Societal Impact: Beyond Frameworks

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Abstract

Our research maps the quickly evolving discourse regarding how organizations (corporate, non-profit, and governmental) should define human and environmental impacts and metrics used to assess impact. Our approach is crossdisciplinary, examining empirical work from social scientific scholars and practitioners. Likewise, the sources we reviewed are multinational and multicultural. We identify five categories of societal impact frameworks currently in use: human rights-based frameworks, environment/climate changebased, hybrid frameworks, business-centric frameworks, and frameworks specifically designed to assess the societal impact of research. We nonetheless offer two recommendations. First, we make a meta-ethical claim that two principles are common to the five categories of frameworks. The principles are: 1) support and advance human rights and 2) attend to environmental issues. By articulating underlying principles, we suggest shifting how societal impact may be defined. Rather than define societal impact using a framework, which our research identifies as the most common approach among empirical sources, we suggest that societal impact may be defined in terms of principles underlying multiple frameworks. Second, we recommend praxis, describing a method for designing metrics that may be associated with multiple frameworks.

Key Words: Societal impact, frameworks, human rights, environmental issues

Introduction

Practitioner and academic discourse regarding organizations' societal impacts occurs in a broader context, which includes an emerging new theory of the firm. For example, 36 U.S. states now have a particular category of corporation, the Benefit Corporation. Investors in benefit corporations agree that managers should sometimes subordinate profit maximization to maximizing some other social good (or minimizing harm).

This broader context involves exploring meta-questions, such as whether the firm functions as an individual, with an individual's negative and positive duties (beyond profit maximization). This broader context involves rethinking the formulas of classical economics, such as the ways economists measure growth and progress. While answers to such questions will inform the decisions organizations make, exploring these topics is beyond the scope of our current research.

We organized this paper around the following research strategy: review and analysis of primary and secondary scholarly sources; and review and analysis of practitioner sources, i.e., think tanks and non-governmental organizations (NGOs). Our research found that approaches to defining organizations' societal impact are often praxis-oriented, taking the form of a framework, i.e., a specific plan to create societal impact. Such frameworks may focus on how an organization's work affects people (physical well-being, exercise of rights), the environment, or both.

A particular framework may also articulate the metrics an organization should employ to measure its progress in achieving specific societal impacts. Metrics may be used within the organization to adjust the framework and externally to provide relevant stakeholders with information.

To be sure, some frameworks are more mature than others, meaning some frameworks are developed to a greater degree of specificity than others. In our estimation, the United Nations Sustainable Development Goals are the most comprehensive and mature framework. Nonetheless, even a cursory internet search for definitions of societal impact yields references to other frameworks, often represented by the acronyms ESG and CSR. References to these frameRecognizing the differences between SDG, ESG, and CSR can be helpful. SDG refers to the specific societal impact framework developed by the United Nations. The UN's SDGs are ultimately grounded in the UN's 1947 Universal Declaration of Human Rights.

While SDG refers to the UN's specific framework, the definition of "sustainable" is evolving. A decade ago, "sustainable" explicitly referred to addressing the impact of an industry on the environment, e.g., reducing a firm's carbon footprint. Increasingly, "sustainable" refers to an industry or specific organization's human and environmental impacts. This shift has occurred because efforts to reduce ecological effects have sometimes created negative human impacts, e.g., building a more environmentally friendly factory may have displaced a village of several hundred farmers, who are then deprived of a livelihood and are reduced to poverty. (Diez-Spelz and Ramirez-Garcia, 2022, pp. 77-98)

In contrast to SDG, ESG and CSR do not refer to a single specific framework. ESG essentially refers to three variables – environment, society, and governance – that businesses should (and increasingly, legally must) consider when creating a societal impact strategy and implementation plan. In the literature, several different frameworks may be labeled "ESG." (Esposito and Antonucci, 2022, pp. 609-619)

De facto, a particular ESG framework developed by a company might have goals similar to the UN SDG goals. De jure, however, the ESG acronym de-links societal impact from the United Nations and the UN's specific focus on protecting and promoting universal human rights. The business-centric frameworks we identified in the academic literature (described below) are each a particular articulation of an ESG framework. These frameworks, rhetorically at least, continue to assert maximizing stakeholder value as of primary importance, with protecting human rights and the environment in service of this ultimate good.

Like ESG, CSR (Corporate Social Responsibility) does not refer to a specific framework. In the literature, several different frameworks may be labeled "CSR." Frameworks labeled CSR are generally based on the idea that firms, like individuals, have a social responsibility. The debate about the validity of this idea continues in academic literature. In the past 40 years, many companies have developed a strategy for conducting themselves responsibly (although definitions of what actions qualify as socially responsible vary widely).

In general, we found that ESG frameworks endeavor to create a more systemic societal impact than frameworks labeled CSR. For example, an organization might require employees to volunteer at a food pantry as a CSR initiative. In contrast, a company's ESG framework might articulate the way that the company can reduce food dependence or hunger so that there are fewer socio-economic situations requiring food pantries. In simplest terms, CSR initiatives are often about "giving back," essentially supporting the status quo. In contrast, ESG frameworks are oriented to create systemic changes, addressing long-term economic and/or environmental challenges.

As of the writing of this paper, some practitioner sources are moving away from the ESG label because it may not provide enough distance from the social and political ideologies sometimes attributed to the UN's SDGs. Due to the fluidity among (and reaction to) the definitions and usages of the terms ESG, CSR, framework, and ranking, we propose defining societal impact in terms of underlying principles common to all iterations of frameworks we found.

Findings from Primary and Secondary Scholarly Sources

By analyzing the theoretical underpinnings of the various frameworks, we identified among scholarly and practitioner sources, we identified five categories: human rights-based, environment/climate change-based, business-centric, hybrids of human rights, and environment/climate change-based, and specifically focused on business school research. Human rights-based frameworks (Table 1, p. 12) tend to define societal impact as efforts and initiatives that advance human rights (typically rights as defined by the United Nations Universal Declaration of Human Rights, although a specific source may not necessarily refer directly to the UN declaration). Environment/climate changebased frameworks (Table 2, p. 12) tend to define societal impact as efforts and initiatives that address climate change and reduce or eliminate other forms of environmental degradation. Other concerns, such as protecting human rights, are subordinated to preserving the environment and seeking to manage climate change. Hybrid frameworks (Table 3, p. 13) place equal emphasis on protecting and promoting human rights, managing climate change, and reducing or eliminating other forms of environmental degradation. Business-centric Frameworks (Table 4, p. 14) tend to define societal impact as initiatives that advance the interests of businesses and, in some cases, free enterprise more generally. These frameworks often take a broad view of business interests, employing a stakeholder rather than a stockholder theory of the firm. In these frameworks, other concerns, such as protecting the environment and human rights, are subordinated to safeguarding business interests. However, specific sources argue that protecting the interests of businesses also protects human rights and the environment. An unexpected finding is the fifth category of frameworks: frameworks specifically designed to assess the societal impact of business school research (Table 5, pp. 14-15). Our research reveals there is currently a robust scholarly discussion related to the methods business schools should use to determine the value of research in achieving societal impact. (Siguroarson, 2019, 71-78)

The scholarly sources we reviewed did not include metrics and often expressly indicated they could not because a specific organization's interests often drive the performance measurement structure.

Practitioner Sources

We examined two types of practitioner sources: think tanks and non-governmental organizations (see tables 6-10, pp. 15-18). We analyzed the research priorities and publications of 50 globally influential think tanks. We identified think tanks by crossreferencing three sources: The University of Pennsylvania Library's Global Think Tank Index, the Wellesley College Career Education Center Think Tank Index, and The London School of Economics Think Tank Index.

Although think tanks produce publications, their work differs fundamentally from academic sources. Think tanks tend to publish responses to current political or economic situations. Their publications appear similar to "Op-Eds" when compared with scholarly sources. Think tanks also produce data, e.g., unemployment rates in a given region, for use by policymakers. Many think tanks explicitly state that their mission is to provide data supporting policymakers' work, but not to advocate for specific policies (such as a particular framework). Therefore, our review of think tank research and publications did not provide societal impact frameworks, as did the academic literature review.

Human Rights-based Frameworks These frameworks focus on the severity and magnitude of the challenges to global human rights. Although some are quite comprehensive (e.g. SDGs), other frameworks are more narrow in scope (e.g. TEFCE Toolbox).

Framework	Purpose	Reference (selection)
United Nations Sustainable Development Goals (SDGs)	The Sustainable Development Goals or Global Goals are a collection of 17 interlinked global goals designed to be a "shared blueprint for peace and prosperity for people and the planet, now and into the future".	https://sdgs.un.org/goals
The European Framework for Community Engagement in Higher Education (TEFCE)	TEFCE Toolbox is a reference tool to understand the dimension of community engagement in a university context. It is a framework for universities to determine how well they perform according to each dimension and where they can improve.	Farnell & Culum Ilic, 2021
Social Quality Configuration of Ontological, Epistemological and Procedural Frameworks	Economic development (including ending extreme poverty), social inclusion, environmental sustainability, and good governance (including security).	Nijhuis, van der Maesen, 2021
Framework for Civil Rights, Environmental Justice, and Health Equity	To promote equal access to publicly funded resources and prohibit discrimination based on race, color, national origin, income, gender, disability, and other factors.	Garcia et al, 2018

Table 1. Human Rights-based Frameworks.

Environment/Climate Change-based Frameworks

These frameworks provide a conceptualization for an organized exploration of environmental/ecological issues. Theoretical underpinnings can be found in decision theory, game theory, systems science, and sustainability science.

Framework	Purpose	Reference (selection)
Driver, Pressure, State, Impact, Response (DPSIR)	Develop an improved understanding of, indicators for, and appropriate responses to impacts of human activities on the environment along with casual chain drivers-pressure-state-impact-response.	Carr et al. 2007, Svarstad et al. 2008, Binder et al, 2013
Earth Systems Analysis (ESA)	Focus on the global interactions in and dynamics of the earth system as well as its sustainable evolutions.	Schellnhuber 1998, 1999, Schellnhuber et al. 2005, Binder et al, 2013
Ecosystem Services (ES)	Analyzes the integral, dynamic, and complex interactions of biotic and abiotic components of an ecosystem concerning the supply of services this system provides to support life on Earth.	Costanza et al. 1997, Daily 1997, de Groot et al 2002, Limburg et al. 2002, Binder et al, 2013
Material and Energy Flow Analysis (MEFA)	Analyzes the metabolic profiles of societies. Analyzes the material and energy flows as representing the metabolism of a society, region, or nation.	Ayres 1978, Baccini and Bader 1996, Haberl et al. 2004, Brunner and Rechberger 2005; Binder et al, 2013
Management and Transition Framework (MTF)	Focus on understanding water systems, management regimes, and transition process toward more adaptive management; enable comparative analyses of diverse case studies; and facilitate the development of simulation models based on empirical evidence.	Pahl-Wostl 2009, Knieper et al. 2010, Pahl- Wostl and Kranz 2010; Binder et al, 2013
The Organization for Economic Co- operation and Development (OECD Guidelines for Multinational Enterprises- PSR framework)	Provides an overview of the pressures of human activities on the environment, the state of the environment and natural resources, and the responses of economic and environmental agents to the state of the environment.	Tapio & Willamo, 2008

Table 2. Environment/Climate Change-based Frameworks.

Hybrid Frameworks
Perhaps the largest group of frameworks, most incorporate both environmental and human rights themes. Few frameworks are
laser focused and most intertwine aspects from a sustainability and vulnerability perspective.

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Framework	Purpose	Reference (selection)	
Social-Ecological Systems Framework (SESF)	Provide a common language for case comparison for organizing the many variables relevant in the analysis of SES into a multitier hierarchy that can be unfolded when needed and for facilitating the selection of variables in a case study.	Ostrom 2007, 2009	
Sustainable Livelihood Approach (SLA)	Analyze which combination of livelihood assets enables the following of what combination of livelihood strategies with sustainable outcomes.	Ashley and Carney 1999, Scoones 1998	
The Natural Step (TNS)	Provides a framework for planning toward sustainability based on constitutional principles (how the system is constituted), outcomes (principles for sustainability), and processes to reach this outcome (principles for sustainable development).	Burns and Katz 1997, Robèrt 2000, Upham 2000, Missimer et al. 2010	
Vulnerability Framework (TVUL)	Analyzes who and what are vulnerable to multiple environmental and human changes and what can be done to reduce these vulnerabilities.	Turner et al 2003a,b	
Human Environment Systems Framework (HES)	Provide a methodological guide or template for analyzing the structure of social-ecological systems and understanding the processes and dynamics between the social and ecological systems and with different scales of the social system.	Scholz and Binder 2004, Scholz et al. 2011a	
Framework for Sustainable Finance	Incorporates interactions between the economy (financial return and risk), and the impact on society-environmental factors.	Schoenmaker, 2017	
Global Environment Outlook (GEO-4)	Encourages the understanding of interactions between human society and the environment across scales and over time.	Bakkes et al, 2022	
Citizen Science Evaluation Framework	Examines three core dimensions: scientific, participant, and socio- ecological and economic.	Kieslinger etal, 2018	
Global Reporting Initiative (GRI Sustainability Reporting Standards)	The GRI Standards allow an organization to report information that covers all its most significant impacts on the economy, environment, and people or to focus only on specific topics, such as climate change or child labor. GRI recommends reporting under the GRI Standards.	https://www.globalreporting.org/	
The International Integrated Reporting Council (IIRC International Framework)	Established guiding principles and identified capitals by the IIRC: financial capital, manufactured capital, intellectual capital, human capital, social and relationship capital, and natural capital. Together they represent stores of value that are the basis of an organization's value creation.	https://www.integratedreporting. org/wp-content/uploads/2021/01/ InternationalIntegratedReportingFramework. pdf	

Table 3. Hybrid Frameworks.

Business-centric Frameworks

Theoretical underpinnings can be found in ESG principles where business organizations are viewed as entities that have responsibility to the world in which they live. However, there appears to be no general agreement about its definition nor a common method of quantifying CSR at the firm level.

Framework	Purpose	Reference (selection)
Business School Impact Survey (BSIS)	A tool designed to determine the extent of a school's impact on its local environment.	Shenton, 2014
Environmental, Social, and Governance (ESG) Principles	A focus on ensuring that a business endures, with societal support, in a sustainable, environmentally viable way.	Tierney, 2022
Well-Being In the Nation (WIN) with Business Framework	Outlines contributions that businesses can make to the well-being of people, places, and equity and racial justice.	Well-Being In the Nation (WIN) Network, https://winnetwork.org/, Pitts et al, 2022
Corporate Social Responsibility (CSR)- several specific frameworks exist	Theoretical foundations in stakeholder theory, legitimacy theory, and particular contract theory. The responsibility of enterprises for their impacts on society.	For various frameworks see Raczkowski et al, 2016
United Nations Global Compact (Communication on Progress)	It consists of nine principles, distilled from key environmental, labor, and human rights agreements, that businesses must abide by. An initiative where CSR and BHR (Business and Human Rights) converge.	Ramasastry, 2015
Framework to Study Grand Challenges	Explores the study of grand challenges from an organizational and management perspective.	George et al, 2016
International Organization for Standardization (ISO 26000 Guidance on social responsibility)	ISO 26000:2010 is intended to assist organizations in contributing to sustainable development. The framework encourages organizations to go beyond legal compliance, recognizing that compliance with the law is a fundamental duty of any organization and an essential part of their social responsibility.	https://www.iso.org/iso-26000-social- responsibility.html

Table 4. Business-centric Frameworks

Research Impact Frameworks Many frameworks view research quality by its social impact. The expectation is that publically funded research deliver benefits to the wider community rather than simply its impact on academia. These frameworks emphasize the growing interest in higher education institutions and the role that scholars hold in creating impactful research.

Framework	Purpose	Reference (selection)
UK Research Excellence Framework (REF)	Three distinct elements are assessed: the quality of outputs (e.g., publications, performances, and exhibitions), their impact beyond academia, and the environment that supports research.	https://www.ref.ac.uk/
Responsible Research in Business and Management (RRBM) Network	Dedicated to transforming business and management research toward achieving humanity's highest aspirations for a better world.	https://www.rrbm.network/
Australian Research Quality Framework (RQF)	A framework for assessing research quality and the impact of research and ensuring that public funding is being invested in research that would deliver real benefits to the wider community.	https://www.business.unsw.edu.au/
New Zealand Performance-Based Review Fund (PBRF)	Designed to increase the quality of research by encouraging and rewarding excellent research in New Zealand's degree-granting organizations. It does not fund specific research projects directly but provides bulk funding to support an organization's research capability, including postgraduate-level teaching support.	https://www.tec.govt.nz/funding/funding- and-performance/funding/fund-finder/ performance-based-research-fund/

Italian Peer Review Assessment	Assesses research output, teaching, administrative performance, social impact, and university student competence.	Akbaritabar et al, 2021
European Performance-Based Research Funding	Programs vary widely. Some consider socio-economic impact or diversity- related assessments. Both quantitative and qualitative assessments are utilized.	Zacharewicz et al, 2019
Model of Interweaving Scholarship and Practice	Provides a conceptualization of interweaving scholarship and practice and how impact can emerge.	Spencer et al, 2022
Framework for Qualitative Analysis based on the Distinction between Three Dimensions of Societal Impact	Examines epistemological, artefactual, and interactive-institutional dimensions. Addresses the relevance gap in academic research.	Miettinen et al, 2015
Responsible Innovation Complex	Expansion on RRI. Provides an analytical model for a context-sensitive understanding of responsible innovation. Innovation that meets economic, social, ethical, and environmental goals.	Jakobsen et al, 2019
An Analytical Framework and Operational Framework for Scientific and Societal Impact of Research	Incorporates individual, organizational, and process-context factors to explain distinct configurations of scientific and societal impacts from research.	D 'Este et al., 2018

Table 5. Research Impact Frameworks.

Think Tanks with a Human Rights Focus The political perspectives and policy analysis areas of these think tanks vary. But, they share an emphasis on protecting and advancing human rights, essentially as defined by the UN Universal Declaration of Human Rights, as the ultimate objective of both domestic and international public policies.

Think Tank	Research Emphasis	Website
Brookings Institution - US	Covers a wide range of specific policy topics related to climate change, economic development, civil liberties; specifically support UN SDG framework	www.brookings.edu
Fundacio Getulio Vargas - Brazil	Poverty reduction	https://portal.fgv.br
Peterson Institute for International Economics – US	Monetary policy	www.piie.com
Woodrow Wilson Center – US	Humanitarian issues, such as refugee resettlement, healthcare, economic impacts of globalization	www.wilsoncenter.org
Center for American Progress – US	Racial equity, healthcare access, economic impacts of climate change	www.americanprogress.org
Konrad Adenauer Foundation – Germany	European unity, education	www.kas.de
Cato Institute - US	Protecting civil liberties defined from a politically conservative perspective (liberal individualism)	www.cato.org
Carnegie Middle East Center	Extending Enlightenment/liberal view of human rights in traditional cultures that tend to be patriarchal	https://carnegie-mec.org
Observer Research Foundation - India	Extending Enlightenment/liberal view of human rights in India	www.orfonline.org
Human Rights Watch – US	Internationally, documenting politically motivated abuses of human rights among vulnerable populations: migrants and asylum seekers, women, children, the elderly	www.hrw.org
African Center for Constructive Resolution of Disputes	Extending Enlightenment/liberal view of human rights in African nations	www.accord.org.za
Barcelona Center for International Affairs	Sustainable development (does not specifically endorse UN SDG framework)	www.cidob.org
American Enterprise Institute - US	Protecting civil liberties defined from a politically conservative perspective (liberal individualism)	www.aei.org

Amnesty International – Great Britain	Arms control, documenting politically motivated abuses of human rights, migrants, and asylum seekers,	www.amnesty.org
German Development Institute	Specifically embraces UN SDG framework	www.idos-research.de
Institute for Economic Affairs - Ghana	Extending Enlightenment/liberal view of human rights in African nations	https://ieagh.org
Imani Center for Policy & Education - Ghana	Extending Enlightenment/liberal view of human rights in African nations	http://imaniafrica.org
London School of Economics - Ideas Think Tank	Specifically embrace sustainable development as defined by the UN SDG framework	www.lse.ac.uk
Urban Institute - US	Race relations, equal access to economic opportunities and economic development	www.urban.org
Food Agriculture and Natural Resources Policy Network – South Africa	Food security; managing natural resources; environmental issues; sustainable development	http://fanrpan.org
African Economic Research Consortium - Kenya	Specifically embrace sustainable development as defined by the UN SDG framework	https://aerafrica.org

Table 6. Think Tanks with a Human Rights Focus.

Think Tanks Focused on Environment/Climate Change

These think tanks address policy areas ranging from economic development, to healthcare access, to global security. However, they share a focus on supporting policies that prioritize addressing climate change and other environmental issues, as the keystone for addressing other challenges, such as sustainable economic development and international security. They distinguish climate change from other environmental issues. For example, a clothing manufacturer may pollute a water source with its dyes. This is an environment issue, which does not directly relate to climate change. Conversely, addressing climate change would not address specific environmental issues, e.g., safely storing radioactive compounds used to treat cancers.

Think Tank	Research Emphasis	Website
Center for Strategic and International Studies - US	Environment as it relates to energy policy; migration; defense	www.csis.org
French Institute of International Relations	Climate change; human health; healthcare	www.ifri.org
Council on Foreign Relations - US	Climate change; globalization; spread of authoritarian governments	www.cfr.org
Asian Development Bank - Japan	G-7 developing nation engagement; economic development in developing Asian countries that account for climate change, and other environmental issues; sustainable food production	www.edb.org
Kiel Institute for the World Economy - Germany	International economic policy from the perspective of environmental economics	www.ifw-kiel.de

Table 7. Think Tanks with an Environment/Climate Change Focus.

Think Tanks with a Business-Centric Focus

These think tanks address policy areas ranging from economic development, to domestic and international monetary policy, to micro- and macro-economic analysis. They share a focus on supporting policies that prioritize the success of businesses above other concerns (e.g., human rights and environmental issues /climate change)

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Think Tank	Research Emphasis	Website
Fraser Institute - Canada	Embraces ESG framework	www.fraserinstitute.org
Korea Development Institute – Korea	Economic trend forecasting	https://kdi.re.kr
Center for Economic Policy Research - UK	Embraces ESG framework	https://cepr.net
Center for European Policy Studies - Belgium	Economic development of the EU, e.g., regulations related to international trade, intellectual property, regulating the internet	www.ceps.eu
East Asia Institute – South Korea	Advancing democracy and market economy in East Asia	www.eai.or.kr

Table 8. Think Tanks with a Business-centric Focus.

Think Tanks with a Security Focus None of these think tanks address societal impact as a specific policy or research area. However, their research area and publications imply that they define societal impact as policies that promote global peace and security (e.g., reduction of conflicts and suppression of terrorism). Their specific areas of research may include human rights/treatment of refugees, climate change, environmental issues, and economic development, but the value of these is consistently assessed as they enhance or reduce global

Think Tank	Research Emphasis	Website
Chatham House – UK	Impact of trade imbalances, environmental issues and climate change on national security, with a focus on the UK and Western Europe	www.chathamhouse.org
International Institute for Strategic Studies – UK	Defense strategies; analysis of militaries, armed conflicts, international power shifts, the impact of changing cultures, norms, values, alliances	www.iiss.org
RAND Corporation – US	US National Security, particularly as impacted by energy supplies and human health	www.rand.org
Japan Institute for International Affairs	International political, economic and security issues such as global power shifts, nuclear non-proliferation, regional integration, terrorism, and energy	www.jiia.or.jp
Friedrich Ebert Foundation – Germany	Foreign affairs, economic and labor relations, and progressive politics	http://dc.fes.de
Clingendael – The Netherlands Institute for International Relations	Armed conflict; trade and globalization; sustainable development; migration	www.clingendeal.org
Carnegie Endowment for International Peace	Security policy; nuclear nonproliferation; Russia; economic policy	www.carnegieendowment.org
Center for International Governance Innovation – Canada	Impact of digitalization on global security, trade, IP laws, innovation	www.cigionline.org
Stockholm International Peace Research Institute	Impact of trade (real or perceived trade imbalances) on global conflict	https://sipri.org
Danish Institute for International Studies	Armed conflicts; migration; managing natural resources; economic development	www.diis.dk
Italian Institute for International Political Studies	Climate change/environmental issues, as these impact security, mainly in Western Europe	https://ispionline.it
Institute for Defense Studies and Analysis – India	International relations, defense	www.idsa.in
Hudson Institute – US	Assessing the impact of various ideologies (religiously based and secular) on global security	www.hudson.org
Bonn International Center for Conversion – Germany	Non-violent conflict resolution research	www.bicc.de
Atlantic Council – US	Economics, business, energy, environment, resilience, and society	www.atlanticcouncil.org
Transparency International – Germany	Anti-corruption in finance, banking, and business	www.transparancy.org
International Crisis Group – Belgium	Gather and analyze data related to ongoing global conflicts	www.crisisgroup.org
Royal United Services Institute – UK	Military defense; armed conflicts	www.rusi.org
German Council on Foreign Relations	Economics, business, public administration, military	https://dgap.org
Istituto Affari Internazionali	Defense, energy and climate, global government and multilateralism	www.iai.it

Table 9. Think Tanks with a Security Focus.

Think tanks, nonetheless, have underlying perspectives and philosophies that align with the categories identified in academic literature. Moreover, several of the most prominent think tanks, such as Brookings and LSE's Ideas, specifically support UN SDG goals.

Analysis of think tank research areas and publications suggests a category for defining societal responsibility not found in academic literature. For many think tanks, societal responsibility is a question of maintaining global security (human rights and environment/climate change are filtered through the question "What erodes or protects global security?").

The think tanks we reviewed did not publish or otherwise recommend metrics, which aligns with their overall stated mission of providing data and informed opinions to policymakers rather than articulating or recommending specific policies.

In addition to analyzing the work of 50 global think tanks, we analyzed the initiatives and publications of two types of nongovernmental organizations. We identified the NGOs by crossreferencing The University of Pennsylvania Library's index of NGOs, the United States Library of Congress's Research Guide to Intergovernmental Organizations, and a list of the ten most influential global NGOs maintained by the non-profit Development Aid. NGOs identified by these sources are of two types: 1) para-government organizations, i.e., established by a coalition of national governments; 2) independent non-profit organizations (Table 10, p. 18).

Our analysis found that para-governmental organizations define societal impact using a Corporate Social Responsibility Framework. Independent non-profit organizations, several of whom focus on ending poverty, tend to explain societal impact using a human-rights-based approach, although not always specifically UN SDGs.

A rich body of scholarly literature examines the relationships between NGO types and their interactions with business. This literature is a subset of a broader discipline, Social Impact Assessment (SIA). Researchers and scholars in this field have formed a professional association, the International Association of Impact Assessment (www.iaia.org).

Measuring Societal Impact

Our purpose in this section is not to specify metrics but to suggest guidelines for creating quality societal impact metrics. Scholars in the field of Social Impact Assessment define social impact mainly in terms of human rights. "The SIA community of practitioners considers that all issues that affect people, directly or indirectly, are pertinent to social impact assessment." (Frank Vanclay, "International Principles for Social Impact Assessment," Impact Assessment and Project Appraisal, vol. 21,

Para-governmental NGOs	Independent NGOs
International Monetary Fund	BRAC International
World Bank	Doctors Without Borders
World Trade Organization	Open Society Foundations
World Health Organization	Ashoka
North Atlantic Treaty Organization	Danish Refugee Council
European Union	Mercy Corps
African Union	JA International
	Landesa

Table 10. NGOs.

number 1, March 2003, p. 7) Such issues include "people's way of life, their culture, their community, their political systems, their environment, their health and wellbeing, their personal property rights, their fears and aspirations." (Vanclay, 2003, p. (8)

In 2010, the European Union commissioned a study of how member states measure societal impact. The study found, among other things, that "social IA is still in its infancy in most European IA systems. Where it takes place at all, the assessment of social impacts is often less well developed than the assessment of economic or financial impacts." (Study on Social Impact Assessment, European Commission, June 2010, p. 1).

The study also found a "tension between the quantitative ambitions of most IA systems and the qualitative reality of most social IAs." The study concluded, "it is important to set realistic expectations as to which kinds of social impacts can more easily be quantified, and for which the analysis will in most cases have to remain qualitative, and to facilitate thorough and robust qualitative social IA for the latter." Developing accurate societal impact metrics requires a robust conception of "what constitutes qualitative 'analysis' (as opposed to just a cursory mention)," and expanding "the available evidence base through wider and better use of stakeholder consultation." (Study on Societal Impact Assessment, 2010, pp. 3-4)

Since then, research regarding societal impact assessment has evolved. The most "significant recent change in international understandings around projects is the growing prominence of human rights," as articulated in the 2011 United Nations Guiding Principles on Business and Human Rights. (Frank Vanclay, "Reflections on Societal Impact Assessment in the 21st Century," Impact Assessment and Project Appraisal, vol. 38, number 2, March, 2020, p. 126; cf., J.P. Smith and L.K. Hessels, (2021). The production of scientific and societal value in research evaluation: a review of societal impact assessment methods. Oxford University Press, 30 (3), 323-25.) Nonetheless, consequences of climate change, climate change mitigation and adaptation actions for people "remain under-developed and deserve more attention." (Vanclay, 2020, p. 128)

Given the state of social impact assessment, we propose that referring to guidelines developed by The Global Reporting Institute (GRI) will be helpful for institutions creating a system of societal impact measurements. The GRI has developed a flexible, modular approach to creating metrics designed to be implemented by many organizations. (A. Toppinen, & K. Korhonrn-Kurki, "Global Reporting Initiative and societal impact in managing corporate responsibility: a case study of three multinationals in the forest industry," Business Ethics: Environment and Responsibility, 22(2), 2013, pp. 202-217.)

The GRI emphasizes that all metrics should be based on eight principles: accuracy, balance, clarity, comparability, completeness, sustainability context, timeliness, and verifiability. (GRI Standards, Foundation, 2021) Furthermore, it recommends organizing measurement systems around three standard types: Universal, Sector, and Topic.

As the name suggests, Universal Standards apply to all types of organizations and involve "disclosures that the organization uses to provide information about its reporting practices and other organizational details, such as its activities, governance, and policies." (Consolidated Set of GRI Standards, 2021) Sector Standards and Topic Standards, defined by GRI, are based on an organization's material topics.

The GRI articulates a four-step process an organization may use to identify its material topics: 1) understand the organization's context; 2) identify actual and potential impacts (positive

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and negative); 3) assess the significance of the impacts; 4) prioritize the most significant impacts for reporting. (GRI Standards, Material Topics, 2021).

Our proposal does not necessarily mean that all organizations conform to GRI's Sector and Topic standards. Instead, we suggest that GRI's method of establishing levels of standards and allowing organizations to adopt standards based on their material topics would be helpful for organizations regarding their measurement of societal impacts. Moreover, the eight principles would be an effective way to ensure integrity in measurement and reporting.

Conclusion

Our research began with a question of praxis: how can organizations' social and environmental impacts be assessed (and possibly changed)? To answer this, we analyzed empirical scholarly and practitioner sources from around the globe. Our research revealed a complex landscape of terms, criteria, perspectives, and priorities. Based on our discoveries, our question became: how can this vast discourse be mapped or systematized to provide clearer answers to praxis questions like that with which we began?

In our subsequent effort to systematize, we turned to ethical theory as a tool. Based on our literature review, we assert that definitions of societal impact and related frameworks we analyzed share two general underlying principles: protecting and advancing human rights and addressing environmental/ climate-change issues. As Giddings, Hopwood, and O'Brien (2002, p. 191) noted, "Nearly all our actions have an impact on the environment." Inescapably and intertwined with environmental impact is the concept of human rights.

Regardless of how societal impact is conceptualized, we argue that, at its core, the notion centers around these two underlying principles. In other words, an organization may assess and improve its societal impact by applying two prima facie principles: protect and advance human rights and address environmental and climate change issues. Like other pluralistic, principle-based approaches to applied ethics (e.g., biomedical and some business ethics), we maintain that these two principles emerge from "ordinary, shared moral beliefs" found in the empirical sources we examined. (Beauchamp and Childress, 2012, p. 100)

Although there is ongoing debate among philosophers regarding the status and content of specific human rights, we found in the empirical cross-cultural literature wide acceptance of the concept of rights as inalienable and inherent to all humans. Moreover, our mapping of sources found that human rights are often specified as basic standards for a life of dignity and the notion that all humans are created equal. While there is debate in the philosophical literature regarding the definition (and thus usefulness) of human dignity, in the social science and practitioner literature we examined, dignity and equality are inescapably interconnected and scarcely controversial. Our analysis found that other actions derived from the principle of protecting and promoting human rights include promoting and protecting freedoms, respect for others, non-discrimination, and tolerance. While acknowledging that conceptions of rights are still developing in ethical and legal thought, we want to highlight that attending to rights is a principle that emerges across empirical sources as a specific action guide organizations should use to make decisions.

The other principle common to the frameworks examined addresses environmental and climate change issues. The schol-

arly and practitioner sources we reviewed share that policy mechanisms are necessary to modify human behaviors that can negatively impact the physical environment, which ultimately has adverse implications for humans. Indeed, Giddings et al. (2002, p. 191) note that "human life itself depends on the environment." The principle of addressing environmental and climate changes is often specified as sustainable production, protection of both natural resources and ecosystems, balance and synergy in human development activities and natural systems, corporate responsibility for the continued viability of biological systems, and building a knowledge base that supports a greater understanding of the environment.

Further philosophical analysis can clarify how these two principles may be specified and balanced. As in other principle-based approaches to applied ethics, these prima facie principles may conflict when applied to specific cases, e.g., when a decision to protect an ecosystem would negatively affect the rights of the people living in or near that ecosystem. Such analysis is crucial but beyond the scope of our research.

Because our research began as an examination of the ways the human and environmental impact of organizations could be assessed, we also considered several questions relevant to leaders of organizations, such as the evolving understanding of the purpose of the firm and the relationship between the global economy and the two underlying principles. Further research can also explore the relationship between economic effects and the two primary principles we have presented here. The fact that the economy directly impacts people (i.e., business profits ultimately affect individuals' standard of living) and the environment (i.e., firms' decisions can significantly impact the environment) suggests a dynamic relationship between the global economy and what we propose as the principles of societal impact. We provide the following illustration of our conclusion (Figure 1, p. 19).

While many organizations are increasing attention to their social and environmental impact, business models, in particular, are shifting. Indeed, our research supports the notion of creating a balance between profit maximization and societal impact. Although profit maximization is still important, businesses realize they do not operate in a vacuum. Instead, business entities are a part of a larger global society, with impacts on the economy leading to direct and/or indirect effects on human rights and the environment. Similarly, organizations are increasingly pressured by stakeholders of businesses, governments, and non-profits to address various societal problems.

As our research shows, societal impact can be defined in multiple ways. Many entities use the concept of societal impact as an umbrella term to cover many types and forms of activities that can positively impact society. Many organizations desire to

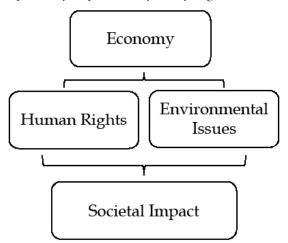


Figure 1. Factors Affecting Societal Impact.

show their positive impact on the world around them. Being "a force for good," which includes human-rights-based issues and

environmental matters, coupled with attention to profits, may become the new modus operandi of tomorrow's organizations.

References

- Akbaritabar, A., Bravo, G., & Squazzoni, F. (2021) 'The impact of a national research assessment on the publications of sociologists in Italy', Science and Public Policy, 00 (0), pp. 1-17. [Online] Available at: https://www.doi.org/10.1093/ scipol/scab013
- Ashley, C. and Carney, D. (1999) 'Sustainable livelihoods: lessons from early experience', Department for International Development, Vol. 7(1), Russel Press, Nottingham, London, UK.
- Ayres, R. U. (1978) Resources, environment and economics. Applications of the materials energy balance principle, John Wiley & Sons, New York, New York, USA.
- Baccini, P. and Bader, H.-P. (1996) Regionaler Stoffhaushalt, Erfassung, Bewertung und Steuerung, Spectrum Verlag, Heidelberg, Germany.
- Bakkes, J., Cheatle, M., Mžavanadze, L.P. & Witt, R. G. (2022) Keeping the World's environment under review: An intellectual history of the global environment outlook, Central European University Press. [Online] Available at: https://doi.org/10.7829/j.ctv209xmzx.9
- Beauchamp, T. L. and Childress, J. F. (2012) Principles of Biomedical Ethics, Oxford University Press.
- Binder, C. R., Hinkel, J., Bots, P.W. & Pahl-Wostl, C. (2013) 'Comparison of Framework for analyzing social-ecological Systems', Ecology and Society, 18 (4), pp. 26. [Online] Available at: https://doi.org/10.5751/ES-05551-180426
- Brunner, P. H. and Rechberger, H. (2005) Practical handbook of material flow analysis, Lewis, New York, New York, USA.
- Burns, S. and Katz, D. (1997) 'ISO 14001 and the natural step framework', Perspectives, World Business Academy, 11, pp. 7-20.
- Carr, E. R., Wingard, P. M., Yorty, S. C., Thompson, M. C., Jensen, N. K., & Roberson, J. (2007) 'Applying DPSIR to sustainable development', International Journal of Sustainable Development and World Ecology, 14, pp. 543-555. [Online] Available at: http://dx.doi.org/10.1080/13504500709469753
- Costanza, R., R. d'Arge, R. de Groot, S. Farber, M. Grasso, B. Hannon, K. Limburg, S. Naeem, R. V. O'Neill, J. Paruelo, R. G. Raskin, P. Sutton, and M. van den Belt. (1997). The value of the world's ecosystem services and natural capital. Nature, 387, 253-260. [Online] Available at: http://dx.doi. org/10.1038/387253a0
- de Groot, R. S., M. A. Wilson, and R. M. J. Boumans. (2002). A typology for the classification, description and valuation of ecosystem functions, goods, and services. Ecological Economics, 41, 393-408. [Online] Available at: http://dx.doi. org/10.1016/S0921-8009(02)00089-7
- D'Este, P., Ramos-Vielba, I., Woolley, R. & Amara, N. (2018). How do researchers generate scientific and societal impacts? Toward an analytical and operational framework. Science and Public Policy, 45(6), 752–763. [Online] Available at: https://doi.org/10.1093/scipol/scy023
- Dielini, M. (2020). Evolution of business ethics: From general philosophical principles to corporate social responsibility. Skhid, 169(1), 18-23. [Online] Available at: https://doi. org/10.21847/1728-9343.2020.5(169).215304
- Esposito, P. & Antonucci, G. (2022). NGOs, corporate social responsibility, and sustainable development trajectories in a

new reformative spectrum: 'New wine in old bottles or old wine in new bottles. Corporate Social Responsibility and Environmental Management, 29(3), 609-619.

- European Union Study on Social Impact Assessment, June 2010.
- Farnell, T. & Ilić, B.C. (2021). International Perspectives on Knowledge Democracy. Brill. [Online] Available at: https://10.1163/9789004459076_021
- García, R., Morales, Z. & Magaña, M. (2018). Strategies for HEALTH JUSTICE: Lessons from the field. Poverty & Race Research Action Council. [Online] Available at: https:// www.jstor.org/stable/resrep27198.9
- George, G., Howard-Grenville, J., Joshi, A. & Tihanyi, L. (2016). Understanding and tackling societal grand challenges through management research. The Academy Management Journal, 59(6), 1880-1895. [Online] Available at: http:// dx.doi.org/10.5465/amj.2016.4007
- Giddings, B, Hopwood, B, & O'Brien, G. (2002). Environment, economy, and society: Fitting them together into sustainable development. Sustainable Development, 10, 187-196.
- Global Reporting Institute: Consolidated Set of GRI Standards, 2021.
- Global Reporting Institute: Foundation, 2021.
- Global Reporting Institute: Material Topics, 2021.
- Haberl, H., M. Fischer-Kowalski, F. Krausmann, H. Weisz, and V. Winiwarter. (2004). Progress towards sustainability? What the conceptual framework of material and energy flow accounting (MEFA) can offer. Land Use Policy, 21, 199-213. [Online] Available at: http://dx.doi.org/10.1016/j. landusepol.2003.10.013
- Jakobsen, S.E., Fløysand, A. & Overton, J. (2019). Expanding the field of responsible research and innovation (RRI) – from responsible research to responsible innovation. European Planning Studies, 27(12), 2329-2343. [Online] Available at: https://doi.org/10.1080/09654313.2019.1667617
- Kieslinger, B., Schäfer, T., Heigl, F., Dörler, D., Richter, A. & Bonn, A. (2018). Evaluating citizen science: Toward an open framework. UCLPress, 81-95. [Online] Available at: https:// doi.org/10.14324/111.9781787352339
- Knieper, Č., G. Holtz, B. Kastens, and C. Pahl-Wostl. (2010). Analysing water governance in heterogeneous case studies: experiences with a database approach. Environmental Science and Policy, 13, 592-603. [Online] Available at: http:// dx.doi.org/10.1016/j.envsci.2010.09.002
- Limburg, K. E., R. V. O'Neill, R. Costanza, and S. Farber. (2002). Complex systems and valuation. Ecological Economics, 41, 409-420. [Online] Available at: http://dx.doi.org/10.1016/ S0921-8009(02)00090-3
- Miettinen, R., Tuunainen, J. & Esko, T. (2015). Epistemological, artefactual and interactional-institutional foundations of social impact of academic research. Springer Science+Business Media Dordrecht, 37(2), 125-133.
 [Online] Available at: https://www.doi.org/10.1007/s11024-015-9278-1
- Missimer, M., K.-H. Robèrt, G. Broman, and H. Sverdrup. (2010). Exploring the possibility of a systematic and generic approach to social sustainability. Journal of Cleaner Production, 18, 1107-1112. [Online] Available at: http:// dx.doi.org/10.1016/j.jclepro.2010.02.024

Nijhuis, H. G. J. & van der Maeasen, L. J. G. (2021). The societal impact of the covid-19 pandemic explained via three frameworks. International Journal of Social Quality, 11(1&2), 5-20. [Online] Available at: https://doi.org/10.3167/ IJSQ.2021.11010201

Ostrom, E. (2007). A diagnostic approach for going beyond panaceas. Proceedings of the National Academy of Sciences of the United States of America, 104, 15181-15187. [Online] Available at: http://dx. doi.org/10.1073/pnas.0702288104

Ostrom, E. (2009). A general framework for analyzing sustainability of social-ecological systems. Science, 325, 419-422. [Online] Available at: http://dx.doi.org/10.1126/ science.1172133

Pahl-Wostl, C. (2009). A conceptual framework for analysing adaptive capacity and multi-level learning processes in resource governance regimes. Global Environmental Change, 19, 354-365. [Online] Available at: http://dx.doi. org/10.1016/j.gloenvcha.2009.06.001

Pahl-Wostl, C., and N. Kranz (2010). Editorial to special issue: Water governance in times of change. Environmental Science & Policy, 13, 567-570. [Online] Available at: http://dx.doi. org/10.1016/j.envsci.2010.09.004

Pitts, J., Milstein, B., & Saha, S. (2022). The role of business in supporting vital conditions necessary for the well-being of people, places and racial justice. American Journal of Health Promotion, 36(6), 1050-1060. [Online] Available at: https:// doi.org/10.1177/08901171221092576c

Raczkowski, K. Sułkowski, Ł. & Fijałkowska, J. (2016). Comparative critical review of corporate social responsibility business management models. International Journal of Contemporary Management, 15(2), 123-150. [Online] Available at: https://doi.org/10.4467/24498939IJ CM.16.014.5554

Ramasastry, A. (2015). Corporate social responsibility versus business and human rights: Bridging the gap between responsibility and accountability. Journal of Human Rights, 14(2), 237-259. [Online] Available at: https://doi.org/10.108 0/14754835.2015.1037953

Robèrt, K.-H. (2000). Tools and concepts for sustainable development, how do they relate to a general framework for sustainable development, and to each other? Journal of Cleaner Production, 8, 243-254. [Online] Available at: http:// dx.doi.org/10.1016/S0959-6526(00)00011-1

Sachs, J., et al. (2021). "Six Transformations to Achieve the SDGs." Nature Sustainability. [Online] Available at: https://doi. org/10.1038/s41893-021-00729-y

Schellnhuber, H.-J. (1998). Discourse: Earth system analysis - the scope of the challenge. Pages 3-195 in H.-J. Schellnhuber, and V. Wenzel, editors. Earth systems analysis - integrating science for sustainability - complemented results of a symposium organized by the Potsdam Institute (PIK).
Springer, Berlin, Germany. [Online] Available at: http://dx.doi.org/10.1007/978-3- -642-52354-0 1

Schellnhuber, H.-J. (1999). "Earth system" analysis and the second Copernican revolution. Nature, 402, 19-23. [Online] Available at: http://dx. doi.org/10.1038/35011515

Schellnhuber, H.-J., P. J. Crutzen, W. C. Clark, and J. Hunt.
(2005). Earth system analysis for sustainability. Environment: Science and Policy for Sustainable Development, 47(8), 10-25. [Online] Available at: http://dx.doi.org/10.3200/ ENVT.47.8.10-25

Schoenmaker, D. (2017). Investing for the common good: A sustainable finance framework. [Online] Available at: https://www.jstor.org/stable/resrep28603.6

Scholz, R. W., and C. R. Binder. (2004). Principles of human environment systems research. Pages 791-796 in C. Pahl, S. Schmidt, and T. Jakeman, editors. iEMSs 2004 International Congress: Complexity and Integrated Resources Management. International Environmental Modelling and Software Society, Osnabrueck, Germany.

Scholz, R. W., C. R. Binder, and D. J. Lang. (2011). The HESFramework. Pages 453-462 in R. W. Scholz. Environmental literacy in science and society: from knowledge to decisions. Cambridge University Press, Cambridge, UK.

Scoones, I. (1998). Sustainable rural livelihoods: a framework for analysis. IDS Working Paper 72. Institute of Development Studies, University of Sussex, Brighton, UK.

Smári Sigurðarson, E. (2019). Capacities, capabilities, and the societal impact of the humanities. Oxford University Press, 29(1), 71-76. [Online] Available at: https://doi.org/10.1093/ reeval/rvz031

Smit, J.P. & Hessels, L.K. (2021). The production of scientific and societal value in research evaluation: a review of societal impact assessment methods. Oxford University Press, 30(3), 323-335. [Online] Available at: https://doi.org/10.1093/ reserval/rvab002

Spencer, L., Anderson, L. & Ellwood, P. (2022). Interweaving scholarship and practice: A pathway to scholarly impact. Academy of Management Learning & Education, 21(3), 1-42. [Online] Available at: https://doi.org/10.5465/ amle.2021.0266

Svarstad, H., L. K. Petersen, D. Rothman, H. Siepel, and F. Wätzold. (2008). Discursive biases of the environmental research framework DPSIR. Land Use Policy, 25, 116-125. [Online] Available at: http://dx.doi.org/10.1016/j. landusepol.2007.03.005

Tapio, P. & Willamo, R. (2008). Developing interdisciplinary environmental frameworks. Springer on behalf of Royal Swedish Academy of Sciences, 37(2), 125-133.

The Sustainable Development Goals Report. (2022). The United Nations.

Tierney, B. (2022). Shortlist: As criticism of ESG grows, so does the business case for doing it right. Global management consulting. Retrieved September 2, 2022, from McKinsey & Company

Toppinen, A. & Korhonen-Kurki, K. (2013) "Global Reporting Initiative and social impact in managing corporate responsibility: a case study of three multinationals in the forest industry." Business Ethics: Environment and Responsibility, 22(2), 202-217.

Turner, B. L., R. É. Kasperson, P. Matson, J. J. McCarthy, R.
W. Corell, L. Christensen, N. Eckley, J. X. Kasperson,
A. Luers, M. L. Martello, C. Polsky, A. Pulsipher, and A.
Schiller. (2003a). A framework for vulnerability analysis in sustainability science. Proceedings of the National Academy of Sciences, 100(14), 8074-8079. [Online] Available at: http://dx.doi.org/10.1073/ pnas.1231335100

Turner, B. L., P. Matson, J. J. McCarthy, R. W. Corell, L. Christensen, N. Eckley, G. Hovelsrud-Broda, J. X. Kasperson, R. E. Kasperson, A. Luers, M. L. Martello, S. Mathiesen, R.. Naylor, C. Polsky, A. Pulsipher, A. Schiller, H. Selin, and N. Tyler. (2003b). Illustrating the coupled human-environment system for vulnerability analysis: three case studies. Proceedings of the National Academy of Sciences, 100(14), 8080-8085. [Online] Available at: http://dx.doi. org/10.1073/pnas.1231334100

Upham, P. (2000). An assessment of the natural step theory of

sustainability. Journal of Cleaner Production, 8, 445-454. [Online] Available at: http://dx.doi.org/10.1016/S0959-6526(00)00012-3

- Vanclay, F. (2003). "International Principles for Social Impact Assessment." Impact Assessment and Project Appraisal, 22(1), 5-12.
- Vanclay, F. (2020). "Reflections on Social Impact in the 21st

Century." Impact Assessment and Project Appraisal, 38(2), 126-131.

Zacharewicz, T., Leori, B., Reale, E. & Jonkers, K. (2019). Performance-based research funding in EU Member States – comparative assessment. Science and Public Policy, 46(1), 105-115. [Online] Available at: https://doi.org/10.1093/ scipol/scy041

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