Ecological Economics 117 (2015) 162–172

Contents lists available at ScienceDirect

Ecological Economics

journal homepage: www.elsevier.com/locate/ecolecon

Surveys

Barriers and opportunities for alternative measures of economic welfare

Brent Bleys [a,*], Alistair Whitby [b]

[a] Department of General Economics, Faculty of Economics and Business Administration, Ghent University, Tweekerkenstraat 2, B-9000 Ghent, Belgium
[b] World Future Council, 100 Pall Mall, London SW1Y 5NQ, United Kingdom

ARTICLE INFO

Article history:
Received 3 April 2015
Received in revised form 28 May 2015
Accepted 15 June 2015
Available online 15 July 2015

Keywords:
ISEW
Index of Sustainable Economic Welfare
NWI
National Welfare Index
GPI
Genuine Progress Indicator
Economic Welfare
Beyond GDP
Barrier study

ABSTRACT

This paper explores a number of barriers and opportunities facing alternative measures of economic welfare by conducting semi-structured in-depth interviews with (potential) users in both Belgium and Germany. The barriers that they identified are grouped into three categories. Context factors are embedded in the policy context and agendas that shape the environment in which an indicator percolates, indicator factors depend on specific characteristics of the indicators, while user factors relate to the level of experience and expertise of the users of indicators and the institutional culture in which they operate. Drawing on the different barriers that are reported, we identify four opportunities to increase the policy value of alternative measures of economic welfare: harmonizing and updating the methodological framework, extending macroeconomic models to include a wider range of welfare-related items, improving the communication around these indicators and promoting indicator and researcher entrepreneurship. These opportunities should be regarded as recommendations to the scientific community that works on these alternative measures. The process of overcoming the different barriers listed in this paper should not be insurmountable, as there is clear international public support for using health, social and environmental statistics as well as economic statistics to measure societal progress and human well-being.

1. Introduction

Pursuing economic growth has been the main focus of macroeconomic policy for the past fifty years. Economic activities have been promoted through a wide range of policy measures, ranging from optimizing taxes, to safeguarding free markets and investing in infrastructure and education. The main assumption underlying these policies is the idea that everybody in society benefits from a growing economy — i.e. the idea that "a rising tide lifts all boats". A rise in GDP per capita increases the average income per person, which, in turn, is automatically translated into a higher level of well-being according to traditional utilitarian thinking. In the 1960s and 1970s the high levels of correlation that were found between GDP per capita and indicators for other important dimensions of well-being (e.g. life expectancy and literacy rates) supported this theory.

Today these correlations are less present in developed countries (Stiglitz et al, 2009). As a result, continuing to promote economic growth in these countries is not as obvious as is often assumed especially when the costs of economic growth in terms of environmental degradation and depletion of natural capital are taken into account. Looking at the ecological footprint, an indicator of ecological sustainability, it is clear that the world as a whole, and developed countries in particular, are expanding their economies through an ecological overshoot. According to the latest Living Planet Report (WWF, 2014) 1.5 Earths are required to support human demand on our ecosystems. Furthermore, the demand for ecosystem services is not evenly distributed around the world — people in developed countries consume resources and ecosystem services at a much faster rate than others.

The criticism of both GDP as an inappropriate measure of economic welfare and the growth paradigm is not new. From the early development of the System of National Accounts – in which GDP is embedded – Simon Kuznets, one of the co-creators warned that "the welfare of a nation can … scarcely be inferred from a measurement of national income" (Kuznets, 1934). And yet, many policy-makers, the public and the media have treated GDP precisely as such. From at least as early as the 1960s, there has been concern about this interpretation of GDP, both from politicians such as U.S. Senator Robert Kennedy, and from academics and other indicator producers. Key areas of concern included technical economic critiques of GDP, the growing acknowledgement that GDP and similar measures tend to distract attention from ultimate outcomes such as people's experiences of their lives, and rising awareness of the need to assess environmental impact (Van den Bergh, 2007). These criticisms and concerns have led to the development of alternative indicators for policy-making from the 1970s onwards (e.g. United Nations' Human Development Index). Boarini et al. (2006), Goossens et al. (2007) and Bleys (2012) can be consulted for an overview of the different indicators that have been developed over the years.

* Corresponding author.
E-mail addresses: Brent.Bleys@UGent.be (B. Bleys), Alistair.Whitby@worldfuturecouncil.org (A. Whitby).

http://dx.doi.org/10.1016/j.ecolecon.2015.06.021
0921-8009/

Momentum began gathering around alternative indicators at the beginning of this century when several individual countries launched initiatives to measure national progress and well-being in a more comprehensible way. The OECD began a series of international conferences, which included the signing in 2007 of the Istanbul Declaration calling for the developing of alternative indicators of progress by leading supra-national organisations including the UN, the European Commission and the World Bank. In 2007, the European Commission and European Parliament organized the Beyond GDP conference, which kick-started their engagement with the agenda. In the same year Eurostat, the European statistical agency, commissioned a study to explore the feasibility of Well-Being Indicators for Europe. In 2008, the French President Nicolas Sarkozy set up the Commission on the Measurement of Economic Performance and Social Progress, led by renowned economists Joseph Stiglitz, Amartya Sen and Jean-Paul Fitoussi. The Commission reported in September 2009, calling for the measurement of progress to move from production to well-being.

Both the Beyond GDP conference and the Stiglitz–Sen–Fitoussi report were initially regarded as important catalysts for the further development and increased use of alternative indicators to guide policies, yet the financial and economic crisis of 2008–2012 steered policy more into the direction of traditional economic views and pro-growth policy prescriptions. In this light, the BRAINPOoL project[1] (short for "Bringing Alternative Indicators into Policy") funded by the European Union FP7 funding stream, started investigating the barriers to, and the opportunities for the use of "Beyond GDP" indicators in policy. The overall aim of the project was to help increase the influence of these indicators in policy, by improving knowledge transfer between those creating and promoting such indicators and their potential users.

In this paper we focus specifically on alternative measures of economic welfare as part of the larger "Beyond GDP" debate. While alternative measures for economic welfare, such as the Index of Sustainable Economic Welfare (ISEW) and the Genuine Progress Indicator (GPI) have been around for 25 years, their policy impact is rather limited. This paper explores a number of barriers that these alternative measures face by interviewing (potential) users in both Belgium and Germany — two countries in which alternative measures of economic welfare have recently been picked up by policy-makers (Bleys, 2013; Diefenbacher et al, 2013).

In Section 2 the different alternative measures of economic welfare are presented along with the impact these measures have had on policy-making. Section 3 presents the barriers to a wider use of alternative measures of economic welfare that were identified in the two case studies that were conducted, while Section 4 outlines a number of opportunities to increase the policy value of alternative measures of economic welfare that counter some of the reported barriers. Section 5 concludes by envisioning a future for the research field.

2. Alternative Measures of Economic Welfare and Their Use

In this section we will briefly present the most widely used alternative measures of economic welfare, listing the studies that have been undertaken at both a national and regional level and investigating the impact these studies have had on policy-makers.

2.1. Alternative Measures of Economic Welfare: ISEW, GPI, MDP and NWI

Measures of economic welfare focus on the contribution of a nation's or region's economy to the overall level of well-being enjoyed by its citizens (Bleys, 2012). In doing so, these measures typically focus on the costs and benefits of economic activities. The *benefits* of these activities are generally related to the services derived from the consumption that is made possible through participating in economic activities, yet differing views exist on how to properly measure these services. The *costs* of these economic activities are predominantly related to the impact the economy has on its natural environment.

GDP is not a good measure of economic welfare, as it fails to discriminate between costs and benefits. This leads to a mixture of 'goods' and 'bads' in its calculation — for example, GDP includes the value of the work generated by dealing with car accidents and cleaning up environmental pollution caused by economic activities. As a result, a rise in GDP is not necessarily translated into an increase in economic welfare, a reality highlighted by the recent standardized inclusion of drugs and prostitution in EU GDP calculations. GDP is a measure of the size of the economy (quantity) rather than one of economic welfare (quality).

The best-known alternative measure of economic welfare is the Index of Sustainable Economic Welfare (ISEW) worked out by Daly and Cobb (1989) in their book *For the Common Good: Redirecting the Economy towards Community, the Environment, and a Sustainable Future*. The authors developed the ISEW based on previous efforts to adjust GDP to overcome its weaknesses as a measure of economic welfare (Nordhaus and Tobin, 1972; Zolotas, 1981). The main advantage of the ISEW over other alternative measures is that it is calculated in monetary terms, so that it can be directly compared to the GDP. All items in the methodology of the ISEW are expressed in monetary terms using valuation methods from different types of literature (e.g. environmental economics for the valuation of environmental degradation, social economics for the valuation of household labour and the welfare losses from income inequalities).

The ISEW takes the private consumption expenditures of a country or region as its methodological starting point, as it is argued that the consumption of goods and services on the part of households are the main benefits of economic activity, generating positive utility and contributing to welfare. Next, a number of corrections are made to incorporate aspects of economic activity that enhance or diminish welfare. A portion of public consumption expenditures and the value of household labour are added to the basic private consumption component of the ISEW, while the defensive part of private consumption expenditures and the welfare losses from income inequalities are deducted. Finally, a number of capital adjustment are generally made to adjust for durable consumer goods and sometimes also for net capital growth and changes in the net international investment position. Within the ISEW, the costs of economic activities are mainly due the loss of ecosystem services that occur either through environmental degradation (water and air pollution, climate change, ozone layer depletion) or through the depletion of natural capital. The ISEW is calculated as the difference between the benefits and the costs of economic activities.

Lawn and Sanders (1999) and Lawn (2003) worked out an ex post theoretical framework for the ISEW starting from the income and capital concepts of Fisher (1906). Fisher regarded income as a stream of services enjoyed by the consumers of all human-made goods — Fisher's view on income is also referred to as "psychic income". Lawn and Sanders (1999) claim that this 'psychic income' constitutes the true benefit of economic activities as the final satisfactions derived from commodity consumption are the ultimate good. Next, an array of psychic disservices (e.g. the disutility of work and commuting), also referred to as 'psychic outgo', are subtracted to obtain a measure of 'net psychic income'. This 'net psychic income' is a measure of the benefits of economic activity, because intermediate transactions are cancelled out. The costs of economic activities are related to the loss of ecosystem services and amenities that result from the use of natural resources in production processes and the associated generation of waste flows. The inclusion of natural capital into the economic system can be linked to Fisher's capital concept that is broader than the capital concepts used by neoclassical economists. Lawn (2003) further notes that using Fisher's concepts of income and capital forces one to recognise that the continual maintenance of human-made capital should be regarded as a cost and not as a benefit. He also demonstrates how the different items in the ISEW are consistent with Fisher's concept of income and capital.

[1] BRAINPOoL webpage: http://www.brainpoolproject.eu.