Rethinking the value of everything

A hard look at how value is measured in investment portfolios, corporate performance and national economies

Current measures of value are too narrowly focused on measuring growth and progress in terms of goods and services consumed and produced. As a result, the value of easily monetized input, outputs, and capital assets is overestimated while the more diffuse but nevertheless material value that characterizes social and environmental assets is underestimated. Moreover, such rigid accounting frameworks omit costly externalities that further distort current estimates and future outlooks.

This myopic view has created an unsustainable system that rewards the short-term and discounts the long-term. But conventional metrics and methods of today's accounting will not work for a sustainable tomorrow.

New mandates, new metrics and new methodologies are needed to help companies and economies recalibrate for the future. We advocate a rethink on what constitutes value creation as well as how to measure and monetize it. With a wealth of corporate sustainability data, analytical tools and long-term orientation, ESG research and ratings providers like S&P Global will be key collaborative partners in defining a new way of assessing value that ensures the interests of all stakeholders are represented and aligned.

Looking for better metrics

The inappropriateness of using GDP as the central benchmark for a nation's success is well noted. The Nobel Prize-winning economist Simon Kuznets, who is often credited as the inventor of the metric, warned that GDP was not a suitable measure of a country's economic development or well-being in his seminal work which redefined how economic growth should be viewed.[1] American politician Robert Kennedy summarized it well in his election speech in 1968 when he said "it [GDP] measures everything in short, except that which makes life worthwhile".

Some governments are looking for better metrics of success. New Zealand is attempting to become the first nation to do without GDP and focus on well-being as a better measure instead. It is part of the Well-being Economy Governments (WEGo) partnership, which currently includes Scotland, Iceland and Wales, and seeks to build economies that deliver human and ecological well-being. Yet while these governments are pioneering new metrics, the use of GDP as the primary yardstick with which national success is measured remains to this day.

[1] Kuznets S. National Income, 1929-32. Letter from the Acting Secretary of Commerce to the US Senate. 1934.

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"What you measure affects what you do". Joseph Stiglitz

Our dependency on GDP complicates a sustainable recovery from Covid-19. As Joseph Stiglitz, former World Bank chief economist and Nobel laureate, explains: "What you measure affects what you do".[2] GDP is the monetary value of all the finished goods and services that are produced within a country. This makes it a sign of economic productivity, not of societal and environmental well-being. The consequences are significant: if metrics fail to capture a myriad of environmental and societal costs and benefits, then our policies will fall short of creating inclusive and sustainable societies coming out of the Covid-19 crisis.

Following this logic through to the long-term impact on investors, if our accounting systems do not reward (or penalize) companies for these hitherto non-financial benefits (or damages), investors are not being properly informed about companies' true value creation potential. Ultimately our risk-adjusted returns, on which our performance is largely judged, does not show the whole picture.

[2] Stiglitz, J.E., Fitoussi, J., & Durand, M. Beyond GDP: measuring what counts for economic and social performance. Paris: OECD Publishing. 2018.

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The 'cost' of doing the right thing

The principal problem with using GDP is its failure to capture a myriad of externalized costs and benefits, many of which mean the difference between life and death. For example, the production and consumption of cigarettes, sugary drinks and fast food all inflate GDP. However, the adverse health impacts they inflict on their consumers is insufficiently captured by the metric and are thus easily ignored.

By the same reasoning, GDP measures the incomes (salaries, profits, taxes) reaped by providing essential services such as health and education but fails to adequately measure all the societal benefits that these activities provide to patients and students in the long run. These shortcomings make investing in a sustainable future less attractive from a GDP perspective.

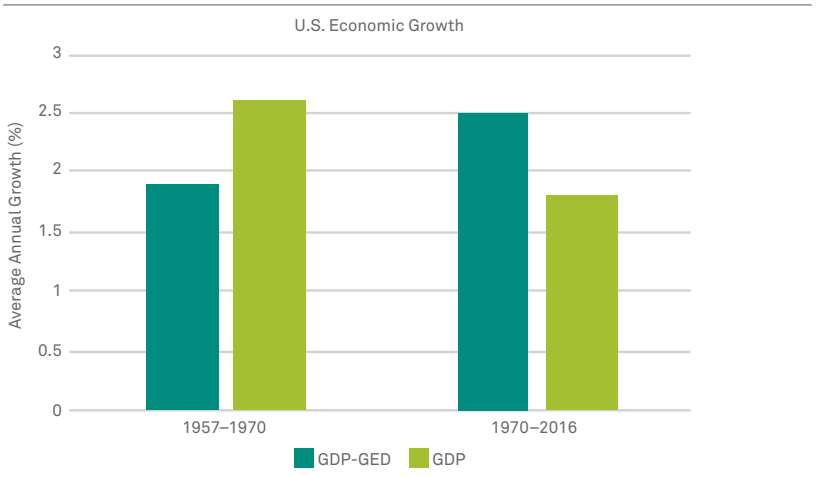
The value of environmental stewardship

Environmental stewardship, in turn, typically reduces GDP, because it does not include the value that nature provides. The business world and the academic field of environmental economics commonly refer to this as ecosystem services provided by natural capital. Healthy ecosystems and biodiversity provide numerous services, from pollination and clean drinking water to medicinal resources and recreation. Hence, nature provides the essentials for a high quality of life.

Researchers are increasingly trying to quantify the value that nature provides. One example is the Gross Environmental Damages (GED) measure developed by Nick Muller of Carnegie Mellon University. Muller found that reported GDP in the United States was overstated during 1957–1970 and understated during 1970–2016 if ecosystem services were valued (see figure 1). When we focus simply on GDP (the light green bars), we see that GDP growth has declined since 1970.

But once we take pollution or the environmental damages that Muller calculated into account (blue bars), growth actually accelerated after 1970 – the year in which the US Environmental Protection Agency (EPA) was created. Less pollution means less environmental damages. Subtracting GED from GDP gives an insight into the wealth that is created by accounting for the harm of pollution. The idea is clear: today GDP ignores environmental costs and benefits to our detriment. Yet much work needs to be done to standardize such approaches.

Figure 1: Recent growth of the US economy would be higher if the value of environmental protection is included.



Source: Catherine Wolfram. GDP – Gross Environmental Damage = actual wealth creation.June 27, 2019. EnergyPost.EU. Based on the work of Nicholas Z. Muller.

... what happens when decisions suggested by valuing natural capital contradict those suggested by applying standard accounting principles?

The Natural Capital Protocol (NCP) is one such effort. It is a comprehensive framework seeking to standardize approaches to measuring and valuing natural capital impacts and improve decision making for businesses. But what happens when decisions suggested by valuing natural capital contradict those suggested by applying standard accounting principles? The next step is to integrate these standards into financial accounts, which requires policies that reward companies for preserving ecosystem services.

The NCP is also an acknowledgment of the difference between measures of flows (e.g. GDP or cash flow) and stocks (e.g. reserves or balance sheet). Both are needed to assess the sustainability of our economy. We are thus interested in new approaches to measure social capital, human capital, and cultural capital.

'Low wage' versus 'low value'

Indeed, the Covid-19 crisis has exposed problems with how we value human capital as well. We see that many jobs at the frontline of battling the pandemic — such as nurses and social health workers — receive relatively low wages. While GDP only measures these professionals' contribution to society by looking at their income, their societal impact is of course much greater: they protect people's health and well-being. Similar arguments can be made for many other jobs where salaries tend to be low (or non-existent) but societal impacts are high (e.g. teachers, parents, warehouse workers, etc.).

In other words, GDP calculations assume that price equates to value, when this is often not the case – there is a difference between value creation and value extraction, between wealth creation and rent seeking.[3]

[3] Mariana Mazzucato. 'The Value of Everything'. 2018.

Failing to measure the true costs and benefits of natural and social capital yields incomplete and inaccurate information that leads to overconsumption of certain goods or services, underconsumption of others, and the misallocation of capital that comes with it. Ultimately, economies become inefficient and produce suboptimal outcomes that would be required to provide human well-being and ecological sustainability. This is concerning, particularly to investors whose breadth of portfolio coverage makes them universal owners.[4]

Various scholars and policymakers have proposed to also use policy instruments for improving sustainability outcomes, such as giving tax credits to promote environmental stewardship, or increasing taxes on the consumption of primary resources.[5] These practices would be similar to the US federal government incentivizing innovation with R&D tax relief. They would also be similar to governments around the world using excise taxes to try to reduce the negative externalities from the consumption of alcohol and tobacco. Followed to their logical conclusion, such changes would have significant impacts on the financial performance of companies and capital allocation by investors.

Beyond GDP – measuring a sustainable future

Many have proposed concepts to replace GDP. One early contestant is the Genuine Progress Indicator, which was developed by economist Herman Daly and theologian John Cobb in 1989.[6] This indicator includes some of the common measures of well-being, such as infant mortality, child poverty, life expectancy, insecurity, crime, pollution, water quality and resource depletion.[7]

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More recently, Kate Raworth's Doughnut Economics has gained a lot of traction (see Figure 2). This doughnut nicely describes a new paradigm, where twelve social dimensions are to be met within nine planetary boundaries.[8] Not meeting the social dimensions means that there is a shortfall: people are left behind by not having access to basic needs and insufficient wellbeing. But if we meet people's basic needs by using more natural resources than our planet can generate, we're overshooting planetary boundaries in areas such as biodiversity, climate and fresh water. This is a concept that originated in, and is now playing a central role in, sustainability science.[9]

[4] https://www.unpri.org/sdgs/the-sdgs-are-an-unavoidable-consideration-for-universal-owners/306.article

[5] Ashiabor, H., Kreiser, L., Sirisom, J., & Milne, J. E. (Eds.). (2011). Environmental taxation and climate change: achieving environmental sustainability through fiscal policy (Vol. 10). Edward Elgar Publishing.

[6] Daly, H, Cobb J. For the Common Good: Redirecting the Economy Toward Community, the Environment, and a Sustainable Future. 1989.

[7] http://www.consultmcgregor.com/documents/resources/GDP_and_GPI.pdf

[8] https://www.kateraworth.com/doughnut

[9] Rockström, J., Steffen, W., Noone, K., Persson, Å., Chapin III, F. S., Lambin, E., & Nykvist, B. (2009). Planetary boundaries: exploring the safe operating space for humanity. Ecology and Society, 14(2).

[10] Jeremy Grantham. The Race of Our Lives Revisited. August 2018. GMO.

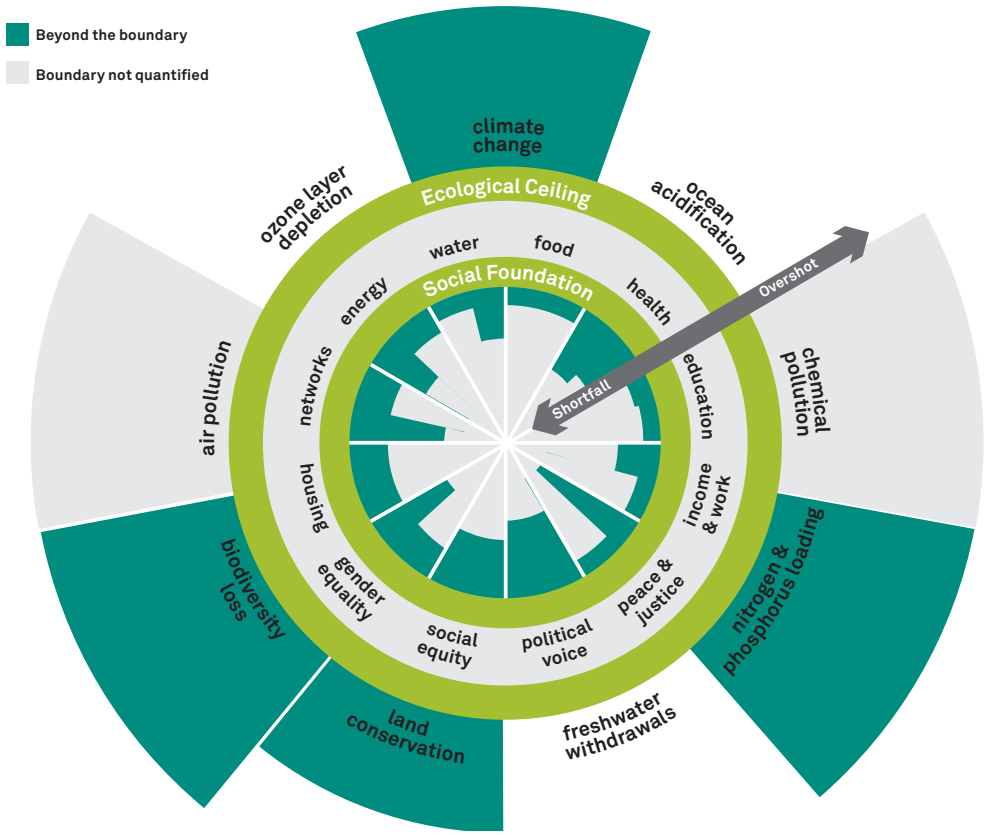
The doughnut helps guide us into a more sustainable future. Assessments show that to date we have challenges on both ends: many people around the world still have a shortfall in seeing their social needs met, while we are also exceeding various planetary boundaries. By combining the planetary boundaries framework with people's social needs, the doughnut can serve as a practical compass for a sustainable Covid-19 recovery.

Not all alpha is created equal

As suggested above, even if society starts to measure progress in a more comprehensive manner, new policies and accounting standards are needed to reflect these principles in companies' financial statements, and valuation approaches used by investors also need to change. Many valuation models start with these incomplete or flawed inputs, then discount the future so highly that the net present value for a project is higher if you degrade a forest or allow farmland soil to erode instead of managing the assets to make sure they remain healthy forever.[10] From a long-term perspective, it makes more sense to invest in assets with a lower, but more sustainable, internal rate of return.

The fact is that common measurement approaches are not meeting our needs, given environmental constraints and the various social objectives outlined in the UN's Sustainable Development Goals. For this reason, the mission and vision of asset managers and asset owners should be based in sustainable thinking, shifting the investment industry from simply creating wealth to creating wealth and well-being.

Figure 2: The doughnut of social and planetary boundaries.



Source: https://www.kateraworth.com/doughnut/

Creating better measurement systems that account for sustainable decisions is fundamental to developing a sustainable economy. If more environmental and societal costs and benefits are internalized in financial statements, we gain insights into how alpha is generated.

However, fiduciary obligations in many countries make it difficult for investors to focus on anything other than shareholder returns. In many cases, this is irrelevant, because sustainability is a driver of financial performance. However, there are also times when negative externalities allow companies to outperform, perhaps from anti-competitive practices or lax environmental regulations, particularly in the short term.

Investors must then navigate between choices that may lead to negative consequences in the long term and those that are clearly sustainable, in order to ensure we meet our current performance obligations while protecting long-term returns–a challenging balancing act.

Creating better measurement systems that account for sustainable decisions is fundamental to developing a sustainable economy. If more environmental and societal costs and benefits are internalized in financial statements, we gain improved insights into how alpha is generated. For instance, a tobacco company and a medical devices company might create the same alpha – although the former harms human health while the latter promotes it. We suggest that comprehensive accounting of the actual value created for all stakeholders by such two companies would expose such differences.

Active collaboration and industry-wide standardization

Asset managers should measure the various impacts of investments using economic, social and environmental indicators. Examples could include the number of clean gigawatts per hour of renewable energy provided, the amount of greenhouse gas emissions avoided, or the volume of waste recycled within investment portfolios. These measures provide investors with better insights into how both wealth and well-being are being created.

However, standardization across the industry is lacking. Those within the financial community should collaborate with others in the industry to share knowledge and develop impact standards. An example is the Natural Capital Declaration, an initiative led by the United Nations Environment Programme Finance Initiative and the Global Canopy Program, that helps the financial sector to integrate natural capital considerations into investment products, as well as in accounting, disclosure and reporting frameworks.

Through this collaboration, Robeco and other sustainably minded asset managers have modelled the impact of natural capital on the credit risks of companies in chemicals, food and beverage, and mining. Having such metrics better informs investors on how their individual investment decisions impact our collective world, and what levels of risk are associated with different investment strategies.
In this respect, S&P Global has been an energetic champion of measuring non-

financial metrics to better assess corporate performance. Moreover, in conjunction with RobecoSAM, they have been a pioneering developer of the tools and methodologies needed to integrate ESG data into investment portfolios. Over the past two decades the S&P Global Corporate Sustainability Assessment (CSA) has continued to raise the bar for ESG ratings and research and has set a new global standard for corporate sustainability performance. As a result, investors are better informed of sources of intangible value and/or intangible risks within companies. On the topic of impact, Robeco continues to work with S&P Global and other leading asset managers and asset owners to improve disclosure and standardization of impact metrics, educating both companies and investors in the process.

Developing better metrics and integrating these into investment processes is not an end destination but a journey that requires iterative improvement and development – with each step, we improve our measurement, understanding and influence of economic, social, and environmental impacts.

Monetizing impacts and aligning incentives

Beyond the standardization of impact metrics, we suggest monetizing and valuing these impacts and externalities so that financial incentives align with sustainability principles. Putting a price on greenhouse gas emissions – for which economists have long been calling – is a simple example where we already see how this works in practice.[11] Emitters have to pay, and clean energy companies or more efficient solution providers (e.g. electric vehicles) often receive subsidies.

In these cases, subsidies are in effect a recognition that the value of a product or service to society is higher than what a consumer is willing to pay. Such policy solutions can be developed for other types of pollution, ecosystem services (soil, forests and biodiversity generally), and drivers of mental and physical health.

The result of these changes would be an ability to steer towards an economy that is sustainable and resilient, and one that creates well-being for people within our planetary boundaries. Aligning financial incentives with sustainability objectives will give companies, investment managers, asset owners and sovereign economies a new mission creating not just wealth but also well-being. S&P Global's role in extolling sustainability leaders and identifying industry laggards will contribute to these efforts that steer an investment industry known for its short-sighted view of financial profits towards a far-sighted vision of global benefits. ■

[11] The Economist (23 May 2020). The world urgently needs to expand its use of carbon prices.