
Opinion piece

Is ESG investing contributing to transitioning to a sustainable economy or to the greatest misallocations of capital and a missed opportunity?

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Abstract Environmental, Social and Governance (ESG) investing has become a focus not only of the asset management industry but also among policy makers as a way to mobilise capital for sustainable economic development. While this could be the mechanism through which capital is allocated to companies and technology of the future to help transition to a net-zero sustainable economy and to deliver on the UN SDGs, all of the ‘noise’ around ESG reporting coupled with the ESG ‘investing frenzy’ may more likely end up being the greatest misallocation of capital and a missed opportunity. Asset owners’ strong interest in investing in ‘green’ assets to transition to a net-zero sustainable economy has led to a growing trend of asset managers labelling and rebranding mutual funds and ETFs as ESG and even mainstream funds are advertising employing ‘ESG integration’. At the same time, significant ‘greenwashing’ exists at the company reporting level due to the lack of agreed standards. Moreover, poor correlations across ESG score providers for a given company as well as intentional built-in biases introduced into the scoring and the total lack of any analysis taking into account ecological ceilings, sustainability thresholds and outer boundary limits of natural resources, will all likely lead to material capital allocation distortions. ‘Greenwashing’ at both the asset manager and the corporate level and the resultant misallocation of capital is likely setting the stage for potential risks including significant macroeconomic and geopolitical risks, as well as risks to the financial markets and financial institutions.

Keywords: *ESG, transition to a net-zero sustainable economy, Paris Agreement, UN SDGs, European Green Deal, climate risk*

INTRODUCTION

Today, there is no shortage of so-called Environmental, Social and Governance (ESG) experts, advising on what needs to be done to

tackle climate change and transition to a net-zero environment. As a result, trillions of dollars are chasing investments and flowing into high ESG ranking companies which are designated as long-

term sustainable while investors are shunning those companies not viewed as sustainable due to low, or no, ESG rankings. But are we actually optimising capital allocation needed to save the planet and life on it, or are we missing an opportunity as policy makers, businesses and investors are now all aligned with scientists who have been warning us about climate change for years?

It is hard to assess the exact size of the ESG market with the varying definitions of investing sustainably, including the fuzzy concept of investing using a process called 'ESG integration'. According to Morningstar, Assets Under Management (AUM) in ESG funds are approximately US\$2.3tn.¹ The Global Sustainable Investment Alliance reports a third of assets under management in five of the world's biggest markets now include some ESG focus.²

But there is a growing trend among some fund managers to overstate their sustainability efforts and call funds 'ESG' or 'sustainable'.³ In fact, 'greenwashing' exists at the broader asset manager level as well. We have seen a wider trend of renaming hundreds of funds as well as Exchange Traded Funds (ETFs) with the ESG labels tracking new indices.⁴ As a result, the Securities and Exchange Commission (SEC) is revisiting the SEC 'name rule' which prohibits materially deceptive and misleading names.⁵

Evidence shows that even with more than 3,404 organisations who are signatories to the Principles for Responsible Investment (PRI) managing more than US\$121tn in AUM,⁶ only a fraction of asset managers are truly 'walking the talk'. Kim and Yoon conclude that many asset managers 'use the PRI status to attract capital without notable changes to ESG'.⁷ Their results show even active managers who sign onto the PRI increase their AUM and increase their fees since labelling funds 'ESG' adds about 5bps that a manager can charge in fees, yet these managers also show no improvement in ESG issues such as in voting. This trend is borne out in the Royal Bank of Canada's (RBC's) Global Asset Management 2021 Global Responsible Investing Survey.⁸ The report shows that while many asset managers and asset owners are PRI signatories, only 28 per cent responded that they significantly used ESG principles as part of their investment approach and decision making.⁷

Of course, it is now widely known that the market suffers due to significant 'greenwashing' at the company reporting level as well, because of the lack of agreed standards, self-reporting unaudited biases and lack the rigor with the same robust processes, controls and audit trails as in traditional financial reporting. Moreover, regardless of the methodology or standards used, according to CDP, three-quarters of financial companies are largely failing to disclose information about their climate financed risk activities. The financed emissions of the 25 per cent of financial institutions that do report on their financed activities are over 700-times larger than their reported operational emissions. This is particularly troublesome from a risk management perspective as half of the financial institutions studied by CDP did not conduct any analysis of how their portfolios impact climate change, which they estimated was associated with credit and market risks of up to US\$1tn. In addition, 'greenwashing' goes beyond just reporting, but is part of some corporate strategies to appease investors. Some energy and coal giants are selling mature assets which have diminishing marginal profitability. Yet they are making the case that they are getting rid of polluting projects as part of their 'net-zero strategy.' However, those projects, and their emissions, aren't going away since these companies are selling them to smaller and private companies who are willing to continue investing in them and they go under the radar.

To add to the lack of objective data for investing sustainably, there are major discrepancies and poor correlations across ESG score providers for a given company. There are many reasons for the inconsistencies including different frameworks and methodologies. Berg, Koebel and Rigobon showed the average correlation across data providers for the same company was 54 per cent, while the range was 38 per cent to 71 per cent.⁹

However, the Organization for Economic Cooperation and Development's (OECD's) research shows there are also intentional biases against small and medium size enterprises (SMEs) built into ESG ratings and rankings while consistently awarding better ESG scores to companies with higher market capitalisation and higher revenue.¹⁰ In addition, according to the International Organization of Security Commissioners

(IOSCO) certain industries and geographic areas benefit from more coverage than others.¹¹

Over the next 18 months the market will see some significant changes which could help reduce 'greenwashing' both at the company and the asset manager level. The International Financial Reporting Standards Foundation (IFRS) formally launched the new International Sustainability Standards Board (ISSB). ISSB will be developing a comprehensive, global baseline of sustainability disclosure standards mostly focusing on environmental disclosure.¹² Separately, the European Commission has rolled out its EU Taxonomy which is a classification system that provides a clear definition of what is 'environmentally sustainable' and is designed to direct investments toward sustainable projects and economic activities to achieve the European Green Deal.¹³ And many countries are requiring ESG reporting as part of listing requirements while others employ the 'comply or explain' approach. Moreover, there is a growing interest and research in new sustainability measurements which take into account the impact companies' activities have on externalities. For example, the World Wide Fund for Nature (WWF) and the Impact Weighted Accounts Initiative (IWAI) are both designed to calculate a company's potential impact on the environment that may present future financial liabilities and costs to the company, thus showing how current stated profitability may be overstated due to new regulations or reputational risks.^{14,15}

While the significant noise due to methodology and model differences and intentional built-in biases introduced into the scoring all likely lead to material capital allocation distortions, these are not the only reasons we are likely misallocating capital. With all of the focus on improving sustainability reporting, it still largely lacks a 'contextual framework' that is scientifically based and ties development measurement indicators into sustainable 'thresholds' or 'outer boundaries'.¹⁶ Even if we achieved a state of total harmonised reporting standards and even if all of the biases and other issues discussed above were addressed and corrected, without *contextualising* what we are reporting, as a society we cannot optimise capital allocation to where it is needed. Instead, we are missing the opportunity to be on a smooth path

of transition. In fact, without completing this puzzle, as a society we may be misallocating capital into the wrong companies and projects while missing out on allocating capital to companies that may be our best potential solutions which will enable a smooth transition to a net-zero, sustainable economy.

The current approach to ESG reporting fails to even think about ecological ceilings and limited resources which have sustainability thresholds and outer boundaries. Rarely do companies take into account natural boundaries and answer the question 'Relative to What?' Instead, ESG reporting is usually measured in absolute terms: X tonnes of CO2 emitted, Y volumes of water recycled; or as relative to a unit of production or revenue known as 'intensity indicators'. This approach fails to take into account how a company is sharing those limited resources.¹⁶ Moreover, indicating and tracking *how* companies will transform to a sustainable economy is virtually nonexistent. In other words, we need to *contextualise* sustainability reporting in order for it to have real meaning.¹⁷

Work is under way both at the UN and multilateral organisations and at the Global Thresholds & Allocations Council (GTAC) to take into account ecological limits and a company's 'fair share' use of those limits.¹⁶ However, importantly, we then need to measure *how* sustainable development will be achieved from our current unsustainable systems.

Sustainability standards setting and measurements are complex, scarce resource allocation issues. We cannot continue to allocate capital to projects in abstract. We need to optimise scarce resources. Economics is concerned with the allocation of scarce resources and goods across societies. However, Economists do not even have a seat at the table in developing ESG standards and measurements, an area which has thus far been dominated by business management consultants, financial analysts, engineers, accountants and regulators with input from investors and other stakeholders. We need 'new tools' and a new way of determining which companies, projects and economic activities are contributing to sustainability and which are not. Transitioning from an unsustainable economy to a sustainable economy requires the serious input of Economists

as well as scientists. Working with environmental and other scientists, Economists should be engaged in developing ESG standards and measurements in order to ensure we are on a path to sustainability.¹⁷

SO WHERE DOES THIS LEAVE US?

In addition to the potential enormous misallocation of capital, all of the ‘noise’ around ESG reporting, coupled with the ESG ‘investing frenzy’, is setting the stage for potential risks including significant macroeconomic and geopolitical risks, as well as risks to the financial markets and financial institutions.

On a macroeconomic level we are surely misallocating capital and missing an opportunity to get on a path to long-term sustainability. Without contextualising ESG reporting relative to natural boundaries we cannot possibly know which companies and technologies will be the ones to ensure a sustainable future. Without a smooth energy transition we will continue to see a rise in the number and severity of climate-related catastrophic events. Since 1980, when insurance companies started to keep track of the number of events and their monetary losses, aggregate losses have totalled US\$5.2tn. On average, only 30 per cent of these losses were insured meaning people, businesses and countries bear the costs.¹⁸ Catastrophic events cost in lives lost as well as in enormous economic costs from rescue and recovery to reconstruction to economic disruptions in lost productivity, employment, tax revenue and supply chain disruptions. A recent Swiss Re Institute climate stress test report shows if no mitigating action is taken, global temperatures could rise by more than 3°C above pre-industrial levels and the world economy could shrink by 18 per cent in the next 30 years. Even if we achieved the Paris Agreement and temperatures stay below 2°C above pre-industrial levels, Swiss Re estimates globally we will still lose 4 per cent of Gross Domestic Product (GDP).¹⁹

The implications for corporations have multiple dimensions. First, there are the costs associated with direct infrastructure losses. Moreover, problems with public infrastructure or employees households can lead to business interruption even if the corporation has no damage. For example, following the Marmara earthquake in Turkey businesses could not operate for an average of 35 days. Then there are supply

chain disruptions. A disaster at a remote supplier may lead to major disruptions in production far away as we have seen many times with auto plants shutting down, for example, as far away as in the USA due to earthquakes in Japan, and as we are seeing now with the chip shortages. Taiwan, which dominates the foundry market, has suffered from its worst drought in half a century which is causing enormous global supply chain issues. Taiwan relies on typhoons for its water supply which is vital for chip production. As global temperatures rise, typhoons are stronger over the Pacific Ocean but are changing course before reaching Taiwan.

Misallocating capital and missing an opportunity to fund the companies and technology of the future and to get on a path to alternative energy and long-term sustainability is also sowing the seeds for geopolitical risks. Unless we get on a path to sustainability and countries invest now, the competition for scarce resources to produce renewable energy technology will intensify among countries, conflicts will likely arise over the Arctic to explore the region for scarce minerals and to claim control over opened passageways as the ice melts, and developing economies will demand compensation from developed economies who were the contributors to climate change to pay for the transition.

Financially, one has to question whether the trend to rebrand mutual and exchange-traded funds ‘sustainable’ is creating an asset bubble? Morningstar data show that, since 2013, 64 funds which had US\$35bn in assets as of June 2021, have been rebranded. More than half of these funds were suffering from withdrawals in the three years before rebranding.⁴ Many funds continue to hold fossil-fuel and coal companies. Many funds that do drop oil and gas producers or other non-aligned ESG companies bought tech and software companies which is partially why these so-called ESG funds have done well over the past few years. These flows are driving up asset prices more because of the ESG label than pure valuations. In fact, recent academic research as well as a recent Bank for International Settlements (BIS) report warned the explosion in ‘green finance’ may be a bubble akin to the mortgage backed securities market prior to the great financial crisis or to the dot-com mania.²⁰ Moreover, with all of the ‘greenwashing’ in order

to attract AUM the asset management industry is exposed to material reputational, regulatory and legal risks. ‘Whistleblowers’ from some prominent asset management companies have come forward. The U.S. Congress held its first hearings and both the U.S. SEC and the German financial regulator BaFin are looking into the allegations.

In addition, banks and other lending financial institutions are woefully understating their risks to climate change. The climate impact, and thus their climate risk, from almost all financial institutions is driven by their financed activities. Yet, according to the Carbon Disclosure Project (CDP), only 25 per cent of financial institutions report on their financed activities, and these financed emissions are over 700× larger than their reported operational emissions.²¹ CDP found half of financial institutions did not conduct any analysis of how their portfolios impact climate change, which they conclude is resulting in banks and financial institutions underestimating their credit and market risks to the tune of up to US\$1tn.²¹

Finally, the increasing number of climate-related catastrophic events is triggering more ratings actions for both insurance companies and reinsurers. S&P Global Rating’s credit outlook for the reinsurance sector remains negative with negative implications for insurance and reinsurance companies’ cost of capital. The negative sector credit view on the global reinsurance sector is due to profitability challenges and diminishing capital adequacy. The top 21 global reinsurers’ capitalisation was only 7 per cent redundant at the ‘AA’ confidence level in 2020, down from 25 per cent just a half-dozen years ago.

CONCLUSION

Globally, our needs are massive in order to achieve our collective goals: US\$6.9tn a year to meet the climate and development infrastructure needs required to achieve the Paris Agreement and deliver on the 2030 Agenda for Sustainable Development;²² US\$1.1tn in investments over the next ten years to fund the European Green Deal;²³ and US\$2.5tn annually to close the funding gap developing countries face in order to achieve the U.N. Sustainable Development Goals (SDGs) by

2030,²⁴ which may be US\$1.7tn higher per year due to the COVID-19 pandemic and response spending.²⁵

These goals cannot be achieved by countries and multilateral development banks alone. They need financial markets to mobilise capital to where it is needed most to tackle climate change and achieve sustainable and equitable economic growth. This means we need to ensure capital is being allocated efficiently to drive policies, decision making and progress towards transitioning to a net-zero economy and delivering on the UN SDGs.

Science shows us we do not have long to get on the right path to sustainability. We need the correct data and the correct scarce resource allocation analyses which will help inform how and where to direct capital to companies and technologies of the future. It is time to bring together all of the best minds including Economists who are trained in this way of thinking. The most vexing problem of our time is figuring out how to transition to a sustainable economy and maximise societies collective utility, given the ecological and natural resource constraints that we face. Our decisions and resource allocations today will shape the future and we need to understand future generations are counting on us to get it right.

Note

Opinions are adapted from the forthcoming book chapter: ‘Efficiently Allocating Capital to Transition to a Sustainable Economy’ by Antoncic appearing in the book ‘Sustainability, Finance, Technology’ edited by Brill, Kell & Rasche scheduled for publication in 2022 by the publisher, Routledge.

References

- 1 Murugaboopathy, P. and Jessop, S., (2021), *Global sustainable fund assets hit record \$2.3 tln in Q2, says Morningstar*, available at <https://www.reuters.com/business/sustainable-business/global-sustainable-fund-assets-hit-record-23-tln-q2-says-morningstar-2021-07-27/> (accessed 2nd November, 2021).
- 2 Jessop, S., (2021), *Sustainable investments account for more than a third of global assets*, available at <https://>

- www.reuters.com/business/sustainable-business/sustainable-investments-account-more-than-third-global-assets-2021-07-18/ (accessed 2nd November, 2021).
- 3 Kowsmann, P. and Brown, K., (2021), *Fired Executive Says Deutsche Bank's DWS Overstated Sustainable-Investing Efforts*, available at <https://www.wsj.com/articles/fired-executive-says-deutsche-banks-dws-overstated-sustainable-investing-efforts-11627810380> (accessed 2nd November, 2021).
 - 4 Shifflett, S., (2021), *Funds Go Green, but Sometimes in Name Only*, available at <https://www.wsj.com/articles/funds-go-green-but-sometimes-in-name-only-11631179801> (accessed 2nd November, 2021).
 - 5 Gensler, G., (2021), *Prepared Remarks Before the Principles for Responsible Investment 'Climate and Global Financial Markets' Webinar*, available at <https://www.sec.gov/news/speech/gensler-pri-2021-07-28> (accessed 3rd November, 2021).
 - 6 Principles for Responsible Investment, (2021), *Annual Report 2020*, available at <https://www.unpri.org/about-the-pri/annual-report-2020/6811.article> (accessed 2nd November, 2021).
 - 7 Kim, S. and Yoon, A.S., (2020), 'How Committed Are Active-Investment Managers to ESG?' *The Columbia Law School Blue Sky Blog*, available at <https://clsbluesky.law.columbia.edu/2020/04/21/how-committed-are-active-investment-managers-to-esg/> (accessed 2nd November, 2021).
 - 8 RBC Global Asset Management, (2021), *Key Findings: 2021 Responsible Investment Survey* available at Our latest independent research - RBC Global Asset ...<https://www.rbcgam.com/responsible-investment> › ou... (accessed 2nd November, 2021).
 - 9 Berg, F., Koelbel, F.J. and Rigobon, R., (2019), 'Aggregate Confusion: The Divergence of ESG Ratings', *MIT Sloan School of Management Working Paper 5822-19*, available at <https://www.econbiz.de/Record/aggregate-confusion-the-divergence-of-esg-ratings-berg-florian/10012104392> (accessed 3rd November, 2021).
 - 10 Boffo, R. and Patalano, R., (2020), 'ESG Investing: Practices, Progress and Challenges', OECD Paris, available at <https://www.oecd.org/finance/ESG-Investing-Practices-Progress-Challenges.pdf> (accessed 3rd November, 2021).
 - 11 Board of IOSCO, (2021), 'Environmental, Social and Governance (ESG) Ratings and Data Products Providers Consultation report', *OICU-IOSCO*, available at <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD681.pdf> (accessed 3rd November, 2021).
 - 12 IFRS, (2021), 'IFRS Foundation announces International Sustainability Standards Board, consolidation with CDSB and VRF, and publication of prototype disclosure requirements', available at <https://www.ifrs.org/news-and-events/news/2021/11/ifrs-foundation-announces-issb-consolidation-with-cdsb-vrf-publication-of-prototypes/> (accessed 3rd November, 2021).
 - 13 European Commission, (2021), 'EU Taxonomy for Sustainable Finance', available at https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/eu-taxonomy-sustainable-activities_en (accessed 3rd November, 2021).
 - 14 Balch, O., (2021), *Big data helps put numbers on sustainability*, available at <https://www.ft.com/content/2a405cf6-9592-4de2-960b-4c3e5d0df030> (accessed 5th November, 2021).
 - 15 Serafeim, G. and Trinh, K., (2020), 'A Framework for Product Impact Weighted Accounts', *HBS Working Paper 20-076*, available at <https://www.hbs.edu/impact-weighted-accounts/Documents/Preliminary-Framework-for-Product-Impact-Weighted-Accounts.pdf> (accessed 5th November, 2021).
 - 16 Baue, B., (2020), 'Compared to What? A Three-Tiered Typology of Sustainable Development Performance Indicators: From Incremental to Contextual to Transformational', *United Nations Research Institute for Social Development*, available at [https://www.unrisd.org/UNRISD/website/document.nsf/\(httpPapersForProgrammeArea\)/CBE444C58139C45A8025848C00547012?OpenDocument](https://www.unrisd.org/UNRISD/website/document.nsf/(httpPapersForProgrammeArea)/CBE444C58139C45A8025848C00547012?OpenDocument) (accessed 5th November, 2021). See also <https://www.r3-0.org>
 - 17 Antoncic, M., (2022 forthcoming), 'Efficiently Allocating Capital to Transition to a Sustainable Economy', *Sustainability, Finance*,

- Technology* (Bril, H., Kell, G. & Rasche, A.). Routledge.
- 18 Munich Re, (2021), *Natural disaster risks: Losses are trending upwards*, available at <https://www.munichre.com/en/risks/natural-disasters-losses-are-trending-upwards.html#1995343501> (accessed 18th November, 2021).
 - 19 Swiss Re Institute, (2021), 'The economics of climate change: no action not an option', *Swiss Re Institute Climate Stress-test Report*, available at The economics of climate change: no action not an ... - Swiss Re <https://www.swissre.com › dam › swiss-re-institute-e...> (accessed 2nd November, 2021).
 - 20 Jones, M., (2021), *Central bank group BIS warns of green asset bubble risk*, available at <https://www.reuters.com/business/sustainable-business/global-markets-bis-esg-urgent-2021-09-20/> (accessed 18th November, 2021).
 - 21 CDP, (2020), 'The Time to Green Finance', CDP Financial Services Disclosure Report 2020, available at <https://www.cdp.net/en/research/global-reports/financial-services-disclosure-report-2020> (accessed 19th November, 2021).
 - 22 OECD, UNEP, World Bank Group *Financing Climate Futures: Rethinking Infrastructure, Policy Highlights*, available at <https://www.oecd.org/environment/cc/climate-futures/policy-highlights-financing-climate-futures.pdf> (accessed 3rd November, 2021).
 - 23 Petrequin, S., (2020), *EU lays out 1 trillion-euro plan to support Green Deal*, available at <https://apnews.com/article/europe-ursula-von-der-leyen-ap-top-news-international-news-environment-5d4db8ffda58f03f090a04c35f0a2dc8> (accessed 3rd November, 2021).
 - 24 UNCTAD, (2014), *Developing countries face \$2.5 trillion annual investment gap in key sustainable development sectors*, *UNCTAD report estimates*, available at <https://unctad.org/press-material/developing-countries-face-25-trillion-annual-investment-gap-key-sustainable> (accessed 3rd November, 2021).
 - 25 OECD, (2021), *Global Outlook on Financing for Sustainable Development 2021: A New Way to Invest for People and Planet*, available at <https://www.oecd-ilibrary.org/sites/6ea613f4-en/index.html?itemId=/content/component/6ea613f4-en> (accessed 3rd November, 2021).