

## Introduction

The purpose of this book is to provide an account of well-being in the context of modern economic growth and globalisation over the past one and a half centuries. It is inspired by Amartya Sen's capabilities approach. Its central tenet, the enlargement of people's choices, informs the concept of human development and its reduced form, the *augmented* human development index, on which the volume rests. A long and healthy life, access to knowledge, and command of resources to enjoy a meaningful life are human development dimensions, and their achievement represents for individuals a historical path to freedom.

### Well-Being beyond GDP

Human well-being is increasingly viewed as a multidimensional phenomenon, of which income is only one facet. In Angus Deaton's (2013: 24) terms, well-being includes income, health, life satisfaction, education, and participation in a democratic society under the rule of law.

Nonetheless, economists and economic historians continue to rely on GDP and economic growth to assess well-being. Empirical observations suggesting that GDP per person does provide an 'informative indicator of welfare' (Jones and Klenow, 2016) and is highly correlated with non-monetary dimensions of well-being (Oulton, 2012) lend support to this view.

In spite of its advantage as a synthetic index, and the observed association between economic growth and welfare (Lewis, 1955; Beckerman, 1993), the use of GDP per capita as a measure of welfare has been regularly challenged since the spread of national accounts after World War II (United Nations, 1954; Nordhaus and Tobin, 1972; Beckerman, 1976; Engerman, 1997; Nordhaus, 2000; Fleurbaey, 2009; Syrquin, 2016). The publication of the report from the Commission on the Measurement of Economic Performance and

Social Progress to France's President Sarkozy (Stiglitz, Sen, and Fitoussi, 2009) triggered a new round of criticism of GDP that questioned its ability to gauge well-being in broad terms (including social and environmental), and was accompanied by a plea for a comprehensive measure of quality of life covering health, education, non market activities, the environment, political voice, and personal security (OECD, 2011). This has led to updates of old critiques, claiming that in so far as GDP only captures market economic activity, it fails to account for non-market and informal activities, leisure, environmental damage, and inequality (Coyle, 2014; Masood, 2016).

There have been a number of attempts to provide comprehensive measures of living standards that transcend GDP and include non-income dimensions of well-being (infant mortality, life expectancy at birth, height, literacy, etc.). They are presented individually by those who favour a dashboard of indicators, or combined into a composite index by those who prefer to portray well-being as a latent, unobserved variable, so the addition of variables is more informative than each variable individually considered.<sup>1</sup> Examples include the Basic Needs approach and the Physical Quality of Life Index.<sup>2</sup>

Sen (1984: 76) made a clarifying distinction between three approaches to well-being: utility, opulence, and freedom. The utility approach uses satisfaction and intensity of desire as its criteria. Studies that weight the various non-monetary dimensions of quality of life and focus on life satisfaction exemplify this strategy.<sup>3</sup> The opulence approach centres on command over commodities, as is the case in income and wealth studies. Finally, the freedom approach stresses capabilities, namely, individuals' ability to choose between various combinations of functionings or achievements (i.e., a consumption bundle, a health condition, a level of education) (Alkire, 2002; Fleurbaey, 2015).<sup>4</sup>

The capabilities approach inspired the concept of human development. As a synthetic indicator, the Human Development Index (HDI) was launched by the United Nations Development Programme (UNDP) in 1990 and has been published annually ever since. As Sen (2020) has commented, Mahbub ul Haq, his intellectual co-author of the *HDI*, claimed that it was created 'to compete with the GDP' but containing 'more relevant information than the GDP managed to do'. In fact, the *HDI* differed from earlier attempts to capture multidimensional well-being because its aim is to track the evolution of a set of basic

capabilities: longevity, education, and control of resources to achieve a decent living standard (UNDP, 1990: 1; 2020: 245) across countries and over time and, thus, to provide an ‘inclusive approach to the measurement of human flourishing’ (Heckman and Corbin, 2016: 342).

### **Purpose of the Book**

This book favours the capabilities approach to well-being and places human development at its centre. How has human development evolved during the past 150 years of globalisation and economic growth? How has human development been distributed across countries? How do developing countries compare to developed countries? Have they caught up? Do social systems influence well-being? What accounts for performance differences across developing regions? These are issues at stake that this volume will address over a lengthy time span from the late nineteenth century to the aftermath of the 2008 Global Financial Crisis.

Thirty years after the launch of the *HDI*, it is time to take stock. That is why the book is grounded on a new *Augmented* Human Development Index that, while it includes achievements in longevity and education using objective measures, departs significantly from the UNDP *HDI*. Available proxies for non-income dimensions of the index (life expectancy at birth and years of schooling) only allow for quantity but not for quality changes and, unlike GDP per capita, are bounded. Unfortunately, the linear transformation introduced by the *HDI* falls short of providing a sound solution. More importantly, the *HDI* includes achievements or functionings, that is, ‘the various things a person may value doing or being’ but fails to allow for capabilities, namely, the freedom to choose ‘alternative combinations of functionings’ or, in other words, one’s own life (Sen, 1999: 75). Moreover, by excluding agency and freedom, the *HDI* captures only ‘basic needs’, not human development. Instead, the *AHDI* makes an attempt to allow for quality changes in non-income dimensions (schooling and life expectancy at birth), as well as for its bounded nature, and, more crucially, includes civil and political liberties as an indispensable dimension of human development. Thus, the *AHDI* provides a measure of both positive and negative freedom.<sup>5</sup>

## Overview

The volume is divided into two parts. Part I, An Aggregate View, presents the new *augmented* human development index, describes its trends, and assesses its international distribution. It consists of three chapters.

The challenge of moving from an abstract concept – human development – to an empirical measure is the focus of Chapter 1. First, it discusses the measurement of human development, examining each of its dimensions: access to knowledge, a healthy life, and other aspects of well-being, and the reduced forms of these dimensions used as proxies. It then proposes a new, *augmented* human development index (*AHDI*) that combines achievements in terms of health, education, and material welfare in a context of freedom of choice, consistent with the capabilities approach. In order to allow for its bounded nature and quality improvements, the new *AHDI*, unlike the *HDI*, derives the proxies for health and education, namely, life expectancy at birth and years of schooling, as Kakwani indices that transform them non linearly, so increases at a higher level represent higher achievements than similar increases at a lower level. Moreover, the *AHDI* adds a crucial dimension, civil and political liberties, to proxy agency and freedom. The contrast with alternative transformations of the income dimension reveals that introducing diminishing returns to per capita GDP (its log), as the *HDI* does, is warranted since it merely represents a proxy for commanding resources with which to lead a meaningful life while, from a practical perspective, preventing GDP, a non-bounded variable, from dominating the *AHDI*. As in the *HDI*, the four indices are combined using the unweighted geometric average to obtain the *AHDI*, as all of them are considered indispensable. The sample covers between 115 and 162 countries between 1870 and 2015, amounting to most of the world population.

The long-run trends for (*augmented*) human development and its dimensions and how they compare to those for GDP per head are addressed in Chapter 2, which also includes a breakdown of *AHDI* gains into their dimensions' contributions and some explanatory hypotheses.

But how has human development been distributed internationally? Chapter 3 offers an answer, first, by presenting absolute and relative inequality trends for *AHDI* and its dimensions, along with those for

per capita income and then by examining absolute and relative gains across the distribution with the help of growth incidence curves.

Part II, *The OECD and the Rest*, examines the evolution of human development in world regions, compares present-day advanced countries and developing regions (the *OECD* and the *Rest*, for short), and pays special attention to Latin America, a region that closely matches the world average, and to Africa, the region persistently at the bottom of world distribution.

How human development evolved across world regions, whether the differences between these regions widened, and, in particular, whether the gap between the *OECD* and the *Rest* deepened are investigated in Chapter 4 by breaking down *AHDI* gains into dimensions' contributions, and assessing whether the gap between the *OECD* and the *Rest*, or the dispersion within each group, accounts for the international inequality of AHD and its dimensions. Finally, it considers regional drivers in the *Rest* that contribute to AHD catching up to the *OECD*.

Whether human development improved in Latin America and the gap with the *OECD* narrowed since 1870, and how human development has been affected by economic performance and income distribution are the issues Chapter 5 addresses.

Does the pessimistic view of Africa's performance in both the colonial and post-independence periods derived from per capita income hold water in terms of human development? Did AHD match economic performance? Chapter 6 attempts to answer these questions. It compares trends in *AHDI* and GDP per capita over the long run and investigates the drivers of AHD gains and catching up to the *OECD* at regional levels before taking a closer look at national levels since 1950.

The main findings can be summarised as follows.

### *Long-Run Trends*

Human development has improved significantly all over the world since 1870, especially during the period 1920–1970, but significant room for improvement remains.

While *AHDI* and real per capita GDP exhibit similar progress in the long run, they behaved differently during the different phases that can be distinguished over one and a half centuries. For example, major gains in

human development were achieved across the board during the economic globalisation backlash of the first half of the twentieth century.

Human development progress was driven by its non-income dimensions. Life expectancy at birth was the main contributor over time, although its principal contribution took place during 1920–1970, as the epidemiological transition that begun in north-western Europe in the late nineteenth century diffused internationally. Improvements in life expectancy depend on economic growth, which results in nutritional improvements that strengthen the immune system and reduce morbidity and in the public provision of health. In the long run, however, it was medical technological change that was the main contributor to greater longevity. Education based on new social views (including liberal ideas, redistribution of wealth, and human capital formation), industrialisation, and nation building made a steady contribution over time. Civil and political liberties led to AHD gains in the past two decades of the twentieth century as the demise of authoritarian regimes gave way to an expansion of liberal democracy.

### *Distribution*

Relative international inequality in terms of human development declined from 1900 onwards. In the long run, countries in the middle and lower deciles obtained larger relative gains over the past century. These findings are at odds with the evolution of per capita income dispersion, which increased until the late twentieth century and only fell after 1990.

A breakdown of relative inequality of AHD into its dimensions' contributions reveals that the spread of mass (primary) education and epidemiological transition drove the decline in long-term AHD inequality from the late 1920s, while civil and political liberties only contributed to this fall from the 1970s onwards.

The uneven diffusion of new medical knowledge and health practices in the early stages of the epidemiological and in the *second* health transitions during the late nineteenth and early twentieth centuries and the late twentieth and early twentieth-first centuries, respectively, provoked increasing inequality in life expectancy.

Inequality in terms of political and civil liberties grew over time, especially between World War I and the demise of the Soviet Union, as

authoritarian ideologies emerged in parallel to liberal democracy, and only fell in the late twentieth century when authoritarian regimes lost ground and liberal democracy spread.

### *The OECD and the Rest*

Human development achieved substantial but unequally distributed gains across world regions in the long run. Life expectancy and schooling drove AHD in both the *OECD* and the *Rest*.

The relative gap between the *OECD* and the *Rest* shrank from the late 1920s onwards in terms of human development, but increased in terms of GDP per capita. The gap between the *OECD* and the *Rest* drove AHD international distribution until the mid-twentieth century, when the dispersion between the regions of the *Rest* took over.

Life expectancy and civil and political rights were the main drivers behind the *Rest*'s catching up to the *OECD*. There was faster catching up prior to 1970, as the epidemiological transition spread, and again in the 1990s, when liberties expanded in the *Rest*.

### *Latin America*

Latin America presents sustained AHD gains since the late nineteenth century, especially during the 1940s and 1950s and from 1970 onwards. AHD progress was therefore not restricted to phases of economic progress, that is, the 1940–1980 phase of state-led growth, but extended to the globalisation backlash (1914–1950) and the 'lost decade' (1980s). However, extreme inequality at low-income levels, which led to a large Inequality Extraction Ratio, was inversely correlated with high AHD levels.

Schooling and life expectancy drove AHD over the long run and accounted for catching up to the *OECD* until 1960, while civil and political liberties had a similar effect in the 1980s. The rise of life expectancy before pharmaceutical drugs spread internationally from the mid-twentieth century onwards points to the diffusion of new medical knowledge that helped to eradicate communicable diseases through good hygienic practices and improvements in water supply and sanitation. In the rise of education, the diffusion of new ideas, urbanisation, and nation building played decisive roles.

### *Africa*

Human development experienced sustained gains in Africa as of 1880, more rapidly between 1920 and 1960, under colonial rule, and at the turn of the century, but the continent remains at the bottom of the world distribution, albeit not all African regions behaved similarly, with the northern and southern regions forging ahead while the rest lagged behind.

AHD grew twice as quickly as per capita GDP, thriving at times of poor economic performance. Unlike GDP per head, which fell behind from a higher relative position, AHD catching up to the *OECD* took place in Africa from the late 1920s onwards.

A mixed picture emerges. Long-term AHD performance does not justify either the pessimistic view of the colonial era or the depiction of ‘lost decades’ for the post-independence era, but there still is a long way to go from a comparative perspective.

Schooling was the main driver behind AHD gains and catch-up, to which life expectancy made a significant contribution in the interwar period, during the early stage of the epidemiological transition. This confirms that, as in the case of Latin America, the diffusion of low-cost health practices reduced the spread of infectious disease and helped cut infant and maternal mortality before the introduction of modern drugs. Civil and political liberties contributed, both at the time of independence (late 1950s–early 1960s) and in the 1990s.

In Latin America and Africa (and presumably in other developing regions), gains in life expectancy at birth often paralleled those in adult height, but there are also occasions on which the rise of life expectancy is at odds with height stagnation. This may result from the exogenous improvement of infant survival rates, while adult heights are dependent on early-life nutrition, conditioned by income level and distribution.

### *Some Lessons*

What lessons can be drawn from the experience of human development over the last one and a half centuries? In the conventional *HDI*, public policies play an important part, since education and health improvements are associated with government activism and intervention. However, this is not a sufficient condition, as there have been national experiences in which governments did not play an active role.



Moreover, in most world regions, economic performance has undergone recurrent episodes of expanding and shrinking, in which countries have failed to provide steady social spending and to raise living standards that would result in improved nutrition, health care, and education. Thus, focusing only on movements along the health or education (or, by the same token, freedoms) function, which derive from increases in average incomes, ignores shifts in the function that, in the case of health, is closely connected to the diffusion of new medical knowledge. The latter is often, but not always, accompanied by new technology (new drugs), and in the case of education and liberties, new ideas and social practices.

Moreover, the spread and contraction of civil and political liberties, an essential ingredient of human development, plays a major role, particularly in developing regions. The socialist experiments of the twentieth century provide an illustration. Despite their initial success in raising human development, they failed to sustain momentum and fell behind prior to the definitive demise of the socialist model. As was also the case with other authoritarian experiences, the suppression of agency and freedom thwarted human development.