

Wellbeing Economics: A Policy Framework for New Zealand

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Abstract

The authors have prepared a book on *Wellbeing Economics* published by Bridget Williams Books in June/July 2014. It draws on Amartya Sen's argument that policy should aim to expand the capabilities of persons to lead the kinds of lives they value and have reason to value. The book therefore focuses on people engaged in purposeful activities to advance their own wellbeing. It considers how individual citizens, community groups, market activities and government policies can work together to expand people's capabilities to lead valued lives. This paper summarises the book's major points to offer a policy framework for New Zealand.

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1 Introduction

In 2008, French President Nicholas Sarkozy invited Joseph Stiglitz, Amartya Sen and Jean-Paul Fitoussi to head a high profile commission to identify the limits of gross domestic product (GDP) as a measure of economic performance and social progress. The commission described the unifying theme of its subsequent report in the following terms: “the time is ripe for our measurement system to *shift emphasis from measuring economic production to measuring people’s well-being*” (Stiglitz *et al*, 2009, p. 12; emphasis in the original). The commission recognised that GDP will continue to be important for monitoring market activity, but its key message that there needs to be greater emphasis on measuring people’s wellbeing is the starting point of this present paper.

Economists have taken large strides in developing two major categories of techniques for measuring wellbeing. The first category involves the creation of frameworks of statistical indicators that are generally associated with progress towards greater communal wellbeing at a local or national level. Examples include: the *World Development Indicators* database maintained by the World Bank at <http://data.worldbank.org/>; the *Better Life Index* maintained by the OECD (see OECD, 2011); the European Union’s *Sustainable Development Strategy*, first adopted in 2001 and renewed in 2006 (see, for example, Eurostat, 2011); the National Wellbeing Programme launched by the United Kingdom Prime Minister, David Cameron, in November 2010 (see Self *et al*, 2012); and the *Framework for Measuring Sustainable Development* published by Statistics New Zealand in 2009.

The second category of techniques involves surveys of a population to obtain a measure of self-reported wellbeing (Kahneman and Krueger, 2006; OECD, 2013). A good example is the Gallup World Poll survey, which asks its respondents to answer the following question (see <https://worldview.gallup.com/default.aspx>):

Please imagine a ladder, with steps numbered from 0 at the bottom to 10 at the top. The top of the ladder represents the best possible life for you and the bottom of the ladder represents the worst possible life for you. On which step of the ladder would you say you personally feel you stand at this time?

Deaton (2008) uses data from that survey to investigate how self-reported measures of satisfaction correlate with life expectancy and per capita income. Another international data source used for cross-country comparisons is the World Database of Happiness available at <http://worlddatabaseofhappiness.eur.nl> (see, for example: Veenhoven, 1996 and 2005; Di Tella and MacCulloch, 2006). There are also country specific surveys, including the New Zealand General Social Survey (see, for example, Brown *et al*, 2012).

Our purpose in preparing this paper is to propose that the profession's renewed focus on wellbeing affirmed by Stiglitz *et al.* (2009) provides an opportunity to move beyond these important measurement issues to consider more fundamental conceptual questions about how wellbeing is framed in regional and national economic policy advice. This proposal is drawn from our respective research programmes on economic policy over the last three decades (beginning with Dalziel, 1986, Dalziel and Lattimore, 1991, Saunders, 1991, and Willis and Saunders, 1988) and our more recent joint research on aspects of 'wellbeing economics' (see, for example: Dalziel *et al.*, 2006; Dalziel and Saunders, 2003, 2005, 2011 and 2014a; Saunders and Dalziel, 2004, 2010 and 2014; and Schischka *et al.*, 2008). It also reflects wider international trends, including the OECD's formal mission statement "to promote policies that will improve the economic and social well-being of people around the world" (OECD, undated), the well-being framework created by the Australian Treasury (see Henry, 2006) and the living standards framework recently introduced by the New Zealand Treasury (see Gleisner *et al.*, 2012).

Section 2 presents the intellectual sources of our wellbeing economics framework. Like so much of economics, pointers can be found in Adam Smith (1776) who explicitly criticised the mercantile system for sacrificing the interest of the consumer to that of the producer. Our major inspiration, however, comes from two sources: Marilyn Waring's (1988) comprehensive criticism of gross domestic product for omitting certain economic activities that are essential for wellbeing; and the capabilities approach of Amartya Sen, presented for example in his 1989 book *Development as Freedom*. The section finishes with five principles that we have used to define wellbeing economics as a policy framework.

The remainder of the paper demonstrates how the wellbeing economics framework is built on those intellectual foundations. This begins with purposeful behaviour by individuals and households (section 3). It recognises ways in which communities of people self-organise to improve their members' wellbeing (section 4). It understands the market as a strong engine for raising living standards and wellbeing (section 5). It considers central government as another community institution able to make its own unique contributions to wellbeing (section 6). The paper finishes in section 7 with a brief conclusion that introduces the idea of transforming New Zealand's 'welfare state' into a 'wellbeing state'.

2 Intellectual Foundations

Adam Smith's *Inquiry into the Nature and Causes of the Wealth of Nations* is universally accepted as the founding text of modern economics. It includes the following comment on the purpose of all production (Smith, 1776, Volume 1, Book IV, Chapter 8):

Consumption is the sole end and purpose of all production; and the interest of the producer ought to be attended to, only so far as it may be necessary for promoting that of the consumer. The maxim is so perfectly self-evident, that it would be absurd to attempt to prove it. But in the mercantile system the interest of the consumer is almost constantly sacrificed to that of the producer; and it seems to consider production, and not consumption, as the ultimate end and object of all industry and commerce.

Smith's 'perfectly self-evident maxim' lends support to the 'unifying theme' of Stiglitz *et al.* (2009, cited above) that we should "shift emphasis from measuring economic production to measuring people's well-being". As its name suggests, gross domestic product is primarily a measure of production (although it can also be interpreted as expenditure or income), whereas Smith reminds us that "the interest of the producer ought to be attended to, only so far as it may be necessary for promoting that of the consumer".

Marilyn Waring is a New Zealand economist who explored this distinction in her very influential 1988 book, *Counting for Nothing: What Men Value and What Women are Worth*. Her book was simultaneously published internationally under the title *If Women Counted: A New Feminist Economics* and was reviewed by Hancock (1989), Stevenson (1989), Henderson (1990) and Postner (1992). French, Japanese, Norwegian, and Spanish translations of her book followed and the University of Toronto Press published an extended second edition in 1999. Waring and her ideas were the subject of a major 1995 documentary by the National Film Board of Canada, *Who's Counting? Marilyn Waring on Sex, Lies and Global Economics* (www.nfb.ca/film/whos_counting).

Waring's book continues to be highly regarded. Its twenty-fifth anniversary in 2013 inspired a tribute volume, *Counting on Marilyn Waring* (Bjørnholt and McKay, 2014), and our own retrospective (Saunders and Dalziel, 2014). The book has been selected for the 'Feminist Classics/Many Voices' series in the *International Feminist Journal of Politics*, which the journal's book review editor, Suzanne Bergeron, describes as bringing together appraisals of "a book widely considered a classic for feminists working on issues of global importance". No other publication on national accounting – except possibly the official reports of the United Nations System of National Accounts (UNSNA), beginning with United Nations (1953) – has received such diverse and enduring attention.

Marilyn Waring's critique arose from her experiences as a Member of Parliament in the New Zealand House of Representatives between 1975 and 1984 (McCallum, 1993; Saunders and Dalziel, 2014). During that time, Waring was appointed to the Public Expenditure Select Committee and was its chairperson when New Zealand's National Income and Expenditure Accounts were reformed using UNSNA international standards. Waring (1988, p. 1) describes her encounter with these standards as a "rude awakening":

I learned that in the UNSNA, the things that I valued about life in my country – its pollution-free environment; its mountain streams with safe drinking water; the accessibility of national parks, walkways, beaches, lakes, kauri and beech forests; the absence of nuclear power and nuclear energy – all counted for nothing. ... Since the environment effectively counted for nothing, there could be no "value" on policy measures that would ensure its preservation.

Hand in hand with the dismissal of the environment, came evidence of the severe invisibility of women and women's work. For example, as a politician, I found it virtually impossible to prove – given the production framework with which we were faced – that child care facilities were needed. "Non-producers" (housewives, mothers) who are "inactive" and "unoccupied" cannot, apparently, be in need.

These sentences introduced wellbeing economics in all but name into New Zealand policy discourse. Waring's concern was that an exclusive focus on market production meant that *economic* activities essential for human wellbeing (such as the care of children by parents or the provision of ecosystem services by the natural environment) were made invisible to economic policy makers. Her analysis drew attention to the way this exclusion is particularly damaging to women in developing and in developed countries.

Waring offered a number of approaches to addressing this social injustice, but the biggest impact came from her call for greater policy attention to the ways in which men and women allocate their time. She expanded on this idea in a later essay as follows (Waring, 1996, pp. 87-88):

Time is the one thing we all have. We do not all have market labour-force activities. We do not all have disposable cash. Many of us do not trade on the basis of money, we trade our time. Our economics is about how we use our time. And, even though we frequently do not have a choice about how we use our time, it is the common denominator of exchange. So time is the one unit of exchange we all have in equal amounts, the one investment we all have to make.

Consumption of time is closely linked to consumption of income; so this is an important issue for economics. Income spent on goods and services, for example, is generally earned through time spent working in market production. Also, wellbeing created by time spent on non-market activities such as family care and personal leisure is enhanced by spending income on relevant goods and services obtained from the marketplace.

The following year after Marilyn Waring's book, Amartya Sen (1989) published *Development as Freedom*, which has become a key text on his capabilities approach (see, for example, Alkire, 2002; Nussbaum, 2011). Sen (1989, p. 18) argued that development can be seen as a process of expanding freedoms, or 'capabilities', enjoyed by persons:

The analysis of development presented in this book treats the freedoms of individuals as the basic building blocks. Attention is thus paid particularly to the expansion of the 'capabilities' of persons to lead the kinds of lives they value – and have reason to value.

This statement emphasises the personal 'agency' of individuals as they go about their daily business of leading lives they themselves value. The final phrase argues that each citizen should not only value the kind of life he or she is living; citizens must "have reason" for their valuation. The insistence on reasoned values takes Sen away from individual libertarianism and gives his theory a strongly communal character.

Sen recognises that individuals live in communities where powerful economic and social forces affect personal capabilities in systematic ways. As a result, whole groups of people, despite individual agency, can find themselves with significantly reduced opportunities when these forces impact on social characteristics such as economic background, gender, ethnicity, marital status, sexual orientation, religious beliefs or physical abilities. Sen argues that the protection of individual freedoms must therefore be a social commitment to ensure people can be substantively free.

Drawing on the above sources, the authors have proposed five principles as important for wellbeing economics (see Chapter 1 of Dalziel and Saunders, 2014a, for a deeper discussion):

Principle 1: The purpose of economic activity is to promote the wellbeing of persons.

Principle 2: The wellbeing of persons is related to their capabilities to lead the kinds of lives they value and have reason to value.

Principle 3: Economic policies should expand the substantive freedom of persons to lead the kinds of lives they value and have reason to value.

Principle 4: Wellbeing is created through persons making time-use choices they judge will contribute to their leading the kinds of lives they value.

Principle 5: Market production should enable persons to add value to the kinds of lives they value.

Based on these principles, any conceptual division between market and non-market activities is arbitrary. Whether market or non-market, all human effort serves the same purpose when it creates additional value for people's wellbeing. Consequently, 'value-added activities', expanding from a personal level to a community level to a market level and finally to a national level, make up the backbone of the wellbeing economics policy framework. The remainder of this paper illustrates how this framework operates.

3 Leading Lives We Have Reason to Value

Principle 1 states that the purpose of economic activity is to promote the wellbeing of persons. This is related in Principle 2 to their capabilities to lead the kinds of lives they value and have reason to value. Principle 3 follows directly: economic policies should expand the substantive freedom of persons to lead such lives. Given these principles, economic policy making requires some shared language for discussing the kinds of lives people value and have reason to value.

Economists must be cautious in adopting such language. At least since Keynes (1891), economists have recognised we do not have any professional expertise in discerning personal or communal values (see also Stigler, 1982, p. 3). Any such attempt would in any case be inconsistent with Sen's principle that people should have the capability to lead the kinds of lives *they* value. Instead, our tradition in economics is to analyse the preferences of people revealed through the choices they are observed to make (Samuelson, 1938). Even when we do this, however, it is important to be sensitive to the ways in which choices may be restricted by economic and social forces that may be evolving over time as part of a community's cultural vitality.

A good source of information on time-use choices made by New Zealand residents is the latest New Zealand Time Use Survey (abbreviated as TUS 2009/10). The focus on time-use choices is justified by the idea in Principle 4 that these choices are made because they are

judged by the choice makers to contribute to the kinds of lives they value. It is therefore possible to gain insights into the personal and household activities that add value to people's lives by studying these choices.

The TUS 2009/10 data provide information on seventy activities grouped under four major headings: necessary time; contracted time; committed time; and free time. Briefly, necessary time is personal care activities such as sleeping and eating; contracted time is labour force activities such as paid employment, education and training; committed time is unpaid work such as household work and childcare; and free time involves all other activities such as recreation and entertainment.

To illustrate how this source can be used, TUS 2009/10 reveals that men and women in New Zealand are currently making different choices about the balance of time committed to the care of children and their time devoted to earning income and advancing careers in market employment. On average, the daily primary activity time recorded as contracted time was 4 hours 55 minutes for men and 2 hours 59 minutes for women. That pattern was mirrored by the daily average primary activity time recorded as committed time: 2 hours 32 minutes for men and 4 hours 20 minutes for women.

This pattern raises important questions for wellbeing economics. Taken at face value, current time-use choices seem to suggest that women value lives involving fewer hours per week in paid market work while men value lives involving fewer hours in unpaid household work. It must be asked: is there reason for such different time-use patterns? Or is this a legacy of social norms that new generations of parents will find harder to justify?

A distressing indicator that all is not well in this aspect of household wellbeing is the extent of child poverty in New Zealand. The first *Child Poverty Monitor* report funded by the Office of the Children's Commissioner, the New Zealand Child and Youth Epidemiology Service at the University of Otago and the J R McKenzie Trust included the following summary facts (University of Otago, 2013):

The 2013 Monitor shows that one in four Kiwi kids are growing up in income poverty and one in six are going without the basic essentials like fresh fruit and vegetables, a warm house, decent shoes and visits to the doctor. Ten percent of children are at the hardest end of poverty and three out of five kids living in poverty will live this way for much of their childhood.

The data showing that large numbers of families do not have the capabilities to obtain sufficient resources for raising their children well indicate opportunities for substantial improvements in wellbeing. This is not a problem just for current wellbeing; a failure to invest in the health of children will create lifetime impacts on education success and workplace productivity that will affect future wellbeing for at least a generation. In the wellbeing economics framework, this does not mean that the best policy response is necessarily increased income transfers by central government (financed out of general taxation); it may be that the primary problem is that the market economy is trapped in an equilibrium offering too few opportunities for parents to earn a living wage (see section 5).

4 Living Well in Communities

TUS 2009/10 recorded that the average time spent alone in a twenty-four-hour period was just 5 hours 14 minutes for men and only 2 minutes more for women. Thus, New Zealanders generally spend more than three-quarters of their day in the company of others. These data illustrate that human beings are a communal species and so this section focuses on two aspects of this feature: the way in which citizens create and participate in a diverse range of voluntary community organisations; and the way in which regions create local government.

There are tens of thousands of community organisations in New Zealand, pursuing a diverse range of objectives determined by their members. Statistics New Zealand (2007), for example, identified 97,000 institutions that were organised, not-for-profit, private, self-governing and voluntary, with 43,220 (44.6 per cent) of these devoted to culture, sports and recreation. Large numbers of citizens participate in these groups. The New Zealand Values Survey 2005, for example, reported that 42 per cent of the adult population are active members of sport or recreational organisations (Rose *et al*, 2005, Table 1, p. 13).

New Zealand has a relatively large non-profit sector compared to many countries. A study commissioned by the Ministry of Social Development's former Office for the Community and Voluntary Sector found that the non-profit workforce in New Zealand was the seventh largest of the economically active population in forty-one countries covered by the study, with a very heavy reliance on volunteers: "90 per cent of New Zealand non-profit organisations employ no paid staff, and so rely on volunteers to function" (Sanders *et al*, 2008, p. 13).

This feature illustrates Waring's (1988) point of the dangers if economic policy focuses on market production rather than on citizen wellbeing. The value of this non-market activity to wellbeing is significant. Statistics New Zealand (2007), for example, has estimated that the market value of volunteer work in non-profit organisations in 2003/04 was \$3.3 billion, which was equal to 2.4 per cent of that year's gross domestic product. As well as this direct contribution to personal wellbeing, authors such as Francis Fukuyama (1995) have argued that strong social networks encourage shared norms and values, which in turn help to build trust, and so make it easier for people to do business with each other in a successful market economy.

There are limits to what can be achieved through voluntary groups, first explored systematically in Mancur Olson's (1965) book. Olson drew some general conclusions; for example, that voluntary community organisations tend to be small and reliant on an even smaller number of their most enthusiastic members. A corollary is that some form of compulsory levy is typically required to achieve an efficient level of funding for large investments in 'public goods', which provides a reason for local government (see, for example Rosen and Gayer, 2014, for an typical textbook analysis of public goods).

Again there are limits. Local governments do not face the innovation and efficiency disciplines that providers in competitive markets must meet, which can allow negative outcomes such as wasted resources, poor decision-making, lobbying by groups for special treatment, and excluded values of minority communities (Buchanan and Tullock, 1962).

Important contributions to addressing this limit have been made by Elinor Ostrom, for which she was awarded the Nobel Prize in economics in 2009 (see, for example, Ostrom, 1990 and 2005). Ostrom drew on decades of case studies to conclude that better outcomes are achieved when a community's different levels and nodes of decision-making are respected (which she termed 'polycentricity') and when citizens and local government officials work together to coproduce public goods. Her emphasis on empowerment of local action resonates with Amartya Sen's emphasis on development as freedom (Tully, 2013), as she expressed in her Nobel address (Ostrom, 2010, pp. 416-7):

When analysts perceive the human beings they model as being trapped inside perverse situations, they then assume that other human beings external to those involved – scholars and public officials – are able to analyze the situation, ascertain why counterproductive outcomes are reached, and posit what changes in the rules-in-use will enable participants to improve outcomes. Then, external officials are expected to impose an optimal set of rules on those individuals involved. It is assumed that the momentum for change must come from outside the situation rather than from the self-reflection and creativity of those within a situation to restructure their own patterns of interaction.

5 Value through Enterprise and skills

John McMillan was one of New Zealand's most eminent economists, being editor of the *Journal of Economic Literature* from 1998 to 2004. He wrote a highly praised book that explained the strengths and limitations of markets as a mechanism for expanding wellbeing (McMillan, 2002, pp. 13-14):

In fact, markets are the most effective means we have of improving people's well-being. For poor countries they offer the most reliable path away from poverty. For affluent countries, they are part of what is needed to sustain their living standards.

Markets, then, are the most potent antipoverty engine there is – but only where they work well. The caveat is crucial ... Left to themselves, markets can fail. To deliver their full benefits, they need support from a set of rules, customs, and institutions. They cannot operate efficiently in a vacuum.

In Dalziel and Saunders (2014a) we note that the universal adoption of markets to organise production and exchange is itself evidence of this institution's enduring contribution to human wellbeing. We emphasise three strengths in particular.

First, as Adam Smith (1776) explained, markets allow producers to *specialise*, both in terms of their chosen outputs and in terms of how they organise their production processes. Second, markets reward entrepreneurs who imagine and organise new ways of adding value for consumers (Schumpeter, 1942). Third, competitive markets support decentralised decision-making because of the property that a competitive market price equals the marginal cost of producing one more unit of the item and the marginal benefit of consuming one more unit (Hayek, 1944 and 1945).

These three strengths make competitive markets a powerful institution for adding value for people. Each enterprise pays the marginal cost of its inputs and processes those inputs to create greater value for its customers. Thus, the market system can be the nation's heart and lungs for supporting its citizens' efforts to develop and sustain wellbeing.

Consequently, it is no surprise that a negative relationship between unemployment and life satisfaction is one of the strongest findings in wellbeing economics, including in a recent New Zealand study (Brown *et al*, 2012). Further, wellbeing requires decent work as was emphasised by Michael Marmot (2010, p. 26) in the United Kingdom:

Insecure and poor quality employment is also associated with increased risks of poor physical and mental health ... Work is good – and unemployment bad – for physical and mental health, but the quality of work matters. Getting people off benefits and into low-paid, insecure and health-damaging work is not a desirable option.

Principle 2 sets a standard for defining decent work; it must provide sufficient income for workers and their families to live with dignity and participate as active citizens in society. The social standard for this income level is called the country's 'living wage', which King and Waldegrave (2012) estimated as being in the order of \$18.40 for New Zealand. The Treasury has undertaken an analysis of Household Economic Survey data using its Taxwell model, which revealed the following features of wages in New Zealand (Treasury, 2013, p. 8):

Over half of the sole parents with dependents who are working have wage rates below the Living Wage, and most of these earn less than \$15 per hour.

In 25% of households with two adults and dependents, the principal earner of the household is on a wage rate below the Living Wage. This earner may also have income from other sources, but generally the partner and dependents will have an even lower wage rate if they are earning wages or a salary.

These figures represent very high proportions of parents who are employed in work that King and Waldegrave's (2012) study implies does not pay them enough to provide for a good quality family life. This fundamental problem must contribute to the high level of child poverty in New Zealand that was noted earlier in this paper (section 3).

The answer is not to raise the statutory minimum wage to \$18.50. The minimum wage sets a floor for the earnings of any worker, including young people in their first job. As workers gain qualifications and experience, however, they should be able to expect their pay will rise so that they can earn a living wage through their own efforts. This is not the case for large numbers of people in New Zealand, which indicates problems in the country's systems for developing and rewarding labour market skills. The consequences of problems in these systems have been well summarised by the OECD (2012, p. 3):

Skills have become the global currency of the 21st century. Without proper investment in skills, people languish on the margins of society, technological progress does not translate into economic growth, and countries can no longer compete in an increasingly knowledge-based global society.

6 Public Service to Expand Capabilities

The previous sections have highlighted the way people advance their wellbeing through their personal time-use choices, through forming households, through participation in community organisations, through coproduction of public services with local government and through market-based enterprise. In these ways individuals construct capabilities to lead the kinds of lives they value and have reason to value (adopting Amartya Sen's formulation). All of this wide range of human effort needs to be understood by policy advisors if central government activities are to add value to the wellbeing of citizens.

To give an obvious example, central government expenditure is generally funded by taxation on market income and expenditure, which removes resources from households that they could have used for market purchases to promote wellbeing according to their own values. Taxation also affects market incentives to earn income, giving rise to additional deadweight losses that Treasury (2005, p. 18) estimates to be in the order of 20 per cent. These social costs mean that a fundamental principle of good government (sometimes called the subsidiarity principle) is that central government should avoid funding goods or services that citizens are capable of purchasing just as effectively for themselves (individually, in households, in community organisations or with the support of local government).

For this principle to be effective, groups of citizens within a country must accept primary responsibility for determining the kinds of lives they have reason to value and for making judgements about what activities will contribute to living those kinds of lives. Central government in its turn must respect property and civil rights of communities as they exercise that responsibility. In Dalziel and Saunders (2014a), we argue that the Māori text of the Treaty of Waitangi provides a powerful expression of this framework that can serve as a model for all groups of citizens in our relations with central government.

Chapter 5 of Dalziel and Saunders (2014a) discusses five central government activities that can add value to wellbeing beyond what citizens could achieve with the same resources: acceptance of an exclusive mandate for exercising physical force to resolve conflicts (following Weber, 1919); accepting overall responsibility for ensuring that rules and institutions for market success are properly codified and maintained (including addressing instances of market externalities); designing equitable and effective social security policies that reflect community values; coordinating 'infrastructure' investments in the country's physical, human, social and cultural capital stocks; and maintaining a public sector workforce that is "imbued with the spirit of service to the community [and] motivated to improve the well-being of New Zealanders" (State Services Commission, 2010, p. 9).

In this paper, we focus on the last of these activities, concentrating on the capability of the public sector workforce to accumulate and synthesise knowledge in the public interest. This capability is important; since the first models of endogenous growth produced by Romer (1986, 1990) and Aghion and Howitt (1992, 1998), economists have paid particular attention to how new knowledge can contribute to living standards and possibly a country's long-run equilibrium growth rate (see Romer, 1994, and Dalziel and Saunders, 2014b, for reviews).

Knowledge has the important properties of being non-rival in consumption and being only partially excludable (see Blakely *et al*, 2005, for a discussion in a New Zealand context). This justifies the existence of a specific legislative framework for defining and protecting intellectual property, to ensure market incentives exist for producing new knowledge. It also means that a standard neoclassical aggregate production function that includes knowledge as one of its inputs exhibits increasing returns to scale. Consequently, economic models with this feature have demonstrated that an increase in the share of the workforce devoted to producing new knowledge can increase an economy's average standard of living (Jones, 1995a, 1995b; Jones and Vollrath, 2013) or its equilibrium growth rate (Young, 1998; Howitt, 1999; Ha and Howitt, 2007; Ang and Madsen, 2011).

Researchers have therefore investigated how policy might support the creation and utilisation of knowledge. Krugman (1991), for example, pointed out how economies of scale can lead to, and be supported by, agglomeration. Applying that theory to New Zealand's productivity paradox, McCann (2009, p. 292) observed that "the major advantage of agglomeration in the modern world is widely regarded as being about maximising the efficiency and effectiveness of knowledge exchanges (Glaeser, 2008) in the production processes of high value-added goods and services in a diverse economic environment (OECD, 2006)".

These insights can be applied to the role of knowledge in public policy advice. David Skilling (2012a, 2012b), for example, observes that small countries have generally performed better than large countries over the last two decades, with higher per capita income growth rates on average of about half a percentage point. He attributes some of these better results to a global economic and political environment that has been more supportive of small country performance than in previous periods, but he suggests it is also partly due to some intrinsic characteristics of small countries and the policy choices made by successful examples. He argues in particular that successful small countries focus on two tasks (Skilling, 2012a, p. 22):

First, develop a clear policy agenda that engages seriously with the global environment, and positions the country to compete in the changing global context. Second, to deliver this policy agenda, governments will need to invest in strengthening public sector strategic capacity, political institutions and social cohesion so that there is a shared understanding and sense of direction.

Skilling (2012b, p. 1) does not count New Zealand among his list of successful small countries, suggesting instead that "New Zealand has an out-dated view of the global economy – that of a commodity exporter – and has not fully recognised that responding to the emerging global realities requires a more deliberate, strategic, comprehensive approach to policy". This focus on public sector strategic capacity can be interpreted as a recommendation for the public service to make better use of its unique capability for accumulating and synthesising knowledge across the broad spectrum of its activities.

7 Conclusion

This paper has presented a wellbeing economics framework for understanding how people create wellbeing through their individual and communal choices, building in particular on the intellectual foundations of Amartya Sen (1989). New Zealand has recently introduced some policy directions consistent with this framework; most notably, the cross-agency *Better Public Services* programme (Wevers, 2011; Ryan, 2012) and Treasury's *Living Standards Framework* (Gleisner *et al*, 2011; Gleisner *et al*, 2012; Karacaoglu, 2012). We do not review those initiatives in this conclusion; instead, we comment on three aspects of policy where we think further improvements could be made.

First, there is a long history in New Zealand policymaking of efforts to promote 'export-led growth'. McAloon (2013, p. 133), for example, writes that "the cumulative effect of all the measures adopted during 1967 [after a collapse in the world price of wool] was a significant reorientation of the New Zealand economy in the direction of export-led growth". Dalziel (1986) recorded the importance of the phrase at the Economic Summit Conference convened by the government at the start of New Zealand's decade of economic reforms. The current Business Growth Agenda is explicitly committed to increasing exports from 30 to 40 per cent of GDP by 2025 (New Zealand Government, 2012, p. 11).

Exports are clearly essential for economic prosperity if only because of the economies of scale that can be achieved by producing for large overseas markets. Nevertheless, we argue in Dalziel and Saunders (2014a, chapter 6) that the policy objective should not be 'export-led growth' for its own sake, but rather 'value-added growth' whether production is for domestic or overseas consumers. This is consistent with value-added activities being the backbone of the wellbeing economics framework. Thus the aim for New Zealand's trade policy should be to develop exports where local producers create the greatest value for overseas consumers (rather than trying to compete on the basis of low costs achieved by low wages or weak environmental standards).

Second, there is solid evidence that New Zealand has serious problems in its systems for skills development. Section 5 commented on the large numbers of parents in New Zealand earning less than the living wage, but the problems are already apparent in data concerning teenagers. Gluckman (2011, p. 1) summarised the evidence as follows:

Adolescents in New Zealand relative to those in other developed countries have a high rate of social morbidity. While most adolescents are resilient to the complexities of the social milieu in which they live, at least 20% of young New Zealanders will exhibit behaviours and emotions or have experiences that lead to long-term consequences affecting the rest of their lives.

Gluckman's report went on to argue that New Zealand cannot afford so many young people being placed at risk. We agree, but the wellbeing economics framework does not assume that initiatives for addressing these poor outcomes will come from public policy only. Skills development by young people is a foundational issue for anyone concerned about present and future wellbeing. Parents and other relatives, employers and other community leaders, voluntary organisations and professional societies can all contribute to helping

young people in all their diversity to discover, discipline and display their talents and interests (Dalziel, 2013, 2014, forthcoming).

Finally, New Zealand is recognised as having been a pioneer in creating arguably the first comprehensive welfare state with the passing of the Social Security Act, 1938. Dalziel and Saunders (2014a) suggest that there is a new opportunity for New Zealand to pioneer a further transformation in how a country enhances the wellbeing of its people, which we refer to as a shift from a 'welfare state' to a 'wellbeing state'. The fundamental difference is where agency is thought to lie: in a welfare state, it is accepted that agency lies primarily with central government and the public service; in a wellbeing state, agency is conceived as lying primarily with the country's citizens.

Thus, the wellbeing economics framework recognises that citizens are daily making time-use choices they judge will contribute to leading the kinds of lives they have reason to value. The role of other institutions is to add value to those choices, especially by expanding the capabilities of persons to enhance their own wellbeing. In a wellbeing state, therefore, the public service concentrates on activities that add value in ways that citizens cannot achieve by themselves using the same resources.

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