tools and techniques of central and strategic planning – was itself the outcome of an explosion of interest, dating from the beginning of that century, in the idea of establishing a *science of administration*. This idea was in turn related to the burgeoning throughout the 19th century of the social sciences, and of ‘governmentality’ in general (Wallerstein, 1991; Dean, 1999). In the early 1900s, Charles Merriam, a political scientist who later headed the United States National

Resources Planning Board, coined a term which is emblematic of this whole development. The proper object of politics, he wrote, was no longer ‘the art of the traditional’ but ‘the science of constructive social control’ (quoted in Marini, 2001, 29).

At least until very recently, the resulting confidence about the ability to control the future persisted, despite the decidedly mixed success of government-led initiatives. During the same period, however, perceptions in non-governmental domains, beginning in philosophy and the natural sciences, had come increasingly to stress the unpredictability and contingency of future events and to express scepticism about the possibility of managing them. In fact, such ‘post-Newtonian’ perceptions can be said to have *preceded* the turn to intensive planning I have been referring to (e.g. William James, Bergson, the later Whitehead, and Heidegger in philosophy;

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Heisenberg in physics), although it is only in the last decade or so that they have come to be more widely influential in policy circles through the importation from the natural sciences of theories associated with 'complexity' and 'emergence' (e.g. Morcol, 2002) and a corresponding increase of interest in matters of process, timing and timeliness.

An important and largely unexplored question raised by these developments concerns the embedded capacities or entailments of the tools used by government to intervene in and attempt to manage the future. Specifically for my purposes, what presuppositions (no doubt largely unconscious) about 'time' are implied in or built into the design and functioning of these instruments and techniques? And further, what can consideration of this embedded temporality in relation to a contemporary privileging of dynamic complexity tell us about how effective the tools are likely to be? In the context of New Zealand history of the last 50 years (a context not dissimilar to that of other Western countries), such tools – broadly conceived to include techniques of social mediation – prominently, and to a certain extent chronologically, include (1) the use of national conferences to enlist expertise and secure consensus over future direction; (2) the use of computer-simulated economic modelling and forecasting; (3) the application of 'free-market' theories to economic and social management; and (4) the techniques of scenario construction.

My aim in this short article, drawing on my recently published book *Governing the Future* (Common Ground, 2011), is to illustrate the theme of embedded temporality just referred to by considering in turn, and to some extent evaluating, each of the exemplary tools and procedures listed above. Each, it can be noted, while continuing to have possible application today, is also paradigmatic of a particular period (its heyday, as it were) within the time span addressed here. It might even be argued in some cases that a tool was – in part – a response to the perceived shortcomings of a previous paradigm; but in suggesting this I do not mean to suggest that the tools have a similar scale or scope. It is rather that

each might be regarded as a reflection of an emphasis or understanding having particular resonance at a certain date. Moreover, they have in common the fact that they have all been recruited for the purpose of providing access to the 'big picture'.

I also need to make clear at the outset that I do not believe I am succumbing

What human beings are and will become is decided in the shape of our tools *no less than* in the actions of statesmen and political movements.

to a technological determinism whereby human activity is held to be wholly dictated by the capacities of available tools. Yet nor do I want to revert to an opposing instrumentalist view of seeing tools as neutral and freely adaptable aids to human rationality. The more nuanced approach I am taking here is summed up by Andrew Feenberg when he writes: 'What human beings are and will become is decided in the shape of our tools *no less than* in the actions of statesmen and political movements. The design of technology is thus an ontological decision fraught with political consequences' (1991, 3; italics added). I also wish to leave room for an understanding of the completely pervasive and unavoidable inter-implication of humans and technology, broadly conceived, as distinct from the 'take it or leave it' attitudes towards technology that remain characteristic of much thinking today. A brilliant exposition of the complex issues involved in this 'co-constitution' of technology and the human, with particular reference to language and contemporary digital media, can be found in Frabetti (2011).

Conditions of compatibility

Given a world resembling contemporary accounts of complexity and emergence, what should an effective future-management tool (if such is possible) be able to take account of? This is a world which, according to Ilya Prigogine (2001), moves very far from equilibrium as a result of the unpredictability of the movement of matter. It is a world which is forever in a process of becoming rather than a world of merely aggregative change from a stable or mature base. When we expand this conceptualisation from the physical sciences to include the human social world, we are faced with a 'spatio-temporal structure' (Prigogine's term), in which human action arises out of a *horizon of expectation* in interaction with a *space of experience* – the terms are Reinhart Koselleck's (in Ricoeur, 1994, 10-15). In other words, our temporal orientation is inseparable from the ever-shifting social, physical and psychological *arrangements* in space (of bodies, objects, emotions, thoughts) that we remember, perceive and, not least, imagine.

Very briefly, then, a tool that was equal to socio-environmental complexity would have to expect the unexpected. It would have to be able to take account of human goals and anticipations, not just known (or typical) actions. It would need to take account of developmental dynamics and processes, but resist the temptation to the teleological. It would need to make room for the broadest possible contextualisation of events and actions.

Conferencing

The value accorded to conferencing is grounded above all in the desire to allow, in spatio-temporal terms, the more or less simultaneous laying out of all the relevant viewpoints, with the hope that such airing will lead to rational discussion and eventual consensus. It is based on the assumption that, in Habermas's words, 'the parties are oriented towards agreement and *not just* towards their own respective success' (Habermas, 1983, 173, emphasis added). In historical terms, it is a technique particularly suited to the 'corporate' administration of the economy that was popular in many capitalist countries in the 1960s, in which it is assumed that society

can be fully represented by capital, labour and government, but which also bears similarity, as Bevir (2006) points out, to contemporary 'system governance'.

In the New Zealand post-war context, this recipe for achieving consensus was inaugurated by the Industrial Development Conference, organised by the Department of Industries and Commerce and held in June 1960. Very briefly, its purpose was to establish an agreed direction for diversifying the New Zealand economy away from its dependence on primary agricultural products (wool, butter, meat carcasses, etc.). The conference opened with plenary addresses from the prime minister, Walter Nash, the head of the Department of Industries and Commerce, W.B. Sutch, and the farmers' official representative, W.P. O'Shea. The gesture of inclusion towards the farmers, as the dominant force in economic production, backfired. O'Shea used his centre-stage opportunity to tell the exact opposite story to the one the government was trying to have heard: he claimed that if the farmers were only given enough resources, they could solve New Zealand's economic problems all by themselves – i.e. by producing more of the same – for as long as anyone present was likely to be interested in the matter.

The conference proceedings (Department of Industries and Commerce, 1960) do not provide any certain evidence that these contradictions were exposed and explicitly discussed. Hence, although the conference concluded on a consensual note, it illustrated the Achilles' heel of the technique: there is not much it can do if the primary objective of one or more of the participants is, contrary to the condition identified by Habermas, to express and defend its own interests. This is a common pattern with representational conferences predicated on faith in rational communication: what is expressed assertively is received politely, rather than with agonistic critique or concerted debate, and the result is typically an unchallenged disjunction of perspectives. The original problem the conference has been called to address is temporarily covered over by the bonhomie with which such events conventionally conclude, only to resurface later.

Another notable feature of conferencing in general – one that continues to be particularly familiar in an academic context – is the division of the given time into, on the one hand, plenary sessions that all can attend, and on the other, parallel sessions that participants must choose between. The variation on this idea in the political context of the 1960 conference was the establishment of a committee structure whereby the main business of the conference was allocated to independent groups working simultaneously on their allocated areas of responsibility. One group was charged

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with exploring and reporting on external influences on the New Zealand economy, while another addressed internal considerations; one group focused on natural resources in isolation from another discussing human resources.

The divisions imposed by this process are sufficiently suspect as to have rendered the proceedings problematic in advance. The main assumption informing this method of operating is that these are autonomous tasks that can be allocated simultaneously to separate – but implicitly homogeneous – groups and the results subsequently collated without the need for considering how the different and deviating dynamics and discussion trajectories of the groups (the temporal aspect) might affect

the compatibility of their individual results. Within each group or domain of responsibility, discussion will stop short of discussing fully what would be better treated as a set of interrelations (the spatial aspect). (This still happens today in problem-oriented conferencing through the habit of instigating break-out groups; the technique can work if the subsequent reporting back and discussion is extensive, but all too often it isn't.) The image this practice brings to mind – a machine taken apart, worked on, and then put together again without any loss – is entirely consistent, of course, with the Newtonian engineering ethos (technical, rational, instrumental) that went virtually unquestioned in the 1960s and remains not unusual today.

What a dynamic temporal perspective allows us to see is that the problem with consensus-building as it was and sometimes still is envisaged, and as it was typically enacted in and encouraged by the conference technique of full representation of competing interests, is not the pursuit of consensus *per se* (that is crucially necessary work in social formation and maintenance), but rather the tendency to see national unity or full representation (and hence coordination) as something that can or should be achievable *all at once*. This is arguably too static and overly utopian an expectation, particularly in contemporary multicultural societies. National unity and consensus is achievable, but not when – as is conventionally the case – it is conceptualised in exclusively socio-structural or spatial (i.e., a-temporal) terms. In a view based on a strongly contingent emergence, the best that can be aimed for realistically is an *historical* unity; one which is registered only in the continuing existence of a given nation despite the periodic rifts and clashes that threaten it, and which requires ceaseless maintenance work on the part of government in order to settle temporarily the grievances that the maintenance process imposes cyclically on one group after another.

This is not to suggest ruling out conferencing as a decision-enabling procedure, but to recognise the over-privileging of immediacy and inclusivity

that the technique can encourage. Conferencing, to be effective now, would arguably also need to be employed much more regularly than it has been in New Zealand since its heyday in the 1960s, so that an appropriate model can be progressively built.

Economic modelling

The National Development Council system, established in the late 1960s, was the product of a further national conferencing exercise. The council and its satellite sectoral committees (again recalling a Newtonian mechanical universe) provided the institutional arrangements for gathering data from all sectors of the economy and setting targets for future output. A vital tool for the management of this process was the computerised model of the economy, a tool which, over the years, has been subjected to the kind of critique and refinement that resonates with, but can be further illuminated by, an analysis of embedded temporality.

Bryan Philpott became the leading New Zealand exponent of econometric modelling, beginning his work at Lincoln University in Canterbury, before moving to Victoria University of Wellington. Here is a brief account of his project, as described later by the Task Force on Social and Economic Planning in its report, *New Zealand at the Turning Point*:

to produce an economic model which could be used to assess where the economy was heading on current trends, what it could feasibly or optimally achieve and what were the policy implications of the optimum blueprint. The model attempted to take account of the complex interdependencies among different sectors of the economy, and alternative assumptions that could be made about important factors in development such as the terms of trade, likely trends in productivity, ratio of savings to national income and the like. (Task Force on Social and Economic Planning, 1976, 12)

It must be acknowledged immediately that, while the description states that the model is based on extrapolation of current trends, an important qualification

appears nevertheless to be implicit in the wording: it is not necessarily assumed that current trends will continue, merely that a certain outcome can be predicted if they do. And yet, even with this qualification there remained, at the time, confidence in the ability of research to separate out and establish the causes of the various dynamics, as well as to quantify the sequential logic of their combination. To this extent, and to the extent that the complexities of human response are absent from the model, the work does not depart from the reductionism of mechanistic Newtonian science. In other words, while

The market cannot embrace, much as its advocates would like it to, the totality and variability of human activity, including its inconsistency and irrationality.

such models (i.e. as were operative in the 1970s) can perform complex calculations, they are still essentially 'additive' or 'linear': the results are derived entirely from – or reducible to – the combination of the numerical components fed into the model by the analyst or forecaster. By contrast, in a non-reductive account – one informed by complexity or emergence theory, for example – the modeler would have to take into account that the results are not simply cumulative, but that any variation or deviation in the values given to the individual elements will, in combination, ramify unpredictably throughout the whole. In the modellers' own terms, it is the problem – never fully solved – of allowing for what came to be known, following criticism of the extrapolation basis of the earlier models, as 'cointegrated variables'.

In Philpott's (1971, 11) terms, considered in relation to the spatio-temporal foundations of emergence theory (Prigogine, 2001), this representational and extrapolating technology is, as he himself put it, 'coherent-rational': that is, it fits logically together (space) while obeying a logical sequence of operations (time). The difficulty with it stems from the presumption that the temporality of the economy can be accounted for by a strictly causal sequence.

The market mechanism

The faith in the ability of the state to determine, by comprehensive planning, a bountiful future, a faith that prevailed amongst societies of every ideological stripe in the 1950s and 60s, came to be contested by the undercurrent of 'free market' or 'neo-liberal' ideology that gradually rose to prominence in Western countries in the late 1970s and 80s. The failures of modelling in the early 1970s in the wake of major economic turbulence undoubtedly contributed in some part to this development. There can be no doubt that if it worked according to theory, the market would be the instrument of dynamic temporal management *par excellence*. In its radical form, the idea was that if the autonomous individual, who is supposedly possessed of full information – or at least the same information as every other functional individual – makes rational choices based on long-term self-interest, the resulting aggregated decisions of supply and demand would be the best possible outcome for everybody. This market situation, constantly evolving according to unpredictable new combinations and interactions, is 'free' in the sense of being *open to change* – in the last analysis 'emergent', i.e., undeterminable by external forces alone. In practice, of course, as has been well documented, the results are destructive for a good many of the human participants, as well as for the environment, perhaps because, as William Connolly (2011, 37) points out, the market cannot operate in isolation from potentially destabilising interactions with innumerable other systems or fields of force. The market cannot embrace, much as its advocates would like it to, the totality and variability of human

activity, including its inconsistency and irrationality.

It is popularly believed that the New Zealand Treasury adopted this free market conception as part of its 'reform' of the economy in the 1980s. A fierce critic of neo-liberalism, Jane Kelsey, in *Reclaiming the Future*, provides a typical expression of the charge:

The 'fundamentals' of the New Zealand Experiment – a deregulated labour market, a minimalist government, a strict monetarist policy, the liberalisation of trade, investment and markets, and fiscal restraint – comprise an ideologically coherent package that is premised on *unfettered* market forces and a limited state. (Kelsey, 1999, 29; emphasis added)

However, I would argue that the Treasury did not embrace the free market to the extent commonly believed. Although clearly wary of planning, the Treasury appears to have conceived of *intervention* as an essential aspect of a market-based future-management tool that governments have at their disposal. Here is the Treasury 'market' view, from *Economic Management*, briefing for the newly-elected Labour government of 1984:

The most obvious body to fulfill the role of 'setting the rules of the game' and ensuring that they are followed is the Government. In a sense, then, all markets can be thought of as having a label attached reading 'made by Government'. Viewed in this way, it does not make sense to treat 'free' markets as being at one end of a continuum which ranges from no government involvement to complete government control. Since a decision not to interfere with the operation of an existing market is then equivalent to allowing a given set of interventions to stand, it is more useful to consider the question 'what set of interventions is most appropriate?' than to attempt to answer those of the form 'should the Government intervene?' In any particular intervention decision, therefore, the extent to which market forces are utilised is a matter related

primarily to the process by which an objective may be achieved rather than an objective in itself. (New Zealand Treasury, 1984, 296)

This prescription strikes me as more consistent with what government did in the 1980s than was popularly believed at the time. Arguably, it shows a degree of sensitivity to what is required of political institutions and practices if the objective is to sustain a market system in the face of an unpredictable future and volatile human response; and as such is consistent with emergence theory, which, when

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translated to the realm of human action, suggests a policy of minimal guidance, of seeding and strategic nudging which will vary in intensity according to the demands of the moment ('what set of interventions is most appropriate'). If the word 'appropriate' in relation to market intervention means we can understand governments to be endorsing a policy of timely and short-term adjustments, then there is a clear resonance with descriptions of emergent or complex adaptive systems such as that provided by Stacey (1996, 87): 'because complex adaptive systems are the product of their precise history, and because it takes time for small

changes to escalate in such systems, their short-term behavior is predictable'. That said, it should also be noted that this interpretation of temporality-informed market action still leaves ample room for criticism of what the Treasury judged to be an 'appropriate' level of intervention during the period in question.

Scenario construction

In the process labelled 'foresight', popular with many governments in the 1990s, and in part a response to recent market failures, we have the potential for a radical departure from previous attempts to manage the future, and one which no doubt was connected also to the contemporaneous ideas of 'reinventing government' and renewing the 'purposive state' (Spicer, 2004). Instead of analysing trends or setting targets based largely on extrapolation from the present, or even, as in the case of the Treasury, correcting divergences from an established or preferred setting – a practice which arguably still assumes an overly linear understanding of change – we have in foresight the idea of envisioning a possible desirable state of things and then developing a strategy for achieving it (sometimes referred to as 'backcasting', as distinct from forecasting). Or, alternatively, we have the notion of positing a range of equally plausible futures out of which particular possibilities can be aimed at, encouraged, resisted or prepared for. In either case there is an assumption that the present, while it may not be fully understandable, is open and malleable to a degree that at least potentially outweighs those aspects which are determining.

The key point of interest for continuing innovation in foresight-related planning, and for research on temporality in government, arising from New Zealand's experience at that time was the development and publicising of a set of contrasting 'national scenarios' of a possible future. In socio-temporal terms, the use of alternative scenarios suggests acceptance of a more open future than was apparent in earlier initiatives, and, moreover, potentially signifies a decisive break from the dubious temporal ideology of economic development, i.e., from development understood teleologically as

either a logical destination or a progressive fulfilment. Unfortunately, the national scenarios produced by the Ministry of Research, Science and Technology (1997) during the early stages of what came to be known as the Foresight Project were rather too technically undeveloped to live up to the promise of the idea. However, I want to reflect more closely on whether scenario construction as a tool for managing the future *could* in principle be compatible with a temporal outlook consistent with complexity and emergence.

There is a fair degree of consensus in the literature on scenarios (e.g., Fahey and Randall, 1998; Staley, 2002; see also Bishop et al., 2007 for a comprehensive comparative survey) as to the main characteristics of a good set of scenarios:

1. All alternative futures represented in a set of scenarios must be plausible while at the same time clearly contrasting with each other. None should be wholly good or wholly bad. All should include attractive elements and be presented positively, which means, most importantly, that they are capable of enabling genuine dialogue and exploration of future possibilities to take place around them, independently of whether any 'choice' will eventually be made.
2. A set of scenarios should not fall into an identifiable pattern of comparative likelihood or impact. As scenario-design experts Peter Schwarz and James Ogilvy (1998, 78) express it: 'beware the 'middle of the road' approach trap – that is, selecting three scenarios that offer 'large, medium, and small' versions of the future. Too often, managers will be tempted to identify one of the three – usually the middle version – as the most likely scenario. Such simplistic scenarios don't challenge the preconceptions of the decision makers; neither do they provoke managers to imagine innovative strategic options and their implications. When presented with large, medium, and small scenarios, managers have a tendency to treat the most likely scenario as a prediction, thus failing to explore the other scenarios fully.'

3. The main 'key drivers' (i.e. known environmental, institutional and cultural forces and trends, such as globalisation, population ageing, or climate change) should be invariably present – although given variable weightings – across all scenarios. The best approach is to make a small selection of those drivers whose presence is to be expected but where there is currently much uncertainty as to what their actual impact will be. Scenario-building, in line with an understanding of emergence theory, gains more value from exploring how

... what I have offered in focusing sharply on embedded temporality is ... a particularly relevant addition to the methods for conducting critique of policy development instruments as they emerge.

the same base (or 'matrix') of drivers or conditions might play out differently according to the different intensities or combinations experimented with across a scenario set.

4. Scenarios should be realistic, in the sense of fleshed out with details. They should make good use of invented historical detail showing how the situation depicted could have come about, allowing a reader to enter into and explore the picture of the future being offered.

This matrix method of scenario formation, if carried out in accordance with the above prescription, is surely

consistent with current conceptions concerning the nature of change and how it can be influenced. Specifically, the method overtly recognises the fact that particular determinants can play out very unpredictably. It also allows the variety and variability of human perceptions and attitudinal responses to be taken into account more readily than economic modelling does. Arguably, however, scenarios produced according to the techniques described above draw too heavily and exclusively on memory, that is, on people's sense of the established forces informing the present (the 'drivers'), and not enough on alternative dreams or purposes. In this respect, an alternative and popular conception of scenarios – the free envisioning of a desirable future that I mentioned earlier – offers a possible corrective, although these typically go too far in the opposite direction, not being sufficiently anchored in the drivers. Certainly, the two approaches to scenario formation can't easily be combined (I attempt to do so in the final chapter of *Governing the Future*, but there is not the space to discuss that here). Even so, of the techniques discussed in this article, scenario construction seems clearly to be the one most suited to the understanding of temporality that I have been favouring. And therefore it is regrettable that more attention has not been paid to this technique since the Foresight Project was abandoned in 1999.

Conclusion

The governmental tools I have been discussing have not, of course, gone unquestioned before now. However, what I have offered in focusing sharply on embedded temporality is, I hope, a particularly relevant addition to the methods for conducting critique of policy development instruments as they emerge. I want to reiterate that the temporal commitments associated with these, or any other, techniques are not necessarily locked in or resistant to modification (as a technological determinism would have it); nevertheless, design and the expectation deriving from initial use will together establish a trajectory of application (a 'destiny', as it is sometimes evocatively said) that can easily assume

permanence if not consciously reflected upon. Nor should it be supposed that I am advocating the avoidance of any of the tools discussed above. Indeed, I would argue that governments should be bold enough to continue employing these sorts of big-picture initiatives, but that they should be used in an integrated manner (e.g. Fontela, 2000), as part of an overall strategy for thinking about and managing the future. However, the last few years have not been encouraging in this regard.

References

- Bevir, M. (2006) 'Democratic Governance: systems and radical perspectives', *Public Administration Review*, 66 (3), pp.426-36
- Bishop, P., A. Hines and T. Collins (2007) 'The Current State of Scenario Development: an overview of techniques', *Foresight*, 9 (1), pp.5-25
- Connolly, W.E. (2011) *A World of Becoming*, Durham; London: Duke University Press
- Dean, M. (1999) *Governmentality: power and rule in modern society*, London: Sage
- Department of Industries and Commerce (1960) *Industrial Development Conference Report*, Wellington: Government Printer
- Fahey, L. and R.M. Randall (1998) (eds) *Learning from the Future: competitive foresight scenarios*, New York: John Wiley and Sons
- Feenberg, A. (1991) *Critical Theory of Technology*, New York: Oxford University Press
- Fontela, E. (2000) 'Bridging the Gap Between Scenarios and Models', *Foresight*, 2 (1), pp.10-14
- Frabetti, F. (2011) 'Rethinking the Digital Humanities in the Context of Ordinary Technicity', *Culture Machine*, 12, available at <http://www.culturemachine.net/index.php/cm/issue/current>
- Habermas, J. (1983) *Philosophical-Political Profiles*, Cambridge, Mass.; London: MIT Press
- Kelsey, J. (1999) *Reclaiming the Future*, Wellington: Bridget Williams Books
- Marini, J. (2001) 'Constitutionalism, the Public Philosophy, and Political Science', *Perspectives on Political Science*, 30 (1), pp.29-36
- Ministry of Research, Science and Technology (1997) *Building Tomorrow's Success: guidelines for thinking beyond today*, Wellington: Ministry of Research, Science and Technology
- Morcol, G. (2002) *A New Mind for Policy Analysis: towards a post-Newtonian and postpositivist epistemology and methodology*, Westport, CT; London: Praeger
- New Zealand Treasury (1984) *Economic Management*, Wellington: The Treasury
- Philpott, B. (1971) *Doubts about Economic Planning: an inaugural address*, Wellington: Victoria University of Wellington
- Prigogine, I. (2001) 'The Arrow of Time and the End of Certainty', in J. Binde (ed.), *Keys to the 21st Century*, New York: Berghahn Books, and Paris: UNESCO
- Ricoeur, P. (1994) 'Comming to terms with Time', *The Unesco Courier* 4, pp.10-15
- Schwartz, P. and J.A. Ogilvy (1998) 'Plotting your Scenarios', in L. Fahey and R.M. Randall (eds), *Learning from the Future: competitive foresight scenarios*, New York: John Wiley and Sons
- Spicer, M. (2004) 'Public Administration, the History of Ideas, and the Reinventing Government Movement', *Public Administration Review*, 64 (3), pp.353-62
- Stacey, R. (1996) 'Emerging Strategies for a Chaotic Environment', *Long Range Planning*, 29 (2), pp.182-9
- Staley, D.J. (2002) 'A History of the Future', *History and Theory*, 41 (4), pp.72-89
- Task Force on Social and Economic Planning (1976) *New Zealand at the Turning Point*, Wellington: Task Force on Social and Economic Planning
- Wallerstein, I. (1991) *Unthinking Social Science: the limits of nineteenth century paradigms*, Cambridge, UK: Polity Press

Engaging End-Users in Telecommunication as Complementary Assets: creating more spaces at the policy table

In recent years, governments and telecommunication companies across the world have poured billions of taxpayer and shareholder dollars into establishing national broadband networks in the light of promises of spectacular returns on investment.¹ For example, it has been estimated that the \$NZ1.5 billion ultra-fast broadband (UFB) network will account for a 7.2% increase in New Zealand's GDP by 2026, assuming the roll-out is achieved by 2014 (Berl Economics, 2010, 8). Although that roll-out date now appears unlikely, even half the projected growth would indicate significant benefit from the UFB to the economy. Access Economics in Australia gives more a modest GDP growth projection of 1.1% as a direct consequence of next-generation

telecommunication infrastructure (Martin, 2010), involving a \$A40 billion investment in Australia's national broadband network (NBN), of which taxpayers will contribute at least half (Given, 2010, 540). Similarly, the World Bank estimates the economic impact of broadband on high-income economies at 1.2% growth in GDP (Quiang, 2009).

However, many question the methodologies and assumptions that inform extrapolations of growth that frequently accompany calls for major government investment in national broadband infrastructure (Kenny and Kenny, 2011; Howell and Grimes, 2010; Martin, 2010). For example, Howell and Grimes observe

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that most projections are derived from 'extremely limited qualitative and case study analyses rather than quantitative research' (2010, 128), further noting that the economic gains derived from more widespread deployment of existing ADSL broadband technology are rarely tested. The failure to differentiate the growth curve gains from current broadband delivery roll-out across time and those projected from installing fiber-optic systems to the home may lead to distortion of the true benefits. Across the Tasman, Martin (2010) is critical of the lack of cost-benefit analysis associated with the NBN, the Australian version of New Zealand's UFB. Reflecting Howell and Grimes' concerns, Kenny and Kenny (2011) identify a tendency of super-

and Grimes consider the emergence of a potential broadband paradox stimulated by research 'championed by supply-side interests' (p.133), and they suggest the need for more attention to be given to focused quantitative studies based on actual and projected demand for faster broadband services as well as the applications that drive them. The suggestion has merit and the paucity of demand-side research is a justifiable concern; but critics echo the response voiced by a former Australian communications minister when questioned about the lack of cost-benefit analysis for the NBN: 'you're dealing with things that are inherently unpredictable [and] the kind of traditional CBA that is done for a rail line ... would only tell

have the power to complement the delivery of existing public and private goods and services, not singularly transform them as if operating in a sociopolitical vacuum. Ellul, moreover, extends the definition of technology and criticism of its reductionism to all scientific methodologies, including economics (Ellul, 1964, 163). Unfortunately, even sophisticated multivariate econometric models have questionable forecasting records (McNown, 1986; Stekler, 2010). How, then, are decisions concerning significant public investment involving considerable sums of taxpayer dollars to be evaluated? Increasingly, triangulation methods, including multiple data-collecting methods from qualitative, quantitative and critical traditions, are emerging as ways of overcoming individual bias and the limited scope of inquiry from which any single approach suffers.

The analysis of the computer and ICT paradox within individual companies and outcomes may provide possible answers, with application as well to other public policy challenges. Brynjolfsson and Hitt observe that the gains in productivity and output of computerisation are significantly greater (by a factor of five or more in point estimates above computer capital costs) over long periods for firms that make complementary investments in organisational capital, such as new work systems, changes in business processes and organisational structure, and new means of interaction between suppliers and customers (Brynjolfsson and Hitt, 2003, 793; see also Teece, 1986). In other words, the combination of investment in technology, capital and labour over time and their subsequent interaction manifest economic gains in the data and reduce the productivity paradox. Furthermore, citing the example of Wal-Mart's efficiencies derived from its new computerised supply chain management, they note that capital investment in intangible, complementary assets alongside tangible physical ones results in a spillover of benefits to not only consumers but also competitors who imitated the innovation (p.805). Although the research is limited to company productivity, the findings are instructive for policy makers and governments

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fast broadband proponents to conflate the benefits of all technological development 'from biotechnology to containerized transport', which may be associated with any internet service delivery (p.6). Furthermore, they observe a similar conflation and boosterism associated with projected benefits from ICT deployment in the comments of US Federal Reserve chairman Alan Greenspan and journalist Thomas Friedman, benefits which failed to materialise (p.5).

Stating what is known as the computer paradox, in 1987 Nobel laureate economist Robert Solow observed, 'we are seeing computers everywhere but in the productivity statistics' (Brynjolfsson, 1993, 1). Solow's statement challenged utopian expectations of economic growth informed by assumptions of the singularly transformative power of ICTs. Arguably, his concerns over an inflated valuation of ICT were realised in the 'dot-com' bubble burst of 2000 and the ensuing fall-out from overvalued ICT stocks. Howell

you exactly what the assumptions and prejudices were of the people drafting the initial terms of reference' (ABC Insiders, 2009). Broadly speaking, that is, how do you project demand for advanced applications yet to be developed that will run on technologies yet to be widely rolled out?

Arguably, the narrowly defined economic parameters that inform both supply- and demand-side approaches suffer from a philosophical shortcoming. Known as technological determinism (see Carey in Munson and Warren, 1997, pp.316-21; Ellul, 1964), the monolithic notion that any technology, or basket of technologies, has the uniform capacity to transform society is problematic. Technologies alone create neither utopian nor dystopian futures. Technological determinism ignores the social, cultural, commercial and political contexts in which technical innovations evolve and operate (Carey in Munson and Warren, 317). In other words, digital technologies

considering large-scale public investments and programmes, in terms of both choice and process: competitive advantage can be maintained if companies are willing to suspend silo-building mindsets and a singular focus on achieving short-term economic efficiencies.

Closely associated with the concept of valuing intangible complementary assets is Chesbrough's (2003) notion of open innovation, which describes the 'pooling of knowledge for innovative purposes where the contributors have access to the inputs of others and cannot exert exclusive rights over the resultant innovation' (Chesbrough and Appleyard, 2007, 60). Significantly for policy makers, renewed concepts of openness involve a reconsideration of the processes that both create and capture value, which approximate 'public good' characteristics in that consumption by one does not require exclusion of another (ibid.). Similarly, as in networks, each connected node adds value to the overall system. Chesbrough and Appleyard cite the examples of social networking websites, the Linux operating system and Google as manifestations of the open innovation paradigm, popularised by Linus's law: 'Given enough eyeballs, all bugs are shallow' (i.e., easy to fix).

Arguably, modern democracies such as New Zealand have a vast array of potential complementary assets in their consumers and citizens. However, much of the value is dormant until organised and mobilised through serious government engagement, including investment to leverage and complement capital set aside for material technologies. Thus, complementary assets may take the form of both expert and lay citizen panels. Mintrom (2011) lays out the case for the former in his analysis of former Treasury secretary Graham Scott's report *Improving the Quality and Value of Policy Advice* (2010). He identifies a disjunction between the world views of expert policy advisers and political ministers, and the need to incorporate Mark Moore's notion of public value, which considers the perception and desires of citizens and their representatives, when evaluating policy. One way this can be achieved is by public managers establishing

institutions which build broad support for policy change by bringing together interested groups from different sectors of society to leverage knowledge and skills. Mintrom cites examples such as the Brookings Institution, the American Enterprise Institute, and, locally, the New Zealand Institute when it was led by David Skilling as successful examples of organisations that build public value into the policy process.

Such institutions harness the complementary assets described above, but limit the concept to gatherings of technocrats and special interest groups translating policy advice into user-friendly language for politicians and citizens.

In an age of convergence of terms as well as technologies, it may be tempting to consider the 'consumer-citizen' as a descriptor to define end users.

It appears as a sophisticated version of Grunig's two-way asymmetrical model of public relations which emphasises research on and persuasion of target groups, which is practiced by most major corporations (Grunig, 1992). However, an extension of the concept of complementary assets may take a form approaching Grunig's two-way symmetrical model, which emphasises mutual communication and engagement between an organisation and its publics. A more inclusive definition of complementary assets involves a measure of boundary-spanning, considered deliberation of all arguments, and interaction as articulated in literature pertaining to deliberative democracy (see Cohen, 1989; Fiskin, 2011). Arguably, consultative-participative processes that tap into both scientific expertise and community knowledge add public value and provide an economic benefit as complementary assets.

Consumers and citizens at the end of the line Digital strategies of governments, councils and communities emerge from

the blurring of previously distinct media technologies and industries: computers, telecommunications, and broadcasting and print media (Barr, 2000, 25). The phenomenon described as convergence of content and carriage is the driving force of so-called digital societies.

At the end of the mix of new and not-so-new technologies is the end user, now commonly called the consumer. However, regulatory and social advocacy agencies tasked with overseeing the safe and equitable distribution of digital services are revisiting how they frame the end user. For example, in a restructuring in December 2009 the Australian Communications and

Media Authority (ACMA), Australia's national regulator for broadcasting, the internet, radio communications and telecommunications, created a Content, Consumer and Citizen Division representing a 'convergent grouping of ACMA "social" regulation functions' – specifically, the ACMA stated, recognising 'a new weighting to the role of the citizen' as a key driver (2009). In an age of convergence of terms as well as technologies, it may be tempting to consider the 'consumer-citizen' as a descriptor to define end users.

However, critics of a designation that conflates the two concepts argue that the foci and priorities of one are antagonistic to the other. For example, the atomistic calculus associated with notions of researching consumer needs and market segments sets the very parameters which prohibit policy attention to broader issues of public interest associated with citizenship, such as equitable, affordable access across the community. Livingstone (2008) draws on communication and broadcasting policy deliberation in the

Table 1: Consumer and citizen interests

Consumer interest	Citizen interest
Wants	Needs
Individual level	Social level
Private benefits	Public/social benefits
Language of choice	Language of rights (inclusion)
Short-term focus	Long-term focus
Regulate against detriment	Regulate for public interest
Plan to roll back regulation	Continued regulation to correct market failure

Source: Livingston (2008)

United Kingdom that, particularly in the earlier stages of addressing public policy issues associated with convergence, differentiates between the characteristics of consumer and citizen interest, as shown in Table 1. However, she observes that later positions by politicians and regulating bodies divide citizen and economic priorities, relying on the market to address most concerns. Taking another perspective, both consumer and citizen interest characteristics are captured and valued in an expansive definition of intangible complementary assets.

As a corollary, education programmes and initiatives that encourage end users to engage with issues as engaged stakeholders in policy processes rather than as passive consumers are likely to stimulate an increased sense of ownership and participation in outcomes that benefit the whole community.

Overcoming complexity

Once an all-encompassing appreciation of end users is developed, the challenge is to motivate and facilitate their involvement in policy discussions. There is no denying the baffling array of terms and concepts that define telecommunication and ICT discourse. ICT represents the contested territory of many disciplines, including engineering, physics, electronics, economics, law and public bureaucracy. Collective interests morph into the complex conceptual terrain associated with network electronics, econometrics and competition law characterised by converged technologies, industries and markets.

Despite the technocratic complexity, issues of access and participation for

end users as individuals and members of a collective polity are relatively simple: issues such as availability, affordability, safety and reliability. Consumers work through these and similar issues in purchasing activities every day. However, at a policy level, where the outcomes relate to significant community investment in terms of finance, time, risk and other consequences, the picture is more complex and holistic. An appreciation of the interrelationships among a number of interconnected technical, social, economic, legal and political issues is required.

Mnemonics such as acrostics break down complex constructs into concepts that are more easily committed to memory. Using the first letter of related concepts to form an easily recognisable word or phrase aids both retention and reflection. Once memorised, it is easier to reflect on the holistic functions which characterise constructs that involve the dynamic interaction of networked commercial, technological, political and cultural elements. A simple example of an acrostic that could be used to define community ICT policy considerations and encourage broader community participation is FIT FOR US. This acrostic is based on a presentation prepared for the Small Enterprise Telecommunications Centre Limited (SETEL) of Australia, a national research and advocacy group for small businesses (Bourk, 2003). Arguably, despite changes in technologies and industry structures the guiding principles maintain their relevance. The community desires affordable interconnected digital services that are 'fit for us':

- Flexible

- Interconnectivity
- Transparency
- Fast communications
- Ownership and control
- Reliable
- Ubiquitous
- Security / Privacy

Flexibility conveys the idea that the diverse telecommunication needs of a community with varying levels of digital literacy are met by services packaged to their specific requirements.

Interconnectivity describes the ability to use one or more service providers seamlessly without the requirement to purchase new equipment and learn complicated software processes linked to network access.

Transparency describes product, pricing and policy data that is accessible, comparable and accountable across service providers and policy makers in advertising and other communication literature.

Fast communications: admittedly, fast communications is a relative concept, but the community should feel that access to the internet, and other telecommunication services, such as call centres, is neither slow nor inefficient. Most end users are pragmatic. They aren't interested in technical discussions about bandwidth or debates surrounding digital divides; they just want the ability to receive valued content and communicate with key publics when and where they want in the most efficient and effective way.

Ownership and control: community and business groups want to 'own' their services. I am not referring simply to possessing the wires, computers and telephones. Ownership of a service carries with it the sense of control over an essential 'set of tools' to engage in processes of transaction, education and communication.

Reliable: continuous, reliable telecommunication service is perhaps the major expectation that businesses have of carriers. When a service fails, businesses are disadvantaged in at least two ways: first, the direct loss of communication and business transaction opportunities, which can only

be calculated on a case-by-case basis; second, the damage to their own reputations for reliability caused by misunderstandings and misgivings of their customers as a flow-on effect from outages. Governments and councils investing in significant telecommunication infrastructure should monitor that capital expenditure levels are maintained to ensure services to the community are future-proofed.

Ubiquitous: the community wants ubiquitous access to services. Within reason, geography should not be a significant barrier to accessing any telecommunication service required by a business.

Finally, in terms of *Security/Privacy*, the ability to select and exchange information with as many or as few as desired is emerging as a major concern for end users. Network security standards are an issue of national significance and must be monitored by government regulatory bodies.

Discussion around the concepts described by acrostics such as FIT FOR US is predicated on a conscious effort being given to understanding the interrelationships between two or more variables. In other words, an element such as transparency cannot be addressed fully without issues of ownership and control also. For example, attempts to make material more transparent by reducing technical jargon or simplifying pricing plans may facilitate businesses to own and manage their telecommunication services, as well as make more informed choices

between competitive offerings. Another example relates to negotiating flexibility and reliability: are businesses willing to compromise on service reliability for the flexibility of accessing new pilot technologies? Finally, discussions related to FIT FOR US must include addressing the role of regulation for each element and the overall network.

The FIT FOR US model is not exhaustive, but an example of how mnemonics may be used to encourage and empower end users to participate in community discussions of ICT policy at all jurisdictional levels. It is one way that policy advice can be 'transformed into language that resonates with the public' (Mintrom, 2011, 10). However, for community participation to maximise its innovative value as a complementary asset requires commitment and investment in resources from government and state institutions. The Australian Communications Consumer Action Network (ACCAN) is an innovative example of a state-sponsored organisation that has many characteristics of the complementary asset advocated in this article. Launched in 2009, ACCAN is an amalgamation of smaller citizen, business and advocacy groups and receives \$A2 million as a peak organisation to canvass community opinion, fund related research, and lobby industry and government for affordable, accessible communication services for all Australians (Australian Government, 2010; Accan.org.au).

To summarise, this article began with questionable claims that a significant public investment in advanced broadband technology alone will result in major economic gains to the economy. With reference to similar transformative power being promised by computerisation in the 1980s and 90s, which resulted in the apparent paradox of the widespread diffusion of computers and less than expected gains, some scholars express scepticism that the projected benefits of the UFB network will be realised. They point out that factoring contemporaneous complementary investments in intangible assets into the equation resolved the paradox, albeit over a longer time period. If, as some suspect, we are seeing the emergence of a broadband paradox fed by excessive speculation over the transformative power of certain broadband infrastructure, where are the complementary assets? The task remains for New Zealand governments and state institutions to leverage technical capacities by investing further in complementary assets formed around the principles of expanded notions of open innovation, public value, and deliberative democratic processes. In this way, inclusive consultative-participative processes are not simply markers of mature democracies but make sound, long-term economic sense.

¹ I am indebted to the comments and helpful suggestions of reviewers of earlier drafts of this article.

References

- ABC Insiders (2009) <http://www.abc.net.au/insiders/content/2009/s2691054.htm>
- ACCAN.org.au
- Australian Communications and Media Authority (ACMA) (2009) 'ACMA restructure comes into effect', media release, 4 December, www.acma.gov.au, accessed 16 September 2011.
- Australian Government (2010) *Budget Paper No.2*, http://www.budget.gov.au/2009-10/content/bp2/html/bp2_expense-07.htm, accessed 14 December 2011.
- Barr, T. (2000) *Newmedia.com.au*, Sydney: Allen and Unwin
- BERL Economics (2010) *GDP Benefits of Early UFB Rollout to Wellington*, report to Grow Wellington and Greater Wellington Regional Council, November, Wellington: Business and Economic Research Limited
- Bourk, M.J. (2003) 'Bootstrapping to Broadband', paper presented to SETEL, Canberra
- Brynjolfsson, E. (1993) 'The Productivity Paradox of Information Technology', *Communications of the ACM*, 36 (12) pp.66-77
- Brynjolfsson, E. and L.M. Hitt (2003) 'Computing Productivity: firm-level evidence', *Review of Economics and Statistics*, 85 (4), p.793-808
- Chesbrough, H.W. (2003) *Open Innovation: the new imperative for creating and profiting from technology*, Boston: Harvard Business Press
- Chesbrough, H.W. and M.M. Appleyard (2007) 'Open Innovation and Strategy', *California Management Review*, 50, (1), pp.57-77
- Cohen, J. (1989) 'Deliberative Democracy and Democratic Legitimacy', in A. Hamlin and P. Pettit (eds), *The Good Polity*, Oxford: Blackwell

- Cunliffe, D. (2006) 'Connection for the deaf', associate minister of communications speech, 12 September, <http://www.med.govt.nz>, accessed 16 September
- Ellul, J. (1964) *The Technological Society* (first published 1954), New York: Vintage
- Fiskin, J. (2011) *When the People Speak*, Oxford: Oxford University Press
- Given, J. (2010) 'Take your Partners: Public Private Interplay in Australian and New Zealand Plans for Next Generation Broadband', *Telecommunications Policy*, 34, pp.540-9
- Grunig, J.E. (1992) *Excellence in Public Relations and Communication Management*, Hillsdale, NJ; London: Lawrence Erlbaum Associates
- Howell, B. and A. Grimes (2010) 'Productivity Questions for Public Sector Fast Fibre Network Financiers', *Communications and Strategies*, 78 (2), pp.127-45
- Kenny, R. and C. Kenny (2011) 'Superfast broadband: is it really worth a subsidy?', *Info*, 13 (4), pp.3-29
- Livingstone, S. (2008) 'What is the Citizen's Interest in Communication regulation?', paper presented to the Media, Communication and Humanity conference, London School of Economics, 21-23 September
- Martin, I. (2010) 'The Promised Land: Costs and Benefits of the NBN vision', *Telecommunications Journal of Australia*, 60 (2), pp.30.1-30.30
- McNown, R. (1986) 'On the Uses of Econometric Models: a guide for policy makers', *Policy Sciences*, 19 (4), pp.359-80
- Mintrom, M. (2011) 'Policy Advice and the Pursuit of Public Value', *Policy Quarterly*, 7 (3), pp.8-12
- Munson, E.S. and C.A. Warren (1997) *James Carey: a critical reader*, Minneapolis: University of Minnesota Press
- Qiang, C.Z. (2009) 'Telecommunications and Economic Growth', unpublished paper, Washington, DC: World Bank
- Stekler, H.O. (2010) *Perspectives on Evaluating Macroeconomic Forecasts*, Research Program on Forecasting working paper 2010-002, Washington, DC: George Washington University, <http://www.gwu.edu/~forcpgm/2010-002.pdf>
- Teece, D.J. (1986) 'Profiting from Technological Innovation: implications for integration, collaboration, licensing and public policy', *Research Policy*, 15 (6), pp.285-35

Local Government Strategic Planning in Theory and Practice

By the Local Futures Research Project

Local Government Strategic Planning in Theory and Practice is the second and final monograph of the Local Futures Research Project, a study of strategic policy and planning in local government, funded by the Foundation for Research, Science and Technology and based at the School of Government, Victoria University of Wellington. The book describes and analyses the experiences of a sample of local and regional councils as they worked with their communities to prepare Long-Term Council Community Plans under the Local Government Act 2002.

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Local Government
Strategic Planning
in Theory and Practice

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Gary Hawke

Sir Frank Holmes

Public Economist

For 60 years Frank Holmes was a colossus of New Zealand's social and economic development.

At the centre of his career was the university, and especially the Institute of Policy Studies. When he left the university for the second time, Frank said two significant things: first, that nobody who had contributed to his first farewell should feel obliged to contribute again; and secondly, that his heart was in the university and would remain so. It did. He never left.

The university council was sadly misguided in the 1960s when it maintained an established chimerical dream of a future in engineering rather than embrace Frank's vision of a future as a university with particular strengths in social sciences and public affairs. Prime Minister Robert Muldoon compounded the error about 15 years later when he vetoed Frank's appointment as chair of the University Grants Committee in retribution for uncongenial advice from the New Zealand Planning Council chaired by Frank. But those losses were to the advantage of the Institute of Policy Studies. Frank returned to the university and directed the Master of Public Policy programme. He had been instrumental in its development from an earlier Diploma in Public Administration, a change which led the then leader of the opposition, Muldoon, to say that there would be only one Master of Public Policy in New Zealand, which was wittier than most of his spontaneous reactions but no more accurate.

Eventually, Frank's university activities were concentrated entirely on the institute. With former Treasury secretary

and long-time friend and ally Henry Lang, and John Roberts who he attracted to the university to teach the DPA, he was one of its principal founders, motivated by a determination that there should be a forum for discussion of public policy issues which could not be muzzled by politicians. Frank steered the proposal through the university, enlightening some senior figures about the difference between 'policy studies' and 'strategic studies' or 'political studies', and being a long-serving member of the institute's board. He was its second chair. He was also a major promoter of projects and author of reports: he wrote on external economic policy and domestic social policy, attracting resources from numerous sources, especially the Ministry of Foreign Affairs and Trade. Frank was still a senior associate of the institute when he died.

Sir Frank emerged from the deep south. His university study at Otago was interrupted by war: he flew a plane before he drove a car, and served in the Pacific. His accounts tended to emphasise bombing volcanoes rather than enemy soldiers, but his diaries show that the missions were serious and dangerous. When he returned to Otago, Frank joined the concentration of talent that crowded into the universities. He switched to economics and never looked back. He claimed that his student record was not distinguished because he was more concerned to pursue the holder of what now seems a quaintly-titled position,

'lady vice-president' of the students' association. Frank's own career in student politics flourished when the president of the association vacated the position, learning that pursuit of the truth was not an adequate excuse for appearing to advocate sexual freedom in Dunedin. But it was the acquisition of Nola which Frank always counted as the main benefit of his time in Dunedin. He migrated to Auckland to complete his University of New Zealand bachelor's and master's degrees in economics.

Until Nola's death earlier this year, she and Frank were a renowned and inseparable dance couple, flowing effortlessly across the dance floor. Nola was, however, an independent person and pursued her own teaching career and hobbies. They also provided for a family, amidst postwar shortages, and then in Linden, Karori and Lowry Bay, with a brief interlude (and later beach holidays) in the Bay of Plenty. Frank would explain the time of his arrival at the university each day as dependent on the state of the domestic economy, and Nola described how their infant son sat on the floor with a pencil and scraps of paper saying, 'Go away. I'm busy.' Frank was a teaching economist, but not to the exclusion of his family.

Frank was very keen on injecting thought into all processes involved in public policy, which was the basis of his enthusiasm for the Master of Public Policy programme and the earlier DPA. He was also a good teacher across the range of university studies. He joined the then Victoria University College in 1952, and as a young lecturer had a good rapport with students. Lectures were mostly in the early morning and from 4 pm onwards. Frank lectured from 6 to 7, and would meet the students downtown before proceeding up the hill when the

Gary Hawke is an Emeritus Professor of Victoria University of Wellington. He was a Professor of Economic History for three decades, and also served as a Director of the Institute of Policy Studies and Head of the School of Government.

bar closed at 6 in time for the scheduled 6.10 start. Fortunately, in a small college lecture halls were not far from latrines.

As a teacher Frank was good at guiding students to where interesting things were happening in the discipline, even in fields in which he was not himself interested or well equipped, such as econometrics. While his own links were to Britain rather than the United States, he was quick to recognise how the centre of the discipline shifted to the US in the 1940s and 1950s, and he advised students and recruited staff accordingly.

In 1959 Frank succeeded Horace Belshaw as Macarthy Professor of Economics. He was then able to lecture at less unsociable hours, but the university switched to full-time hours in the early 1960s anyway. Frank described his experience as head of department as being essentially an unrelenting effort to find appropriate staff to put in front of classes as burgeoning student numbers coincided with the small cohorts of the 1930s and 1940s and uncompetitive salaries. He nevertheless presided over a growing department which had four chairs by the time he ceased to be head in 1967. He also contributed in faculty and university affairs.

Frank authored a long list of publications. Most drew on the economics literature to generate commentary and recommendations on policy issues. When he returned to the university as Professor of Money and Finance in 1972–77, Frank thought he should become more academic and he produced a sound discussion of the New Zealand financial sector. But even that was not at the leading edge of the theoretical literature. Frank always wondered whether he had been wise to give up his plans in the 1950s to undertake a PhD, but his forte was in applied work, and through the Institute of Policy Studies he authored a stream of studies of New Zealand's external economic policy and of social issues, especially, but not only, in health and superannuation. Nobody will be able to study New Zealand's economic and social development without using material written by Frank. Furthermore, he greatly stimulated similar material from others.

It was as a public economist contributing to public affairs that Frank made his biggest contribution. He was diverted from any PhD project when,

in response to the unexpectedly strong showing of Social Credit in the 1954 election, the government established a royal commission on monetary, banking and credit systems and Frank was offered a post as one of its two major secretaries. Belshaw advised that the opportunity offered much more than a PhD, no doubt remembering his own experience in the 1930s, when service on a monetary commission added to the skills and experience he had as professor at Auckland and enabled him to embark on an international career as a development economist. Sir Arthur Tyndall, judge of the Court of Arbitration, chaired the commission, and he took advantage of the government's wish for a wide-ranging enquiry which would securely bury Social Credit and led the commission into a searching and thorough review of New Zealand's institutions and processes for all of economic policy. Frank was his principal ally. The commission had to spend a lot of time on the claims of Social Credit and its contending factions, but Frank ensured that his colleague, Mac MacGregor, undertook most of that work, while he focused on management of the exchange rate, interest rate, monetary policy and other enduring issues. Perhaps it was recognition of the unfair distribution of work at the commission that led Frank to recruit Mac to a retirement job at the university. The government's hope for a burial was more or less delivered as far as Social Credit theory was concerned, but, not for the last time, political activity long outlasted the invalidation of ideas.

The royal commission directly contributed to changes in how the Reserve Bank managed monetary policy, and to the ability of Treasury to inject economic thinking into fiscal policy. It also led to the creation of an independent centre for economic research, the New Zealand Institute for Economic Research, and, after some delay, to the creation of a quasi-autonomous monitor of economic policy, the Monetary and Economic Council. Frank served two terms as its foundation, part-time chair (1961–64).

The Monetary and Economic Council issued regular reviews of the current economic outlook for New Zealand. It issued one of the first serious studies of New Zealand's growth record and

potential. It made major contributions to formulating policy towards economic integration with Australia before the New Zealand Australia Free Trade Agreement of 1965, which eventually led to the Closer Economic Relations agreement in the 1980s, probably the single most important policy development for New Zealand in the 20th century. It contributed to debate about New Zealand's response to Britain's likely and eventual entry into the then EEC (the European Economic Community). Frank had recognised the significance of the EEC and advocated a positive response when he spent some time on leave in London in the later 1950s, when Henry Lang was economic attaché at the High Commission. As a leader of the New Zealand economics profession, Frank participated in the council's light-hearted annual toast to 'the General' after de Gaulle's veto of British membership of the EEC, but he was a leader in a more intellectual approach to the formulation of a sensible New Zealand response.

Frank's participation in leadership of the New Zealand economics profession had a serious side too. He was among the founders of the New Zealand Association of Economists and was the founding editor of its journal, *New Zealand Economic Papers*. Characteristically, he wanted *New Zealand Economic Papers* to have an inclusive character, just as he argued for the main criterion for membership of the association to be a genuinely enquiring interest in economic thinking.

While the Monetary and Economic Council continued under other chairs (and Frank returned in 1970–72), he had established a reputation which made him an obvious choice to chair a Task Force on Economic and Social Planning in 1976. In any case, after leaving the Monetary and Economic Council, Frank remained engaged in policy issues. He was active in the National Development Conference which was convened in 1969, partly in response to the council's advocacy of 'indicative planning' in an effort to reconcile the planning of different sectors of society and economy. Frank was a government-appointed member of the New Zealand Council for Educational Research. He had served as joint secretary of the Parry Committee which was part of the process by which the components of the University of New

Zealand became distinct universities. He readily extended his competence to the education sector as a whole: he was quick to recognise the development of the economics of education as a distinct sub-discipline. He was therefore the natural choice to chair the Advisory Council on Educational Planning, which was more or less the educational arm of the National Development Conference. When the government changed in 1972 the task was magnified, and he chaired the Education Development Conference which set out to map appropriate educational developments for the late-20th and early-21st centuries. Progress was stalled for some time, but the work of the conference was eventually picked up, somewhat modified, in the 1980s. Frank's work in education continued. In the mid-1980s he advised the Trade Development Board on the benefits to be derived from the sale of educational services overseas and assisted it to implement the recommendations. He also chaired Consult New Zealand Education Ltd, the forerunner of New Zealand Education Ltd, another early component of the development of educational exports, which are now a major component of New Zealand's external earnings.

The principal concern of the Task Force on Social and Economic Development was to integrate economic and social policy, and it resulted in the establishment of the New Zealand Planning Council. Frank was recruited from the university to be the council's foundation full-time chair. It absorbed the Monetary and Economic Council, while establishing an Economic Monitoring Group to maintain independent economic commentary. The council extended its role to social policy and began exploring how to maintain the benefits of a welfare state while restoring the primacy of individual initiative. It also attempted to maintain economic rationality in the face of the 'growth projects', and generally advocated a 'more market' approach to economic policy. Not surprisingly, despite Frank's diplomatic skills it fell out with Robert Muldoon. In the 1980s the overall agenda of integrating social and economic policy was implemented more rapidly and with less adjustment assistance than the council advocated. Like many of his contemporaries, Frank would have

preferred a different balance of change and continuity, but he knew that change had been unduly delayed. He continued to seek an optimal path, especially in health and superannuation policy.

Frank's first employment was as a diplomatic trainee with the predecessor of the Ministry of Foreign Affairs and Trade. When he joined the university he retained his interest in international affairs. One of the benefits of his war service was that he hitched a ride with the air force to an international affairs meeting in Pakistan, while the plane taking the New Zealand delegation, including some colleagues at Victoria University, crashed at Singapore. Frank was eventually national president of the New Zealand Institute of International Affairs and its first life member.

Frank was the New Zealand contact for Asia-Pacific economists as soon as they began to think about the implications for this part of the world of the growth of the EEC and the spread of economic integration in the North Atlantic. Kojima of Japan was the first to become prominent in advocating Asia-Pacific free trade, and Frank was the New Zealand participant in the Pacific Trade and Development Conference from 1964. (That Kojima was a professional imperial dancer, who was still performing in the 1980s, may have created a further bond.) Frank was easily able to participate in the Pacific Basin Economic Council and in business councils when they began forming in the later 1960s. He also led New Zealand's participation in the Pacific Economic Cooperation Council from its foundation in the 1980s. With the Institute of Policy Studies, he wrote a series of studies of how best to develop economic integration with New Zealand's partners: Australia, Canada (as a proxy for the United States), Asia and Europe. Frank's understanding of the changed position of Asia in New Zealand's economic relations made him an obvious choice to be the foundation chair of what has become the Asia New Zealand Foundation. Frank combined clear vision of New Zealand's changed international environment with an equally clear analysis of both potential and obstacles in New Zealand.

When he first left the university Frank became planning and economic manager for Tasman Pulp and Paper Ltd. He was

recruited by Geoff Schmitt, who he knew well from his previous role at Treasury, but Geoff resigned on the day Frank arrived following a major disagreement with Bowater UK, who held management control. Frank's motivation was not entirely personal, since forest products constituted a major part of the NAFTA agreement signed in 1965 and Tasman was at the forefront of a new outward orientation of New Zealand economic policy. For three years he was active in forest product development in Australia and New Zealand.

When he left the Planning Council, Frank resumed his private sector career. He was director and chair of a number of private sector boards, including chairing the Norwich Union Group in New Zealand and the National Bank of New Zealand's Southpac Merchant Finance subsidiary. Characteristically, he combined activity with study. He wrote two volumes of a three-volume history of the National Bank of New Zealand. In 1983 he founded The Hugo Group, a venue for discussion of policy issues by business leaders, and he chaired it from 1989 to 2009. He became a distinguished fellow of the Institute of Directors to accompany his accolades as an economist – honorary degrees from Victoria and Otago universities, the NZIER Prize in Economics, fellowship of the New Zealand Institute of Management, and a distinguished fellowship of the New Zealand Association of Economists. His knighthood was awarded for services to economics and education in 1975.

From his central base in the university and Institute of Policy Studies, Frank built an impressive record as a public economist. He led rethinking of the appropriate balance of private and collective activity, taking a thoughtful approach to the role of the state. Perhaps most notable of all was his role in reshaping New Zealand's stance in the international economy: making a positive response to European integration with a more open trading stance and recognition of the enhanced role of the Asia-Pacific region. Frank shared with Kojima an interest in dancing, and he certainly danced his way, with intricate steps, to immortality.

Conference on the Funding of Student Finance Critical Issues and Policy Options

Wednesday 18 & Thursday 19 April 2012
Rutherford House, Bunny St, Wellington

Hosted by the IPS, School of Government, Victoria University of Wellington

In association with the Inland Revenue Department, the Ministry of Education, the Ministry of Social Development, the Tertiary Education Commission, the Treasury, the NZ Union of Students' Associations, and Universities New Zealand

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Background

Since the late 1980s there have been major changes to the funding of tertiary education in New Zealand. Both the student loan scheme and the targeted allowances for living costs have been the subject of on-going public debate and controversy, and frequent policy adjustments have been made since the early 1990s.

In light of this history, the conference will:

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