

Analysis of the indicators of economic welfare beyond gdp

[Life](#), [Death](#)



INTRODUCTION

GDP has been used as a measure of economic well-being since the 1940s. GDP provides a measure of final goods and services produced in an economy over a long period of time without attention to what is produced, how and by who. Joseph Stiglitz, “ what we measure informs what we do and if we measure the wrong thing we are going to do the wrong thing. In 2009, Nobel peace winning economist Joseph Stiglitz and others, criticized GDP as an insufficient measure of economic wellbeing. Criticisms included, the failure of the GDP to count many of the things that are good that improve the well-being and those that do not improve the wellbeing and therefore misses on how wellbeing and income are distributed across the population.

As a measure of current welfare, GDP’s shortcomings are even more evident, as people care about a lot more than just income. For example, their quality of life is influenced by security, longevity, good health, a clean environment, equal opportunity, social cohesion, distributive justice and having a political voice, household production, value of leisure among many others. This measure does not, for example, include environmental externalities such as pollution or damage to species, since nobody pays a price for them, nor does it incorporate changes in assets value, such as the depletion of resources or loss of biodiversity and unpaid jobs that are nevertheless important (e. g., household chores). GDP does not net these off the flow of transactions during the period covered. Also, GDP doesn’t account for nonmarket activities such as household production and the value of leisure, and GDP includes spending that provides no immediate welfare. Although this

criticism may be well founded, GDP is highly correlated with other measures of well-being, such as life expectancy at birth and the infant mortality rate, both of which capture some aspects of quality of life.

The business landscape is changing, inequality expanding, shifting of demographics and the climate change gets worse and technology is really advancing at a fast speed. For Instance, the amount of one kind of unpaid voluntary work is on the increase and is clearly making a valuable economic contribution. That is the voluntary provision of free digital goods – not “ free” online content in fact paid for by selling personal data to advertisers, but genuinely voluntary contributions.

DIGITAL VOLUNTEERING AND UN PAID WORK

The increase in digital volunteering means there is an unmeasured contribution to valuable economic activity. More importantly, it blurs the clear boundary between “ unpaid work” and “ economy” assumed in the conventional definition of GDP. People who provide such content online might be doing some of it as part of a paid job, some as a hobby; or they might hope it will turn into paid work later, or provide some marketed services using the free content as a shop window. In any case, the old boundary is breaking down.

Ownership of smartphone and tablet devices has also increased dramatically. According to Ofcom, two thirds of adults own a smartphone, up from less than third in 2011, while more than a half own a tablet. As a result, the number of adults accessing the web on a mobile has tripled in just five

years. Moreover, advances in mobile network technology have further increased the speed and facility of exchanging data. Since the launch of the 4G mobile connections have already reached almost a third of the entire market. These developments in technology have highly and greatly facilitated the production, processing and sharing of digital information, making possible a huge amount of data available in many forms hence the increase in online data. The traffic reflects digital services replacing traditional counterparts. Examples include: people nowadays have started reading news content online as opposed to reading newspapers; and using streaming media providers, such as Spotify and YouTube, instead of buying CDs and DVDs. People have also started reading and doing their research online on google queries and encyclopedia as opposed to going to libraries to look for books they can read. The widespread access of internet with easy access through portable devices such as smartphones and laptops has greatly minimized costs of high intensive information activities. This has therefore led to services that were previously provided at a charge are now days provided at a very negligible cost to the consumer.

The greatest economic measurement challenge arises from the consumption of digitalized products which do not involve and include a monetary transaction that corresponds to the value received by the consumers. Digital products that are delivered at a zero price, for instance, are all together excluded from GDP, in accordance to the agreed internationally statistical standards. The gap between what is measured and what is valued grows every time access is gained to a completely new good or service or when

existing goods or services are offered free as is often the case after digitalisation. The question is how these new forms of consumption should be accounted for in economic statistics as indicators of economic welfare beyond GDP.

A digital product is very costly to create in the first instance. However, the digital product can easily be imitated if there are no barriers to entry hence driving the price of the product to close to zero. Regardless of the original supplier inhibiting entry, he /she may provide incentive of his or her product by reducing the cost of the commodity in order to attract a large pool of users. As a result, there will be no observable price for use for some of the most important digital products, except for the fixed cost for the internet access. This therefore, becomes hard to identify the end user value and to capture it in measures of GDP and of productivity.

The increased internet accessibility has led to a dramatic growth in the digital product consumed online. One would expect to see similarly buoyant growth in the statistics meant to capture the digital sector. But this is far from the case, suggesting that official statistics may be missing an important aspect of the contemporary economy.

Since 2007, the number of people reading the news online has risen from one in five to three in five. Over the same period, the publishing sector output as a share of GDP, and household expenditure on newspapers, magazines and other periodicals has declined sharply. If the same content

can be accessed online for free or at a much lower price, purchasing a paper copy is less likely and less frequent.

Additionally, it has been possible to make cheap calls over the internet globally regardless of the distance apart, rather than over more expensive fixed line and cellular networks ever since Skype introduced its Voice over internet protocol (VoIP) service in 2004. As a result, the number of adults making voice or video calls online has increased from around one in ten in 2007 to nearly four in ten today. And about 80% of these users end up paying nothing for their calls. However, this new form of digitalization in our communication is largely missing in the official statistics. This example explains that a significant volume of activity that takes place in the web is not well captured within the existing GDP framework.

Since GDP does not capture such unpaid work value which happen to be a measure of economic welfare helping improve economic well-being, calls for the need of indicators of economic welfare beyond GDP involving the following methods that would put into account the digital products being accessed for free.

To value a digital product in the internet, we need to rely on valuing the amount of time a person foregoes in order to access the internet and the value of satisfaction received after receiving a service online. The assumption is that the amount of time spent online is time that they could be working. Assuming that the opportunity cost of time is given by average hourly earnings, and making the assumption that the opportunity cost for the

non-employed is zero, then one finds that the average annual growth rate in percentage points higher if digital products are already accounted for. Figuring out the unobservable value created by the internet is not easy by any means.

Measuring the footprint of the digital economy rests on the insight that the production and use of data is a fundamental element of economic activity, in parallel to the production and consumption of goods and services. This idea leads naturally to focusing directly on measuring data generation, flows, use and storage as routes into understanding digitally-based economic activity. More specifically, growth in internet traffic can be used as a proxy for the growth in the consumption of digital product.

Home produced services such as cleaning and child care have been not included in the GDP as a measurement of social welfare. Surveying household services is a very difficult and a very daunting task and they are rarely produced in the market place. In the modern world, the market for services in this day and age has grown and households switch between performing and buying the services. Households are treated as a non-productive part of the economy whereas the government and businesses as the productive part (IMF). Nowadays more and more people are self-employed or freelance through digital platforms. They have more flexible hours and work overlap with other activities. Most households have employed house nannies and managers to manage their households when they are away for work. The income paid to this workers is not recorded in the GDP calculations. This income should be included in the measurement of

GDP. This hence explains why we need better and other approaches to compute the social welfare of a country.

In other instances, people in a country carry out so many activities that are income generating, but mostly few are recorded in the GDP. For instance, a government official who is paid \$1000 monthly pay, and he /she has other consultancy jobs that he carries out part-time apart from his monthly jobs such as preparing project plans for other business without a company name, means that all the income generated from the consultancy is not recorded. This therefore shows that GDP does not account for the social welfare of a country.

BEA's published GDP statistics exclude household services from measured output. This exclusion is consistent with the international guidelines for national accounts, the System of National Accounts 2008 (SNA 2008).

However, BEA has previously estimated satellite accounts tracking traditional household services like cooking, cleaning and childcare (Bridgman 2016, Landefeld, Fraumeni and Vojtech 2009).

In general, it is difficult to value household production. It might be true that the market sector produces services that appear to be close substitutes for household production but a detailed examination shows that market output has different attributes than household production. Consider the case of cooking services. On the one hand, amateur cooks might be lower quality because they have less formal training than restaurant chefs. On the other hand, amateur cooks might be higher quality because they have more

experience with their family's food preferences. Cooking, cleaning and childcare are necessary for survival – so families must outsource them to the market sector if they do not produce them within the household. In addition, it is common for individuals to quit their market sector job or reduce their work hours in order to focus on cooking, cleaning and childcare. Therefore, it makes sense to use market wages to value those activities.

ENVIRONMENTAL SUSTAINABILITY

GDP ignores externalities- Externalities are large indirect effects that can become problematic. Consumption, production, and investment decisions of individuals, households, and firms often affect people not directly involved in the transactions. Economic growth usually goes hand in hand with increased exploitation of both renewable and non-renewable resources. Due to this overuse, more and more negative externalities arise e. g. pollution, overfishing, flooding and social welfare will decrease as a result. This effect are not included in GDP. The increase in economic growth is related to an increase in the production and consumption of goods and services; consequently, this may lead to an increase in the multiplied goods of the people and income per capita consumption.

The growth may produce negative impacts on the environment through many aspects, such as degradation in the environment system, environmental condition such as pollution, overexploitation of natural resources, loss of wildlife habitat, and climate change caused by factors such as deforestation, the costs of more frequent flooding for which countries are

still ill-prepared are all illustrations of the gap between GDP growth and economic welfare as a case experienced in Kenya recently in June 2018 in the long rains period. The environmental quality decline is considered to be a serious issue for the living condition of the population from the current as well as the long-term perspective more so for the future generations. This is due to the high rate of growth in recent years relying on natural resources to support the export volume and also to increase the domestic productivity.

In the case of pollution—which is a traditional example of a negative externality—a polluter makes decisions based only on the direct cost of and profit opportunity from production and does not consider the indirect costs to those harmed by the pollution. The indirect costs include decreased quality of life, for instance, a home owner near a smokestack, higher health care costs; and forgone production opportunities, for example, when pollution harms activities such as tourism. Since the indirect costs are not borne by the producer, and therefore not passed on to the end user of the goods produced by the polluter, the social or total costs of production are larger than the private costs. An oil spill also negatively affects the local economy in so many ways that GDP does not account for: for instance, fishermen losing their jobs and livelihood, restaurants temporarily closing or going out of business, and tourism in the area rapidly declining. Moreover, the local ecosystem is completely thrown off balance and damaged, sometimes irreparably, for many years to come.

Hurricane Katrina is another example of the limitations of the GDP. A lot of money, efforts and energy was used in the cleanup costs for the hurricane

effect that amounted to \$ 250 billion which was not reflected on the GDP and the wellbeing of the New Orleans Citizens. Several residents were displaced permanently and were therefore left homeless. This therefore means that the welfare of the citizen was affected negatively and this must have not been recorded in the GDP. The city has not yet approached the population figures before the hurricane. As of 2012, the city has reached only 80 percent of its former population. Such externalities pose and lead to fundamental economic policy problems when individuals, households, and firms do not internalize the indirect costs of or the benefits from their economic transactions.

In Kenya, residents near the Mau forest have encroached the forest and have started settling in the forest. It is the largest indigenous montane forest in East Africa in the Rift Valley of Kenya. The Mau Forest has the highest rainfall rates in Kenya. The forest has been encroached by tribes whose hunting life is well sustainable there. Activities such as logging have led to deforestation of the forest. This has led to several side effects such as disruption of the weather patterns in the country and climate change. The Evictions that are set to happen in the Mau forest will have adverse effects on the social welfare of the people living in the forest. Their houses will be demolished and this will lead to them lagging behind and having to restart their lives afresh in a new place. This effects are, however, not included in the calculation of the GDP. Deforestation also leads to loss of habitat for millions of species in the world. This wildlife provide incomes to the nation in terms of foreign exchange from the tourist attractions.

To achieve extreme development, the economic condition should not be measured by the GDP growth alone. Instead, the sustainability of natural resources and environmental condition must be considered to be one key factor that can be used to prove that the benefit of growth is distributed throughout the population and environment. Consequently, the strength of the country's economy must be incorporated into the condition to achieve economic growth.

The growth of economic activities, in terms of production and consumption, requires larger inputs of energy and material that generate a greater quantity of waste by-products (Georgescu-Roegen, 1986). This is confirmed by Grossman and Krueger (1995), who state that to achieve a high level of growth a country needs more inputs to enlarge its outputs, leading to an increase in the waste and emissions generated through the production of economic activities. The increased allocation of natural resources, accumulation of waste, and concentration of pollutants directly impacts on the degradation of environmental quality, leading to a decrease in the human living quality, despite the rising income (Daly, 1991).