The Great Invention: The Story of GDP and the Making and Unmaking of the Modern World

by Ehsan Masood New York and London: Pegasus Books, 2016 ISBN 978-1-68177-137-3 Hardcover C\$36.95, 254 pp.

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The journalist Ehsan Masood, who specializes in international public policy, has performed a remarkable feat: He has written an entertaining history of GDP measures. He even makes his visits to archives seem exciting. And he has written a history with a message: that we could and should have been better served by a measure that incorporated elements other than those generally included in GDP, and in particular the environmental costs of economic activity.

Historians worry that a history written to convey a message can be biased. This account has many heroes who argued in favour of more diverse measures, but Masood also appreciates that many important characters in the story had a mixed effect. Masood tells a very personalized story: GDP measures emerge primarily as a result of the efforts of a smallish cast of characters, with only occasional and brief reference to the broader economic and political forces at work.

The book opens with a brief discussion of what GDP is. One quibble here is that Masood throughout treats GDP as entirely a measure of total spending, when in fact GDP is calculated on the premise that what we spend must be equal to what we earn. National accounts thus calculate and ensure equality between total spending and total income. He might also have devoted more than a footnote to explaining the difference between GDP and GNP. But he does a good job of noting many of the activities excluded from GDP, such as unpaid housework or volunteer activity. (An example of how GDP goes up if I hire someone to clean my house, even if they do a worse job than me, might have been useful.) He notes that GDP has no place for either job satisfaction or environmental costs: It is thus quite possible for GDP to rise as a result of policies that actually make people worse off. Such critiques of GDP are a staple of introductory courses in macroeconomics, but Masood may have usefully brought them to the attention of a wider audience.

He stresses that GDP measures matter. Since politicians are judged by what happens to GDP, they seek to increase it. If, then, environmental or other variables were incorporated into GDP, politicians would pay greater heed to such matters. He assures the reader that his interviews with a variety of world leaders confirm this observation, but provides no telling anecdote.

Masood begins the story of GDP in 1934, when the US Senate in the depths of the Depression demanded better measures of economic output: They realized that they were hampered in addressing the Depression because they did not really know what was happening to output or incomes (they also wanted better measures of employment). Masood might have noted that governments had been increasing their collection of various statistics for decades before, but 1934 was surely a watershed moment for GDP: The government selected Simon Kuznets—who would later be awarded a Nobel Prize for his work on national income accounting—to lead its effort. He and a very small team built on existing statistics of the output of some sectors of the economy, and visited individual enterprises to fill in gaps in their accounting.

I was not aware before reading this book that Kuznets had argued against including government expenditures in GDP. Masood describes a battle over a period of years about whether to include government in GDP, connecting this to wider debates regarding the role that governments should play in a market economy. It is hard for me to imagine that the decision could have gone the other way: The logic of GDP as a measure of both total income and total spending would seem to call for government inclusion, and as government spending grew to become 40 percent of total spending in most developed countries, its exclusion would have been too glaring.

After the war, the United States insisted that any country receiving Marshall Plan aid had to develop measures of GDP (so that the effectiveness of aid could be evaluated), and that they had to follow the American template. By the early 1950s, the United Nations were encouraging all countries to collect comparable GDP statistics. The methods for calculating GDP were regularly tweaked over the ensuing decades, but are still broadly similar to those agreed to by the United States, United Kingdom, and Canada in 1944.

One of the most interesting chapters in the book treats Masood's home country of Pakistan. He argues that a focus on GDP encouraged the post-Independence government to invest in industry rather than health and education. The author worries that GDP—a measure created by developed countries for their own purposes—might be ill-suited to less-developed countries. Yet it is not clear how much of the blame lies with GDP itself rather than the development theories of the time; spending on health and education appears in GDP just as spending on industrial output does. Certainly GDP cannot be blamed directly for the Pakistani government's decision to support the business ventures of a few families rather than creating a competitive marketplace.

It is true, though, that GDP does not capture either unemployment or income inequality. A focus on GDP rather than these other variables might have played a role in nudging countries such as Pakistan toward a type of growth that benefitted a few families more than the masses. Still, the real villain may well have been a belief that inequality inevitably worsens in the early stages of development. It is odd that Masood makes no mention here of Kuznets' own well-known hypothesis regarding inequality: As data became available Kuznets conjectured a tendency for levels of inequality to rise in the early stages of development but to fall later. This hypothesis became known as the "Kuznets curve." (The relationship between growth and inequality is now viewed as more complicated, especially as inequality has risen for decades across most developed countries.)

There is also, not surprisingly, an interesting chapter devoted to the development of the UN's human development index (HDI). Masood discusses how this came to weigh three factors equally: GDP, health (life expectancy), and education (at first measured as just adult literacy, and later as years of schooling as many countries approached 99% literacy). He notes the concerns of Nobel Prize winner and key HDI developer Amartya Sen that this was just as "vulgar" a measure as GDP itself, but Sen came to believe—correctly—that HDI would encourage governments to pay more attention to health and education. The author discusses how and why suggestions that environmental measures be included in HDI were set aside, in part because the data was poor and in part because environmental issues were only beginning to be appreciated. Nutrition and inequality were also ignored, in large part because data was poor at the time.

I would quibble with a few of the author's arguments. He credits Keynes with establishing a framework for Roosevelt's New Deal policies of the 1930s, but Roosevelt had begun job creation initiatives before Keynes' *General Theory* was published, and was motivated by a simple desire to employ the unemployed rather than a sophisticated understanding of macroeconomic theory. Masood credits the HDI with weakening the "Washington Consensus" by which the International Monetary Fund urged poor countries to balance budgets, but the real blow to that consensus occurred when richer countries such as Greece illustrated the dangers of dramatic cuts in government spending. He celebrates the fact that average HDI grew from 0.57 in 1990 to 0.68 in 2010, and credits this to governments caring about HDI, but surely much of this increase reflected the dramatic increase in GDP in many countries over that period, and a tendency of most countries to increase health and education spending as they develop. Though Rachel Carson and Maurice Strong, among many others, deserve great praise for placing environmental issues on the international political agenda in the 1960s and 1970s, increased urban smog and discoloured rivers played a supplementary role that the author ignores. He lauds everyone associated with the Club of Rome and their "Limits to Growth" project of the 1970s, neglecting to mention that their predictions of resource shortages have proven (so far) to be wildly pessimistic.

Masood devotes a chapter to Bhutan's efforts to develop a measure of Gross National Happiness and use this to guide government policy. But we are not really told much about GNH, though it seems to incorporate education, health, and environmental measures. The policies that seem to have flowed from prioritizing GNH in Bhutan, such as staying out of the World Trade Organization, not acting to facilitate business formation, and limiting tourism, are all controversial, though the author seems positively disposed.

Several chapters touch on the complex question of how exactly to measure the environment. Masood notes that some environmentalists are suspicious of the very idea of placing a price on the environment, while others see this as a critical strategy for encouraging governments to recognize the environmental impact of various policies. He closes with some hope for optimism: The United Nations have encouraged countries to keep separate accounts of environmental variables. Since other variables have been moved from separate "satellite" accounts into GDP calculations over the years, Masood suggests that this might one day happen for the environment. The lesson Masood draws from history is that this will only occur if people of vision champion the idea and convince key governments that this is a good idea, and moreover that we now have accurate enough measures of environmental variables to proceed.

Another possibility, suggested in many chapters, is that we move away from focusing on one number toward a "dashboard" of indicators. The success of HDI, alongside GDP, indicates that the public and their governments are willing to pay attention to more than one number. But the author worries, with good reason, that neither the public nor politicians really want to grapple with a dozen different measures.

I enjoyed reading this book. I hope that it encourages more people to recognize the limitations of GDP. I concur with the author that we especially need to focus more attention on environmental variables. While I think the author exaggerates the role of individuals in this particular story, I nevertheless concur that we need leadership among both academics and members of governments to develop better measures, which will in turn encourage better policies.