RESEARCH PAPER

The Subjectivity Inherent in Objective Measures of Well-Being

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Abstract Claims abound that GDP accounting ignores social and ecological problems and misrepresents social well-being. While GDP growth continues to be a policy priority in most countries, it is at best one objective among many in achieving humanity's "ultimate purpose." Yet revisions to the income accounts and alternative well-being indicators are also problematic, since they reinforce the illusion that social and ecological impacts on well-being are objectively measurable. Future policy must not only be informed to a greater extent by qualitative and multi-dimensional assessments, but must recognize that any rank-ordering of society's ultimate ends cannot but be subjective.

Keywords Well-being indicators · Quality of life · Subjectivity · Subjective measurements · Rationality · Commensurability · Comparability

> Man is far too clever to be able to survive without wisdom E. F. Schumacher

1 Introduction

Proper evaluation of social well-being or progress has arguably never been more important than at present. While traditional measures such as consumption and growth in the gross domestic product (GDP) continue to exhibit clear gains throughout much of the world, many (Sachs 1992; Worster 1995) argue that unacceptable environmental and social consequences require a rethinking of how we evaluate human progress. Debate over the relevance of GDP to general social well-being has intensified in recent years, and there have been a number of recent attempts at alternatives (e.g., the index of sustainable economic welfare, the genuine progress indicator), largely motivated by what are perceived to be inaccuracies or misrepresentations in the national income accounts.

Yet in an important respect, criticisms of GDP and attempts to refine it miss the main point. Well-being is a concept that encompasses many distinct—elements some expressed

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quantitatively, some not—that cannot properly be reduced to a single indicator. Aside from the methodological problems implicit in any such attempt, well-being at the national level cannot be measured objectively because the preferences and priorities of individuals vary substantially and it cannot be known which preferences are more important.

The paper argues that if we recognize the inherent subjectivity in the so-called objective assessments of social well-being, it may be more practical, from a policy standpoint, to evaluate by deliberation over the relevant criteria than to fabricate an "objective" allencompassing indicator that may produce an arbitrary conclusion. As Brekke et al. (1996) note, information that can be used as input to an arbitrary social welfare function may be preferable to information that is the output from a welfare function specified by some analyst.

The paper further suggests that in cases where well-being assessment criteria are all strictly incomparable, the only rational course may be to rely on informed and enlightened discussion to guide policy, presuming that policy makers are motivated to pursue the common good. I leave for another paper the issue of whether continued progress or wellbeing improvement along the lines suggested would be more likely delivered by a benevolent dictator or by an "enlightened" market system.

2 Problems with Well-Being Measurement

Few topics in economics elicit as much controversy as the question of how social wellbeing ought to be measured.¹ While there can be no question that well-being is related to success at satisfying our material needs, orthodox economics regards such needs or wants as limitless. The belief in insatiability of needs or wants largely explains the importance granted to growth in the gross domestic product (GDP) as a proxy for improvement in well-being. Yet in truth it is unlikely that we continue to demand more consumption at the expense of everything else. While there are some types of needs the satisfaction of which is paramount (e.g., food, shelter, and security), there exist many other "needs" or often superfluous wants (e.g., a second cell phone, a third car) the satisfaction of which must be balanced against the disutility from forgoing alternatives such as leisure or time with the family.

Such luxury or superfluous goods belong in a separate category, since the gratification experienced from consuming them stems from how one views oneself relative to others in society (Csikszentmihalyi 2000; Dupor and Liu 2003; Leibenstein 1950; Veblen 1912). While we may, at the individual level, be insatiable in consumption of the goods or services in this category, we only gain individual well-being in their consumption at the expense of others who are not as "successful". GDP growth resulting from greater consumption of such commodities is, in other words, zero-sum² because the individual well-being produced diminishes as other members of society consume the same products (e.g., Brekke and Howarth 2000; Dupor and Liu 2003; Hirsch 1977; Howarth 1996; Schor 1991).

¹ By social well-being I refer specifically to the welfare of society as a whole, the measurement or estimation of which is often classified as "objective" (e.g., Paim 1995). I do *not* by this term mean an aggregation of the component individual subjective "well-beings". I will have more to say later about this distinction.

 $^{^2}$ It is beyond my present cope to discuss plausible arguments for why growth may be *negative*-sum under such a criterion, but the point is amply addressed in the literature. See especially Scitovsky (1977) on this point.



Fig. 1 Relationship between social well-being and GDP per capita

Such a problem is of relatively minor importance in many contemporary lesserdeveloped countries (LDCs), where GDP growth is to a greater degree associated with improvement in areas that are considered necessities. Indeed, the relationship between GDP and well-being likely depends on how rich a country is. As shown in Fig. 1, income increases contribute little to overall well-being at low levels of GDP (the region labeled "poor" on the graph), since only a narrow segment of the population is benefiting directly.³ Moreover, as noted by Sen (e.g., 1997, 2001), non-monetary benefits such as health and education—that improve individual capabilities—are often more important than income in poor countries. As the benefits of continued growth trickle down to a burgeoning middle class, social well-being rises dramatically (area labeled "middle income").

Continued GDP growth may contribute little if anything further to provision of necessities (region labeled "rich"), being fueled mostly by increases in superfluous consumption. Beyond a certain income level, therefore, GDP growth may cause well-being to decline, a phenomenon here dubbed "spiritual impoverishment." Many (e.g., Ackerman 1997; Daly 1995; Klasen 1994) believe that continued GDP growth *already* involves greater social cost at the margin than the marginal social benefit that it produces.

It is in this context that a number of alternatives to GDP have been introduced. For example, the United Nations Development Programme's (UNDP) human development index (HDI) accounts for the role of income in well-being assessments but accords it only one-third weight in determination of the level of human development alongside education and health. "Green GDP" measures such as the one introduced by the World Resources Institute (WRI, e.g., Repetto et al. 1989) take a different tack, not contesting the relevance of GDP to well-being, but taking issue with the manner in which it is measured, specifically the fact that it entirely omits any accounting for depletion of a country's "natural capital." Finally, the index of sustainable economic welfare (ISEW) adjusts for omitted benefits and erroneously included costs yet, like GDP, is denominated in currency units so

³ Kuznets (1955) was among the first to note this, presenting evidence that the income distribution in a country becomes more unequal as it begins along its development trajectory, only later to change course toward greater equality.



as to be directly comparable to GDP. Studies on the US and several European countries comparing GDP and ISEW trends (e.g., Daly and Cobb 1989; Stockhammer et al. 1998) in most cases find the latter peaking some time in the 1970s, in tentative support of the spiritual impoverishment thesis.

Welcome as these alternatives might be, they are nevertheless consumption based and offer a notion of well-being that arguably is not much broader than GDP.⁴ The problem with emphasizing material consumption is that progress, development, or well-being improvement involves many other dimensions not reducible to income. Norgaard (1994), for example, notes that development should be understood as a process of "coevolution" between knowledge, technology, social organization, values, and nature. The multi-disciplinary aspects to development are, in other words, in stark contrast not only to what is offered by GDP, but also the aforementioned alternatives.

If we place economics in a broader context than conventionally imagined, we see that it merely spans intermediate means and ends, serving as a bridge between studies of the natural or physical world and studies of philosophy, subjectivity, and values (Fig. 2).⁵ If we regard labor-power or artifacts such as raw minerals and timber as intermediate means, we imply that they are derived from some basic or ultimate means. I refer, in other words,

⁴ The HDI differs in that consumption (income) counts as but one of three dimensions. Nevertheless, as I will discuss, the UNDP's approach is also exceedingly narrow since well-being has many more dimensions, many of which defy quantitative measure.

⁵ The diagram is as in Daly (1991, p. 19) save for two minor modifications. I use the label "philosophy and values" instead of ethics because the latter may be interpreted as relating more to narrow questions of individual morality. Also, I label the area of inquiry concerned with the ultimate end "spirituality" instead of religion in order to eliminate any suggestion of institutional influences and to more accurately convey a non-material (or post-material) ultimate purpose.

to resources in their crudest form possible—in situ, or prior to any human alteration, extraction, or the like. Ultimate means quite simply cannot be created by humans; they are given to us by nature.⁶

The literature on the economics of transforming so-called ultimate means to intermediate means is voluminous and it is not my purpose to delve further into the issue. Rather, the main concern here is with the top section of Fig. 2, where we have intermediate ends that can be thought of as means in the service of our ultimate end(s). We often mistakenly consider benefits such as consumption, health, comfort, education, wealth, security, etc. as final goals. Yet the very idea that we allocate our scarce resources to serve *competing* ends requires that our resource allocation decisions be based on rank-ordering of our distinct goals or objectives. As noted by Daly (1991, p. 20), any rank-ordering of our intermediate ends implies some ultimate end or purpose. Given that humans invariably rank-order goals or outcomes—albeit usually only implicitly or unconsciously—we cannot escape the fact that there exists for humanity some ultimate end(s), even if not universally understood or defined in any coherent fashion.⁷ Barrera (1999) makes a similar point in discussing an "overarching moral order" that implicitly determines our subjective rank-ordering. Lane (2000) considers high life quality to be our ultimate end, listing subjective well-being, human development, and justice as its defining features.

Few economists consider the question of which intermediate ends compete with consumption in defining well-being or progress. The evident sin of omission must be challenged, as it is increasingly clear that humankind's ultimate purpose extends beyond simple consumerism. While alternatives to GDP are largely successful in calling to the fore some "competing" intermediate ends (e.g., literacy, health, etc.) they are still primarily consumption-based and offer little improvement toward articulating a clear human purpose or ultimate end.⁸ As will be further elaborated, such an endeavor is unavoidably subjective, and recognition of this implies a need for a more deliberative approach to policy evaluation than can be offered by quantitative indicators.

3 Commensurability, Comparability, and Rationality

There are two fundamental problems inherent in any attempt to devise an index or indicator of well-being. First is the methodological problem of how to define well-being at the individual level (the *identification* problem), where the answer varies according to unique individual preferences. On the matter of individual well-being the literature is also extensive (see, e.g., Eckersley 2000; Frey and Stutzer 2004; Ng 2002; Paim 1995; Rogerson et al. 1989), and I will not add to it here. Yet while the identification problem is

⁶ To De Gregori (1986), ultimate means are those that only *become* resources once developed by the human hand and human ingenuity. Along similar lines, to Daly (1995) they are the "stuff to which value is added." Ultimate means are also often classified as "low-entropy" matter-energy, the foundation for (and constraint on) all human activity. See also, e.g., Corning (2002), Ferrari et al. (2001), and Georgescu-Roegen (1971).

⁷ Note the hierarchy among different areas of inquiry. Choices made regarding both the path of technological change and the extent of human impact on the environment are a product of the "economics" (i.e. intermediate means-intermediate ends) sphere. We can therefore say that nature and technology are sub-ordinate to economics. The latter is in turn subordinate to "philosophy and values" since it is humanity's pursuit of the "ultimate end" that directly, if unconsciously, determines our rank-ordering of competing intermediate ends.

⁸ In all that follows I will take progress, development, or well-being improvement to refer to success in achieving the ultimate human purpose.

not a question of normative economics (it is a "what is-" rather than "what should be-" type question), it is an inescapably subjective issue in that well-being depends, in each, case, on a unique individual.⁹ Accounting for preference variability makes exceedingly more complex the task of developing a common metric for actually measuring individual well-being.

My emphasis on subjectivity in this paper, however, is in reference to the *aggregation* problem, which addresses the question of how we combine the individual well-being values (assuming that they can be obtained) into a composite (e.g., national) indicator. Here it is a problem of normative economics, since the implicit question is "which individuals or groups matter the most?" Should well-being improvements for the poor—many whose basic needs have not yet been met—carry greater weight in determination of overall well-being? It is an inescapably subjective problem, and no methodological innovation will change the fact.

All of the aforementioned GDP alternatives make implicit determinations based on what variables they consider. GDP is of course as biased and subjective as its alternatives. It is biased in that it puts a premium on consumption of commodities and material wealth in general, at the expense of well-being attributes already discussed; and, as noted by Ahluwalia and Chenery (1974), the objective of GDP growth implicitly places greater importance on the income growth of wealthier groups (their group income growth rate has disproportionate weight in overall GDP growth).

Any attempt to reliably and accurately assess development or progress therefore promises to be a formidable undertaking. The identification problem is by itself highly challenging given the myriad possible dimensions of well-being and the unique tastes and preferences of all individuals. Even if the problem were resolved by developing an appropriate measure of, say, satisfaction, and surveying a population, the matter of aggregation necessarily imparts subjectivity. We are left with two alternatives: either concede the subjectivity and devise a means of accounting for it (by, e.g., looking at competing scenarios, a possibility I will comment on later), or dispense with well-being indicators altogether.

Is there then anything concrete that we can say about well-being or progress, or our success in achieving our ultimate end(s) or purpose? An incursion into normative economics may very well be preferable to disallowing the question on mere grounds that it cannot be analyzed impartially. Given the inherent subjectivity, reasoned policy discussion that recognizes the inevitability of bias or partiality seems preferable to pretense (through the use of indicators) that well-being or progress can be objectively measured.

Such policy discussion or evaluation should, in principle, be guided by rationality. But what is rationality? In economics we think of "maximizing" behavior as a defining attribute. Individuals maximize their utility, firms maximize profits, and so forth. But is such a characterization of rationality suitable for designing policy that will help us (a) define progress or well-being improvement and (b) develop a method through which our success at achieving it can be measured or evaluated? As we will see, in evaluating or measuring progress or well-being improvement, a different conception of rationality is required.

Generally speaking, there are many instances in which project or policy decisions can rationally be made according to some simple maximization rule. Indeed, our task is the least challenging when we assume that there is *strong commensurability* (Martinez-Alier

⁹ I should be clear that by "subjective" I mean biased or partial and *not* individual or personal as the word is often used in the literature.

et al. 2001) among the values to be considered. That is to say, there is a uniform unit of measure that can be commonly applied to all variables in the analysis in order to reduce our outcome to a single value. Traditional social cost benefit analysis is one example of this, where private, social, and environmental costs and benefits are combined to render a single net benefit (in dollar terms, for example). The net benefit outcome can be used to compare cardinally with other projects or outcomes. GDP (either conventional or its "green" variant) as well as the ISEW are other examples, since any and all social benefits (as well as costs) bought or sold in the market are also all reducible to domestic currency units.

In contrast, *weak commensurability* describes instances where outcomes can still be compared, but only in ordinal terms. Such a scenario is present in cases where—either for methodological or philosophical reasons, or both—certain variables are not expressed according to the same units of measure. Even where we might be hesitant to, for example, estimate the dollar value of a human life, we might still be able to compare among projects based on which one, say, saves the most human lives per dollar expended. Another obvious example is the HDI, where although unrelated units relating to income, longevity, etc. are used to formulate an index, the units of the index are essentially meaningless and only serve the purpose of ranking countries. According to Martinez-Alier et al. (2001), both strong and weak commensurability fall under the category of *strong comparability*.

Policy decisions in cases of strong comparability are driven by what Faucheaux et al. (1997, p. 56) call *substantive rationality*, which is concerned with "obtaining some predefined type of result designated analytically by some criterion such as optimization." In other words, some welfare or benefit function is contrived in order to produce "outcomes" from available information or data. The rational course is therefore simply to maximize. Countries can seek to maximize GDP, ISEW, or green GDP; private firms might try to maximize their net benefit. Alternatively, governments might try to promote literacy or health in order to increase their measured human development index.

Comparability can also be weak—in the case of *incommensurability* of values—or impossible, as is the case when non quantitative values are considered. Figure 3 presents a summary of the different categories and their relation to the well-being question. Note that the extent to which we can express well-being quantitatively diminishes with the degree of comparability among the different dimensions of well-being. The extent to which these dimensions *are* actually comparable is, of course, the critical (and unresolved) question. I submit that *if* it is accurate to characterize them as being either incommensurable or strictly incomparable, then we should look beyond a simple maximization rule in determining how successful our society or country is at achieving its ultimate purpose.

4 Procedural Rationality as an Alternative

Substantive rationality is of limited utility in instances where distinct criteria are incommensurable, that is, when it is impossible to reduce to a single criterion the obtained values for different variables relevant to the analysis. Examples include such rules or policy guidelines as strong sustainability or the precautionary principle, both eschewing monetary valuation of the environment and natural resources (Costanza and Cornwell 1992; Pearce and Barbier 1990). Policy evaluation and decisions must in such cases involve discussion of the relative importance among different variables—e.g., income, employment, environmental impact, inequality, and the like. There is no avoiding the subjectivity involved in the ultimate decision on which criteria to accord greater importance though again, the practice of using a single criterion to evaluate multiple variables is no less subjective.

Fig. 3 Comparability of values in well-being evaluations. <i>Sources</i> : Martinez-Alier et al.	Degree of Comparability	Description	Implication for Well- being Assessments
	Strong		
(2001)		Strong commensurability: Values can easily be reduced to a common metric. Alternatives or outcomes can be compared cardinally.	Well-being measurable and individual performances can be aggregated into meaningful units.
		Weak commensurability: Values all expressed in units, but universality of measurement approach not possible. Alternatives can be compared ordinally.	Well-being only measurable in terms of index numbers. Not possible to aggregate individual performances.
	Weak		
		Incommensurability: Impossible to reduce all relevant values to commensurable units. Comparisons necessarily ad hoc or subjective.	Well-being can only be assessed in terms of numerous individual criteria. Subjectivity in evaluations inevitable.
	Absent		
		<i>Incomparability</i> : No measurable units involved. Values expressed qualitatively.	Only qualitative well- being assessments possible.

Indeed, opting to reduce environmental resources and benefits to currency units raises numerous questions (unfortunately beyond our present scope) about how such values can be determined.

Procedural rationality (Faucheaux et al. 1997, p. 57) is concerned with rationality in the decision making process or procedure instead of rational outcomes based on unique but questionable or arbitrary functions or criteria. Rationality depends, in other words, on the manner in which the ultimate policy decision is made (Munda 1997). There are at least three distinct means of going about this, and they differ in terms of conceptual distance from the circumscribed world of substantive rationality. These are presented in Fig. 4.

Scenario analysis involves examination of the sensitivity of the outcome to a change in one or more of the underlying assumptions. It often encompasses substantive as well as procedural rationality, since it often operates in the realm of strong comparability and may even accept income as a proxy for well-being, similar to the WRI green GDP approach. Torras (2003), for example, develops an alternative well-being indicator to demonstrate that under various combinations of both positive and normative assumptions—regarding discount rates, allocation of resource depletion externalities, and relative weight given to population subgroups—Brazilian aggregate well-being failed to improve from 1965 to 1998, despite significant growth in per capita GDP over the same period.¹⁰ The conclusion is not definitive since there remain a minority among the 27 total scenarios in which the

¹⁰ The "positive" assumptions relate to different scenarios for allocation of the resource depletion externalities in the absence of reliable data. The competing scenarios regarding the weight or importance given to the performance of individual subgroups is a "normative" exercise, as discussed earlier. Finally, we might say that the different discount rate assumptions have a positive and a normative aspect—positive in the sense that they may correspond to available estimates of time value preference or capital opportunity cost, normative in that they imply some relative intergenerational preference.

	Scenario Analysis	Multi-criteria Analysis	Qualitative Needs
Comparability of Values	Strong (strong or weak commensurability)	Weak	Absent
Treatment of Subjectivity	Recognized but incorporated into analysis (e.g., through use of competing weighting schemes).	Addressed by requirement that dominance on all categories is required to deem an outcome preferredt o the other alternatives.	Recognizes policy bias toward quantifiable variables. Relies more than other forms on enlightened and reasoned discussion of alternatives.
Attitude toward GDP or alternative indicators	Favorable though outcomes under competing assumptions should be compared	Such indicators are each one quantitative criterion among many	Should be disaggregated into component parts. More helpful to view how well each component satisfies social needs

Fig. 4 Three alternative forms of procedural rationality

conclusion is not supported. Yet much transparency and credibility is gained for the precision that is sacrificed. Despite the ambiguity of the conclusion, the results obtained are useful in that they may provide insight in any reasoned assessment or discussion of Brazilian policy or outcomes.

A second approach, multi-criteria analysis, not only dismisses the narrow income approach to well-being, but also any attempt to aggregate individual level performances into a broad indicator. In other words, while scenario analysis accepts the use of indicators, but only allowing for uncertainty and/or subjectivity, the premise for multi-criteria analysis is that non-income aspects of well-being are incommensurable with income or with each other. This is not to say that the variables cannot individually be measured, merely that the criteria are measured in incommensurable units.

Multi-criteria analysis involves the rank-ordering of projects based on whether any one dominates any other. Quite simply, if one outcome is superior to another based on all of the incommensurable criteria, we can conclude that it is a superior outcome. If, on the other hand, there is even one category in which the "superior" outcome fails to dominate the other, we must remain without a definitive conclusion, since we have no *objective* basis for deciding how important this one category is relative to all the others. Martinez-Alier (1995) and Munda (1997) employ such an evaluation method; the latter uses it to compare the well-being of nine Sicilian provinces based on various economic, environmental, and social variables. Not surprisingly, there are many inconclusive results. But there are a number of cases in which well-being in one province is unambiguously better than in another.

If we accept and appreciate the complexity and subjectivity involved in social wellbeing assessment, however, we must recognize that even multi-criteria analysis does not go far enough. From where, after all, do the multiple incommensurable criteria to be used in such an evaluation originate? On what basis are they decided? Not only is subjectivity involved in deciding the relative importance of each criterion once they are all selected, but also in deciding *which criteria to select*. No doubt in such schemes quantitative variables are preferred to qualitative ones, since the former allow for some rank-ordering and direct comparisons. As with all the approaches described earlier, therefore, the multi-criteria approach reflects a bias in favor of quantitative over qualitative variables. There is no manner with which to objectively decide what is an exhaustive list of wellbeing criteria, and no unambiguous manner of deciding which combinations of variables or criteria are preferable to which others. Here we have the other extreme in our classification scheme, the most challenging due to the highest level of complexity. In evaluating well-being improvements we encounter values that not only are incommensurable, but *incomparable*.

At first glance, the idea that different definitions of well-being cannot be compared does not appear reassuring. It is true that what is being proposed is a fundamental rethinking of how we conduct such evaluations—away from simple quantitative indices and toward more nuanced discussion. Yet such a change would be both reasonable and desirable. As noted by Schumacher (1999, p. 33):

[Q]uality is more difficult to 'handle' than quantity, *just as exercise of judgement is a higher function than the ability to count and calculate.* Quantitative differences can be more easily grasped and certainly more easily defined than qualitative differences; their concreteness is beguiling and gives them the appearance of scientific precision, even when this precision has been purchased by the suppression of vital differences of quality. The great majority of economists are still pursuing the absurd ideal of making their "science" as scientific and precise as physics, as if there were no qualitative difference between mindless atoms and men made in the image of God. (My emphasis)

In short, it is possible that we omit a great deal of useful information by focusing exclusively on the measurable, and it is well known that much of what constitutes our wellbeing defies quantitative expression.

We might, as a possible alternative, express components of well-being in a sufficiently broad manner as to invite little or no controversy and at the same time arguably be exhaustive in its presentation of the different dimensions of well-being. For example, it is possible to subsume most if not all aspects of well-being under just a few categories of needs, such as subsistence, security, identity, freedom, and affection. Some (e.g., Maslow 1968) might add justice, aesthetics, or meaningfulness, but it seems imprudent to concern ourselves with the "self-actualization" aspect of well-being when there is a severe worldwide deficiency in the more fundamental categories. While none of the above easily lend themselves to facile quantitative measure, procedural rationality in such a context might involve setting out to identify the outcomes (norms, practices, etc.) that either support or inhibit the satisfaction of one or more of these needs. As examples, censorship is an outcome that conflicts with freedom (so progress toward our ultimate end presumably would involve eliminating it wherever it exists), while breast-feeding infants helps satisfy subsistence, security, and affection needs (and should therefore be encouraged).

According to Max-Neef (1992), outcomes fall into five categories, ranging from those that undermine any satisfaction of the direct need in question (e.g., arms race—security) as well as other needs, to those (dubbed "synergic satisfiers") that satisfy the intended need as well as one or more others (e.g., meditation—identity, freedom.). Such a scheme provides some further evidence of the tenuous link between GDP and need satisfaction. For example, while the arms race, bureaucracy, and status symbols undoubtedly contribute substantially to GDP—but arguably little to need satisfaction and well-being—meditation and breast-feeding, both irrelevant to GDP or related measures, likely enhance well-being to a significant degree.

Following Maslow, Max-Neef, or any related schema, appropriate policy can be designed to either encourage or discourage a given outcome as seen fit. One may of course quibble with the subjectivity inherent in such an approach. But as a method for classification it is useful. Once enlightened discussion (procedural rationality) enables identification of the outcomes most consistent with broad-based well-being improvement, policy incentives can be designed to promote them (and, of course, to discourage outcomes inimical to well-being). Such an approach would not help us assess in any objective and quantitative manner the extent to which we are successful at achieving our human purpose. There is nothing conceivable that will, for reasons discussed earlier. But there is scant reason why progress toward the goal cannot and should not be, at least in part, assessed qualitatively.

5 Concluding Thoughts

With the pace of change in most areas of human life more rapid than at any time in history, never has the problem of evaluating well-being changes been more important. In this paper I have made a case for a different approach to well-being assessment and evaluation, one that emphasizes informed discussion on qualitative criteria and places less importance on quantitative variables. Since we live in an increasingly complex world, defining well-being—even at the individual level—is an increasingly difficult task. As conflicts between social groups grow increasingly visible, the subjectivity in social aggregates becomes more self-evident. Perhaps most important, it is possible that most relevant dimensions of wellbeing defy quantitative expression.

Continued emphasis on gross domestic product (GDP), at least in rich countries, may lead society down a path of spiritual impoverishment. In such a context, alternatives such as the index of sustainable economic welfare (ISEW) or the human development index (HDI) serve a purpose. As John Stuart Mill foresaw nearly 150 years ago, an absolute limit on growth is not necessarily undesirable:

I cannot...regard the stationary state of capital and wealth with the unaffected aversion so generally manifested towards it by political economists of the old school. I am inclined to believe that it would be, on the whole, a very considerable improvement on our present condition ...I am not charmed with the ideal of life held out by those who think the normal state of human beings is that of struggling to get on; that the trampling, crushing, elbowing, and treading on each other's heels which form the existing type of social life, are the most desirable lot of human kind, or anything but the disagreeable symptoms of one of the phases of industrial progress. (Mill 1848, p. 453)

As he recognized, non-increasing capital or wealth implies not stagnation, but opportunity. Nevertheless, making the point through the use of indicators is intellectually dishonest since the practice still carries with it the pretense of objectivity. There is enormous bias in using GDP as a well-being proxy, but is there any *less* bias in the alternatives? Most would agree that the alternatives are merely motivated by different social or political beliefs. There is nothing wrong with pursuing GDP growth in its own right, *as long as policymakers are prepared to sacrifice it in instances where it is judged to detract more from other criteria than it itself contributes to well-being*. Recalling our means-ends continuum, GDP (or indeed any one of the alternative indicators discussed) is only one criterion among many in defining well-being, and the more honesty policymakers and evaluators exhibit in attempting to define humankind's ultimate purpose(s), the more manifest the shortcomings of GDP are likely to become. What is our ultimate purpose? While probably *not* the reality we witness even a century and a half after Mill's celebrated comment—one of "struggling, trampling, and crushing" often just to keep from sinking—we have made little progress in articulating an alternative vision, and as such cannot realistically assess how far we are actually straying from it. Yet even if the quantitative means by which to evaluate success have their limitations, much can be gleaned through informed, detailed discussion on the various dimensions of wellbeing. While a wholesale shift to the use of qualitative variables and categories may today seem unrealistic, it is important that we move in this direction, possibly through more widespread use of scenario analysis or even multi-criteria studies. Most important, and far more problematic, serious progress is unlikely until analysts, policymakers, and scholars shed the guise of objectivity in their well-being evaluations.

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