
NEW TRENDS IN MEASURING SUSTAINABLE BUSINESS

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Abstract

Sustainable business as an inherent part of the economy faces new dimensions of topicality. Formerly, the company's impact on the environment was measured with respect to its CO₂ emissions, the usage of fossil fuels or its consumption of natural resources. In order to evaluate or compare the companies' environmental governance, different models were implemented.

Nowadays, the company's negative externalities are being considered multidimensionally and applied to the whole value chain of business. New environmental topics such as the pollution of the sea by plastic waste and microplastics, the loss of topsoil through intensive farming and the depletion of natural resources are being hotly discussed worldwide. These challenges are enhanced by the increasing world population and the accession of wealth of the emerging markets and BRIC countries, thus resulting in sustainable growth being the only solution to the conflict of objectives.

Rating models that evaluate the sustainability of investments in the financial markets are already approved and used in politics, as well as help investors measure and compare companies' impact on the environment. Due to the new eco-friendly megatrend and challenges, the authors deal with the question whether the actual sustainable practices and measurement models are still contemporary.

Keywords

Sustainable business and development; social responsible investments (SRI); environmental, social and corporate governance (ESG); sustainability measurement; ESG-rating; Green Economy.

JEL Classification

Q55, Q56, G15

Introduction

According to the United Nations (UN) the world population will grow to be 9.8 billion people by 2050 (United Nations, 2017) Based on that fact, there is a bigger need for housing, food and energy consumption, even though the earth's resources are already limited, since the industrial countries' economic wealth already exploits the available resources. Henceforth, Brazil, Russia, India and China (BRIC countries) as well as the emerging markets will observe an accession of wealth. This megatrend leads to a fast-increasing resource demand from nature, far more than it can regenerate. On the other hand,

the population growth depends on economic expansion, as the population's needs have to be satisfied.

In order to respect both objectives equally, a sustainable economy interconnects an economic growth within ecological limits. The idea of the Green Economy introduced by the UN and the United Nations Environmental Program (UNEP) in 2012 is one solution to deal with the conflict at hand: “[The Green Economy] contributes to eradicating poverty as well as sustained economic growth, enhancing social inclusion, improving human welfare and creating opportunities for employment and decent work for all, while maintaining the healthy functioning of the Earth's ecosystems” (UNEP, 2011).

By the means of this concept, the environment is included into economical calculations in the capacity of nature capital as negative environmental side effects such as air pollution, waste and pollution of the water have an essential impact on a nation's wealth. Therefore, this deadweight loss has to be considered in national accounting.

With respect to certain studies, sustainability is now more important than ever, although it was already first used in the nineties (Cortés, 2015) by using the term “environmentally responsible development” by the World Bank in 1992 (Moldan et al., 2011) but still it seems to be difficult to reflect environmental side effects financially. To manage this challenge, a range of indices like Living Planet Index (LPI), Ecological Footprint (EF), Environmental Sustainability Index (ESI) or Human Development Index (HDI) and methods like environmental full-cost accounting (EFCA) or an environmental, social and corporate governance (ESG) rating were implemented to measure and compare companies' performance.

In regard to the new trends in sustainable business e.g. the avoidance of plastic waste, this article focuses on the question whether or not the rating of the companies' environmental impact is still up to date. Through literature research the core elements of current sustainable business practices are determined. The definition of the term “sustainability” is basically the same in most of the numerous publications, but it is not specific enough to determine a global consensus of a measurably sustainable economy.

The authors analyze the rating model of the MSCI ESG-rating, which is approved in the financial markets, concerning its measurability of sustainability and the context of the new trends in environmental questions.

Literature research

Sustainable business has been exercised since the nineties but has experienced a comeback in the last years as “global environmental problems have become increasing pressing” (Durant et al., 2017).

The broad definition of sustainability refers predominantly to the environmental sustainability as global resources are limited. A sustainable consumption of natural capabilities “in a manner that does not eliminate or degrade them or otherwise diminish their usefulness for future generations [...] and implies using non-renewable (exhaustible) mineral resources in a way which does not unnecessarily preclude easy access to them by future generations” (Moldan et al., 2011).

Cooney (2009) describes sustainable business practices as adhering to environmental principles with an outcome of environmentally friendly products or services.

According to Epstein and Buhovac (2014) sustainability is divided into the nine principles ethics, governance, transparency, relationships, financial returns, community involvement and economic developments, value, employment practices and protection of the environment. Protection of the environment means a commitment of “minimizing the use [...] of natural resources, [...] decreasing waste and emissions [...] and to maximize the use and production of recycled and recyclable materials, the durability of products, and to minimize packaging” (Epstein and Buhovac, 2014).

Although “sustainability remains a ubiquitous term [...] the most famous definition of “sustainable development” remains that of the Brundtland Report”, (Durant et al., 2017, Epuran et al., 2018).

The Brundtland Report’s definition of sustainability “meets the needs of the present without compromising the ability of future generations to meet their own needs”, (Brundtland and the World Commission on Environment and Development, 1987).

To sum up, the fig. no. 1 gives a good overview of all definitions of sustainability throughout the correlation of the ecological footprint and the human development index. The human well-being must not be compromised by sustainable businesses, however, the consumption of the natural resources is restricted to one earth. Both targets have to be equilibrated to achieve sustainability.

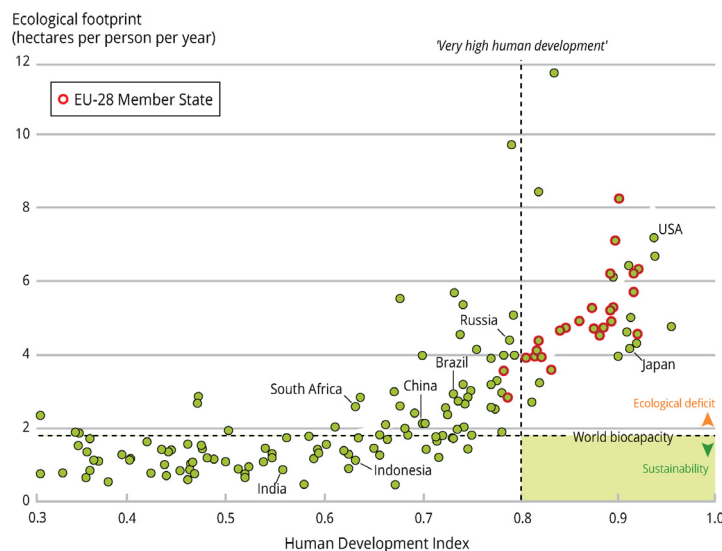


Fig. no. 1 Correlation of the ecological footprint and the human development index

Source: European Environment Agency, 2015. Green economy, [online] Available at: <<https://www.eea.europa.eu/soer-2015/europe/green-economy>> [Accessed 27 March 2019].

Measuring sustainability

As the literature research shows sustainability is a multidimensional definition without a global consensus which makes it hard to quantify the information into measurable factors. Nevertheless, a transformation into a green economy requires certain quantified indicators and a range of sustainable indices are already developed and used in policy practice. Böhringer and Jochem, (2007) have evaluated sustainability indices like LPI, EF, ESI or HDI with respect to scientific requirements and found the following: No index reproduces all variables of sustainability. Furthermore, the variables are not objectively weighted and almost all indices, “fail to comply with the scientific aggregation rules [... only one] uses the appropriate geometric mean for aggregation” (Böhringer and Jochem, 2007) and most of the sustainability indices are not applicable for the assessment of companies.

Besides indices a range of rating agencies like the Morgan Stanley Capital International (MSCI) or Sustainalytics have developed ESG-ratings to set standards for a company’s business. The environmental standards focus on the company’s impact on nature, while the social factor examines the company’s relationships with respect to employees, business partner and the society. The criterion corporate governance rates the company’s leadership and willingness to make its business transparent.

The ratings are based on a list of criteria individually compiled by the agency. Hence, due to differently weighted criteria and a varying definition of sustainability the ratings diverge from each other, even by evaluating the same company, (Karrenbrock, 2018).

The MSCI ESG-rating model specifies ESG risk and opportunities which “are posed by large scale trends (e.g. climate change, resource scarcity, demographic shifts) as well as by the nature of the company’s operations” (MSCI Inc, 2018a). Environment, social and governance are clustered in themes which are subdivided into a variety of “key issues”, which are converted to each industry (MSCI Inc, 2018a). The range of key issues is shown in fig. no.2.

3 Pillars	10 Themes	37 ESG Key Issues	
Environment	Climate Change	Carbon Emissions Product Carbon Footprint	Financing Environmental Impact Climate Change Vulnerability
	Natural Resources	Water Stress Biodiversity & Land Use	Raw Material Sourcing
	Pollution & Waste	Toxic Emissions & Waste Packaging Material & Waste	Electronic Waste
	Environmental Opportunities	Opportunities in Clean Tech Opportunities in Green Building	Opp’s in Renewable Energy
Social	Human Capital	Labor Management Health & Safety	Human Capital Development Supply Chain Labor Standards
	Product Liability	Product Safety & Quality Chemical Safety Financial Product Safety	Privacy & Data Security Responsible Investment Health & Demographic Risk
	Stakeholder Opposition	Controversial Sourcing	
	Social Opportunities	Access to Communications Access to Finance	Access to Health Care Opp’s in Nutrition & Health
Governance	Corporate Governance*	Board* Pay*	Ownership* Accounting*
	Corporate Behavior	Business Ethics Anti-Competitive Practices Tax Transparency	Corruption & Instability Financial System Instability

Fig. no. 2 ESG key issues of the MSCI ESG-rating model

Source: MSCI Inc., 2018a. *MSCI ESG Ratings Methodology. Executive Summary.* [pdf] Available at: <https://www.msci.com/documents/10199/123a2b2b-1395-4aa2-a121-ea14de6d708a> [Accessed 28 March 2019].

MSCI Inc. evaluates the exposing to the company and the company’s ability to manage those key issues. The relevant key issues are weighted and the evaluation of a company’s business is normalized to other companies of the same industry.

Finally, the scores between 0 and 10 are asserted to produce an established letter rating between AAA and CCC that “helps investors identify ESG risks and opportunities within their portfolio” (MSCI Inc, 2018b). The process of the aggregation is shown in fig. no. 3.

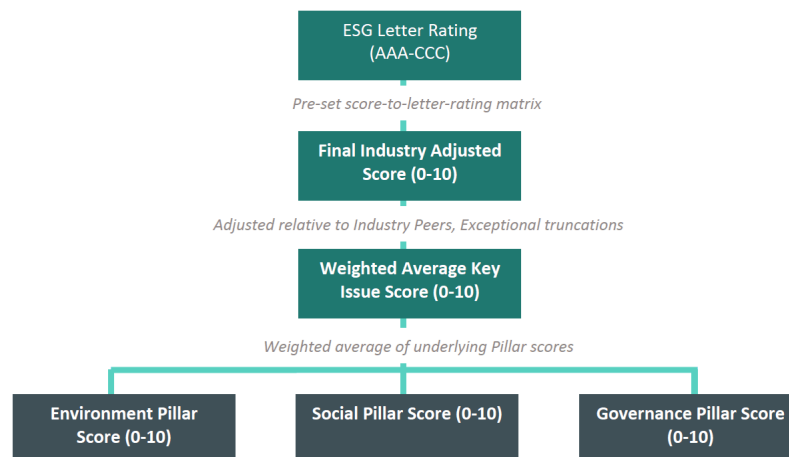


Fig. no. 3 The MSCI ESG-rating hierarchy

Source: MSCI Inc., 2018. *MSCI ESG Ratings Methodology. Executive Summary*. [pdf] Available at: <https://www.msci.com/documents/10199/123a2b2b-1395-4aa2-a121-ea14de6d708a> [Accessed 28 March 2019].

Stock exchanges have taken up the ESG-ratings to create ESG indices that “reflect the level of maturity of companies listed in this area. Currently, there are more than 50 indices of responsible companies on the global market [like Dow Jones Sustainability Index, ESG MSCI, STOXX Global ESG Leaders Index]” (Mikolajek-Gocejna, 2018).

Example indices may consist companies with higher ESG ratings compared to the benchmark (e.g. MSCI ESG Leaders Indexes), high ESG-rated companies are separated into regions (e.g. MSCI USA ESG Focus Index) or investments without an involvement in specific industries like tobacco, weapons or fossil fuels (MSCI Inc, 2018b).

Conclusions

Through the literature research the missing consensus of the term “sustainability” becomes apparent. Because of this, every business and industry has the possibility to call itself sustainable, which opens the floodgates to greenwashing. Sustainability, although it remains a ubiquitous term, implicates an ecofriendly business model to potential customers.

The ESG-rating model values a company’s impact on the environment and establishes transparency for financial investors. However, the model is predominantly applicable for companies quoted on the stock exchange. So, most of the worldwide corporations are neither listed on the stock exchange nor rated in matters of ecofriendliness. In addition, a low ESG-rated company with a high exposure of risks does not have to bear financial consequences. The rating itself is not a basis for sanctions, only an instrument for ESG aware investors. However, most investors will not take this rating into consideration.

Unfortunately, the results of the rating agencies differ in weighting, emphasis of the key issues and the evaluation itself is subjective and not transparent. Furthermore, every corporation’s business model is individual and the value chain not completely transparent. Therefore, the question arises, how does the rating agency deal with low or non-rated subsidiary enterprises and subcontractors? And at the same time how are companies assessed with ecofriendly and conventional brands?

So, as long the ESG ratings cannot be objectively quantified to offer financial incentives or financial penalties conversely, a transformation towards sustainability is difficult to implement.

References

- Böhringer C. and Jochem P., 2007. Measuring the Immeasurable – A of Sustainability Indices. *Ecological Economics*, 63(1), pp.1-8.
- Brundtland, Gro H. and the World Commission on Environment and Development, 1987. *Our Common Future: Report of the World Commission on Environment and Development*. Cambridge, UK: Oxford University Press.
- Cooney, S., 2009. *Build a green small business: profitable ways to become an ecopreneur*. New York: McGraw-Hill.
- Cortés, P., 2015. *The external impact of the Green Economy - An analysis of the environmental implications of the Green Economy*. [online] Available at: <<http://hdl.handle.net/10419/120878>> [Accessed 21 March 2019].
- Durant, R., Fiorino, D. and O'Leary, R., 2017. *Environmental Governance Reconsidered. Challenges, Choices and Opportunities*. Cambridge, MA: MIT Press.
- Epstein, M. and Buhovac, A., 2014. *Making Sustainability Work. Best Practices in Managing and Measuring Corporate Social, Environmental and Economic Impacts*. Sheffield: Greenleaf Publishing Limited.
- Epuran, G., Brătucu, G., Bărbulescu, O., Neacșu, N.A. and Madar, A., 2018. Food Safety and Sustainability – An Exploratory Approach at the Level of the Romanian Wine Production Companies. *Amfiteatru Economic*, 20(47), pp. 151-167.
- Mikolajek-Gocejna, M., 2018. The Environmental, Social and Governance Aspects of Social Responsibility Indices – A Comparative Analysis of European SRI Indices. *Comparative Economic Research*, 21(3), pp.25-44.
- Moldan, B., Janouskova, S. and Hák, T., 2011. How to understand and measure environmental sustainability: Indicators and targets. *Ecological Indicators*, 17(2012), pp.4-13.
- MSCI Inc., 2018a. *MSCI ESG Ratings Methodology. Executive Summary*. [pdf] Available at: <<https://www.msci.com/documents/10199/123a2b2b-1395-4aa2-a121-ea14de6d708a>> [Accessed 28 March 2019].
- MSCI Inc., 2018b. *MSCI ESG Focus Indexes*. [pdf] Available at: <https://www.msci.com/documents/1296102/1636401/MSCI+Brochure_ESG+Focus+Indexes_Oct+2018.pdf/e7ffd929-bf55-8cc2-b246-36044fc5e11f> [Accessed 31 March 2019].
- Karrenbrock, P., 2018. *Was Anleger bei ESG-Ratings beachten sollten*. [online] Available at: <<https://www.private-banking-magazin.de/nachhaltige-anlagen-was-anleger-bei-esg-ratings-beachten-sollten/>> [Accessed 28 March 2019].
- United Nations, 2017. *Zahl der Weltbevölkerung steigt bis 2050 auf 9,8 Milliarden Menschen*. [online] Available at: <<https://www.unric.org/de/uno-schlagzeilen/28065-zahl-der-weltbevoelkerung-steigt-bis-2050-auf-98-milliarden-menschen>> [Accessed 21 March 2019].
- United Nations Environmental Program, 2011. *Working towards a Balanced and Inclusive Green Economy: A United Nations System-wide Perspective* [pdf] Available at: <http://www.fao.org/fileadmin/user_upload/sustainability/pdf/GreenEconomy-Full.pdf> [Accessed 21 March 2019].