## ARTICLE IN PRESS

ECOLEC-04535; No of Pages 2

Ecological Economics xxx (2013) xxx-xxx



Contents lists available at SciVerse ScienceDirect

## **Ecological Economics**

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



**Book Review** 

Marc Fleurbaey, Didier Blanchet, Beyond GDP: Measuring Welfare and Assessing Sustainability, Oxford University Press Inc., 2013, (09 May, 320 pages)

It has by now been widely accepted that GDP is neither a good measure of well-being nor of sustainability. But any alternative metric suffers from various diseases, sometimes similar to those of the GDP. As a result, the GDP remains the king of all metrics, satisfying the appetite for golden numbers and easy guidelines.

A new book by Marc Fleurbaey and Didier Blanchet, titled "Beyond GDP — Measuring Welfare and Assessing Sustainability" brings new light to this issue (Fleurbaey and Blanchet, 2013). One could say 'laser light', given its rigorous and clear analytical treatment of the topic. While the authors are dedicated economists and philosophers, most parts are easily accessible and worth reading also for those coming from a more ecologically minded perspective. In fact, even if one disagrees with their carefully argued conclusions, this book still constitutes an essential reading, sharpening the argument on what constitutes welfare and how to measure it.

Readers who expect easy answers, however, will be disappointed. The authors explain the Scylla and Charybdis of the issue. The Scylla is the aggregation, which always requires a trade-off between not necessarily commensurable dimensions, often involving disputable value judgments. The Charybdis is the accumulation of numerous specific indicators, each of which gets lost in the sea of indicators. But the discussion clarifies possible avenues, and disqualifies others. The first insight is that indicators of current welfare should not be confused with sustainability indicators. Green GDP measures, for example, may indicate some measure of an environmentally corrected welfare estimate for current consumption, but reveal nothing on its sustainability.

Second, the authors navigate the Scylla and Charybdis by arguing for a route in between: They call for a multiplicity of synthetic indicators. The reason is that there are several reasonable philosophical approaches towards aggregation that cannot converge into a single indicator. On the other hand, aggregation should still be attempted as a plethora of specific metrics would fail to satisfy the need to evaluate welfare comprehensively.

The authors argue that such a fine-tuned dashboard of indicators should include, among others, both happiness and capability metrics. They appreciate happiness metrics for their potential to include what matters to people according to their verbal statements, e.g. friendship, love and health. But they see happiness metrics as being insufficient, notably because of a calibration problem: Open-bounded ambitions are mapped on a bounded scale, which results in a recalibration of this scale with having achieved certain ambitions and developing new ones. Thus humans may adapt for instance to improvements of material living conditions without becoming any happier (Frederick and Loewenstein, 1999), but most would want to count raising living standards as welfare improving. Moreover, Fleurbaey and Blanchet are sympathetic towards a liberal interpretation of

Sen's capability approach — that is one in which what constitutes a good life is derived from a deliberative process.

The authors also take position in arguing for their favorite: the equivalent-income approach. According to the equivalent-income approach, various monetary and non-monetary preferences can be compared by willingness-to-pay and elasticities of substitution. Each comparison would be routed in reference values, which themselves are subject to ethical choices. The income-equivalent approach respects individual preferences and enables a monotonic ordering in bundles of options. Depending on ethical choices, it is compatible with a Rawlsian worst-off principle but also allows for a preference for some inequality.

The focus on preferences, however, deserves more scrutiny. Three arguments can be put forward against making individual preferences the primary focus of welfare indicators. First, many parts of human behavior are subject to addictions. Think not only about conventional drugs and alcohol but also about sugar and the use of TV, internet and mobile phones. Some sort of addiction is the rule rather than the exception. In fact, addiction corresponds to positive feedbacks - rewards - in ancient parts of our brain. Large parts of our behavior can be explained by dopamine release in the limbic system, which acts unconsciously and predates the emergence of those parts of the brain that correspond to 'rational' action. Individual preferences based in addiction should not necessarily have normative value. Fleurbaey and Blanchet point themselves to behavioral studies demonstrating that immediate preferences are malleable and cannot be trusted. Hence, studies on preferences should focus on what could be considered the deeper, authentic preferences under time-inconsistent behavior that often results from addictions. Ongoing research explores the options available (Bernheim and Rangel, 2007, 2009).

Second, no one would justify theft, murder or rape on the basis of individual preferences. Clearly, social norms and individual duties play an important part of behavior (see Hollis, 1991). In a social context, the nature of these norms has a clear impact on individual welfare. In essence, a welfare metric on individual preference is blind to the social norms desirable for society — which themselves decisively shape individual wellbeing (Layard, 2005). Perhaps one can argue that a set of social norms can be identified by investigating individual preferences on these norms. But the social character of social norms points to a dimension that goes beyond individual preferences and hence should be clearly identified as such.

Third, and most importantly, the focus on individual preferences misses the point that these are fundamentally formed by choice settings and infrastructures — through the psychological effects of anchoring, framing and defaults (Ariely et al., 2003; Thaler and Sunstein, 2008). Willingness-to-pay metrics are only indicative of preferences given any infrastructure. To see this point, consider world A characterized by infrastructure A', and world B characterized by infrastructure B'. For the purpose of illustration consider that infrastructure A' enables a satisfaction of individual preferences such as individual mobility. Infrastructure B' in turn would be more restrictive on individual mobility but would provide higher social welfare

2 Book Review

in total by reducing congestion, improving air quality, and even contributing to improved social life. Infrastructure B' would achieve this by modifying the preferences through framing and setting default options so that externalities are easier to tackle. Individuals live in world A; world B is only hypothetical for them. In another words, the state of knowledge that individuals have on these two worlds is fundamentally asymmetric. Under such circumstances, individuals may prefer world A over World B independent of different metrics concerning health, efficiency, and quality of life. Prospect theory identifies this phenomenon and calls it loss aversion.

The above example also illustrates an intuition that some have when arguing against a liberal perspective that is based on preferences. Possibly, a conceptual focus on individual preferences leads to a bias in favor of that utility that is connected to personal freedom and opportunity — at the costs of that utility that is derived by collective action. Preferences are manipulated everyday by institutions and advertisement, and interact with social norms. Under such a perspective, and if individual preferences interact with collective action problems, the satisfaction of individual preferences can be seen as a dubious goal. Instead, one may prefer to identify and design, by means of a democratic process, institutions, which guide preferences and incentives such that these co-align with solutions to collective action problems.

In summary, Fleurbaey's and Blanchet's book is both an essential and extremely pleasant reading for anyone who is interested in the substance of the 'Beyond GDP' question. Even those who disagree with their arguments in favor of the equivalent-income approach will discover a wealth of material to sharpen their mind and to find intellectual satisfaction.

## References

Ariely, D., Loewenstein, G., Prelec, D., 2003. "Coherent arbitrariness": stable demand curves without stable preferences. Quarterly Journal of Economics 118 (1), 73–106. Bernheim, B.D., Rangel, A., 2007. Behavioral public economics: welfare and policy analysis with non-standard decision-makers. In: Diamond, Peter, Vartiainen, Hannu (Eds.), Behavioral Economics and Its Applications. Princeton University Press, Princeton.

Bernheim, B.D., Rangel, A., 2009. Beyond revealed preference: choice-theoretic foundations for behavioral welfare economics. The Quarterly Journal of Economics 124 (1), 51–104.

Fleurbaey, M., Blanchet, D., 2013. Beyond GDP: Measuring Welfare and Assessing Sustainability. Oxford University Press. USA.

Frederick, S., Loewenstein, G., 1999. Hedonic adaptation. In: Kahneman, Daniel, Diener, Ed, Schwarz, Norbert (Eds.), Well-being: The Foundations of Hedonic Psychology. Russell Sage Foundation, New York, pp. 302–329.

Hollis, M., 1991. Rationalität und soziales Verstehen: Wittgenstein-Vorlesungen der Universität Bayreuth. Suhrkamp, Frankfurt a. M.

Layard, R., 2005. Happiness: Lessons from a New Science. Penguin, London.

Thaler, R.H., Sunstein, C.R., 2008. Nudge: Improving Decisions about Health, Wealth, and Happiness. Yale University Press.

Felix Creutzig

Mercator Research Institute on Global Commons and Climate Change, Torgauer Straße 12-15, 10827 Berlin, Germany Chair Economics of Climate Change, Technische Universität Berlin, Straße des 17. Juni 145, 10623 Berlin, Germany

Corresponding reviewer at: Mercator Research Institute on Global Commons and Climate Change, Torgauer Straße 12-15, 10827 Berlin, Germany. Tel.: +49 30 33 85 537x225.

E-mail address: creutzig@mcc-berlin.net.

Linus Mattauch

Mercator Research Institute on Global Commons and Climate Change, Torgauer Straße 12-15, 10827 Berlin, Germany Chair Economics of Climate Change, Technische Universität Berlin, Straße des 17. Juni 145, 10623 Berlin, Germany

> 24 May 2013 Available online xxxx