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ESG: measuring what we value and the need for longer term planning and global collaboration

ESG is the largest risk cluster that our generation faces! When I was asked to write an article on ESG risk, I started by re-reading an article I wrote in 2007 for the London-based Insurance Day titled “Climate Change – understanding new risks and mitigating exposures”. Fifteen years ago the “Climate Change” phrase was everywhere. Today this has morphed into more than just Climate Change – it is now Environment, Social and Governance.

In this article I take a closer look at why we cannot focus on just one of these letters without bringing the others along. I also discuss the importance of figuring out how to change what we currently do, to measure and report on what we actually value.

The genesis of ESG

My search led me to what seems to be the accepted origin of ESG - the 2005 United Nations (UN) Asset Management Working Group, Freshfields report: “A legal framework for the integration of environmental, social and governance issues into

institutional investment”. This report explored the fiduciary responsibilities of those responsible for managing other people’s investments and whether they had a duty to focus on measures beyond short-term profitability. In particular, they suggest that ethical conduct requires a focus on more than just short-term financial returns and should extend to longer term considerations, including social and environmental returns.

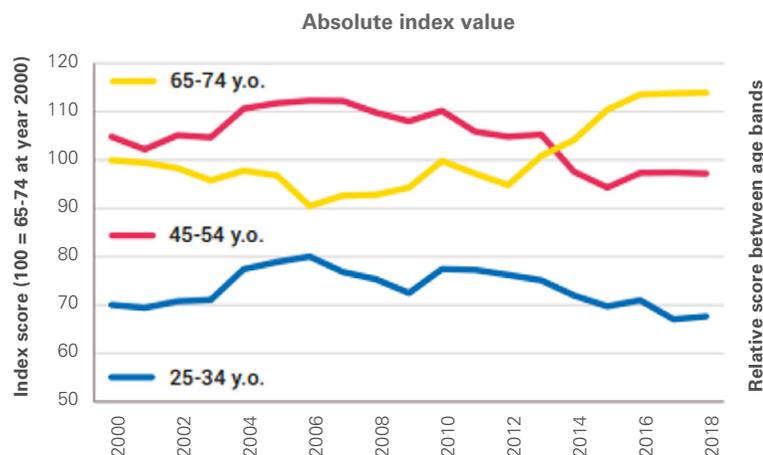
Sustainable development

Although this seems to have been the origin of the ESG acronym, the underlying considerations were already being discussed years earlier, with the UN’s Brundtland report “Our Common Future” in 1987 already defining sustainable development as: “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”.

Directly linked to this focus on intergenerational quality of life, the Australian Actuaries Institute embarked on an exercise to forecast how we are looking after our children’s futures¹.

¹ <https://www.actuaries.asn.au/microsites/australian-actuaries-intergenerational-equity-index>

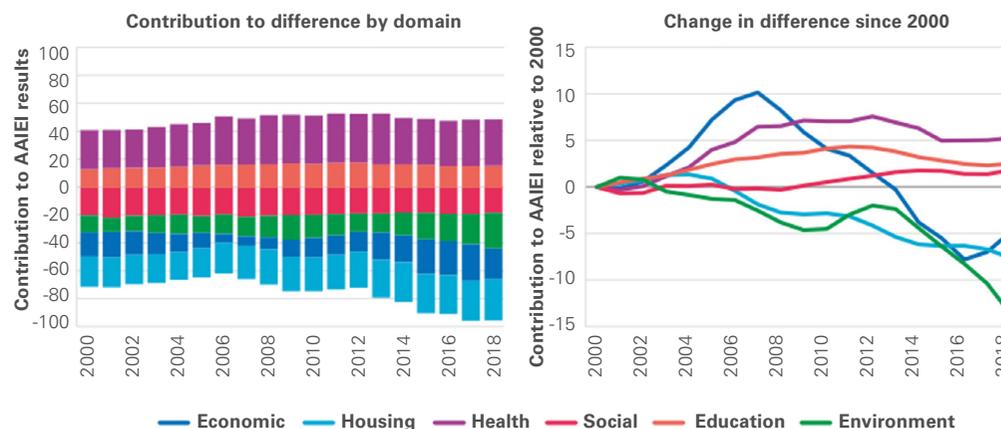
The graphs below and on the right are taken from this research “Mind the gap – The Australian Actuaries Intergenerational Equity Index”² and show that younger people have been relatively disadvantaged across a range of measures in the past few years. As quoted in the publication: “The absolute lines (left) indicate whether wealth and wellbeing are improving for particular age bands across the range of domains. The level of the lines for different age bands indicates that measures are generally better for older versus younger people. For the last calculated year, the index is 68 for the 25-34 age band, 99 for the 45-54 age band and 115 for the 65-74 age band. This compares to an average standard deviation of approximately six within each age band over the time period and, therefore, the gaps are substantial. This ordering seems natural. For example, in the economic and housing domains, older Australians have had more time to accumulate wealth and housing, which is reflected in the differences. The most notable trend in the absolute index values is the marked increase in the index for the 65-74 age band from 2012 onwards, while over the same period there was a pronounced drop in the index for the 25-34 and 45-54 age bands.”



In particular, the study emphasises the negative differentials between the younger generation and older generations associated with the economy, housing and the environment. The publication further goes on to say that “While younger Australians have significantly higher scores for health and education-related measures, we can

see large deficits for the economic, housing, social and environment domains. When focusing on change – particularly over the past five years – it is the movement of the economic, housing and environmental components of the index that causes the observed slide in relative score for 25-34 versus 65-74 age bands.”

Contribution of domains to the values and movement in AAIEI: 25-34 versus 65-74 age bands



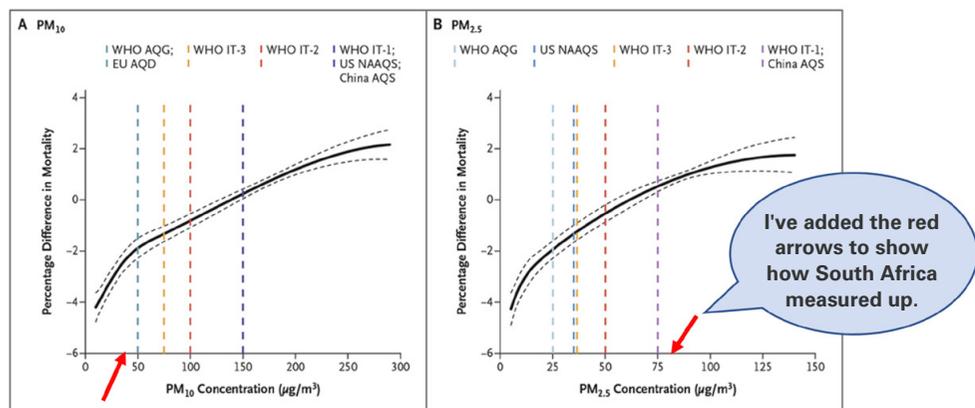
As can be seen from the above, ESG concerns have been around for decades, but we are still grappling with how to ‘solve’ this challenge. Before turning to the constraints of our current systems and the cycles that are preventing us from moving forward quickly enough, I wanted to highlight some recent research, evidencing that air pollution has a direct and measurable impact on how long people live.

Why life insurers should be interested in air pollution

I’d like to give credit to Santiago Arechaga and Melissa Leitner for drawing my attention to this example. They presented Plenary Session II: The Sustainability Actuary: for Planet People or Profit at the European Congress of Actuaries in 2022. In this session they referenced the New England Journal of Medicine: “Ambient Particulate Air Pollution and Daily Mortality in 652 Cities” which shows the change

in mortality rates linked to changes in concentrations of inhalable particulate matter. The graphs below show relative changes in mortality rates based on concentrations of larger particle pollutants in the air on the left-hand side and finer particle pollutants on the right-hand side.

The way to interpret these graphs is to consider life expectancy impacts based on where a city's pollution index measures up relative to the weighted average in the survey, which is calibrated to zero on the vertical axis. Put simply, very clean air can reduce mortality rates by around 4%, in contrast very dirty air can increase mortality rates by up to 2%.



Source: Ambient Particulate Air Pollution and Daily Mortality in 652 Cities | NEJM³

This is quite motivational - if we clean up the air we are breathing, we will live longer! I added the red arrows to show how South African cities measured up, which was significantly better than the average with respect to the larger particulate pollutants in the air (left graph) but worse than the average with respect to finer pollutants in the air (right graph). If you're interested in more detail see the full report at the source linked above.

Focusing on the opportunity that this presents to South Africa, on the left-hand side it can be seen that marginal gains to life expectancy actually increase as a city cleans up its air. So even though we are already better than the average, there is still good incentive to keep improving. On the right-hand graph, we can see that even if marginal benefits are slower at first, there are significant longer-term benefits that could be achieved if we clean up the air in our cities.

Insurers are well positioned to incentivise the kinds of behaviour that can reduce air pollutants through the use of telematics. This can be used to promote efficient driving, recommend optimised routes and reduce unnecessary idling which contributes to reduced fuel consumption. Alternatively, for example, life insurers can offer green life-wrapped investment vehicles that only invest in more sustainable investments.

We have seen how air quality impacts life insurers through longevity risk. Non-life insurers are of course more directly and immediately impacted by climate change.

Property and casualty insurers

We can look at ESG impacts on non-life insurers through many different lenses. While this article is not focusing on the broader ESG considerations for non-life insurers, I wanted to share this publicly available research providing up-to-date insights into how environmental changes are impacting society and insurers in:

- The USA and Canada: Data Update to the Actuaries Climate Index | American Academy of Actuaries⁴ and
- Australia: Australian Actuaries Climate Index⁵.

These projects monitor extreme temperatures, sea level rises and extreme rainfall, directly impacting insurers through increased bushfire, storm and flooding risk for example. This has a direct impact on insurance claims cost and brings into question whether certain regions become uninsurable all together.

We will now turn to key considerations to unlock some of the better future outcomes.

³ <https://www.nejm.org/doi/full/10.1056/NEJMoa1817364>

⁴ https://www.actuary.org/Data_Update_to_the_Actuaries_Climate_Index#:~:text=The%20Actuaries%20Climate%20Index%20is,period%20from%201961%20to%201990.

⁵ <https://www.actuaries.asn.au/Library/MediaRelease/2022/MediaReleaseAACISummer2022FINAL280422.pdf>

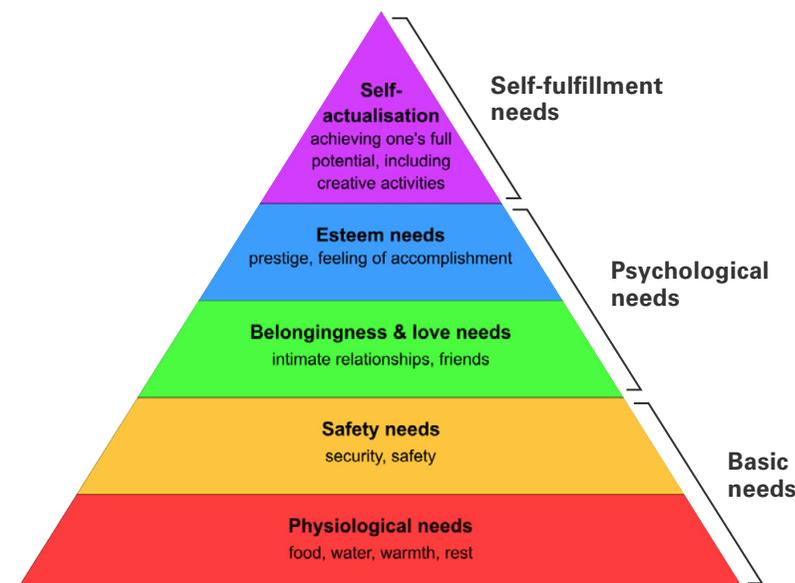
The link between Environmental and Social issues

Intuitively it makes sense to me that we cannot solve a globally interconnected problem like climate change without solving the globally interconnected problem of societal inequality. The COVID-19 pandemic showed us that local societal conditions and inequalities can very quickly spread and become a global problem. In particular, the response in Wuhan was not able to contain and eradicate the virus at source whereas under different social conditions this might very well have been achieved. Also, once the virus had gone global, different countries' ability to source and distribute vaccines had a significant impact on how the virus impacted different societies. Just like a pandemic, our sea and air are globally connected systems and it is encouraging that we are seeing acknowledgement and progress on some of these interconnected issues. For example, at the United Nations COP 26 conference held in November 2021, it was discussed that rich countries can't push production onto poor countries and then point at them for being heavy carbon emitters.

Although it is a step in the right direction if country A sets itself a goal to cut polluting emissions and stop overfishing etc, the benefits of this are quickly eroded if country B increases its emissions and poaches the fishing waters to feed itself and country A. Therefore, it is important to consider how people are faring in each of the more or less 200 countries.

According to the **Credit Suisse Global Wealth Report**⁶, "2.9 billion individuals – 55% of all adults in the world – had wealth below USD 10,000 in 2020" in aggregate owning only 1.3% of the total global wealth.

If we consider this alongside Maslow's Hierarchy of Needs, we can understand why people are unlikely to prioritise worrying about climate and damaging the environment if they do not feel safe and secure and do not have their basic needs met. This supports the view that the outcomes of Environmental and Social matters are closely inter-related.



Source: Maslow's hierarchy of needs - Wikipedia⁷

It also explains why politicians with a focus on short-term populist issues that more directly address the short-term needs of the 55% of the population with wealth below USD10,000 have been able to win the vote in democratic countries. Even if politicians do try to focus on longer term infrastructure investments to address problems like climate change, the relatively short political cycles have meant that many of these initiatives lose momentum when the opposition is voted in 3 or 4 years down the line.

Environmental and Social issues are different problems, but they are connected and it seems unlikely to me that we can solve global environmental problems without moving forward on global societal inequalities. This is important to understand and explains why in South Africa at the moment the focus is more weighted towards social matters rather than on the environment, compared to Europe for example.

⁶ <https://www.credit-suisse.com/media/assets/corporate/docs/about-us/research/publications/global-wealth-report-2021-en.pdf>

⁷ https://en.wikipedia.org/wiki/Maslow%27s_hierarchy_of_needs

What we measure - why time horizon is important

For more or less the last century, company reports and global success has focused on annual revenue and profitability growth. Corporate leadership incentives have tended to focus on short-term results with the last year's revenue growth often a key driver of bonuses.

Does it make sense for a CEO to make a substantial investment that is going to reduce her or his remuneration in the three years before retirement, even though it will significantly increase the profitability of the company in 10 years' time? With remuneration packages structured to incentivise individuals to focus on the short-term, can we expect those nearing retirement today to make decisions to reduce their short-term payoff to improve the lives of people in 20, 30, 40 years' time?

The focus on profitability through the time value of money discounts away the value we place on our great grandchildren's voices. This is contrary to the common definition of sustainable development that "meets the needs of the present without compromising the ability of future generations to meet their own needs".

Similarly, our short-term political cycles of three, four or five years disincentivise politicians to make longer term investments in infrastructure or education that will have an opportunity cost in the short-term of not being able to win political favour linked to other more populist spending measures. In many cases those leaders with stronger morals and ethics who do what they know is right, making the long-term investment decisions, lose popularity because of the short-term hardships that result and end up getting voted out, only for the opposition to take the credit for the fruits of the long-term investments once they get voted into power on a populist ticket.

Global political cycles and the annual focus on corporate year-on-year revenue growth needs to be revisited for us to tackle longer term challenges such as environmental degradation and societal inequalities. Throughout history, great political and corporate leaders have bent potential future outcomes towards their vision by having a clarity of focus through the short-term ups and downs. Think Nelson Mandela, Bill Gates, Steve Jobs or Elon Musk. Together with strong leadership, maybe artificially intelligent machines can help us come up with better performance metrics to create incentives for business and political leaders to focus on the long term?

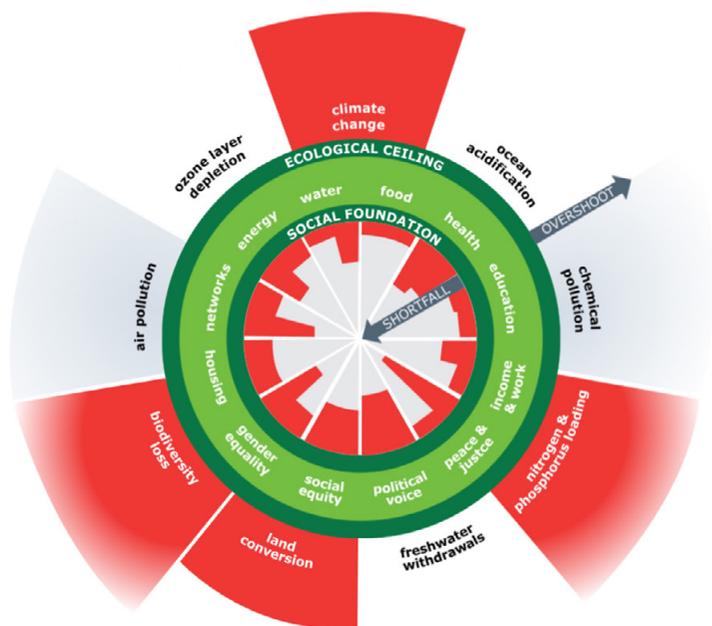
Coming up with new measures and reporting on what we actually value

So, moving forward on ESG is really about us getting clarity on and redefining what we value and then creating new ways to measure what we actually value.

This point was brought home to me by Kate Raworth in her book "Doughnut Economics". If you haven't got time to read her book you can listen to her TED talk. She explains how the well-known Gross Domestic Product or GDP measure was invented in the 1930s to help the world move forward from the Great Depression. However, it has continued to dominate policy and strategy ever since and we have never paused to ask whether we are still measuring the right thing. This addiction to growth has resulted in relentless pressure on listed companies to find new ways to grow profits year-on-year without asking the question of whether that is actually in the long-term interests of the investors or society more generally.

Growth in GDP, as we have measured it to date, certainly served a purpose when it was introduced and has improved the quality of life of many. Now we need to revisit the one-tracked focus on this old-style GDP growth, which is resulting in environmental destruction and worsening societal inequalities.

We need to adapt our measures to incorporate the market externalities that we would like to see managed better. Kate Raworth challenges us to figure out how to get our governance right and come up with new measures that we report on as rigorously as we have focused on GDP and revenue growth (the governance or G in ESG). She argues that we need to harness growth within the constraints of not damaging our environment and at the same time figure out how to improve society more holistically, i.e. focus on growth within the green doughnut pictured on the next page. If we grow beyond the doughnut, it is negatively impacting the environment and if we grow within the doughnut we are magnifying societal shortcomings, both limiting future generations' quality of life.



Source: The Doughnut of social and planetary boundaries Doughnut | Kate Raworth⁸

What to do with all of the data out there

Defining what we value and figuring out how to measure it is the crux of what ESG is all about. However, because ESG is a relatively new field, many organisations face similar challenges when it comes to identifying and capturing ESG-related data in a way that is consistent and meaningful. Some clients report to having data from over 400+ rating agencies and are not certain as to how they will make sense of their wildly disparate scoring systems. As software and technology develops in this area, it is anticipated that we will begin to have more structured and clearer methodologies around ESG data capture. Organisations will also need to better understand their own risk profiles and materiality, and feed these into their data-capture frameworks. Technology, like low-code platform, natural language processing, artificial intelligence,

as well as data warehousing and analytics tools are making this easier for organisations and can importantly provide real time data – key in a world where things are rapidly changing. Whilst we are still getting our heads around ESG data collection, in the near future we should be able to use ESG data like we use credit ratings.

Is the ESG risk cluster going to be a human disruptor?

The Kodak story has become a case study on how a successful company can be blindsided and disrupted. Kodak was founded in 1892 and for most of the 20th century it was a leading global brand in photographic film. However, the company failed to adapt to the introduction of digital photography in the late 1990s and early 21st century and in January 2012 filed for bankruptcy. After some serious restructuring they have re-emerged, but it has been a difficult journey for the company⁹. Disruption has become a buzz word in the last decade due to rapid technological advances creating existential threats to incumbent organisations that not long before seemed so well entrenched and untouchable.

In Bill Gates' book the "Road Ahead" he shares an insight that probably best explains why organisations get disrupted. To paraphrase, when something new comes along we always overestimate the change that will occur in the short-term and underestimate the change that will occur in the longer term. This cognitive dissonance that arises from thinking too linearly in an exponential world is well captured by this poem that popped up on my social media feed:

Not yet
 Not yet
 Not yet
 Not yet
 Not yet
 EAT ME NOW
 Too late.
 - Avocados

⁸ <https://www.kateraworth.com/doughnut/>

⁹ [Kodak - Wikipedia https://en.wikipedia.org/wiki/Kodak](https://en.wikipedia.org/wiki/Kodak)

I've heard it said we are the first generation to be broadly aware of the risks associated with pollution and environmental degradation and the last to be able to do anything about it. In avocado terms the time to eat is now!

What does this mean for insurers?

Insurers are well positioned to lead the change. Various tools exist in the insurance process to incentivise good behaviour such as pricing and underwriting requirements. These can be used to encourage sustainable behaviours. Insurers also manage significant amounts of retirement funds and policyholder assets, which are invested with long term goals in mind. Through aligning these investment portfolios with ESG outcomes, insurers can help make the long-term decisions that others tend to shy away from.

The global challenges posed by ESG seem immense, but Elon Musk summed it up best when he said that he thought he would fail but that some things are important enough to try even if the expected outcome is failure.

We need to figure out how to reconsider the time horizons and measures we focus on. This is not going to be easy to do and we need global leadership and collaboration from those at the top of the wealth pyramid to drive this forward.

We do know that we have a very short window of time to limit our emissions, to avoid a climate catastrophe. Like the avocados, we have reached a tipping point and how we respond in the next decade or so is going to define what humanity's future looks like. Thankfully regulators are getting involved - we need regulatory intervention. We also need tech enabled machine learning and/or artificial intelligence (AI) systems to help us with ESG issues.

We tend to be biased toward managing what we can measure. Quoting Jennifer Shulman, KPMG global lead partner, ESG advisory "I loved the notion of changing the definition of value. One that's not just driven by profit or GDP but...quality of life, quality of the planet we live on and interrelationships with other people". To me that is what ESG is all about.

