



#2 WHY IMPACT INVESTING IS A RESPONSE TO CLIMATE CHANGE AND FIDUCIARY DUTY





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Executive Summary

In the wake of the Covid-19 pandemic, the Overton window on climate change has moved drastically, and so have the time horizons. What was once viewed as a problem that our grandchildren or their children might one day face, has swiftly come to be recognised as a material threat to our current way of life. The science is clear, if we do not meet our Paris Agreement targets then we may irrevocably harm the planet. Stakeholders at all levels are waking up to this fact, and acting accordingly, from the International Organization of Securities Commission's (IOSCO) recognition that climate risks are a financial risk for firms, institutions and systems to the Task Force on Climate Related Financial Disclosure and Global Reporting Initiatives that are developing disclosure methodologies and reporting frameworks for these new methodologies to be structured and actionable.

Despite all this and the weight of evidence rebutting market timing as a credible investment strategy, many investors remain confident that they can adjust their portfolios if or when climate impacts become more tangible, so are not meaningfully adjusting their investment strategies today. And yet this folly is highlighted by industry leaders such as Mark Carney, former Governor of the Bank of England, and Bent Flyvbjerg of Said Business School. Climate change will not only cause jump-to-distress pricing due to changes in policy, technology and physical risks, but traditional risk modelling will fail to account for this threat. Our economic models, which for 70 years have focused on GDP or national output as the prime measure of progress, must adapt to the disruptive challenges of the 21st Century. A sustainable revolution will be required to address

climate change and the United Nations Sustainable Development Goals (SDGs) in an inclusive, collective, universal plan. The focus on growth has been used to justify extreme inequality of income and wealth with unprecedented environmental destruction but it is time to accept the limits of growth. A wider consideration of investment strategy is required to take account not just of climate change, but also of biodiversity and other sustainability issues.

2020 was the year that climate change was recognised as having a potential material impact on the value of the assets of a pension fund – either in terms of physical or transition risk.¹ Trustees will need to hold their managers to account for the impact of climate change on asset values as much as to any other risk driver, with the expected impact of climate change on asset values, showing the same magnitude as those that emerged in the Global Financial Crisis.² In response, the market is now being flooded with products rich in ecological and ethical signifiers, but whether this is merely greenwashing through rebranding existing products or a meaningful reframing of their investment principles to address the climate emergency remains to be seen.

In the face of all this, investors in the private sector have no choice but to act decisively and proactively, they cannot wait for government interventions to force their hands. Investing for impact is a necessary strategy to meet our fiduciary duty in the wake of the climate disaster not simply a siloed corner of an investment portfolio created for marketing purposes. There is nothing more powerful than an idea whose time has come, and that time is now.

1. [Rust, Susanna, Cheers and concerns over DVWP climate amendments to pension bill, IPE \(2020\)](#)

2. [Decarbonization Advisory Panel Beliefs and Recommendations, for the New York State Common Retirement Fund \(2019\)](#)

Why Impact Investing is a response to climate change and fiduciary duty

The idea that the climate emergency is real and requires drastic action is now irrefutable. The Overton window has moved drastically with regards to climate change.³ The human mind is best wired to deal with direct causal links and much less able to cope with systemic causes and ideas.⁴ The exponential shortening of time horizons, from a problem for our grandchildren to deal with to a current day crisis, has turned this into a prescient causal problem. If we do not meet the Paris Agreement targets and the SDGs by 2030, the science is telling us, it may be too late.⁵ Climate change, driven by the overconsumption of unsustainable linear economies, is now a recognised material risk which is already having a meaningful impact on our current way of life, and the longer we remain inactive, the greater that impact will be. It is no longer “we’re affecting the way the ecosystems work, which could have effects sometime in the future,” instead it has become “we are destroying the planet in a way that we may not recover from”.

Damage due to climate change becomes a core financial risk

What we are seeing is what Nobel Laureate Economist Robert Schiller calls consilience, the unity of knowledge among the different

“Nothing is more powerful than an idea whose time has come.”

– Victor Hugo

academic disciplines, creating constellations of little narratives. These come together to form larger concepts or economic narratives, and these contagious economic narratives have the potential to change how people make economic decisions. We are seeing consilience of constellations of contagious arguments from around the world all telling us of the radical need for change to the way we engage and interact with the planet and nature. This will accelerate this change; we have reached a tipping point where sufficient economic actors are moving. A report by Barnett Waddingham paints this in stark relief, “when it comes to investment, your own beliefs do not matter. If others believe it will have an impact and are changing what they do, the price of assets will change, and you will be affected.”⁶

The 2019 advisory panel to the New York State Common Retirement Fund, the retirement fund for all public sector employees in that state, was quick to state that they viewed climate change

3. [“The Overton Window is named after Joseph P. Overton of the Mackinac Center for Public Policy. According to Overton, the window contains the range of policies that a politician can recommend without appearing too extreme to gain or keep public office in the current climate of public opinion. It can shift and expand as societal norms and values change.”](#)

4. Lakoff, George, Don’t Think of an Elephant, Chelsea Green Publishing, pp34-40 (1990)

5. [Is It too late to prevent climate change?, NASA](#)

6. [Smith, Pete, There is more than one C in ESG, Barnett Waddingham \(2020\)](#)

not as simply “a discrete risk factor” but a “macro-disruption across industries, geographies and arenas” noting that it would bring “fundamental change to economic systems [that] has a financially material impact on investment”. To them, it is clear that “enough global warming is already ‘baked into the system’ to cause significant disruption and impacts to portfolios from physical risk regardless of the speed or scale of the Transition”. They warn that “to delay action is, itself, a decision to enter unprepared into a more volatile investing environment and a more abrupt market correction”.⁷

“What was once an issue of social responsibility, an ethical and moral question regarding whether companies should “do good”, is now a core financial risk which will have broad reaching systemic implications.”

As a result, what was once an issue of social responsibility, an ethical and moral question regarding whether companies should “do good”, is now a core financial risk which will have broad reaching systemic implications. That is why this issue is not going away, and stakeholders everywhere are beginning to recognise it. The question now is not why should we integrate sustainable investing into our practices but how swiftly can we do it? This change in our understanding of fiduciary duty is exemplified by Hiro Mizuno, Executive MD of GPIF; “Integration of ESG issues into investment practice and decision making is an increasingly standard part of the regulatory and legal requirements for institutional investors ... [a] more holistic understanding of fiduciary duty is critical to preserving capital over the long-term. Issues such as climate change ... pose long-term systemic risks that ultimately affect our fund performance, and these risks cannot be hedged away through traditional portfolio diversification. Companies that generate significant negative externalities in pursuit of short-term gains hinder our ability to fulfil our duty as a fiduciary.”⁸

Other examples include demands from constituents for institutional investors to integrate sustainability considerations. A 2019 UK public survey identified climate change as the number two risk that the UK will face in the next twenty years (second only to Brexit, where three years earlier, climate change had ranked only 13th) and an Australian pension fund is the subject of a member-brought lawsuit highlighting the lack of transparency on and any plans to address climate risk.⁹ Young activists from Portugal have filed the first climate change case at the European court of human rights in Strasbourg, demanding 33 countries make more ambitious emissions cuts to safeguard their future physical and mental wellbeing. They seek to hold them accountable both for the emissions within their borders and for the climate impact that their consumers and companies create globally from trade, fossil-fuel extraction and outsourcing.¹⁰

Regulators are waking up and starting to move on this issue as a result. A recent report on sustainable finance by the International Organization of Securities Commissions (IOSCO)

7. Ibid 2

8. [Government Pension Fund \(GPIF\) is an incorporated administrative agency established by the Japanese government. It is the largest pool of retirement savings in the world with assets of ¥162,672.3 billion \(\\$1452.5 billion\).](#)

9. [‘Biggest shift yet’ in British public’s attitude to risks of climate change, Cardiff University \(2019\)](#) and [Millennial Sues Australian Pension Fund over Climate Change Risks, Chief Investment Officer \(2019\)](#)

10. [Portuguese children sue 33 countries over climate change at European court, The Guardian \(2020\)](#)

likewise recognises that “climate-related risks [are] a potential source of financial risk for individual firms as well as for the financial system.” It cites the need for and growing emergence of regulatory programmes requiring disclosure of the financial impacts of ESG risks, re-orientating capital to sustainable investments and supervising greenwashing of financial products, including in pension funds.¹¹ New Zealand is aiming to become the first country globally to compel its financial sector to mandatorily report on climate risks. The newly proposed law will require financial institutions with more than NZD 1 billion (c. USD 665million) in AUM to disclose their exposure to climate risk, on a comply-or-explain basis, as early as 2023.¹² Canadian securities legislation requires reporting issuers to disclose the material risks affecting their business and, where practicable, the financial impacts of such risks. It classifies climate-related risks as mainstream and warns there “is no uniform quantitative threshold at which a particular type of information becomes material”.¹³ Section 78 (3) of the Ontario Pensions Benefits Act requires plans to include in their Statement of Investment Policies and Procedures whether and how ESG factors are incorporated into their investment policies.

Distress pricing and slow responses pose threat

On understanding and awareness, the Task Force on Climate-Related Financial Disclosure (TCFD) and the Global Reporting Initiative are developing disclosure methodologies and reporting frameworks for these new methodologies to be

structured and actionable.¹⁴ The Harvard Business School Impact Weighted Account Project aims to create accounting statements that capture externalities to drive investor and managerial decision making.¹⁵ Similarly papers in the UK by Lane Clark & Peacock and Barnett Waddingham have stressed that climate-related risks are already relevant to pension scheme investments, sponsor covenants and funding, that transition risks may well impact before physical risks and that the UK regulator already expects schemes to take into account all factors that are financially material to investment performance and state the extent to which ESG factors impact their investment decisions.¹⁶

“Climate-related risks [are] a potential source of financial risk for individual firms as well as for the financial system.”

Despite all of this and the weight of evidence rebutting market timing as a credible investment strategy, many investors remain confident that they can adjust their portfolios if or when climate impacts become more tangible so are not meaningfully adjusting their investment strategies today.¹⁷ The folly of this is highlighted in the September 2015 words of Mark Carney, then Governor of the Bank of England, “Changes in policy, technology and physical risks could prompt a reassessment of the value

11. Sustainable Finance and the Role of Securities Regulators and IOSCO (2020)

12. [A New Zero Tolerance Era for ESG Reporting, Regulation Asia \(2020\)](#)

13. Reporting of Climate Change-related Risks, CSA Staff Notice pp51-358 (2019)

14. [Recommendations of the Task Force on Climate-related Financial Disclosures \(2017\)](#)

15. [Harvard Business School Impact-Weighted Accounts](#)

16. [Smith, Pete, There is more than one C in ESG, Barnett Waddingham \(2020\)](#)
[Jones, Clare; Clements, John, A guide to climate-related risks, Lane Clark & Peacock \(2017\)](#)

17. [Interim report of the Expert Panel on Sustainable Finance, Government of Canada \(2018\)](#)

of a large range of assets as costs and opportunities become apparent. The speed at which such re-pricing occurs is uncertain and could be decisive for financial stability.”

As Carney notes, we have already seen a few high-profile examples of this jump to distress pricing. The Washington Post called Pacific Gas and Electric Company’s Chapter 11 filing the USA’s first climate bankruptcy. PG&E, one of six regulated investor-owned utilities in California which had a market capitalisation of \$3.25billion, filed for Chapter 11 following media accusations of blame for devastating wildfires in the state in 2017 and 2018 that resulted in potential claims of c\$30billion. Whilst wildfires are not new, the longer drier summers greatly increased their impact and poorly maintained PG&E equipment was blamed by media sources as the cause of the blazes. As more effects of the climate crisis are felt, we will see more sudden distress cases for companies that fail to take appropriate action, just as Covid-19 has devastated numerous industries such as airlines, the fashion industry, entertainment and across high streets globally.

More than simply jump to distress pricing, climate change poses an atypical threat to traditional risk-based modelling. As Bent Flyvbjerg of Said Business School, Oxford University, argues regression to the mean is a meaningless concept for certain events such as “wars, terrorist attacks” but this also includes climate related ones such as “floods, forest fire, earthquakes, and tsunamis” since they “have no population mean, or the mean is ill defined due to infinite

variance”. These events “will always regress to the tail, i.e. to extreme outcomes, and sooner or later there will be an event more extreme than the most extreme to date.” For Flyvbjerg “... massive loss of life and wealth will likely follow if climate change is not mitigated now, at speed, and at unprecedented scale, with no time to waste in each step involved...”¹⁸

“Massive loss of life and wealth will likely follow if climate change is not mitigated now.”
– Bent Flyvbjerg

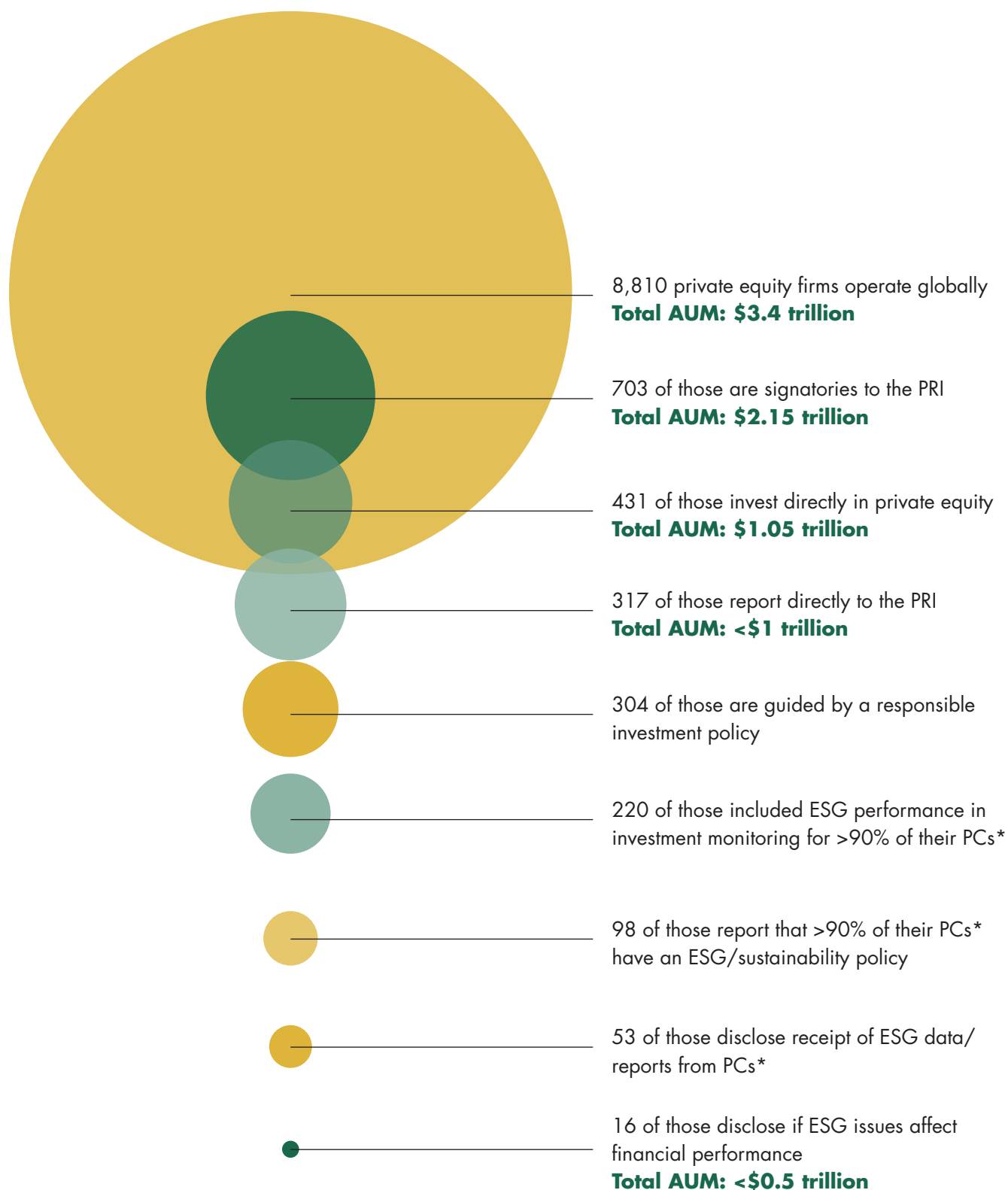
This increased impact will be exacerbated by the slow responses and limited transparency offered by most corporates. In his October 2019 speech, Mark Carney highlighted how few corporates were meeting TCFD requirements to report on the resilience of corporate strategies to climate change (<10%) and how integrated climate change issues are into corporate risk management processes (<20%).¹⁹ Similarly, in the private equity world, Institutional Investor reports that of the almost nine thousand firms operating globally only 703 are signatories to the UN PRI, only 317 report directly to the PRI, only 220 include ESG performance in the monitoring of over 90% of their investments, only 53 disclose receipt of ESG reporting from their investments and only 16 disclose the impact of ESG issues on their financial performance.²⁰

18. Flyvbjerg, Bent, *The Law of Regression to the Tail* (2020)

19. TCFD: *strengthening the foundations of sustainable finance - speech by Mark Carney, Bank of England* (2019)

20. Pucker, Ken; Kotsantonis, Sakis, *Private Equity Makes ESG Promises. But Their Impact Is Often Superficial*, Institutional Investor (2020)

Private Equity ESG Bubble



Sources: Preqin and PRI

*Portfolio Companies

In addressing this, Trustees face a systemic issue which is simultaneously their greatest challenge but also a great opportunity. Pension funds must plan towards very long-term horizons, but the temptation to focus on short-term performance is hard to resist. In the 21st Century, as life expectancies continue to rise in the western world into the mid-80s, some schemes are now looking at potential horizons of over 75 years. At the same time asset performance metrics are short-term, focusing on perceived current or near future expectations. The only “tool” to meet the financial obligation of the fund over which Trustees have full control is the mix of assets they hold. Yet this is an area where the required skill – picking those assets or managers who are going to perform well in the future - is more art than science.

The market is now being flooded with products rich in ecological and ethical signifiers, but whether this is merely greenwashing through rebranding existing products or a meaningful reframing of their investment principles to address the climate emergency remains to be seen. Products in this space have often used such identifiers as Socially Responsible Investing (SRI), ESG Investing and Impact Investing and it is worth taking a moment to differentiate these. The earliest to appear, SRI, chooses criteria to exclude or target (excluding tobacco or gambling or choosing socially responsible companies). ESG investing ranks companies based on their performance on environmental, societal and governance issues both within and across geographies as well as sectors. Impact investing assesses an investment on projected positive outcomes for the environment and society as well as the quality of its governance. All three can combine these traditionally “non-financial” considerations with standard financial analysis to build a portfolio.

Despite the growing weight of evidence, there is still a reluctance on the part of many institutional investors to respond to the need to reposition portfolios away from “business as usual” industries that have profited from unsustainable operating models. A successful portfolio transition requires a change in systems thinking and modelling to allow for these climate risks to be fully reflected in the market. For this, the aforementioned New York Common Fund Advisory Panel states these changes cut across all areas of investment in a way that means it cannot be treated as a siloed matter (this does not merely

“Despite the growing weight of evidence, there is still reluctance on the part of many institutional investors to move away from industries that have profited from unsustainable operating models.”

require a “pure” corner of the portfolio to be sustainable, leaving the remainder unaltered); it is a driver of risk across all asset classes. The Panel went further to combine resisting siloed thinking with the potential weaknesses of ESG investments; they note that “a company well positioned for the Transition might receive low ratings because of its social and governance practices, or conversely, a company poorly positioned for the Transition could receive high ratings because of its social and governance practices.”²¹ The latter is demonstrated by the high weightings of fossil fuel and mining stocks in ESG market indices that do no screening, but purely rank ESG scores.²²

21. Ibid 2

22. See for example the Russell ESG indices

John Authors, writing for Bloomberg, highlights that “There is worryingly little agreement over what constitutes a good company on environmental and social grounds; and almost no agreement at all on what constitutes good governance.” The disparity amongst ESG ratings was highlighted by the Financial Times which noted MIT research showing correlations of about 0.6 and proffered the example of Tesla, which rates “in the bottom 10 per cent of all companies by one rating agency (JUST Capital) but receives an “A” grade from another (MSCI).” The discrepancy arises from the different weightings

applied – JUST Capital²³ focusing on workers’ rights, whereas MSCI focuses on environmental impact.²⁴ The Russell ESG Indices are built purely from high ESG scores, with no screening of companies, products or their impacts. As a result, their FTSE All Share ESG Index top ten holdings comprise three oil & gas stocks, one each from the mining, alcohol and tobacco sectors, one universal bank, two pharmaceuticals and Unilever; it is unclear whether they consider this as validation of their process or an unintended consequence.²⁵

Spectrum of capital

Approach	Traditional investments	Responsible investments				Philanthropy	
				Impact investments			
Focus	Financial only	Negative screening	ESG integration	Impact driven		Impact only	
				Financial-first	Impact-first		
Financial goals				Target competitive risk-adjusted financial returns		Accept low risk-adjusted returns	Accept partial/full capital loss
Features		Manage ESG risks					
			Pursue ESG opportunities				
				Intentionality: delivering impact is central to underlying assets/investments			
				Impact investment is measured and reported			
IMP intentions	May or do cause harm	Act to avoid harm					
			Benefit all stakeholders				
				Contribute solutions			

Sources: Adapted from Bridges Fund Management (2014), PRI (2013), RIAA (2019), UK NAB (2017), Impact Management Project (IMP) (2018) Phenix Capital (2019)

23. “JUST Capital is the only independent non-profit that tracks, analyses, and engages with large corporations and their investors on how they perform on the public’s priorities. Our research, rankings, indexes, and data-driven tools empower all market participants to help build a more just economy. We are neutral and data-driven – an honest broker working to move the vision of stakeholder capitalism from rhetoric to reality.” <https://justcapital.com/>

24. Nauman, Billy, Fund managers struggle to compare ESG apples with oranges, FT (2020)

25. <https://www.ftserussell.com/products/indices/esg> (2020)

Where the Raters Agree and Disagree

Correlations of ESG ratings agencies' scores across a common sample of companies

■ Below 0.1 ■ 0.1 to 0.3 ■ 0.3 to 0.5 ■ 0.5 to 0.7 ■ Above 0.7

Overall ESG rating

Agency	Asset4	KLD	RobecoSAM	Sustain*	Vigeo-Eiris
Asset4	--	0.42	0.64	0.67	0.71
KLD	0.42	--	0.49	0.53	0.48
RobecoSAM	0.64	0.49	--	0.68	0.71
Sustain*	0.67	0.53	0.68	--	0.73
Vigeo-Eiris	0.71	0.48	0.71	0.73	--

Environmental rating

	A4	KL	RS	SA	VI
A4					
KL					
RS					
SA					
VI					

Social rating

	A4	KL	RS	SA	VI
A4					
KL					
RS					
SA					
VI					

Governance rating

	A4	KL	RS	SA	VI
A4					
KL					
RS					
SA					
VI					

*Sustainalytics

Source: MIT Sloan School of Management

As previously stated, given the shortfall on meaningful ESG reporting and resilience planning it is highly likely that these are extremely conservative estimates which will be many orders of magnitude more severe in reality. Once sentiment shifts to recognise these as irrecoverable there will be a market dislocation as prices plummet to reflect this new reality. Academic research is now quantifying the expected impact of climate change on asset values, showing climate related risks of the same magnitude as those that emerged

in the Global Financial Crisis.²⁶ In fact, a wider consideration of investment strategy is required to take account of climate change, biodiversity and sustainability issues. 2020 was the year that climate change was recognised as having a potential material impact on the value of the assets of a pension fund – either in terms of physical or transition risk.²⁷ Whether considering increased storm or flood risk to physical assets or the risk of stranded assets due to the transition away from fossil fuels, Trustees will need to

26. Gianfrate, Gianfranco, Climate change finance: the big picture, EDHEC Research Insights, p7 (2020)

27. Rust, Susanna, Cheers and concerns over DWP climate amendments to pension bill, IPE (2020)

hold their managers to account for the impact of climate change on asset values as much as to any other risk driver.

The statistician George Box famously stated that “all models are wrong, but some are useful”.²⁸ Our economic models, which for 70 years have focused on GDP or national output as the prime measure of progress, must adapt to the disruptive challenges of the 21st Century. A sustainable revolution will be required to address climate change and the SDGs in an inclusive, collective, universal plan. The focus on growth has been used to justify extreme inequality of income and wealth with unprecedented environmental destruction. Going forward, as Kate Raworth puts it, “The central premise is simple: the goal of economic activity should be about meeting the core needs of all but within the means of the planet.”²⁹ She presents an alternative series of lenses and models through which to approach and engage with our economic planning. These dispense with the linear flow models which have dominated economics since WWII and instead develop models that meaningfully integrate circular economics processes encompassing the embedded and interwoven nature of both our social and economic interactions.

The pandemic has paved the way for action

The global lockdown brought on by the Covid-19 pandemic has created an interesting moment of reflection for governments and nation states worldwide. Our current economic systems were ground to a halt, and their vulnerabilities brought into stark relief. On the back of this there has

been a wave of opinion that argues that perhaps we should not want to rush back to “normal” quite so swiftly. Given the scale and scope of the bailout packages that will be required, a strong argument can be made for the idea that we should not return to normal but in fact aim to build back better whether these are comprehensive “Green New Deals” or merely small attempts to nudge and adjust lifestyle choices and decisions. The French and Dutch governments for example have agreed to bail out the merged Air France-KLM airline but it is a bailout that comes with conditions, along with cuts to dividends. The Dutch government’s €3.4 billion required

“The goal of economic activity should be about meeting the core needs of all but within the means of the planet.”

– Kate Raworth

a 20% reduction in evening flights and a 50% reduction in passenger emissions by 2030. The French government’s €7 billion required a reduction of domestic flights by 40%. Austrian Airlines will face a similar reduction in their short haul flights for their government bailout.³⁰ The Dutch city of Amsterdam has also pledged to embrace Raworth’s doughnut model as the core of its public policy making to mend its post-Covid economy.³¹ In Italy, the city of Milan has introduced an ambitious scheme to transform over 35km of streets to create experimental cycling and walking spaces in the city in an attempt to

28. George Box, British Statistician (1919-2013) from “A life in statistics” in *Significance*, the journal of the Royal Statistical Society.

29. Kate Raworth – Environmental Change Institute (ECI), University of Oxford and Cambridge Institute for Sustainability Leadership, author of “Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist” (Cornerstone, 2018)

30. <https://fortune.com/2020/06/26/airline-bailouts-climate-conditions-coronavirus/>

31. <https://www.theguardian.com/world/2020/apr/08/amsterdam-doughnut-model-mend-post-coronavirus-economy>

maintain the improvement in air quality that has been seen since the lockdown commenced in the Lombardy region where Milan is situated.³² These are far from the widespread and systemic changes that the proper application of sustainable and doughnut economics would require. However they highlight the fact that from region to region and sector to sector, small and incremental changes can be made to the roadmap to reopening post-Covid to assist in building back a better, greener normal.

To correct our course and avert the ecological, and thus economic disaster that we face, we must come to understand our economic actions in terms of equilibriums, condition intermediates or indeed “golden means” between two other states, one involving excess, and the other deficiency. In terms of deficiency, a starting definition could be the shortfall in human wellbeing versus the foundations of a just society, be that a lack of food, education or housing. Excess lies in an “overshoot of pressure on Earth’s life-giving systems” breaking the ecological ceiling resulting in the destruction of our climate. The challenge of the 21st Century will be to bring

humanity within this safe and just space of a golden mean. Again, we return to challenge the need for economic systems to be maintained by constant growth, that Raworth likened to the cuckoo in the nest.³³ The ecological degradation that we are observing is not a necessary part of human existence but is simply a product of poor industrial and economic design.

“The ecological degradation that we are observing is not a necessary part of human existence but is simply a product of poor industrial and economic design.”

Inaction is a choice, delay and indecision are acts of compromising our future for the hope of short-term financial gain. But the message is clear, the time for the private sector to stand back and wait for government or regulators to legislate for action has passed. Investing for impact is a necessary response to both climate change and fiduciary duty.

32. <https://www.theguardian.com/world/2020/apr/21/milan-seeks-to-prevent-post-crisis-return-of-traffic-pollution>

33. Raworth *ibid*



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