Bill Rosenberg

The 'Investment Approach' is Not an Investment Approach

A centrepiece of government social policy is the so-called 'Investment Approach' currently being used in the Ministry of Social Development (MSD). There are active plans to expand it into other social services. The attractive concept of an investment approach to public policy has been around for many years, but is that what this approach is really advocating?

An 'investment approach' to the provision of social services is sometimes described as 'spending now to reduce future costs'. But the point of social services is to provide benefits in the way of services and outcomes that society values, such as health, education, security, opportunities, increased well-being and greater equity. The distribution of where both costs and benefits fall within society must also be considered. Unless those benefits and their distribution are improved, or at least held constant while costs are reduced, we may be no better off and it can become simply a cost-reduction exercise. Balanced consideration of both costs and benefits in this broad sense is therefore essential in an investment approach. Under these conditions it is an attractive concept.

In contrast, the investment approach being taken by the Ministry of Social Development is a narrow and flawed one. It fails to take a balanced investment view. Far from being an investment approach to social welfare, it focuses on costs to the government, fails to incorporate either benefits or full costs, and makes invalid assumptions about outcomes for beneficiaries which are central to its logic. In its current form it is a recipe for reducing government expenditure. This narrow, one-dimensional approach has implications for MSD clients and the impact of its services on wider society, but it also has much wider significance because of the plans to expand its use.

The difference between a full investment approach and that used by MSD is summarised in Table 1.

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The investment approach in the MSD sense appears to be used to cover at least these aspects:

- the use of actuarial techniques to calculate a measure of future fiscal liability (referred to in MSD's context as 'future welfare liability'), which is then used for evaluation of 'success' and for policy purposes;
- the use of a large longitudinal data set to prioritise case management – or, in more general terms, policy and actions.

This article builds on Simon Chapple's earlier analysis of this development (Chapple, 2013) to look at these aspects in turn and consider their use both in MSD and in other public services.

Future welfare liability

The 'future welfare liability' (FWL) of current beneficiaries is estimated by using two decades of past and current social security records and various modelling assumptions to project each beneficiary's future use of welfare benefits[1] and their cost. Let us assume for the moment that this is a full and accurate characterisation of each beneficiary, and therefore an accurate future liability calculation. The liability is solely a fiscal liability: that is, the call the welfare benefits[2] and their administration are predicted to make on current and future government revenue through Vote Social Development. The reduction in size of that estimated fiscal liability is then used as an objective for policy purposes to prioritise interventions, such as stricter employment requirements for single parents and intensive supervision of young people.

Fundamental flaw: weighs costs, not benefits

The fundamental flaw with this procedure is that it looks only at costs to the government and at nothing else. Future fiscal liability is a measure solely of cost. 'Cost effectiveness', or a proper cost–benefit test, requires measures of benefits to weigh the cost against. No measure of benefit is part of the MSD approach. Minimising fiscal liability is therefore simply a policy to minimise public expenditure rather than maximise welfare.

This problem is acknowledged by the New Zealand Productivity Commission in its final report on commissioning of social services (New Zealand Productivity Commission, 2015, pp.224-37), which draws a distinction between the MSD's investment approach (calling it MIA) and an investment approach with the qualities it desires. It says that the MIA is 'not a cost–benefit analysis', and recommends that it 'should be further refined to better reflect the wider costs and benefits of

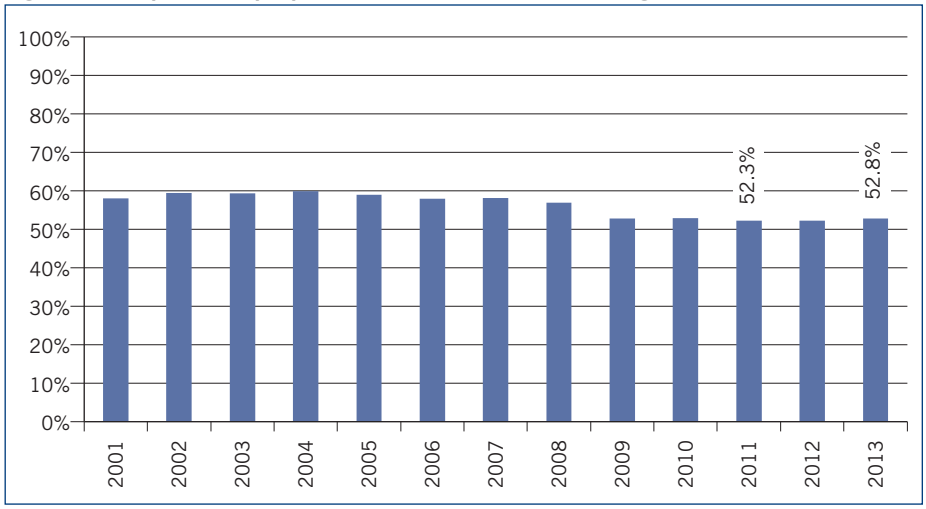
Table 1: A full investment approach compared to the MSD investment approach

	Full investment approach	MSD investment approach
Costs		
Costs to Crown	Cost of raising taxes and administering welfare system, and other public services affected by social welfare decisions	Full costs to Vote Social Development*
Private – financial	Financial costs to individuals and firms of social welfare interventions (e.g. transport to interviews, work, child care, medical, additional training)	–
Opportunity costs	For instance, loss of leisure if employed; loss of employment income if insufficient retraining and/or time for job search	–
Non-financial	Non-financial costs to individuals, households and society (e.g. less time with family, crime, ill health, poverty, poor education levels, failure to fulfil economic/social/personal potential)	–
Benefits		
Reduced expenditure/ increased income to Crown	Reduction in costs of raising taxes and administering public services (e.g. due to reduced need for social services); increased revenue (e.g. from taxation due to increased private incomes)	Reduced costs to Vote Social Development*
Private – financial	Financial benefits to individuals and firms from social welfare interventions (e.g. additional earnings from finding better job, additional revenue to employer, reduced medical costs)	–
Non-financial	Non-financial benefits to individuals, households and society (e.g. quality of work, reduced crime, improved physical and mental health, greater participation in society and social cohesion)	–

* At present the costs are solely to Vote Social Welfare, but consideration is being given to extending them.

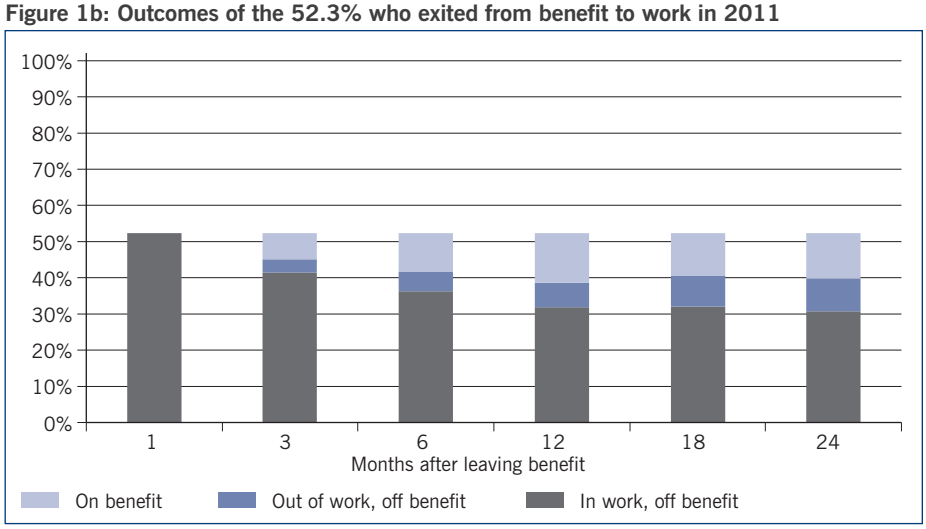
Financial costs and benefits are considered in the 'full investment approach' on an economic basis.[3] Note that the MSD investment approach evaluates costs on a future fiscal liability basis. This could be used in both cases, in which case other financial costs and benefits should be treated in a similar way, and a long-term (e.g. lifetime) approach should be taken to non-financial costs and benefits.

Figure 1a: Proportion of people in work one month after leaving a welfare benefit



Source: LEED, Statistics NZ

Figure 1b: Outcomes of the 52.3% who exited from benefit to work in 2011



Source: LEED, Statistics NZ

interventions'. It warned that 'slavish application of an investment approach based purely on costs and benefits to government [like the FWL] might lead to perverse outcomes', giving as an example that early deaths from obesity would reduce future fiscal liability. As will be seen, other examples arise as the approach is being implemented by MSD.

Is future welfare liability a valid proxy for benefits?

Yet the commission also states that '[t]here are good reasons for believing that FWL is strongly correlated with what society does care about, at least for the social services to which it is currently applied – primarily employment services.' This is similar to MSD's and the government's justification for its use of FWL. The commission argues that '[t]he service is aimed at getting people into work, and people who get and stay in work will likely have lower future welfare costs. Further, being employed is strongly correlated with better social outcomes.' So the argument is that, despite being a measure of cost, FWL is a proxy for at least some benefits because it is associated with getting people into work.

The only evidence the commission cites for this is an assertion by the Welfare Working Group and results of Statistics New Zealand's general social survey showing greater self-rated well-being for people in employment. This applies only to average employment experiences, not the insecure, low-income jobs which, as will be seen, may be the only ones available to many MSD clients pressured to take any work available.

The claim that FWL is a good proxy for at least some benefits rests on three assumptions: that most or all beneficiaries ceasing to be a cost to the welfare system find work; that the work they find is better for their welfare than remaining on a welfare benefit; and that work is the only benefit that should be weighed against cost. The evidence does not bear these out.

Not all welfare benefit exits are to work

First, not all exits from welfare benefits are to work. Data provided under the Official Information Act from MSD for 2014, for example, show that only 45.6% of benefit cancellations were for the reason 'obtained work'. MSD says beneficiaries whose benefit was cancelled for certain other reasons may also be in work; in fact, they say that in general they don't know. In the unlikely event that all those whose benefit was cancelled who possibly found work in fact did so, then 39.8% would still not be in work immediately after leaving the benefit. Some left for full-time study, but between 29.2% and 43.8% were in neither work nor full-time study on this basis.

Some of the people who were in neither work nor study may have been in acceptable circumstances, such as in a new, supportive relationship, and some (including those in prison, who died or whom non-government social agencies say are homeless) certainly were not, but fiscal liability values all exits the same, whether the people leave to good-quality jobs or to homelessness. Indeed, MSD does not in general know their circumstances unless they apply for a benefit again, so is unable to judge the outcomes of its clients' exits from the welfare benefit system.

Another source of information is Statistics New Zealand's linked employer–employee data (LEED). These show[4] that in 2013 (the latest available), one month after leaving a welfare benefit only 52.8% were in employment, a lower proportion than in any year between 2001 and 2008 (see Figure 1a). Of them, 30% were no longer in work after six months, and a third of those (10.2%) were not on a welfare benefit. Of those who left the welfare benefit for work in 2011, 41.3% were not in work two years later, and over two in five of them (17.5%) were not on a benefit (see Figure 1b). Equating exit from welfare benefits or reduced liability with finding employment is therefore far from valid.

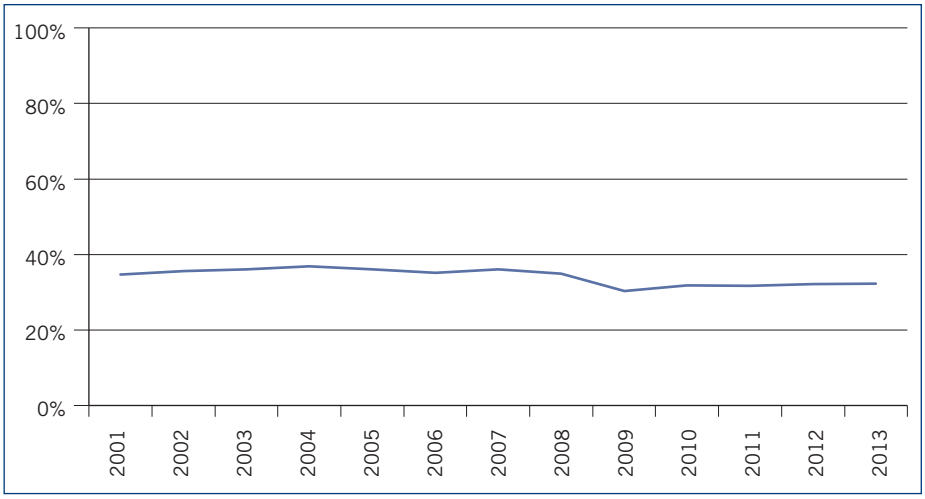
Not all work means better social outcomes

Second, being employed is not always 'strongly correlated with better social outcomes' as the Productivity Commission asserted: insecure, low-income work with poor prospects for career development may have worse outcomes, as may jobs which don't fit family life due to, for example, long commutes or unsuitable hours (Brewerton, 2004, pp.27-8; Burchell, 2011, p.9; Johri, 2005, pp.23-4; Marmot, 2010, p.26). Not all jobs are equal. Those finding work may be in work of poor quality which leaves them worse or little better off, and both MSD and LEED data suggest that, for many, that is the case. MSD's benefit system performance reports and actuarial reports provide some data on the rate at which former beneficiaries return to a welfare benefit. For example, in the report on the year to June 2014 they find that 40% of 'jobseeker work-ready' exits have returned to a welfare benefit 12 months later, and this hasn't materially improved over the four years it provides data for (Raubal and Judd, 2015, p.23). Their 2013 report suggested that the high 'churn' rate could have been due to insecure work or 90-day trials (Raubal and Judd, 2014, p.33).

LEED data[5] finds that only 32.3% of those exiting a benefit were in work and off welfare benefit for all of their first six months in 2013. Of those who came off a welfare benefit in 2011, only 15% had been in work and off a welfare benefit for all of the following two years (see Figures 2a and 2b). This suggests insecure and spasmodic work, if it was found.

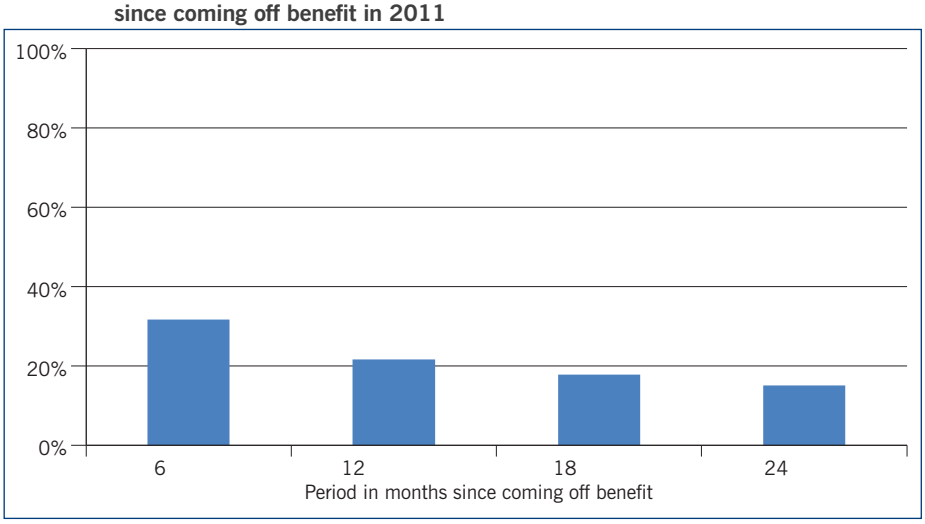
Measuring success by exits from a welfare benefit is a poor measure of benefit even on this evidence. International evidence confirms this: longer time on a welfare benefit can improve subsequent employment outcomes. For example, labour economist David Card and colleagues Kluve and Weber (Card, Kluve and Weber, 2010) in a meta-analysis of evaluations of active labour market policies found that welfare exit rates and other short-term measures are poor predictors of the quality of employment outcomes. Judging performance on exit rates neglects the longer-term benefits of spending more time on a welfare benefit, which can, through raising skills and more effective job search, improve subsequent employment outcomes. Engbom, Detragiache and Raei (2015) found that reduced time on unemployment benefits in Germany as a result of the Hartz reforms, which included tightened conditions and reduced welfare benefit payments, led to 10% lower subsequent earnings, implying less satisfactory employment outcomes.

Figure 2a: Percentage employed and off benefit in first 6 months



LEED, Statistics NZ

Figure 2b: Percentage employed and off benefit in all months since coming off benefit in 2011



LEED, Statistics NZ

Even putting quality of work aside, being employed is not always the best outcome for beneficiaries. Consider a sole parent, just out of a traumatic relationship break-up, who is being pressured to put her children into care and take a job, perhaps full-time. Are there no benefits to her staying at home supported by a welfare benefit? That, after all, is the purpose of the welfare system. In fact, there are many benefits, such as allowing her to care for her children, enabling her family to recover from the trauma of the break-up, and better health outcomes for both her and her children.

Yet MSD apparently doesn't know whether people leaving a welfare benefit got a good or poor job, stayed in work or remained unemployed outside the welfare system, let alone whether their lives improved or worsened as a result of either exiting or staying in the system. The FWL model takes no interest in this.

Work is not the only benefit that should be weighed against cost

There are many possible benefits from a well-functioning social welfare system. The purpose (section 1A) of the Social Security Act 1964 reflects some of them: helping people to support themselves and their dependants while not in paid employment or in hardship; helping them find or retain paid employment; helping those for whom work is not currently appropriate because of sickness, injury,

disability or caring responsibilities. More broadly, we would look for benefits in maintaining the dignity of welfare beneficiaries and their participation in society. There are also social benefits external to the individuals themselves in avoiding members of society, especially children, falling into poverty. There are benefits to employers and the economy from the productivity of those finding jobs. These other benefits are ignored in MSD's investment approach.

It is worth noting that FWL itself is not measuring an economic cost or benefit: it measures a transfer between New Zealand residents which only changes the distribution of income, rather than directly creating economic costs or benefits to the economy as a whole, except to the extent that there is a deadweight loss from taxation.

Failure to incorporate a cost–benefit analysis

These are symptoms of the fundamental flaw in the FWL model: it fails to take a cost–benefit approach, weighing benefits against costs.

As an example, consider just the financial benefits of employment. Higher expenditure, such as for job search or retraining, may be more than justified by the benefits to welfare beneficiaries and society of the better jobs they find as a result. The benefits of work can be crudely quantified as the income earned in the job found, but there will also be benefits to the employer and society (and non-fiscal costs). Because the FWL measure looks only at fiscal costs, it will appear that 'effectiveness' has been reduced rather than increased by the added cost of the job search or retraining. It fails the test of a true investment approach by failing to identify an opportunity to spend more now to get better outcomes later.

MSD staff leading the implementation of the FWL model say that 'spending has been directed away from lower liability clients (short-term jobseekers) towards higher liability clients such as sole parents (Edwards and Judd, 2014, p.10). This means that people on what was formerly called the unemployment benefit are getting less assistance because they have the 'lowest average liability' of all the main benefits. Another MSD report indicates that the result may be that jobseeker exit rates are not falling: 'The focus on SPS [Single Parent Support] clients may also partly explain why JS [Jobseeker] exit rates have been relatively stable in the last three years. In prior years, resources currently diverted to SPS clients would have been more heavily focused on JS clients' (Raubal and Judd, 2015, p.26).

> The MSD's approach … is the reduction in future liability created by a given expenditure, still without taking benefits into account.

Suppose an MSD client is a skilled tradesperson: a printer, made redundant because of the state of the newspaper industry and changing technology. Some of her specific skills may be redundant, but she will have a host of other skills, including 'soft skills', and would still be highly employable. Left alone, she will undoubtedly find another job eventually, but almost certainly at reduced income and productivity because she may not have the specific skills required. Support from MSD to retrain, apply for jobs, perhaps establish her in an adult apprenticeship, and support her during the initial stages of employment would be greatly beneficial for both the worker and the economy. But the FWL model says no.

An example from outside the social welfare system makes the fallacy of omitting consideration of benefits even clearer. Consider applying the MSD's future fiscal liability approach to education. The 'future educational liability' will be higher for those advancing to higher education because of the additional expenditure it will require from the government. It is commonly accepted that sound early childhood education is likely to lead to later educational success (e.g. Early Childhood Education Taskforce, 2011, pp.21-8). Should we therefore take action at the early childhood level to reduce the likelihood of future success because it increases 'future educational liability'? Of course not: we would never contemplate this action without considering the many benefits of the different levels of education. Some of those benefits may create income for the government (such as income tax on higher incomes, if that is the result of higher education), but crediting these against the future liability as has been suggested by the Productivity Commission is not part of the MSD investment approach. Even if it was, the many other benefits of education are still not taken into account.

In fact, according to the Productivity Commission, the Ministry of Education is considering an investment approach which appears to contrast sharply with that of the MSD. The commission reports that '[i]n education, a child or student centred approach is needed to ensure that developmental outcomes of individuals are at the forefront' (New Zealand Productivity Commission, 2015, p.234). We have yet to see how, and how fully, these developmental outcomes and other benefits will be incorporated, but this is promising.

The MSD's approach does include the idea of 'return on investment'. But this is not a cost–benefit analysis either. It is the reduction in future liability created by a given expenditure, still without taking benefits into account.

The annual reports commissioned by MSD on the investment approach are now suggesting that MSD should take an interest in quality of employment. But it is a stretch to assert that that is the success of the approach. Even if it could be said that improved quality of employment is encouraged by the investment approach, because it reduces future liability by making re-entry less likely, that doesn't

need a calculation of forward liability: MSD and LEED data show that simple annual costs would tell us that.

The use of data to prioritise policy and actions

The use of a rich data set to discover correlations and associations between the introduction of new services, clients and outcomes can be very worthwhile. However, its use as demonstrated by MSD and its contractors warns that caution is required.

The crowing rooster does not cause the sun to rise

First, correlation is not causation. For research purposes, correlation is a handy indicator as to where it is worth looking deeper for causation. But when used for policy purposes, it is essential that we are confident of the direction of causation. Should we make it more difficult for beneficiaries to rent Housing New Zealand Corporation houses because a high proportion of its tenants are beneficiaries, adding to the future fiscal liability? Does the finding that many long-term beneficiaries come from families which were often reliant on a welfare benefit mean that we should reduce the availability of welfare benefits, or that we should reduce poverty (which frequently leads to reliance on social welfare, and vice versa), or something else? To optimise policy it must optimally *cause* increases in social well-being. If we don't know that the causes our policy may be far astray.

To a man with a hammer, everything looks like a nail

Second, many factors that are not recorded in the database can and do bear on the outcomes of services: economic conditions (only unemployment is used for the predictive modelling, though interest rates and inflation are used in the actuarial calculation of the future liability); the full financial situation of families; the relationships, health and skills within a household; broader community and whānau support (or lack of); families' housing situations; their history before coming onto a welfare benefit, and so on. There is a strong tendency for too much weight to be attributed to the data available because it is available and quantifiable.

For example, MSD annual benefit system performance reports put heavy weight on past welfare benefit history, where many other factors are involved. Similarly, MSD appears to use the data solely to recommend changes to its own operations and policies. Yet if its modelling is correct, a far greater reduction in forward liability would occur if the government pursued policies to reduce unemployment by 2% to a level similar to that immediately before the global financial crisis, than from the likely effects of the MSD's own interventions (Raubal and Judd, 2015, p.38). To achieve a similar effect would require a further 25% increase in the quarterly exit rate of beneficiaries on both jobseeker welfare benefits, where, despite new, more stringent policies, the exit rate for jobseekers has been stable for four years, and sole parent support, where the quarterly exit rate has already increased a very substantial 19% (from 3.2% to 3.8% per month) in the year to June 2014 (ibid., 2015, p.26). The latter is presumably as a result of even more stringent policies and considerable MSD effort. Raising it a further 25% would require draconian policies.

This narrowness of view may be partly addressed by linking in other databases, such as those of Housing New Zealand, education, health and IRD, though the increasing complexity carries its own risks, not least around privacy. But it still requires more rigorous research and modelling, and does not address the central issue: the need for a cost–benefit analysis. For example, the 2015 MSD benefit system performance report (ibid., 2015, pp.51-2) makes the unsurprising discovery that many Housing New Zealand tenants are welfare beneficiaries. It deduces that the fiscal cost of welfare assistance is not limited to welfare benefits and recommends extending the investment approach to social housing clients. The policy outcome 'might involve giving higher priority for intensive case management to clients in social housing', which suggests harsher treatment for beneficiaries who are in social housing in order to save on income-related rent subsidies. This attributes no benefit to social housing, which may improve health, educational and employment outcomes.

Most of the use of the data set involves modelling, which in turn requires crucial assumptions … which are either unclear, in technical reports or not provided.

Modelling assumptions and error margins are unclear

Most of the use of the data set involves modelling, which in turn requires crucial assumptions (for example, about the effect of economic conditions) which are either unclear, in technical reports or not provided. The assumptions are acknowledged by actuaries Taylor Fry in their reports (e.g. Greenfield et al., 2015, pp.111-12, 128), but bands of errors in crucial estimates are not given and in some cases cannot be. Estimation or modelling errors could well be material, given that the estimate that the latest welfare reforms led to a reduction of $2.2 billion in forward liability is only 3% of the total estimated liability and appears to be a residual after modelled factors have been accounted for. Instead, the point estimates are quoted as though they were certainties, and the residual reduction in forward liability once economic factors have been filtered out confidently attributed to policy changes (e.g. Raubal and Judd, 2015, pp.35-6) rather than estimation error.

Further, the models rely on past decades of experience of beneficiaries' behaviour deduced from the MSD

database. But this experience is, of course, dependent on the different policies in place at each point in time. For example, if at one time the priority was to spend more effort helping unemployment benefit recipients rather than reduce domestic purposes benefit numbers, then the records will reflect that 'experience'. That is not an inherent characteristic of those types of beneficiaries, but is strongly influenced by previous policy.[6] Behaviours change over decades too: an increasing proportion of women in the workforce, smaller families, and so on. The models apparently try to adjust for these changes using quarterly dummy variables (Taylor Fry Pty Ltd, 2012, p.4), but this is a blunt approach.

Most of the useful deductions that can be derived from analysis of this data do not need to be tied to fiscal costs. Knowing that certain groups of people spend a longer or shorter time on benefits, for example, does not require fiscal cost to suggest useful policy.

Conclusion

Future fiscal liability (and its social welfare instance, future welfare liability) is, in the end, just an inter-temporal rather than current measure of cost, and even then only certain fiscal costs. It is not a cost–benefit analysis, which is the well-established and accepted method for policy evaluation and selection of interventions. It is a dangerous fallacy to assess the performance of the welfare system on such a one-dimensional measure – unless the sole aim is to make room for tax cuts or to reduce the size of the state. It disregards the social assets that social services should protect and enhance, such as a healthy, equitable, cohesive, educated and productive society. It treats citizens as liabilities unless they are employed, and even then they are not regarded as assets. This is the logic of the approach and is being demonstrated in harsh, poorly conceived welfare policy which, ironically, is short-sighted because it ignores human need. It promotes an impoverished approach to public policy, which can be dangerously wrong.

Where could we head? In a recent speech the minister of finance, Bill English (English, 2015), set out what he called a 'social investment' approach to social services. While this article is not intended to discuss this in detail, his general approach is closer to the full investment approach described at the outset. He defines his use of the term as follows:

> At its core, social investment is a more rigorous and evidence-based feedback loop linking service delivery to a better understanding of people's needs and indicators of the effectiveness of social services. This needs to take account of the long-term – including those benefits that might take years to be delivered.

It is therefore closely tied into the extensive use of data, but also recognises the need to balance benefits against costs: 'We will be measuring outcomes and using cost benefit analysis where we can, but this informs judgment, rather than replaces it.' More specifically, he implicitly criticised MSD's approach:

> These new data tools are not just about measuring fiscal costs and future fiscal savings as a measure of the effectiveness of a particular intervention. Fiscal costs have been used in welfare as a proxy for the economic and social benefits of getting people back into employment. But we also measure broader results – capturing the wider social outcomes that we ultimately care about. … measuring the return on investment in social services makes sense whether it is fiscal costs or wider social benefits that are being considered.

It is not clear how far the government is moving towards a fully balanced approach, but it does appear to be moving. Other aspects of what English described raise concerns. For example, it suggests highly targeted interventions which place heavy reliance on data analysis and contracting out of services, and could risk becoming substitutes for a broadly-based social security system. But if it changes government thinking towards a longer-term view of social services and expenditure, with full recognition of benefits as well as costs, it lays the basis for progress. It will not happen without sufficient funding for the deeper analysis required, changes to accountability for finances and outcomes in government agencies, and increased information-sharing, with proper safeguards.

There are obviously benefits to be gained from the use of 'big data'. It can provide tools for a full investment approach. If, with careful research and modelling, we could understand better the consequences for health, housing and education of forcing people off benefits too early, or the consequences for beneficiaries and their children of poor housing and health, or the benefits for education of better health and housing – and so on – we would be able to make much better public policy. But information systems of this kind must be used with care. Correlation is not a substitute for causation. We will never know everything, and it is hazardous to draw conclusions with relevant information omitted. The assumptions

If, with careful research and modelling, we could understand better the consequences for health, housing and education of forcing people off benefits too early, … we would be able to make much better public policy.

under which the information is used must be clear and valid, and the robustness of its modelling must be above reproach, especially if it is used for policy purposes. Systems and policies must protect against the real dangers of invasion of privacy and misuse (intentional or unintentional) that can cause grave and lasting harm to individual citizens and families. Future fiscal liability may play a role, but it should be just one consideration, not the dominant one.

Most importantly, we must seriously address the admittedly difficult problem of evaluating the benefits of public policy and expenditure and integrating them into decision-making: we cannot afford to have policies that ignore them.

1 In this article, 'welfare benefit' is used to mean payments from the state to a social welfare beneficiary, and 'benefit' to mean generalised improvements in welfare in the usual sense.

2 The welfare benefits in the FWL calculation include transfers such as the unemployment benefit, allowances such as the accommodation supplement, and employment assistance such as training costs and non-recoverable hardship assistance, but exclude benefits paid to people over 65 such as New Zealand Superannuation, student loans allowances and unemployment benefit student hardship, and assistance outside Vote Social Development such as Working for Families.

3 New Zealand Productivity Commission (2015, p.230) is acknowledged for some material in this table.

4 See Tables 2.17 and 2.26 of the annual LEED series at http://nzdotstat.stats.govt.nz/wbos/Index.aspx.

5 See Table 2.23 of the annual LEED series at http://nzdotstat.stats.govt.nz/wbos/Index.aspx.

6 I thank Michael Fletcher of AUT for pointing this out.

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