opinion

By Johan Fourie

LIVING STANDARDS

Better ways to measure improvement

Gross domestic product is the widely-used indicator for the general prosperity of society. While useful, it has it limits, and some adjustments to the measure need to be tabled.

During my first four years of high school, I delivered the Afrikaans daily *Die Burger* to about 50 homes in my neighbourhood every morning. For a fee, subscribers would have access to national and global world news over breakfast. Today, a printed version of *Die Burger* is still delivered to subscribers, but there are far fewer of them. Far more consumers, including myself, don't buy a printed paper anymore. We read the news online.

The conundrum for national statisticians who are interested in measuring the living standards of South Africans over time is that the decline of newspaper sales will register as a decline in gross domestic product (GDP) – the widely-used indicator for the general prosperity of society. And if people don't pay for their online news service – but instead get the news from free services like News24.com or the Huffington Post – then there will be no concomitant increase in GDP. What would appear like lower levels of living standards, will in reality be significantly improved welfare; no need to get up for a sometimes-late newspaper when you can pick up your phone and read up-to-the-minute news in the comfort of your bed, for free. This, in essence, is the problem with using GDP as an indicator of living standards. GDP raises many problems that economists have known about for a long time. When Simon Kuznets (who is most famous for his work on inequality) first designed the measure in the 1940s, he was unsure whether to include housework in the measure. If you appoint a gardener, for example, it will be counted as part of GDP; if you choose to do the gardening yourself, it will not be included.

But the rise of information and communications technology (ICT) has made matters much worse: our ability to connect with friends (Facebook), or make international calls (WhatsApp) or study any topic on earth (Wikipedia) *free of charge* has without question boosted our living standards, but won't be reflected in GDP. We may not be consuming more, but we are certainly consuming better, faster, and a greater variety with more comfort.

The failure of GDP to capture these advances is beginning to worry economists. The 30 April edition of *The Economist* calls for a "fresh approach". Several new books by prominent economists – of which Diane Coyle's *GDP: A Brief but Affectionate History* is my favourite – have noted the need for change.

Measuring the improvement in living standards accurately is important, for at least two reasons. Firstly, it has an influence on the political process. Weak GDP growth provides opposition parties with ammunition. But a focus on incomes only may miss the large improvements in living standards derived from both free public services and technology. Even the way we measure poverty may need adjustment to this new world of freeconomics.

Secondly, and often neglected, mismeasuring the improvement in living standards also implies a mismeasurement of the causes of that improvement. Poor growth suggests that technology has had little impact on our welfare. This has become known as the productivity paradox. Nobel-prize winning economist Robert Solow famously quipped: "You can see the computer age everywhere except in the productivity statistics." The remark was aimed at the inability of computers to have the cataclysmic effect of the dynamo or the steam engine of an earlier age. But perhaps it did (and still does), but we are simply not measuring it accurately. I suspect the Digital Age has added far more quality to our lives than has been measured in GDP estimates.

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Of course there have been many attempts at constructing a better measure of living standards. A few years ago, happiness was touted as a better measure of general welfare. The problem is that, beyond a certain level of development, happiness changes very little. So, too, for light density – a measure of economic performance that relies on images from satellites. Light density does have its uses, though. A new paper by Maxim Pinkovskiy and Xavier Sala-i-Martin uses light density to show that living standards in developing countries have risen much faster, and that the world income distribution has become more equal than previously thought. (This is because the quality of surveys in these countries is often poor.)

Charles Jones and Peter Klenow also attempt to measure the general improvement in living standards. They construct a composite indicator that consists of consumption, leisure, mortality, and inequality – the four main things, they argue, that determine welfare. Although welfare and GDP are correlated, there are large deviations – including South Africa. We rank much lower on welfare than we do on GDP because of our high level of inequality and low life expectancy.

And yet, even this composite measure fails to account for the immense gains from technology in the Digital Age, like free news, communication and information. GDP will remain a very useful measure, but it is not invincible. Politicians and their electorate should take note. ■

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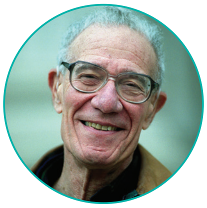

Robert M. Solow
Economist

"You can see the computer age everywhere except in the productivity statistics."

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