

Capability Approach and the Measurement of Human Welfare

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Abstract:

Amartya Sen's capability approach (CA) is regarded as a cornerstone for understanding human welfare. However, critics argue that its theoretical richness comes at the cost of practical measurability. This essay argues that such concerns confuse the approach's conceptual flexibility with operational failure. It first examines the conceptual strengths of the CA including its move away from income and utility towards what people are able to do and be. It then analyses the main measurement challenges identified in the literature: the selection of capabilities, trade-offs, aggregation, heterogeneity, identification and observability. Drawing on Ravallion, Robeyns, Clark, and Lutz and Kebede, the essay shows that these problems arise from flawed design choices in frameworks such as the HDI and MPI, and not from the CA itself. It then proposes alternatives. These include a multi-indicator model in which each capability is measured separately, participatory approaches to weighting, and "good enough" indicators that are transparent and practical. The essay concludes that measurement can catch up with the theory and that the CA remains one of the most comprehensive frameworks for capturing development in people's lives.

Keywords: capability approach, human welfare, measurement, multidimensional poverty, Amartya Sen

Introduction

Amartya Sen argues that development should not be narrowed down to economic growth but understood as the expansion of substantive freedoms that people relish (Sen, 1999). The prerequisite of development is removing unfreedoms rooted in poverty, systemic oppression and structural barriers that deprive individuals of basic necessities and hinder them from developing their full potential.

He introduces five types of freedoms that are instrumental in promoting the capability of a person. These are namely: (i) political freedoms, (ii) economic facilities, (iii) social opportunities, (iv) transparency guarantees and (v) protective security. He further distinguishes between means and end, where resources are seen as means to achieve wellbeing while freedom is both the primary end and the principal means of development (Sen, 1999).

This conceptualisation of "development as freedom" (Sen, 1999) in the form of capability approach is a cornerstone for understanding human welfare. While critics contend that the CA's theoretical richness comes at the cost of practical measurability, this essay argues that such concerns confuse the approach's conceptual flexibility with operational failure.

The capability approach provides a strong conceptual grounding for understanding human welfare, and its apparent measurement limitations arise from flawed design choices. Drawing on empirical critiques and proposals put forward by Clark (2005), Robeyns (2006), Ravallion (2010), Lutz and Kebede (2018), and others, this essay first examines its conceptual strengths before analysing why current measurement

methodologies fall short. Finally, it suggests alternative approaches that can effectively capture improvements in human welfare.

Conceptual Rigour of the Capability Approach

The Capability Approach (CA) is premised on the criticism of traditional welfare economics, in which human wellbeing is either based on opulence (income, commodity) or utility (happiness, desire). Sen formulates the hierarchy as follows (Clark, 2005):

Commodity → Capability (to function) → Functioning → Utility

Like Aristotle, he considers commodities as a means to achieve some end goal. He establishes a relationship between commodities and capabilities and explains how it varies among different communities. For instance, individuals with disadvantages such as disability or disease find their ability to earn and convert income into capabilities impeded (Sen, 1999; Clark, 2005).

However, high income individuals often have better access to resources that expand their freedoms and, in turn, lead to higher income.

Sen challenges the utility approach and posits that there are various other things of intrinsic value to humans and happiness is just one of them. Moreover, utility can be easily manipulated and is subject to conditioning. For example, a women's health survey in India highlighted disparities between externally observable health and the subjective interpretations of the participants (Clark, 2005).

He called for a more direct approach that focuses on human functioning, i.e., achievement of a person in terms of what they can manage to do or become (like being healthy or educated) and the capability to achieve valuable functionings (Clark, 2005). This makes the CA flexible and pluralistic, in the sense that it emphasises personal value judgements rather than a definite set of capabilities.

Sen argues that the CA should be used differently depending on the variable. For instance, poverty can be assessed by using a small subset of capabilities like health, education and income, but these would not suffice to assess overall human development. He also recognises broader societal goals beyond personal ambitions, referred to as 'agency,' such as protecting the environment and fighting against injustice. Sen accepts that the CA does not give a complete picture of development, as other factors such as personal liberty, efficiency, and economic growth must also be considered (Clark, 2005).

The CA is widely appreciated for treating people as ends in themselves, which makes it people centric. This is imperative in embracing diversity and human agency. Building on this, Martha Nussbaum (2005) provides a list of 'central human capabilities.' These include: (i) life, (ii) bodily health, (iii) bodily integrity, (iv) senses, imagination and thoughts, (v) emotions, (vi) practical reasons, (vii) affiliation, (viii) other species, (ix) play and (x) political and material control over one's environment (Clark, 2005).

Lutz and Kebede (2018) used the CA's conceptual base to illustrate a relationship between: (i) mean years of schooling and life expectancy, and (ii) mean years of schooling of women aged 20-39 and child mortality by redrawing the Preston curve (Figures 1 and 2). This shows a positive correlation between educational attainment (especially women's education) and overall health.

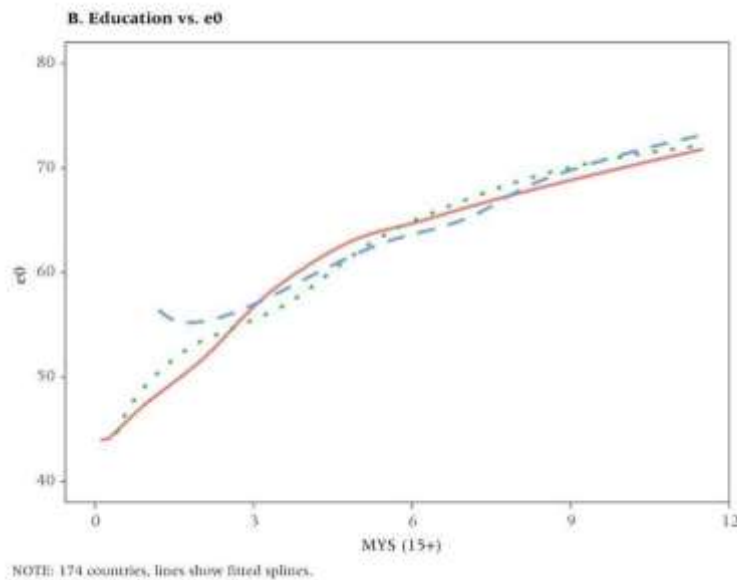


Figure 1: Mean years of schooling (age 15+) and life expectancy at birth (e0). Source: Lutz and Kebede (2018).

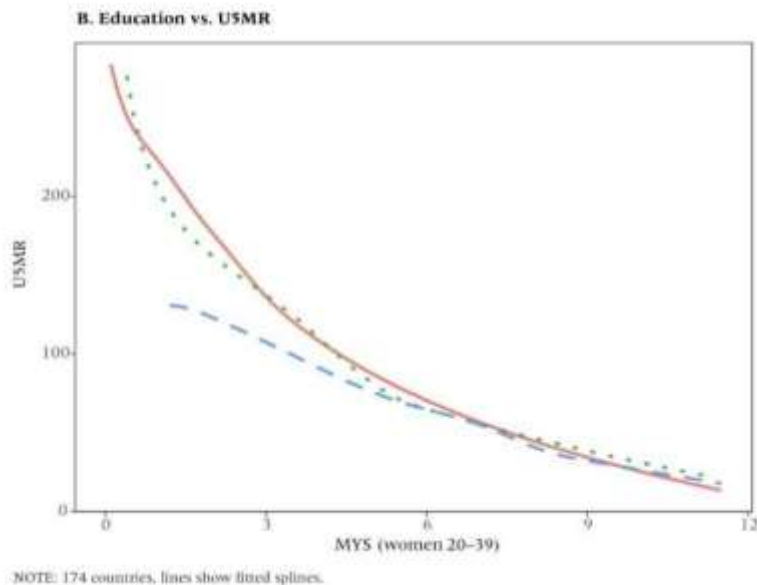


Figure 2: Mean years of schooling (women aged 20-39) and under five mortality rate (U5MR), 174 countries.

Source: Lutz and Kebede (2018).

While the CA is theoretically superior to income or utility-based approaches, critics argue that the very flexibility leads to measurement problems. However, these challenges are not unique to the CA and reflect the difficulty of operationalising any multidimensional idea of welfare.

Challenges in Measuring Improvements in Human Welfare

Myriad problems have been identified in measuring improvements in human welfare through the CA, mainly because capabilities are multidimensional, subjective, and sometimes unobservable.

The foremost problem relates to the ‘selection of capabilities.’ Ingrid Robeyns (2006) asks: Which capabilities are important? Nussbaum made a list of ten central capabilities, but critics argue that it lacks legitimacy as different cultures value different things. The Multidimensional Poverty Index (MPI) developed by OPHI in partnership with UNDP is a widely used tool in this regard. However, Alkire and Santos (2010) criticise its indicators for being based on normative reasoning and for lacking universal applicability. Amartya Sen himself refuses to create a fixed list, leaving it to communities to decide via democratic process (Sen, 1999).

Ravallion (2010) examines the ‘trade-off’ problem. It raises the question of how much weight should be assigned to each capability. He further critiques the Human Development Index (HDI) for giving the same weight to health, education and income without justification. He argues that such choices are often biased by the value judgments of researchers and even a minor change in weights can alter a country’s ranking. Ravallion (2010) also highlights the normative subjectivity in multidimensional indicators as different communities prioritise capabilities differently, and equal weighting can significantly distort development analysis. This complicates the idea of a universal index. Clark (2005) argues that value judgements imply trade-offs because improving one capability (such as health) can come at the cost of another (such as political freedom), so there is no universal way of determining the right trade-offs.

The next concern is ‘aggregation.’ Robeyns (2006) questions how multiple capabilities should be combined in an overall assessment. Should different capabilities such as education, health and income be merged into a single score or should they be weighted separately? For instance, if health, education and income are combined into a single category, it can misrepresent the complete picture. Two people might end up with the same overall score even if one is severely deprived in health but doing well in education while the opposite is true for the other person. Thus, mixing all the components together fails to provide a clear understanding of what exactly is wrong (Ravallion, 2010).

Sen (1999) highlights the concept of ‘heterogeneity,’ where there are variations in how different people convert their resources into capabilities depending on their physical, environmental and social characteristics. This makes the operationalisation of the CA difficult through a standard approach. Ravallion (2010) also emphasises the ‘identification’ problem: who should be considered multidimensionally poor? Both the choice of dimensional cutoffs and the number of dimensions are frequent points of contention.

Then there is the ‘observability’ problem. Clark (2005) notes that while functionings like being healthy are observable, capabilities such as dignity or freedom of choice are not directly observable. Proxy indicators like surveys are used to counter this. However, these may either not fully capture the capability or may be interpreted very differently. This results in measurement challenges. Apart from this, low-income countries often lack the resources to collect reliable data on multidimensional capabilities, which further makes transnational comparison difficult.

Alternatives to Measure Human Welfare Effectively

These measurement challenges appear daunting when put together, and critics like Sugden (1993) have argued they make the CA impractical for policy purposes. However, each challenge identified above has viable solutions. The key is recognising that these are problems of methodological design, not inherent limitations in the capability framework per se.

Ravallion (1997, 2010) shows that the CA inspired frameworks such as the HDI and MPI are distorted. His criticism is premised not on Sen’s concept but on the choices of parameters which include issues like

trade-offs, equal weighing, normalisation, identification and composite mashups. This does not necessarily render the CA unmeasurable.

As illustrated in Figures 1 and 2, Lutz and Kebede (2018) were able to measure education capability by elucidating a direct correlation between educational attainment, income and wellbeing. They identified that better health results in higher productivity, better health leads to better cognitive development and a longer life span results in increased savings and investment. They redrew the Preston curve and empirically demonstrated a relationship between mean years of schooling and life expectancy at birth, and between mean years of schooling of women aged 20-39 and child mortality. Their work points to the fact that capabilities such as education and health are measurable if better dimensions are employed.

Clark (2005) developed a methodology for gauging wellbeing perceptions among the poor in South Africa, and found similar parameters such as jobs, housing, education, income, health, family and friends being mentioned by respondents as constituents of a good life. This highlighted that most people have a shared vision which aligns with the capabilities advocated by Sen and Nussbaum.

All the indicators involve a certain degree of normative subjectivity. Birdsall and Meyer (2015) posit the concept of 'good enough' indicator which shows that indicators are not supposed to be empirically perfect but transparent and practical. Indicators should be judged based on whether they measure real changes in human wellbeing, and various capabilities such as education, health and participation can, by far, be measured with reliability. Capability indicators can be approximate and still useful for driving meaningful policy initiatives. A feasible alternative to one universal indicator is to use a multi-indicators model to measure the CA. Amartya Sen (1999) argues for using several distinct informational bases for measuring capabilities. Similarly, Robeyns (2006) vouches for a list of capabilities and different indicators for each dimension. This implies that each capability such as education, political participation, safety, etc., should be measured separately to avoid the problems of trade-off and aggregation.

Many international organisations already use a similar approach to measure different dimensions separately. UNDP's Human Development Reports and OECD's Better Life Index are examples of this. Even Lutz and Kebede's (2018) education capability model serves as a paradigm for measuring other capabilities practically. Their life expectancy analysis shows capabilities can be related to measurable functionings.

Clark's (2005) study in South Africa highlights participatory aggregation is practical as communities have a sense of what parameters matter to them most. It helps to ensure locally defined weights with people as active agents and avoids external imposition. This aligns with Sen's flexible approach to determining capabilities democratically and addresses the problems of selection and weighting.

Robeyns (2006) argues that there should not be a universal list of capabilities and that it should be locally determined through deliberation. Sen (1999) refuses to give list of capabilities as they vary across different communities. Lutz and Kebede (2018) also highlight the variation in the education-health relationship across countries. Thus, measurements should be flexible enough to tailor to diverse contexts.

Conclusion

The CA provides a rigorous theory to conceptualise improvements in human welfare, precisely because it does not reduce lives to a universal list of capabilities. Most of the problems in measuring human welfare emanate from poor design choices used in current frameworks such as the HDI and MPI. Moreover, Sen's refusal to create a fixed list of capabilities is imperative in recognising diversity among communities and in empowering people through direct participation. This flexibility supports a multi-indicator model where

each capability is measured separately. Evidence from Lutz and Kebede (2018), and Clark's (2005) participatory studies reflect the feasibility of such measurements.

The way forward is to replace composite indicators with transparent and context-specific indicators tailored to local requirements. As Ravallion (2010, p.32) asserted, "Theory needs to catch up," measurements can catch up to the CA's theory. The CA not only provides a strong basis for measuring human welfare but is also one of the most comprehensive frameworks for capturing development in people's lives.

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