Composite Indexes of Human Well-being: Past, Present and Future

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Introduction

Human well-being is often treated as a multidimensional concept, consisting of a number of distinct, separable dimensions. Theoretical research has identified an array of dimensions. Often specific to a particular conceptualization of well-being; these dimensions can be social, physical, psychological or material in nature (Alkire 2002). Empirical research has proposed a number of composite indexes intended to measure multi-dimensional well-being, especially at the level of countries. At least twenty composite indices have received international attention in the last four decades (Booysen 2002). The best known, and that which has received the most attention, is the UNDP’s Human Development Index (HDI) (UNDP 1990–2004). Others include the Physical Quality of Life Index (PQLI) (Morris 1979), the Combined Quality of Life Indices (CQLI) (Diener 1995), and the Human Suffering Index (HSI) (Camp and Speidel 1987, Hess 1989, Tilak 1992). Also included in these indexes are United Nations Research Institute for Social Development (UNRISD) Level of Living Index (LLI) (Drewnowski and Scott 1966), General Index of Development (GID) (McGranahan et al. 1972), and Socioeconomic Development Index (SDI) (UNRISD 1970). The designers of these indexes typically emphasize that there is more to well-being enhancement than material enrichment, and therefore often combine what might be loosely termed ‘economic’ and ‘non-economic’ well-being indicators. In some instances the indexes are intended to serve as alternative or competing indexes to traditional income-based measures, and therefore include non-economic variables only.

This chapter critically reviews composite well-being indexes. Its focus is on indexes of overall national well-being achievement, as opposed to more specific indexes of poverty, gender bias, sustainability or single well-being dimensions. Indexes such as the UNDP’s Gender-related Development Index, Gender Empowerment Measure, Capability Poverty Measure, and Human
Poverty Index (UNDP 1990–2004), or the Combined Consumption Level Index (Bennett 1951), Real Index of Consumption (Beckerman and Bacon 1966), Index of Economic Well-being (Osberg and Sharpe 2002), and Human Freedom Index (Humana 1992) are not considered, therefore. A number of issues are examined, including the general structure of the index, the choice of components, universalism, component weights, scale equivalence, component transformations, the treatment of income, correlations among components and policy relevance. Most of these issues are examined in the context of a critical review of the many criticisms of the HDI and the UNDP’s responses to these criticisms, some involving changes to the design of the index. Possible directions for the future design and application of composite well-being indicators are identified, including adoption of participatory country and time variant component weighting schemes. It should be stressed that there is a huge literature on the HDI that includes studies by McGillivray (1991), Murray (1991), McGillivray and White (1993, 1994), Acharya and Wall (1994), Gormely (1995), Lüchters and Menkhoff (1996, 2000), Hicks (1997), Ivanova et al. (1998), Noorbakhsh (1998a, 1998b, 2002), Sagar and Najam (1998), Neumayer (2001), Cahill (2002, 2005) and Morse (2003). The current chapter does not do justice to this literature as it does not look at the full ranges of issues raised in it or at the many useful revisions to the HDI it proposes. Nor does it do justice to a number of innovative, but less known, measures proposed in studies such as Maasoumi and Nickelsburg (1988), Slottje (1991), Majumdar and Subramanian (2001) and Zaim et al. (2001). The chapter is, instead, concerned with selected core issues.

Consisting of a further seven sections, this chapter begins with a critical overview of the structure of composite indexes and addresses some key issues in the selection of component variables. It pays special attention to the issue of universalism. Then we look at methods used to achieve scale equivalence in component variables, before examining transforming values to reflect perceived non-linear relationships, highlighting the case of the HDI income component. After looking at correlations between components and with other well-being measures and the weighting of components, we then discuss, mainly in the context of the HDI, the policy relevance of composite indexes used in international well-being assessments. The conclusion provides remarks on the future design and application of composite well-being indexes.

**Structure and components**

The general structure of most composite well-being indexes is:

\[ W_i = \sum_{j=1}^{k} w_j C_{i,j} \quad i = 1, \ldots, n \] (5.1)