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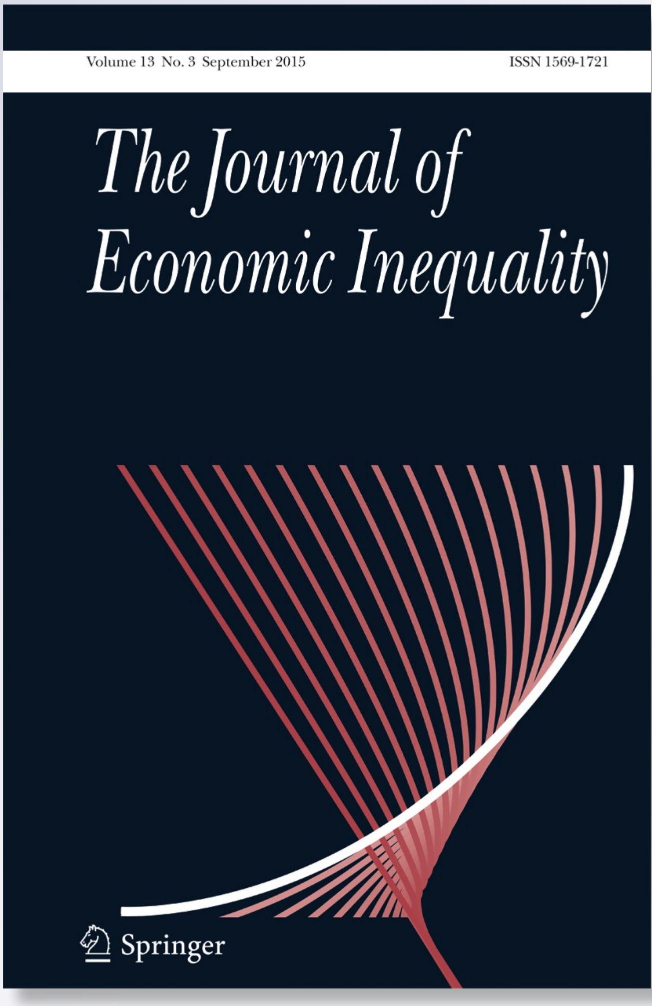

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Book Review of *Beyond GDP: Measuring Welfare and Assessing Sustainability*

By Marc Fleurbaey and Didier Blanchet, Oxford University Press, 2013. pp. 301. ISBN: 978-0-1997-6719-9 (hbk)

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Politicians and pundits may obsess over Gross Domestic Product, but as Marc Fleurbaey and Didier Blanchet emphasize from the outset of this book, GDP is by itself a poor indicator of social progress. Their argument is that "even if economists cannot be accused of overselling the GDP, they should perhaps feel a special responsibility for helping to construct better alternatives". This erudite and well-written book therefore surveys the current literature in economics, asking whether a better measure of social well-being is now available and what types of social indicators should be constructed in future. Like a partially full (partially empty?) glass, the economics literature can be seen from multiple angles: some important questions have been addressed but many crucial issues also remain ignored. The limitations of the book therefore offer a window on the limitations of the larger economics literature which, to put a positive spin on the issue, illustrates the many future possibilities for creative new research on the measurement of social well-being.

Dissatisfaction with GDP has produced a number of competing indicators of social well-being over the last 50 years. Chapter 1 provides a compressed overview, sorted into four typologies: subjective approaches, composite or hybrid indices, "dashboard" indicators and accounting/monetary approaches. The authors start with a useful discussion of how a composite index with fixed weights implicitly assumes substitutability among component sub-indices, which may imply that an unattractive monetary value is assigned to, for example, human life. The Human Development Index, in particular, assigns equal one third weights to linearly-scaled sub-indices summarizing population life expectancy, education and material living standards (for which the proxy is log(real GDP per capita)). In very poor countries a small absolute change in GDP can be a large percentage change. As a result, for poor countries quite small absolute changes in GDP have an equivalent impact on HDI as a year's increment in life expectancy, and the implied shadow dollar value of human life is (a) very low in some countries and (b) differs hugely across nations – conclusions which many observers might question.

Nevertheless, despite the incommensurability of, for example, health and education, in everyday life social decisions have to be made which favour one or the other. Despite the reluctance many people feel in assigning dollar values to non-market aspects of life, social decisions typically also have implications for available market consumption. And the daily debates of contemporary politics clearly demonstrate that individual citizens disagree, sometimes vehemently, on social decisions and social priorities, i.e. on which dimensions of collective life should weigh more heavily when "social well-being" is measured and "social progress" is assessed. Composite indices with variable weights such as the Index of Economic Well-Being[1] and "Dashboard" approaches such as the OECD's Better life Index[2] therefore allow individual citizens to choose the weighting to be assigned to specific components of well-being. Both approaches start from the viewpoint that social well-being depends on multiple aspects of life, many of which have no natural common unit of measurement. Both approaches interpret the purpose of social index construction as providing information to assist the democratic debate on social decisions and both therefore see it as a virtue when individual citizens, who may each have different values, can see the implications of their own values for the aggregate measurement of "social progress". Fleurbaey and Blanchet, by contrast, see such flexibility as a vice. The underlying presumption of their book is that "scientific judgement" can uniquely define, and ultimately measure, social progress. As they put it when discussing dashboard indicators (p. 28), "[o]fficial statisticians prefer not to be in charge of saying by how much income must be weighed against additional years of life or other non-monetary aspects of well-being. This is supposed to be a matter of personal values, not of scientific judgement." As a consequence, composite indices and dashboard indicators receive little further attention in their volume.

"Sustainability" is a key word in current debates about social progress, so Chapter 2 begins by introducing the standard notation of the discounted present value of individual well-being from the consumption of commodities over time. As economists often do, this perspective on individual well-being is then generalized to the well-being of a collectivity by the simple expedient of replacing lowercase letters by uppercase letters, thereby sidestepping discussion of whether inequality among individuals or externalities in the production or consumption of commodities might complicate aggregation across individuals.[3] It is taken for granted that the nation-state defines "society".[4] The sustainable level of well-being is then expressed as the sum of current utility from consumption and the utility value (to the current generation) of the investments in productive assets (broadly defined) necessary to maintain a steady level of consumption over time. Fleurbaey and Blanchet emphasize the important point that a single "Green GDP" number cannot reveal whether current well-being is above or below the long term sustainable level: one needs to know both the current level of well-being and the sustainable level of well-being. There is also a nice discussion of the problems involved in assessing whether current savings are sufficient to maintain consumption, given that natural environments may have tipping points, whose exact levels are uncertain, and that current observed market prices depend on myopic expectations about an inherently unknowable future.[5]

Unfortunately, the time path of population growth is not mentioned. Two different literatures are being summarized, both of which gloss over (differently) the distinction between

[1]E.g. Osberg and Sharpe (2005) present illustrative calculations using specific weights but direct readers to http://www.csls.ca/iwb.asp to experiment with the implications of alternative weightings.

[2]Available at http://www.oecdbetterlifeindex.org/.

[3]The distinction between individual and social discount rates on future consumption is, however, discussed.

[4]Although the examples provided invariably refer to nation-states, the "collectivity" over which social progress is assessed is never defined explicitly. But if the well-being of humanity were the intended focus, there would surely be some discussion of the implications for well-being of trends in global inequalities and sustainability as affluence replaces absolute deprivation in some now-poor nations.

[5]The preferences of future generations, possibilities for technical progress and implications of the future discoveries of environmental science are all crucial – and unknowable.

aggregate and per capita measures (e.g. GDP and GDP per capita). In discussions of the environmental impacts of economic activity, it is largely immaterial why aggregate economic activity is growing (even if it is empirically clear that population growth is an important driver): total GDP is what matters for CO_2 emissions, climate change and all its implications. However, when the literature on well-being attempts measurement of the average material standard of living, per capita calculations are usual. In their book, Fleurbaey and Blanchet refer throughout simply to "GDP" but the context suggests that per capita GDP would often make more sense. Admittedly, discussion of population growth and whether social well-being increases if fewer people enjoy life more instead of more people enjoying life less raises deep ethical issues, particularly when the size of unborn future generations is being considered,[6] but the difficulty of the issue is not a good reason for avoiding recognition of it.

Chapter 3 begins by noting "because this chapter is mostly critical it can be skipped by the readers who are already convinced that a notion of total income cannot be a good proxy for social welfare" (p. 77). Chapter 4 then aims at a justification of measuring individual well-being by "equivalent income" or "money-metric utility", and then summing over individuals now alive to obtain social well-being. Clearly, the selection of the reference price vector is crucial to the calculation of equivalent income and early debates in welfare economics[7] noted that when preferences are heterogeneous, any set of general equilibrium market prices will depend on the initial distribution of endowments, so selecting a particular measure of equivalent income embodies an implicit distributional judgement. Fleurbaey and Blanchet therefore do not advocate the use of current observed market prices, and in fact discuss at some length multi-reference and personalized-reference variants of the equivalent income approach. How these might be actually operationalized is not specified.

Underlying it all is the mainstream assumption that individual utility $u_i(x_i, y_i)$ depends on individual consumption of marketed commodities (x_i) and non-market goods (y_i). Implicitly, externalities of production or consumption are ruled out. More fundamentally, preferences are entirely self-regarding.[8] But if we all really were like that, why would any of us be interested in a measure of social well-being? Each of us individually knows our own life situation better than any statistician possibly could. An index of social well-being cannot help us to maximize our own personal utility – *unless* we somehow care about other people. But when altruism, interdependence, identity and concern with the broader community are all ruled out, and no individual actually cares about "social welfare," the construct of a "social welfare function" becomes a bit odd.

Chapter 5 examines the idea that social well-being can be measured from self-reported happiness or life satisfaction data. The title of their Section 5.1 ("The Easterlin Paradox: Have we been wrong for 70,000 years?") gives a hint of the authors' leanings. Easterlin and his sympathizers would probably respond that within-country trends over the last 70 years are what they have been examining[9] and agree that human progress did occur during the 69,930 years before that. Nobody disputes that, for example, human well-being increases when per capita food availability increases from 1,000 to 2,500 calories per day. The issue under discussion is whether ever-increasing material consumption above the levels now

[6] See, for example, Duclos and Zabsonre (2014).

[7] See Little (1950).

[8] On page 80, the authors argue "it is debatable whether other-regarding preferences deserve as much attention in social evaluation as self-centered preferences."

[9] See Easterlin (2013).

observed in rich countries (e.g. average caloric intake in the 3500+ calorie range, and rising) adds to human well-being.

Fleurbaey and Blanchet do mention briefly that the Easterlin paradox might be due to the competitive nature of consumption in affluent societies implying that economic growth is the residual waste of the fight for relative social positions. However, their own emphasis is firmly mainstream: unbounded individual utility can come from ever more material consumption. Indeed, they argue that survey data based on pre-set categorical responses are unreliable because "the real difficulty with satisfaction questions is that the true scale of life is more like GDP and is not naturally bounded" (p. 183). There is a long discussion of the complexities that should be considered before answering seemingly simple questions about happiness or life-satisfaction, but no discussion of why measurement errors in individual survey response micro data would not offset each other, leaving estimates of population averages unbiased. In common with most of the economics literature, individual preferences are taken as entirely exogenous and unquestionable: our daily bombardment of aspirational messaging is unmentioned and "advertising" is not in the book's index.

For a book whose title explicitly mentions "sustainability", it is a bit odd not to ask whether the size of utility gains to further increases in material consumption in rich countries warrants the environmental risks involved. Whatever the current size of the marginal social benefit of greater per capita GDP, diminishing marginal utility and economic growth together imply that it will be smaller in future. Exactly when the marginal social benefit of further increases in money income becomes very small or nearly zero is, in neoclassical terms, a debate about the relative size of the second derivative of the utility function. However, the debate is about when, not if, it will eventually happen. In cross-sectional analyses of micro-data on self-reported happiness and life-satisfaction in rich countries, the affluent tend to report more happiness than the poor (a result quite consistent with both relative status and absolute income interpretations) but the coefficient on income is always remarkably small compared with the importance of social relationships or the impacts of unemployment.[10] So two practical questions arise: (1) does the ever smaller size of utility gains to material growth in rich countries warrant the environmental risks? (2) Does the type of growth matter, e.g. does "jobless growth" actually improve social well-being? In this book, the authors critique the use of happiness measures as a summative index of social progress. What they do not address is how subjective happiness data can be used to analyze which types of social and economic performance really should be counted as "social progress".

Chapter 6 introduces the Capabilities Approach and the relationship between Capabilities and Opportunities. "Capabilities" enable "functionings", which are defined to "encompass all that a person manages to do or to be" (p. 208). As is normal in this literature, no further specificity of definition and no list of capabilities and functionings is provided, so there is little guidance for measurement. As well, no distinction is drawn between purely individual functionings (such as walking upstairs) and functionings which are social roles which depend on the consent or co-operation of others (such as being "the man of the house" in a traditional patriarchal family), but the context suggests that Fleurbaey and Blanchet are thinking about purely individual functionings.

Throughout the book, the model of individual decision-making used is one-generational. Individuals are assumed to have finite lives but there is no mention of any intergenerational linkage or altruism of individual utility maximizing agents. This omission impedes

[10] See Helliwell and Huang (2014).

the discussion of sustainability, but is particularly problematic for the discussion in Chapter 6 of opportunities as capabilities. This discussion distinguishes between those outcomes due to exogenous circumstances (grouped into types) and those outcomes due to effort, suggesting that inequalities due to effort can be accepted while inequalities between types are due to differences in capabilities or opportunity. But although the chapter heading promises a discussion of opportunities, there is actually no mention of socio-economic background or the bequest of human and financial capital within families. Becker and Tomes (1979) had the insight that when parents care about their children and can control their own bequests, the unequal distribution of income of each cohort of parents enables unequal bequests to their own children, which enables unequal incomes and unequal bequests in the grandchildren's generation, which replicates in the great-grandchildren's generation, etc. In general, the whole notion of equality or inequality of opportunity makes no sense at all in a one generation model of human behaviour. However, as soon as the human capital model is extended to consider two or more generations, inequality of outcome in a market economy in one generation generates inequality of opportunity for the next generation, and a strict distinction between the "effort" and "circumstance" of each family line becomes untenable.

Practitioners in the area of social index construction will not find concrete suggestions for measurement improvements in this volume. In their conclusion, Fleurbaey and Blanchet are eclectic enough to suggest that happiness indicators and capability indicators should continue to be produced, because some people find them convincing. They themselves advocate the virtues of equivalent income to measure social well-being, even if no suggestions are provided as to how this is to be measured in practice. Fleurbaey and Blanchet also advocate the 'capital-based' approach to sustainability (a.k.a. "weak sustainability"), which requires that drawing down some asset types be offset by accumulation of other asset types, but they recognize clearly that current market prices are a myopic guide to adequacy of savings, and are unlikely to tell us when environmental disasters loom until it is too late. Having dispensed with market prices as a guide, they tell readers that there are many unknown parameters to be considered and "the necessity of such predictive exercises is beyond this discussion" (p. 248).

In recent years, economics has considerably broadened its scope, embracing ideas of identity, cognition and the meaning of rationality that were once thought somewhat heretical.[11] Many economists were raised, however, in the earlier tradition of the rational, solely self-regarding utility maximizing individual who communicates with others solely through price signals in competitive markets. The strength of this book lies in its thorough summary of what that tradition has had to say about measures of social well-being and social progress. As they note, there is much work yet to be done. I look forward to reading their next book.

References

Akerlof, G.A., Kranton, R.E.: Identity economics: how our identities shape our work, wages, and well-being. Princeton University Press, Princeton (2011)

Becker, G., Tomes, N.: An equilibrium theory of the distribution of income and intergenerational mobility. J. Polit. Econ. **87**, 1153–1189 (1979)

Duclos, J.-Y., Zabsonre, A.: Social evaluations when populations differ in size. Can. J. Econ. Rev. Can. Econom. **47**(2), 605–633 (2014)

[11] See Kahneman (2011) and Akerlof and Kranton (2011).

Easterlin, R.A.: Happiness and economic growth: the evidence, Discussion Paper No. 7187. IZA, Bonn (2013)
Helliwell, J.F., Huang, H.: New measures of the costs of unemployment: evidence from the subjective well-being of 3.3 million Americans, Working Paper No. 16829. NBER, Cambridge (2014)
Kahneman, D.: Thinking fast and slow. Farrar, Strauss and Giroux, New York (2011)
Little, I.M.D.: A critique of welfare economics. Oxford University Press, Oxford (1950). Reissued 2002
Osberg, L., Sharpe, A.: How should we measure the 'economic' aspects of well-being? Rev. Income Wealth **51**(2), 311–336 (2005)

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