ECONOMIC WELL-BEING IN REGIONAL ECONOMIC DEVELOPMENT[1]

Caroline Saunders
Professor, AERU Research Unit, Commerce Division, PO Box 84, Lincoln University Post Office, Canterbury, New Zealand.

Paul Dalziel
Professor, AERU Research Unit, Commerce Division, PO Box 84, Lincoln University Post Office, Canterbury, New Zealand.

ABSTRACT: 'Economic well-being' is appearing as the high-level goal of regional economic development and other legislation around the world, including the Local Government Act 2002 in New Zealand. This term is, however, rarely if ever defined. The purpose of this paper is to explore the economic literature to explore how the term can be interpreted by policymakers and practitioners. The first strand reviewed comes from development economics, especially drawing on Sen's concept of development as freedom. The second strand reviewed comes from the sustainability literature, beginning with the Bruntland Commission in 1987. The paper draws on Solow's definition of sustainability as 'non-declining per capita human well-being over time'. This leads to a discussion of the central role of maintaining five different types of capital: human-made, social, natural/environmental, cultural and human capital. The paper concludes with a discussion of how it can be operationalised by practitioners in their particular local circumstances.

1. INTRODUCTION

In 2002, New Zealand reformed the Act governing its local government. The previous Act had defined nine purposes of local government; to: (a) recognise the existence of different communities in New Zealand; (b) recognise the identities and values of those communities; (c) define and enforce appropriate rights within those communities; (d) provide scope for communities to make choices between different kinds of local public facilities and services; (e) provide for the operation of trading undertakings of local authorities on a competitively neutral basis; (f) provide for the delivery of appropriate facilities and services on behalf of central government; (g) recognise communities of interest; (h) provide for the efficient and effective exercise of the functions, duties, and powers of the components of local government; and (i) provide for the effective participation of local persons in local government. In contrast, the Local Government Act 2002 defined just two purposes of local government (section 10):

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- to enable democratic local decision-making and action by, and on behalf of, communities; and
- to promote the social, economic, environmental, and cultural well-being of communities, in the present and for the future.

The second purpose has the potential to expand considerably the role of local government in regional economic development. New Zealand has two tiers of local government. There are 74 territorial authorities at the city or district council level, and 12 regional councils that under the previous Act were responsible for implementing key pieces of legislation such as the Soil Conservation and Rivers Control Act 1941, the Resource Management Act 1991, the Biosecurity Act 1993, the Maritime Transport Act 1994 and the Land Transport Act 1998. The focus of these regional councils' work was on the integrated management of the natural and physical resources of their region. Promoting the social, economic, environmental, and cultural well-being of their communities will require a much more pro-active approach than in the past.

The reference to well-being in the second objective of section 10 is echoed in other parts of the reformed Local Government Act. One of the core principles defined in the statute is that local authorities must adopt a sustainable development approach, taking into account the social, economic and cultural well-being of people and communities (section 14). In any decision, local authorities must assess the benefits and costs of each option for the achievement of the decision's objective in terms of the present and future social, economic, environmental and cultural well-being of the district or region (section 77). Every six years, the local authority must carry out a process to identify community outcomes, including opportunities for communities to discuss their desired outcomes in terms of the present and future well-being of the community (section 91). Thus it is no exaggeration to say that "social, economic, environmental, and cultural well-being" is now core to the objectives, functions and duties of local government in New Zealand.

Despite this, there is no guidance in the Act about what 'well-being' involves. This is not unusual. The New Zealand 2002 reform followed a similar reform in the United Kingdom (the Local Government Act 2000). Part I of the United Kingdom Act created a new power for local authorities to do anything they consider likely to promote or improve the economic, social or environmental well-being of their area. The Office of the Deputy Prime Minister (undated) has issued statutory guidance to local authorities on this new power, which included the following comment (section 27):

> *The Government does not intend to define what actions would constitute the promotion of economic, social or environmental well-being, although it should be clear that it considers these terms to be sufficiently broad to encompass both cultural well-being and the promotion or improvement of the health of a council's residents or visitors to the region. It is for the local authority itself to decide whether any particular action would promote or improve well-being, taking account of their local circumstances and the wishes and needs of their community.*

A recent study by the New Zealand Treasury that created an analytical framework for evaluating public investment in well-being was similarly broad in one of its early comments (Jacobsen, *et al.*, 2002, p.2, fn. 1):

The nature of well-being is not defined [in this working paper]. Rather, interventions that are intended to prevent or ameliorate adverse outcomes can be viewed as improving well-being. The precise way in which well-being is improved depends on the nature of the outcome being addressed.

The purpose of this paper therefore is to draw on the economic literature to explore how 'economic well-being' can be interpreted by policymakers and practitioners. The first strand reviewed comes from development economics, especially drawing on Amartya Sen's concept of development as freedom. The second strand reviewed comes from the sustainability literature, beginning with the Bruntland Commission in 1987. The paper draws on Robert Solow's definition of sustainability as "non-declining per capita human well-being over time". This leads to a discussion of the central role of maintaining five different types of capital: human-made, social, natural/environmental, cultural and human capital. The paper concludes with a discussion of how it can be operationalised by practitioners in their particular local circumstances.

2. WELL-BEING AND FREEDOM

Despite the centrality of per capita gross domestic product in macroeconomics, it has been generally accepted from as early as the 1950s that average income on its own is not an adequate measure of a community's well-being (Erikson, 1993, p.67). A core concept for well-being as understood by economists is the ability to make choices (now and in the future). In recent time, this concept has become particularly associated with the work of Amartya Sen who uses the word 'capabilities' to describe the ability of individuals to make choices (see especially Sen, 1999). The choices discussed by Sen relate to people's freedom to participate in society. Sen distinguishes five freedoms that he argues are instrumental in allowing people to have choices: political freedom, economic facilities, social opportunities, transparency guarantees and protective security. Sen also argues that the links between these are important with these connections being central to development (*idem*).

The first of the five freedoms (political freedom) is associated with democracies in their widest sense, including the ability to influence governance structures and who governs, access to uncensored press and freedom of expression. This does not just apply to the political system itself, but extends to a general ability to engage in the democracy. All of this is consistent with the statutory first purpose of local government in New Zealand's revised Act: 'to enable democratic local decision-making and action by, and on behalf of, communities'.

Economic facilities refer to the ability to access resources to engage in economic activity, production, exchange and consumption. These facilities include access to land, and to finance and other resources (which could include employment through the labour market). It also includes just socio-cultural and legal structures that affect access to resources and resource allocation. This may be hindered by inadequate information provision or interpretation.

The third instrumental freedom identified by Sen (1999) is social opportunity, particularly access to education and health. Sen argues that social opportunity is not just important for a healthy population, but education is essential for citizens to be able to participate and make informed choices about engagement with the political system, employment opportunities and more general access to resources.

The fourth instrumental freedom of transparency guarantees are necessary to create and maintain trust as part of the underlying socio-cultural framework within which society operates. This relates to a broader literature on transaction costs and the way in which a market system requires well-defined property rights or 'rules of the game' (Bromley, 1989). Clearly these property rights will differ across countries and even regions, but transparency is essential to reduce corruption and accompanying disillusionment in a country's economic and social interactions.

Finally, Sen argues that some form of safety net is required to allow people the security and freedom to engage in society. This protects security social welfare entitlements and ad hoc arrangements for community support in times of acute need (such as natural disasters).

Sen's framework is very useful for thinking about policies for promoting economic well-being. In New Zealand, this strand of economic thought has been recognised by the Ministry of Social Development (MSD) when discussing well-being and the economic standard of living. Its *Social Report* (Ministry of Social Development, 2003) recognises that well-being is related to access to basic necessities such as food, clothing and housing but also that the standard of living contributes to overall well-being through improving a sense of belonging, status and empowerment. The report further stresses participation in society and choice as essential components of development, which are both central to Sen's thesis. Participation is defined in its broadest sense both in terms of participation in the family and community as well as in work and the economic system. Choice is defined as the individual's ability to affect the course of their life, including where they live, how they live, and their ability to access and allocate resources.

Critics of Sen have argued that applying his definition of choice and or freedom has difficulties within a practical policy situation. Nevertheless, a number of countries have created lists of indicators to assess economic development. In New Zealand the MSD uses six indicators: market income per head, income inequality, proportion of population with low income, proportion of the population with low living standards, housing affordability and housing crowding. Similarly, the so-called 'Swedish Approach' has included a standard of living survey as far back as 1968. Table 1 provides typical indicators in these surveys, which attempt to incorporate the broader aspects relating to well-being as suggested by the United Nations (Erikson 1993).

In the United Kingdom, the government has an overall vision relating to economic social and environmental well-being (Audit Commission, 2004). This involves four overarching aims: maintenance of high and stable levels of economic growth and employment; social progress that recognises the needs of everyone; effective protection of the environment; and the prudent use of natural resources. The central government recognises the key role played by local government in maintaining and leading local communities. It also recognises the challenges faced by local governments in achieving this with what is termed the ‘humpty dumpty’ effect (the difficulty of integrating the stands of a wide range of national programmes and initiatives from various government departments into a coherent local strategy).

Table 1. Typical Indicators in the Swedish Level of Living Surveys

Components	**Indicators**
Health and access to health care	Ability to walk 100 metres, various symptoms of illness, contacts with doctors and nurses
Employment and working conditions	Unemployment experiences, physical demands of work, possibilities to leave the place of work during working hours
Economic Resources	Income wealth, property, ability to cover unforeseen expenses of up to $1000 within a week
Education and skills	Years of education, level of education
Family and social integration	Marital status, contacts with friends and relatives
Housing	Number of persons per room, amenities
Security of life and property	Exposure to violence and threats
Recreation and culture	Leisure time pursuits, vacation trips
Political resources	Voting in elections, membership of unions and political parties, ability to file complaints.

Source: Erickson (1993)

3. SUSTAINABILITY

Another way of interpreting ‘choice’ that has an extensive economics literature is through the lens of ‘sustainable development’. A good summary of this literature in the history in economic thought is provided by Perman, *et al.* (1996); see also Pearce, *et al.* (1998) and Pezzey (1989). Sustainable development itself is a politically defined term, which was defined by the Bruntland Commission as development that ‘seeks to meet the needs and aspirations of the present without compromising ability to meet those of the future’ (WCED, 1987, p.43). Another word for ‘needs and aspirations’ is ‘choice’.

Various disciplines have addressed the interpretation of sustainability in very broad terms. It is not uncommon, for example, to distinguish ‘social sustainability’, ‘cultural sustainability’, ‘environmental sustainability’, and of course ‘economic sustainability’. Social sustainability includes key concepts such as resilient communities, sustainable livelihoods, and access to core services of education and health. Cultural sustainability includes language, values and cultural aspirations. Environmental and economic sustainability are key concepts in this paper presented in more detail below.

4. ECONOMICS AND SUSTAINABILITY

Robert Solow’s 1974 presidential address to the American Economics Association was devoted to the question of economic and environmental sustainability. Solow, the originator of modern growth theory in economics, defined economic sustainability as ‘non-declining per-capita human well-being (utility) over time’. Note that his definition emphasised ‘well-being’, not ‘income’. At about the same time, Hartwick interpreted sustainability as non-declining consumption over time (Hartwick, 1977), which is now often referred to as the Hartwick–Solow condition for sustainability. This requires ‘a non-declining capital stock over time’ (Solow, 1986; Repetto, 1986) where capital stock is understood in its broadest terms to include human capital, social capital, cultural capital, human-made capital and natural capital.

Human capital includes knowledge, skills, competencies and attributes embodied in individuals that facilitate the creation of personal, social and economic well-being. It is created through lifelong experience as well as formal education. Social capital has been defined as the ‘network of shared norms, values and understanding that facilitate co-operation within and between groups’ (OECD, 2001). Cultural capital is the set of values, history, traditions and behaviours that link a specific group of people together. It can be particularly important where a minority culture exists alongside a dominant majority culture: Wales in the United Kingdom, Quebec in Canada and Māori in New Zealand. Human-made capital refers to public and private capital such as buildings, factories, office blocks, plant and machinery, computers, infrastructure, airports, seaports, highways, roads, railways, schools, hospitals, the courts, telecommunication networks; and electricity networks. Many of these are either under the direct or indirect influence of local government.

Natural capital in economics is generally classified into three types: extractive resources such as soil, minerals, forests, fish and water; amenity values (direct and indirect) such as landscapes, native bush, recreational fishing; and assimilative capacity or the ability of the environment to ‘process’ waste pollution. Natural capital is different from the other types of capital discussed in the previous paragraph because of the irreversibility of some forms of natural capital when used. This leads to ‘well-being’ rules on its use that may include using renewable resources in a way that the harvest rate is not more than the renewal rate and keeping waste flows within the assimilative capacity of the local environment (Pearce, 1988). This is particularly important for stock natural resources that do not renew themselves (e.g. coal, oil). One rule for stock resources is that planners should ensure that reductions in the stock are compensated for by increased investment in renewable resources or other forms of capital (Hartwick, 1977). Of course, this assumes there is substitutability between stock resources and other capital (Solow, 1974), an assumption that is not universally accepted (see, for example, Daly, 1996, pp.76-80).

Another factor in assessing natural capital (and indeed other forms of capital) is the multi-functionality of this capital, and hence whether all the associated benefits are properly assessed. This is related to the stability and/or resilience of the natural system, resilience being the ability of ecosystem to maintain itself when shocked by natural or human disturbance. Sustainability therefore requires that human interactions with the environment should consider the impact on ecosystems as a whole rather than just on resources themselves with care to avoid threatening the stability of the ecosystems (Common and Perrings, 1992).

All the above forms of capital, including natural capital, can be enhanced by technological development. A constant or growing standard of living is possible from a reduced set of natural resources through technical advances and/or greater efficiency, which is why governments pay such attention to fostering innovation in their industry and higher education policies (in New Zealand, for example, national economic policy is currently designed within what is termed the Growth and Innovation Framework).

5. IMPLICATIONS FOR LOCAL GOVERNMENT

The previous two sections suggest a fundamental principle for local governments charged with promoting economic well-being: the overall objective is to enhance the capabilities of individuals and groups in the community to make choices, now and into the future. This in turn requires that local resource use (including the environment) must be sustainable in the sense just discussed.

In the western world most resources are allocated by the mechanism of competitive markets. There are some very strong economic theories ('the fundamental theorems of welfare economics') that explain the conditions under which market mechanisms can be relied upon to allocate resources efficiently.[2] These include many firms selling an identical product, many buyers, no industry restrictions on entry or exit, perfect information, and no external costs or benefits from production and consumption. Even when these conditions are not fully met in practice, economists often argue that the market allocation mechanism remains useful as a 'benchmark' for evaluating alternative policy proposals

Within this context, there are two important ways in which local governments engage with the market mechanism in promoting economic well-being. First, local government typically play a part in establishing the rules or property rights within which markets can operate (for example, setting clear rules for planning permissions or resource use consents). Second, free markets will not efficiently provide some goods and services (known in the economics literature as 'public goods'), and there may be a role for local government in identifying and filling these gaps.

[2] Clearly there are many texts on markets, market failure and property rights. In this section use has been made of Samuelson and Nordhaus (1989) for the general explanation of markets and market failure. In the discussion of property rights extensive use has been made of Randall (1987) and Bromley (1991).

How markets operate and resources are used depends upon property right structures. Property rights define ownership (ownership being the right to use, made up of entitlements, privileges, and limitations; see Dalziel and Saunders (2004) for a discussion in the context of regional development partnerships). Some of these rights are defined in law but many are not. Instead they result from basic values and accepted norms of behaviour that constrain or influence citizens' actions and thus are affected by culture and society.

Property rights are an essential prerequisite for the efficient operation of markets. Ownership assigns a right to use, subject to various conditions, the least restrictive kind of which is exclusive use rights. Property rights particularly need to be carefully and clearly specified where there is potential conflict between different owners of property rights, in order to reduce conflict between owners and non-owners. How particular rights are specified will vary depending on a wide range of legal, cultural and economic factors, which must be interpreted by central and local government.

This process is not costless. Specification of rights, transfer of rights, arbitration of rights and enforcement of rights are all costly. Government, the justice system, the police force, barristers and solicitors all exist to enforce and specify rights. These transaction costs mean that some property rights may be imperfectly defined or not well understood by market participants. This may occur if the costs of specification are judged to outweigh the benefits or if a new technology requires new rights (or creates new conflicts over rights) that have not been addressed by lawmakers or tested in the courts. Social norms of accepted behaviour also evolve, so that a continual process of reviewing property rights is needed as society and the economy develop.

Even where ownership entitlements are clearly specified, specific rules may be needed for markets that do not meet the requirements for perfect competition. For a particular industry, there may be imperfect information, a small number of buyers or sellers, or significant barriers to new entrants. Under these conditions, policymakers (typically at the central government level) have to determine the type and extent of imperfect competition, and then consider whether and how to intervene.

The second role for central and local government in the marketplace is to identify goods and services that are 'non-exclusive in use' or 'non-rival in consumption' or both. The former property means it is not possible (physically, politically or cost-effectively) to exclude anyone from using the resource. The second property means that one person using the resource does not prevent another person from using the same resource. These public goods are an example where market allocation is inefficient. With public goods more than one consumer can benefit from consumption and no one can be excluded even if they do not contribute to the cost of supply. In these cases public provision by central or local government is frequently the best way of ensuring the service is provided. Examples include street lighting and national parks.

Closely related to pure public goods are goods or services that produce 'externalities'. Externalities are by-products of consumption or production that affect citizens other than the buyer and seller in a way that is not valued by the market. The most commonly discussed of these is pollution, which is a negative externality. Not all externalities are bad, however, and the positive externalities from health and education are often used to justify at least some public provision of these services.

An important application of externalities theory concerns future generations. Consumption of natural resources and investment in physical capital can be considered as involving negative and positive externalities respectively for future generations. This can be used to justify local government interest in ensuring that local resource use (including the environment) is sustainable.

6. CONCLUSION

In New Zealand and in other parts of the world, local government is being required by statute to promote community well-being in its region. This paper has drawn on Amartya Sen's work to argue that this can be achieved by enhancing the capabilities of individuals and groups in the community to make choices, now and into the future. This requires five instrumental freedoms (political freedom, economic facilities, social opportunities, transparency guarantees and protective security), but also requires that local resource use (including the environment) must be sustainable. Sustainability can be defined very broadly, including social, cultural, environmental and economic sustainability. The last two concepts can be addressed within the Hartwick-Solow framework of a non-declining capital stock over time. Natural capital is a particularly important consideration, because of the irreversibility of some forms of natural capital when used. This leads to a number of well-established rules for environmental use that can be adopted by local government in defining and enforcing property rights within its local region.

Figure 1 presents a framework for local governments with a statutory duty to promote the social, economic, environmental and cultural well-being of their local communities. At the heart of the framework is the obligation to determine where the region's weaknesses and/or risks lie that might threaten well-being now or in the future. This requires five streams of information.

The first stream is a statistical analysis of the region's resource base, including its human, social, cultural, human-made and natural capital, as discussed above. Over time, these stocks of capital can be expected to expand or shrink (depending on depreciation, investment and use), which is a vital determinant of sustainability into the future. Hence the second stream of information involves indicators of these three flows for each type of capital.

The third and fourth streams draw information from the region's communities and business sector. This is necessary to obtain community views on well-being and key constraints on achieving further economic development. These two streams are grouped together in Figure 1 to reflect that businesses are of course already engaged in their local community (as employers and as suppliers of goods or services demanded by consumers), and this engagement needs to be incorporated in good public policy design.

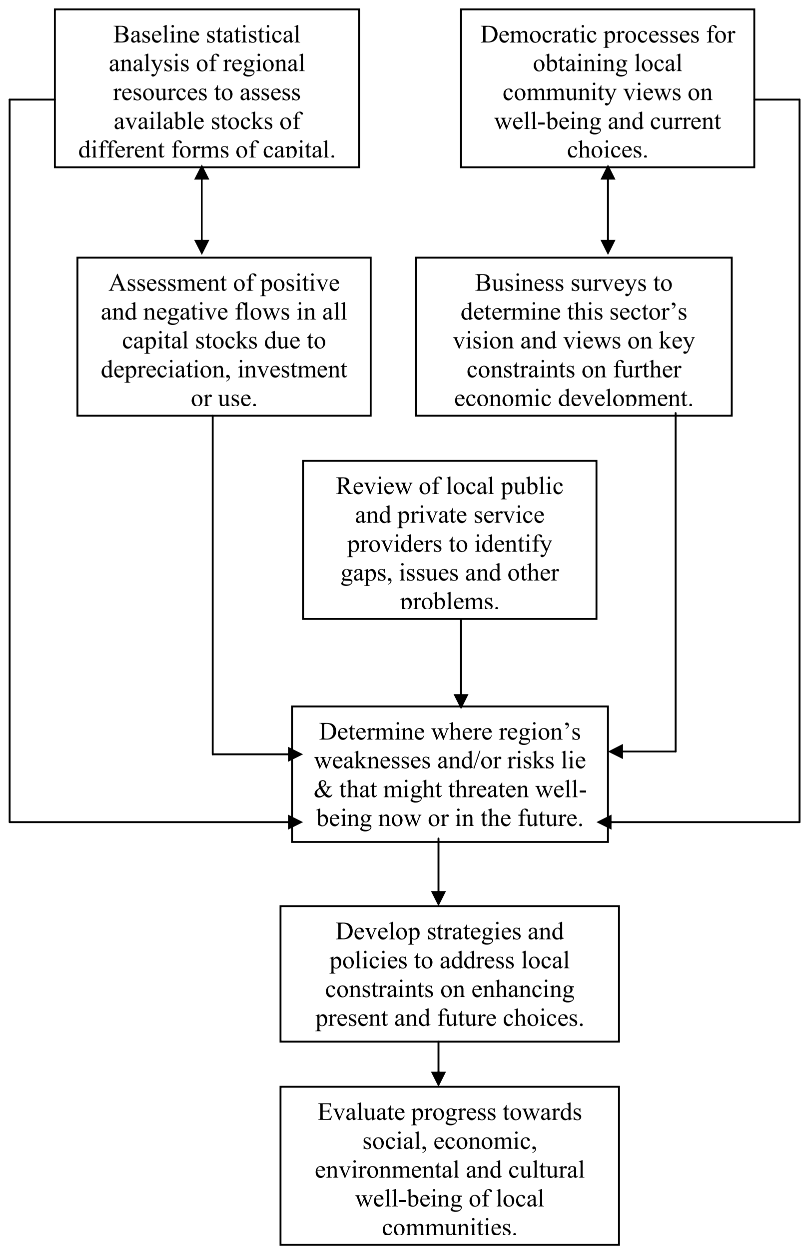

Figure 1. Framework for Local Government Action

The fifth stream reviews local public and private service providers to identify gaps, issues and other problems. There is a very wide range of central government agencies, local government agencies, community groups and private enterprise involved in regional development aimed at promoting greater social, economic, environmental and cultural well-being. Each of these typically has its own strategic plan, and there is evidence that the most effective form of regional partnerships for development is to co-ordinate the already existing strategic plans into a wider development strategy (see, for example, Dalziel and Saunders, 2004).

Once these five streams of information have been used to determine the region's weaknesses, the next step is to develop strategies and policies to address local constraints on enhancing present and future choices. The final step in the cycle is to evaluate the progress made by these strategies and policies towards greater social, economic, environmental and cultural well-being of local communities.

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