



Integrated Profit & Loss reporting

– a framework for integrating natural, human and social capital externalities when measuring corporate performance

We cannot manage what we do not measure. Financial statements, following national and international standards, quantify corporate accountability. But what similarly quantifies corporate responsibility? The answer is “Integrated Profit & Loss”, a universal and comprehensive framework for evaluating businesses’ total stakeholder impacts – not only on financial capital, but also on natural, human and social capital. It informs corporate decision-makers, investors and company regulators and makes companies future-ready.

The term “capital” is an economic metaphor for “value”. It implies the existence of stocks of assets that have value and will, if used appropriately, generate or secure flows of benefits such as income. The most popular economic definition of “income” was by Hicks (1946) (1), who equated an individual’s ‘income’ in any given period to the amount of expenditure in that period which still left the individual’s *capital* intact. This definition also captures ‘sustainability’, as only *sustainable* spending (i.e. spending which leaves capital intact) is a measure of income.

Unfortunately, we live in a world in which many kinds of capital face risks of depletion. As several planetary boundaries are being rapidly approached or even breached, *Natural capital* is at risk. *Social capital* is challenged by increasing inequality, intolerance and polarization, and human health, the mainstay of *Human capital*, is increasingly at risk from e.g. pollution and unhealthy diets (2).

The main driver of these challenges is our dominant economic model and its main agent, the private sector, which accounts for almost two-thirds of global output and jobs (3). Despite that, today’s corporation is only formally required to quantify and report its impacts on *shareholder financial capital*, not the human or natural capital that affect important *stakeholders* such as employees, customers, suppliers, regulators, governments, citizens, the youth, etc (4). This makes very little sense from any perspective, be it that of transparency, or justice, or sustainability. “Integrated Profit and Loss Reporting” or IP&L, evolved as a corporate initiative in sustainability leadership in response to the publication of the “Integrated Reporting Framework” by the International Integrated Reporting Council (IIRC) in 2013 (5). It called for the need to take a wider ‘stakeholder’ view of corporate performance. This approach has been used

by many sustainability leaders around the world, including AkzoNobel (a European chemicals giant, in 2014), Amata (a forestry company in Brazil, in 2015), Yarra Valley Water (Melbourne’s water utility, in 2016) and Sveaskog (Sweden’s largest forest owner, in 2018). IIRC’s thinking extends to all capitals the logic of the Natural Capital Protocol (6), a universal process guideline and framework prepared by the “Natural Capital Coalition” (7) to help businesses to discover and measure their impacts and dependencies on *natural capital*. The Natural Capital Coalition has grown from its origins as the “TEEB for Business Coalition” (8) and developed into a wide-ranging community of practice seeking to understand corporate impacts and dependencies on natural capital. This community has helped support, replicate, and scale ‘best-of-breed’ work done by corporate leaders in sustainable business practice.

The four dimensions of the wealth (‘capital’) of third parties such as individuals, communities, or the public at large, most impacted by businesses are summarized in the table below, with a few examples given of each capital class and type of ownership.

The below framework at the micro-economic level uses only four kinds of capital. This is wholly consistent with mainstream literature in environmental economics as well as the ‘inclusive wealth’ approach adopted by United Nations University and the United Nations Environment Programme (UN Environment) in their Inclusive Wealth Report (9) which provides multi-capital analysis of national performance. In that report’s foreword, Prof. Partha Dasgupta, a leading Cambridge economist who pioneered the recognition of non-financial ‘capitals’ in modern economics, explains the four capitals thus;

		Capital Classes			
Ownership Categories		Produced capital	Human capital	Natural capital	Social capital
	Private Ownership: ("Private Goods")	Factories Securities Software Patents	Health Education Job skills	Mines Fields Private forests	
		Market design, regulations, rules, etiquette Civil & Criminal Laws; Judicial systems			Social capital
	Community Ownership: ("Club Goods")	Community centres Community schools	Traditional community knowledge	Community forests Grazing commons	
		Community rules, norms, customs, culture			Social capital
	Public Ownership: ("Public Goods")	Roads Bridges Public hospitals	Public databases Non-patent knowledge	High seas fisheries National parks/ forests	
		Constitutions; Judiciaries; Law & order; Tax systems Social equity; Communal harmony; Cultural diversity			Social capital

Table: Capital Classes & Ownership Categories

"Inclusive wealth is the social value of an economy's capital assets. The assets comprise (i) manufactured capital (roads, buildings, machines, and equipment), (ii) human capital (skills, education, health), and (iii) natural capital (sub-soil resources, ecosystems, the atmosphere).

Such other durable assets as knowledge, institutions, culture, religion – more broadly, social capital – were taken to be enabling assets; that is, assets that enable the production and allocation of assets in categories (i)–(iii). The effectiveness of enabling assets in a country gets reflected in the shadow prices of assets in categories (i)–(iii)"

Is "Intellectual Capital" a separate class of capital?

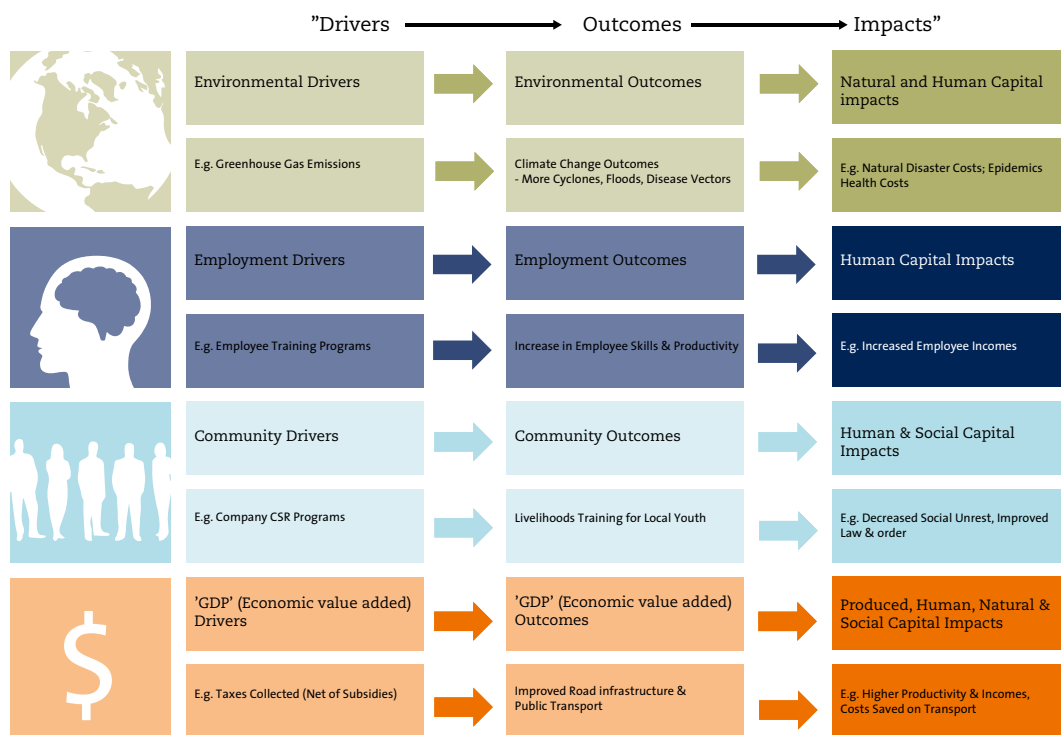
Some literature (including the IR guidelines of the IIRC) also recognizes a fifth class of capital, called "Intellectual Capital". However, we live in an age dominated by technology and information, therefore intellectual capital is ubiquitous, and in fact is usually found *embedded* in other forms of capital. It could either be embedded in privately owned *produced capital* (eg: in the form of Intellectual Property ("IP") such as patents, copyrights, trademarks, brands, etc, and incorporated into numerous consumer goods) or community owned *human capital* (eg: traditional knowledge of tribal communities about their local herbal remedies) or *human capital* in the public domain (eg: wikipedia, non-copyrighted knowledge and technology). In all these cases, it is found that 'intellectual capital' is in fact embedded into assets which are part of one of the four classes of capital (usually produced or human capital) held in some category of ownership (private, community, public) and

thus it is not necessary to create a separate "capital class" to capture "intellectual capital".

What do ownership categories tell us about the ethics of offsets?

When evaluating impacts and considering offset strategies, companies would be well advised to ask "*whose capital is it anyway?*". For example, a mining company headquartered in North America afforesting empty land near its head office would not have an ethical case for calling that a "*natural capital offset*" for its pollution damage to river waters and soils caused by its mining operations in a distant African developing country. In this case, the costs are being inflicted on the health and incomes of poor village communities there, whereas prosperous citizens around its head office are reaping the benefits of a better quality of urban life.

In the table above, community-owned wealth is referred to as "club goods" (10) and it should be noted that the "communities" we refer to may be as varied as tribal villages, city precincts, or country golf clubs: the key point here is that they exercise *shared* ownership rights and the ability to exclude others from accessing or benefiting from their club goods. This is not the case for *public goods*, which by definition are non-excludable. In other words, no one can be prevented from using them and use by one party does not prevent use by another. Whilst capital classes are widely considered by corporate managers when evaluating externalities and designing mitigation strategies, more attention needs to be paid to ownership categories.



A universal comprehensive evaluation framework to measure stakeholder performance, with an example of each driver, outcome and impact. Developed by GIST Advisory, 2018.

Proposed capitals-based valuation framework for business externalities

Business externalities can result in positive or negative impacts on third parties: individuals, communities, or the public at large. These impacts are changes in well-being and can be measured as changes in one of four *categories of capital* (*natural, physical, human, social*) belonging to one of three classes of ownership (*private, community, public*).

An *evaluation framework* is in essence a logical template to answer the question “*what should be evaluated, and why?*”. It identifies *which* impacts deserve closer attention, measurement, disclosure and management on the basis of *materiality*, i.e. economic or social size and significance. The diagram above illustrates a framework used for ‘Integrated Profit & Loss’.

There are four broad categories of ‘drivers’ of various impacts arising from the activities of business: environmental drivers (emissions, pollution, etc), human resource drivers (training, H&S standards, etc), community drivers (CSR programs, etc), and classical GDP drivers (profits, salaries, taxes, etc). They all have various outcomes, leading to positive or negative impacts on third-parties. All impacts are measured and valued as changes in produced, natural, human and social capital.

Negative externalities may typically arise from “environmental drivers” (i.e. from greenhouse gas emissions; freshwater extraction; waste generation; land-use change; air pollution; land & sea pollution). These six environmental drivers were first proposed by Trucost plc & PwC in their advisory work, and formed the basis of their Environmental Profit & Loss

(“EP&L”) calculation for Puma, in an externality statement published by the company in May 2011 (11).

Amongst positive externalities, benefits that “spill over” and create broader societal gains, a good example is the human capital externalities from formal training. For example, Infosys, an IT consulting major from India, in 2012–2013 generated an estimated USD 1.2 billion of *positive human capital externalities* as a result of skills training, experience, and brand association benefits carried out with them by employees who left them during the year; normal industry attrition rates are quite high at around 15–17%. (see Chapter 5, “Corporation 2020” (3)

A further point is that, in general, a company’s societal impacts and externalities can either be classified “by business drivers” or “by impacted capital”. The first is usually more useful for business management, enabling response strategies to be formulated by the business unit driving the impact. The latter is more useful for impact analysis at the level of the company, industry or sector, providing high-level perspectives for regulators and policy makers as well as industry benchmarks for analysts and investors.

Integrated profit & Loss Reporting adopts a universal valuation framework based on the widely accepted ‘four capitals’ lexicon of the United Nations’ “Inclusive Wealth Report”. If one approach is followed by everyone, it allows results to be compared across and within business sectors. This is a common ask from analysts, investors, civil society organizations, company regulators and from corporate management themselves.

Definitions of Terms Used

Drivers: Activities and transactions of agents (governments, corporations, individuals, etc) which result in various significant *outcomes* leading to material *impacts* on third-parties.

Outcomes: Changes in conditions or states (physical, biological, psychological, etc) of systems caused by *drivers*, which may have material *impacts* on third parties, and possibly also on the drivers and their transactional counterparts.

Impacts: Changes in one or more dimensions of the well-being of third parties, and possibly also of drivers and their transactional counterparts, as a result of various outcomes.

Scope: The ranges for one or more parameters (geo-political unit, company, division, product, etc) for which an evaluation is being carried out.

Value Chain Boundary: The range of value-chain stages for which an evaluation is being carried out.

Evaluation Framework: Description and classification of *outcomes & impacts* (for a given scope and value chain boundary) caused by specified drivers, that answers the question “what should be evaluated and why?”.

Evaluation Methodology: Analytical techniques and methods that answer the question “how should we evaluate these *outcomes & impacts*?”

Natural capital: “an economic metaphor for the limited stocks of physical and biological resources found on earth, and of the limited capacity of ecosystems to provide ecosystem services.”^A

Human capital: “the knowledge, skills, competencies and attributes embodied in individuals that facilitate the creation of personal, social and economic well-being.”^B

Social capital: “networks together with shared norms, values and understandings that facilitate cooperation within or among groups.”^C

A. from “Glossary” of the TEEB Synthesis Report, “Mainstreaming the Economics of Ecosystems & Biodiversity”, TEEB, 2010

B. from OECD, 2001, “The Well-being of Nations: The Role of Human and Social Capital”, Paris: OECD Publishing

C. OECD Insights. URL: <http://www.oecd.org/insights/37966934.pdf>

References:

1. Hicks, J.R. 1946. Value and Capital: An Inquiry into some Fundamental Principles of Economic Theory. p.174
2. International Food Policy Research Institute. 2016. Global Nutrition Report 2016: From Promise to Impact: Ending Malnutrition by 2030. Washington, D.C. <http://dx.doi.org/10.2499/9780896295841>
3. Sukhdev, P. 2012. Corporation 2020. Transforming business for tomorrow's world. Island Press.
4. Voluntary disclosure standards have evolved to address business risks to sustainability (eg: Global Reporting Initiative's GRI Standards <https://www.globalreporting.org/standards/>). The EU requires firms with above 500 employees to disclose social & environmental impacts, & policies for managing these impacts (DIRECTIVE 2014/95/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 22 October 2014, as regards disclosure of non-financial and diversity information by certain large undertakings and groups). However, statutory reporting follows either International Financial Reporting Standards (<https://www.ifrs.org/>) or national accounting standards, neither of which address measurement or disclosure of impacts on stakeholders and their Human, Natural and Social Capital.
5. <https://integratedreporting.org/wp-content/uploads/2013/12/13-12-08-THE-INTERNATIONAL-IR-FRAMEWORK-2-1.pdf>
6. <http://naturalcapitalcoalition.org/protocol/>
7. <http://naturalcapitalcoalition.org>
8. <http://www.teebweb.org/areas-of-work/teeb-for-business/>
9. UNU-IHDP and UNEP. 2014. Inclusive Wealth Report 2014. Measuring progress toward sustainability. Summary for Decision-Makers. Delhi: UNU-IHDP. http://www.ihdp.unu.edu/docs/Publications/Secretariat/Reports/SDMs/IWR_SDM_2014.pdf
10. Cornes, R. and Sandler, T. [1986] 1996. The Theory of Externalities, Public Goods, and Club Goods. 2nd ed. Cambridge University Press.
11. <https://about.puma.com/en/newsroom/corporate-news/2011/11-16-11-first-environmental-profit-and-loss>

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