CIO Vantage Point

ESG Investing

A wake up call for humanity

The pandemic had brought out the good in pursuing environmental sustainability, the bad of not tackling social issues, and the ugly in companies without good corporate governance structures.

Intangibles becoming reality

ESG investing provides a framework to count the intangible costs of generating growth – costs that may not always surface in accounting entries as dollars and cents.

From fringe to mainstream

Exploring the various environmental, social, and governance trends, and their investment implications reveals why ESG investing matters more now than ever before.

Doing well by doing good

The outperformance of companies with higher ESG scores warrants that investors look at ESG as an investment style, in addition to being a force for good.

INTRODUCTION

ESG

Dear valued clients,

Once a perspective thought to come at the expense of returns, ESG investing – the practice of seeking investments that generate returns while maintaining responsibility towards Environmental, Social, and corporate Governance factors – has grown to join the cores of mainstream investment principles.

According to Bloomberg, global ESG assets are on track to exceed USD53t by 2025, representing more than a third of the world's total projected assets under management. Accelerated by the pandemic and green recovery in the US, EU, and China, ESG investing endeavours to quantify costs previously ignored by a world that had been blindsided solely by top-line growth.

Contrary to common belief, sustainable investing does not equate to compromising shareholder returns and the accumulation of financial capital. ESG as an investment style has built on returns by guiding investors in decision making; for instance, buying ESG-focused exchange-traded funds that track indices has shown to yield returns comparable to their benchmarks.

We are also welcoming the intergenerational transfer of wealth to sustainability-conscious millennial investors. A FactSet study found that 90% of high-networth Millennials surveyed want to increase their allocations to responsible investments. Truly, there is no better time to incorporate an ESG lens into our investment strategies.

In this fourth edition of CIO Vantage Point where we highlight transformational themes, we explore the various economic, social, and governance trends in our world today, and how they will shape the investment landscape in time to come.

I hope you enjoy the read.

Hou Wey Fook, CFA
Chief Investment Officer

the evolving landscape of sustainable investing

Source: Unsplash

ESG Investing
Snapshot

Introduction

Global growth has progressed in leaps and bounds since the first Industrial Revolution in the 1760s, but this was not without a price. Costs came in the form of environmental degradation, increasing ideological fractures in society, and more frequent instances of disreputable corporate behaviour. With an ever-growing focus on growth being sustainable, ESG investing endeavours to give a framework to count such costs that may not always surface in accounting entries as dollars and cents. The surprising twist is that this does not detract from investment returns, but rather, augments it with a new lens for assessing investment risk. In this report, we unpack the reasons why ESG investing matters now more than ever before.

The clock is ticking

The urgency to curb emissions begets rising scrutiny of environmentally unsustainable business practices, to prevent irreversible climate damage.

Big (green) government

Governments are coordinated in their pursuit of sustainable growth and are likely to incentivise industries with climate friendly operations, while penalising those that do not.

Resilience of renewables

The renewable energy supply chain continues to enjoy tailwinds from rapid capacity expansion and regulatory protection. Demand only rose throughout the pandemic.

Generational ideology shift

Shifting voter demographics usher an ideological shift that may precipitate more climate-friendly and redistributionist policies, which have large implications for financial assets.

Blindsided by Social risk

Social risks will increasingly feature as a factor for financial performance due to increased cultural sensitivities and mechanisms for virality – risks that are inapparent.

The need for Governance

Governance risks are asymmetric to the downside; occasionally the investor can see large losses at the revelation of corporate lapses – a risk that investors are increasingly intolerant of.

The time is now.

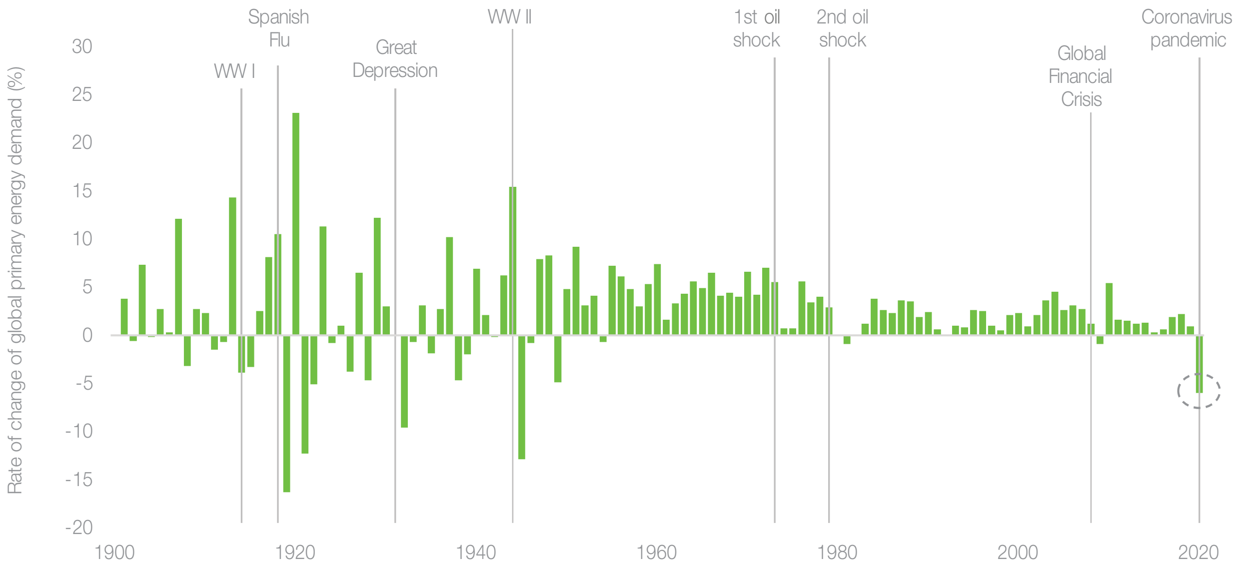
Daryl Ho, CFA
Strategist

A much needed wake up call for humanity. It may have taken a once-in-a-generation pandemic to do the job, but the investment landscape will never return to the unsustainable ways of its pre-pandemic past again. In that one momentous year, ESG investing – the practice of seeking investments that generate positive returns while maintaining responsibility towards Environmental, Social, and corporate Governance factors – made its final irreversible transition from a once fringe ideology of "tree hugging" zealots to the very cores of mainstream investment psyche.

Intangibles becoming reality. It is not difficult to imagine why; the pandemic has brought out the good in pursuing an environmentally sustainable future, the bad of prolonged inaction in tackling social issues, and the ugly in companies lacking in corporate governance structures – giving humanity a foretaste of how each aspect of the E, S, and G trichotomy impacts lives; consequences that were previously ignored by a world that had been blindsided by growth.

- *Environmentally*, the curtailment of travel and other forms of energy demand had drastically reduced carbon emissions, if only for a short period of time; yet in certain localities it was sufficient to turn the skies from a smoggy grey hue to a fresh clear blue.
- The *social* impact of the pandemic was also clearly amplified in the unequal outcomes between the "haves" and "have nots"; the former having far better security in employment,

A fall in energy demand not since World War II



Source: IEA, Change in global primary energy demand, 1900 to 2020e, IEA, Paris https://www.iea.org/data-and-statistics/charts/change-in-global-primary-energy-demand-1900-to-2020e, DBS health care, food, shelter, etc. than the latter throughout the crisis.

- *Governance* issues also came to the fore, as the sudden downturn in global growth made it difficult for wayward companies to conceal a multitude of disreputable behaviour, leading to several instances of high profile collapses (Wirecard (WDI GR), Luckin Coffee (LKNCY US)).

The world took a hard look at the "growth at all cost" approach to business and collectively realised that perhaps, the costs were not so trivial after all.

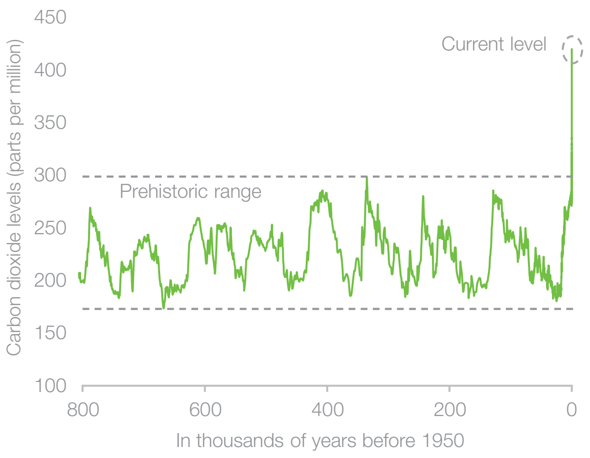
Even so, growth was still a gift to humanity. This is certainly not to say that the pursuit of growth be marginalised henceforth. Since the Industrial Revolution in 1760, accelerated global growth has resulted in progress by leaps and bounds of global life expectancy, standards of health and living, reduction in extreme poverty, and lower child mortality rates, just to name a few. What ESG investing endeavours to accomplish is not to obstruct growth, but to give a framework to count the costs in generating all that growth – costs that may not always surface in accounting entries as dollars and cents.

More alpha than altruism. Nonetheless, this is more than just being about righting the wrongs on our planet. We believe that paying attention to the "intangibles" of ESG would equip the investor with new eyes to keenly navigate the evolving landscape of sustainable investing, no doubt augmenting the "dollars and cents" of investment returns in the process. We explore the (a) various economic, social, and governance trends shaping our world today and (b) their associated investment implications to unpack the reasons why ESG investing matters now more than ever before.

Environmental factors – The clock is ticking

Earth's climate bore the brunt of unsustainable growth. In no other area has growth had such a disproportionately detrimental impact than it has had on the Earth's climate. While correlation does not necessitate causation, the acceleration of economic growth in the industrial age was mirrored only by the dramatic increase in carbon in the earth's atmosphere – it is not a stretch to believe that growth and emissions came as one double-edged sword. Put in perspective, the levels of carbon dioxide in the atmosphere today are unprecedented in the last 800,000 years.

Our climate's future is all up in the air



Source: World Data Center for Paleoclimatology, Boulder and NOAA Paleoclimatology Program. Retrieved from https://www.ncdc.noaa.gov/paleo-search/study/17975 on 10 June 2021, DBS

This generation's burden to carry. This sharp breakout of carbon dioxide levels above its prehistoric range had only occurred in the last 100 years, a sliver of time in earth's long history. As such, the burden to prevent irreversible damage

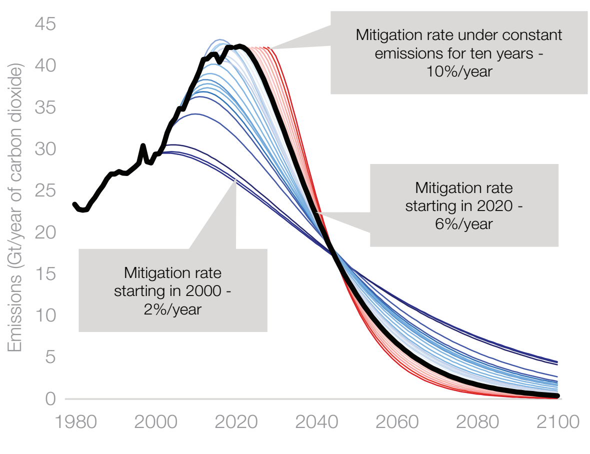

heal
investing
to
heal the
world

Source: Unsplash

to the climate is undeniably upon the shoulders of this present generation – the same generation that benefitted from one of the most significant eras of rapid multidisciplinary advancement in mankind's history.

The work is plenty, the time is not. The United Nations Climate Change group posits that keeping the rise in global average temperatures below 2°C above pre-industrial levels would substantially mitigate the ramifications of climate change – biodiversity loss, increased frequency of natural disasters, food and water shortages, etc. Based on the estimated remaining emission quotas consistent with that temperature limit, starting mitigation in 2020 would still require aggressive annual reductions of c.6% per year – delayed action only means that more drastic cuts are required further down the road to avoid the dreaded point of no return.

Inaction begets more drastic action



Note: The range of carbon dioxide mitigation curves to have a >66% chance of keeping global average temperature rise below 2°C. Scenarios measure future global annual emissions necessary based on a given start year for emissions mitigation
Source: Robbie Andrews, CICERO, based on data from the Global Carbon Project. Data obtained from https://folk.universitetetioslo.no/roberan/t/global_mitigation_curves.shtml on 10 June 2021, DBS

Key investment implication(s):

- *Swiftly rising scrutiny and intolerance of environmentally unsustainable business practices to prevent irreversible climate damage.*

Environmental factors – Big (green) government

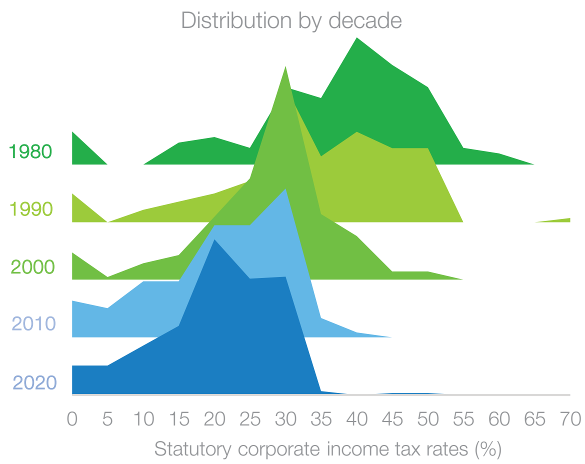
Urgent need for coordinated government action. Given the urgency and unpredictability of how much time the world has left to act on climate change, it is becoming increasingly likely that world leaders would take more assertive action on the issue. Most immediately, the election of Joe Biden as a US president who champions a "Clean Energy Revolution" precipitates more legislative changes to achieve net zero emissions by 2050. More than just saving the Earth, however, addressing climate change may be a win-win proposition for governments, providing the cover necessary to also address another bubbling crisis in the making – record levels of global indebtedness. We outline the reasons how:

a. **Climate investments provide new sources for growth.** Without new growth, a world awash in debt is just a crisis waiting to happen. Yet growth and emissions come hand-in-hand as previously highlighted. The world therefore needs to find a way to create and promote sustainable growth to balance the need for both managing debt loads and protecting the planet – something that investment in climate-friendly infrastructure solves in one stroke.

With public debt levels already high, governments would likely pursue a combination of (i) incentivising the private sector in making climate-friendly investments and innovation in green technology, and (ii) targeted financing of public green infrastructure, as presently low costs of borrowing sets a more modest hurdle rate for long-term positive returns on such investments. By extrapolation, we believe governments would also be motivated to keep borrowing costs for such investments persistently low to ensure their success, to the extent of providing "green" QE if necessary, to support the financing of these projects.

b. **Carbon taxation for incremental revenues.** The imposition of a carbon tax essentially shifts the bearer of the costs of burning carbon. Where this was once borne by those who suffer from the effects of health and environmental damages, the tax assigns the true monetary cost to companies and consumers who were responsible for such negative externalities in the first place. To emphasise the gravity of the situation, the UN recommends a punitive tax rate between USD135 to a staggering USD5,500 per tonne of carbon dioxide emissions.

Corporate tax needs a substitute



Source: taxfoundation.org, DBS

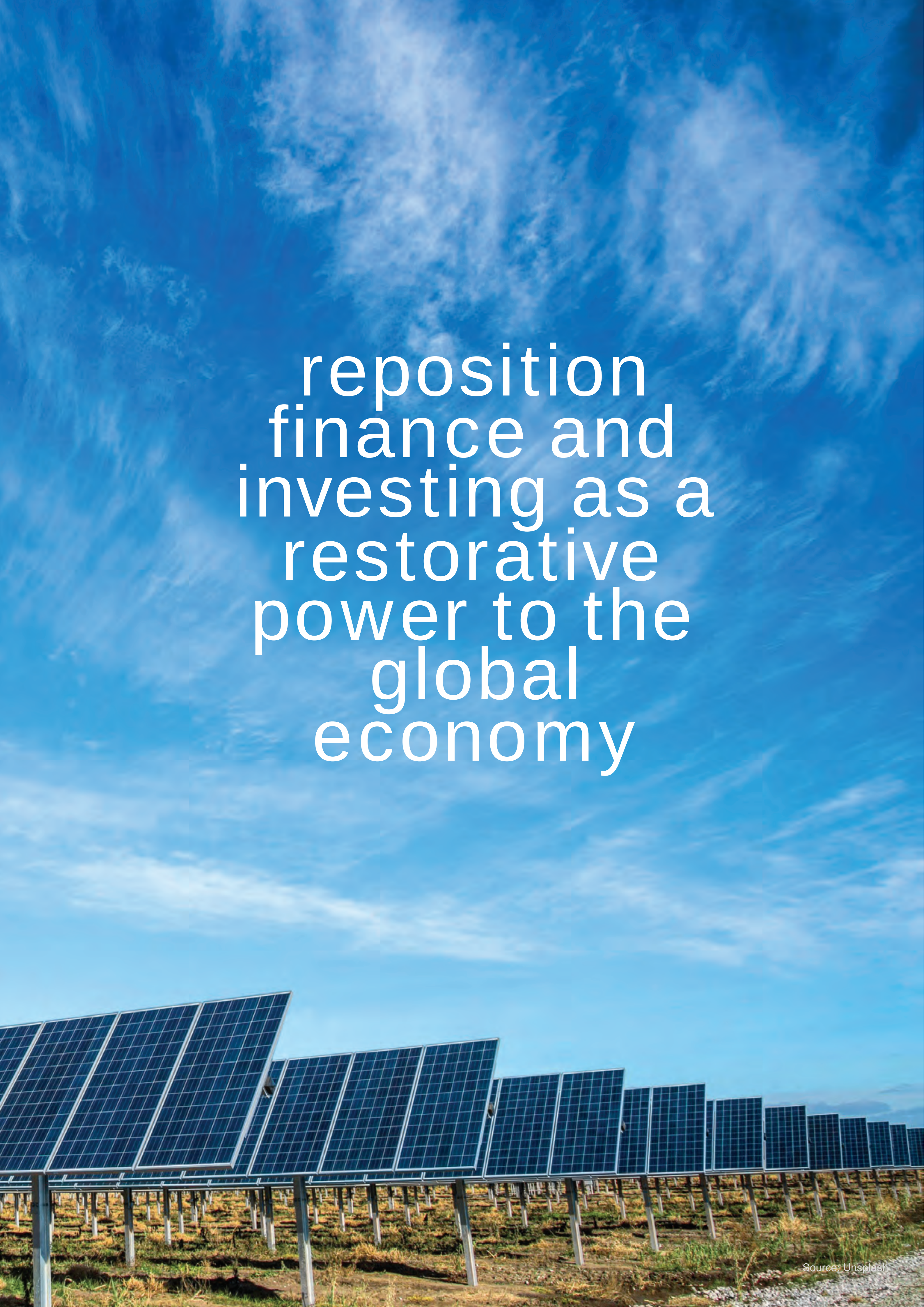
That said, the levies need not even come close to such levels to repair government finances – a situation no doubt worsened by lost revenues from steadily declining corporate tax rates over the recent decades. The US Congressional Budget Office (CBO) estimates that a tax starting at just USD25 per metric tonne, increasing at a real rate of 5% a year, would raise more than USD1t of additional revenues by 2030. Seeing as this is a means by which governments can kill the two "birds" of unsustainable practices and rising indebtedness with one stone, we believe it is no longer a matter of "if", but "when" companies will experience the impact of such taxes on their bottom line.

Key investment implication(s):

- *Industries and sectors with climate-friendly operations are more likely to receive government support/tax subsidies.*
- *The reverse is true; those that do not will likely incur fines, penalties, taxes, and enforcement actions that restrain future profitability.*

Environmental factors – Renewables' resilience

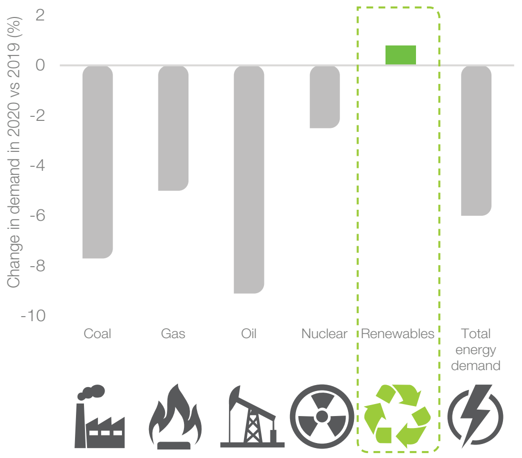
Every cloud has a silver lining. Notwithstanding the severe upheaval brought about by the pandemic, the year of 2020 was a big win for renewable energy. According to the International Energy Agency (IEA), renewable capacity additions in that year alone rose by 45% to c.280 gigawatts, an amount equivalent to the total installed capacity of the ASEAN economies. Notably, this was also the largest increase since 1999, and it accounted for 90% of the entire global power sector's expansion for the year.



Source: Unsplash

Positive supply-demand dynamics. Not only was it a significant year for capacity supply growth, the demand picture also kept pace despite a historic decline in other forms of energy needs around the globe. In most cases, renewables received priority in the power grid and were not made to adjust their output to match demand, insulating them from the impact of the downturn. To that extent, renewables were the only energy source for which demand increased in 2020, while consumption of all other sources had declined.

Renewable energy demand was pandemic-immune



Source: IEA, Projected change in primary energy demand by fuel in 2020 relative to 2019, IEA, Paris retrieved from https://www.iea.org/data-and-statistics/charts/projected-change-in-primary-energy-demand-by-fuel-in-2020-relative-to-2019 on 10 June 2021, DBS

Key investment implication(s):

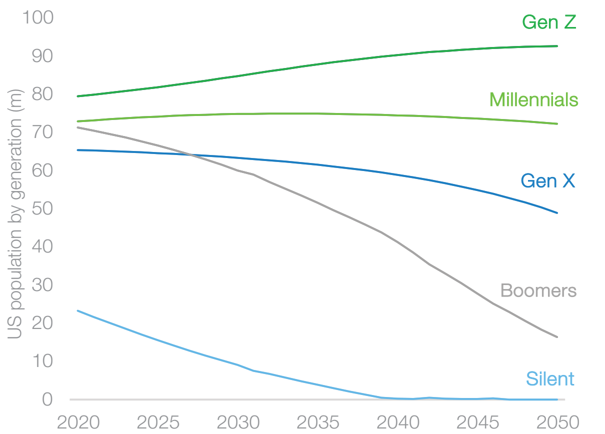
- *The renewable energy supply chain enjoys tailwinds from rapid capacity expansion and regulatory protection.*

Social factors – Generational ideology shift

The young pay the price. Regarding the above repercussions of climate change and debt, there is perhaps no other generation with more skin in the game than the young people of today, who would likely be alive in 50 years' time to face the consequences of our indifference. Not only would they inherit a world fraught with environmental fragility, they would need to suffer the consequences of greater corrective action to repair said damages. Perhaps worst of all, access to financing needed to fight future battles would be limited by high debt burdens, debt that they played no part in giving rise to in the first place.

Demography is destiny. Persistent negligence in matters of climate and debt only raises the odds of political upheaval, where future partisan leadership would be elected based on strong redistributionist and climate policies. Should this wave of political disruption become a globe-wide phenomenon, investors can expect abrupt yet seismic turbulence in financial assets, housing markets, climate policies, tax systems, and a host of other areas. This scenario would likely rear its head in the latter half of this decade, when Gen Z and Millennial voters eventually outnumber their older counterparts in the US.

New demographic order

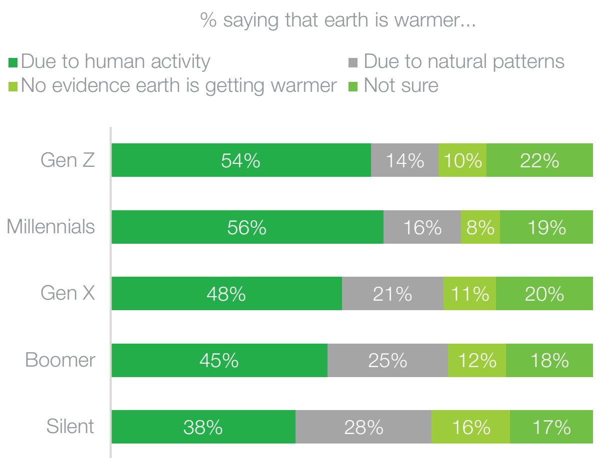


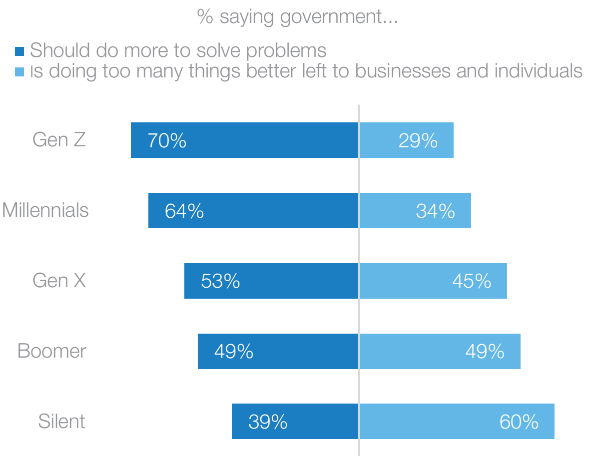
Note: Generational segregation by age bands in 2019 - Gen Z: Aged 4-22, Millennials: Aged 23-38, Gen X: Aged 39-54, Boomers: Aged 55-73, Silent generation: Aged 74+
Source: US Census Bureau, DBS.

Letting young voices be heard. It is therefore imperative that policymakers have ears on the ground to proactively redress the concerns of the young now, before the seeds of populism take deep roots in society. As it stands, the next generation is more inclined to attribute climate change to human activity, and concurrently expects government responsibility in solving problems, based on surveys by the Pew Research Center.

In this regard, we believe that (a) climate policies encouraging carbon taxation, green infrastructure, electric vehicle (EV) adoption, and (b) redistributionist policies related to higher wealth taxes, estate duties, and social welfare may surface much sooner than most expect them to.

What the next generation thinks





Note: Share of respondents who did not offer an answer not shown.
Source: Pew Research Center, On the Cusp of Adulthood and Facing an Uncertain Future: What We Know About Generation Z So Far, DBS

Source: Unsplash

Key investment implication(s):

- *Climate-related policies may come sooner than anticipated due to shifting voter demographics.*
- *Higher taxes on the wealthy and other redistributionist policies would become popular opinion within the decade.*

Social factors – Character-building for companies

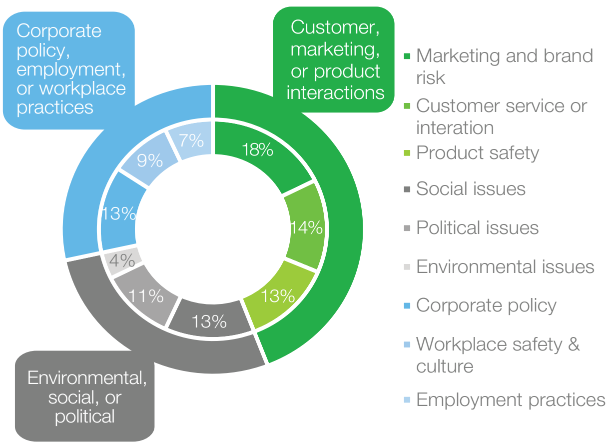
Blindsided by social risks. As important as they are, environmental and political topics are but the tip of the iceberg when it comes to the breadth of social issues that concern the next generation. It gives no additional comfort that missteps in dealing with any one of these social factors can lead to sudden but significant loss of a company's reputation, which in turn hurts financial performance. Yet the opposite is also true; there are several instances where paying attention to social issues gained tremendous value for companies in terms of social goodwill. Airbnb famously aired its #weaccept campaign voicing multiracial and multireligious acceptance of its users – just days after US President Donald Trump signed an order to temporarily close America's borders to refugees in 2018 – solidifying the company's intolerance for discrimination in the eyes of their customers.

In that regard, the management of a company's social capital – or social risk – is a risk that has increasingly come to dominate the mindshare of executives as companies' interface with markets that are ingrained with an evolving value system. Several underlying trends have been responsible for the intensification of such risks in recent years:

1. **Proliferation of social media:** Encourages the virality of both exemplary and unbecoming company practices.
2. **Birth of "woke" culture:** Heightened cultural sensitivities to social and justice issues.
3. **Purpose-driven companies:** A growing sense that corporate actions should maximise not just shareholder, but stakeholder (employees, customers, broader society) value as well.

Social risks come in all shapes and sizes. To illustrate how inapparent social risk can be, Marketing Scenario Analytica (MSA) – a company that advises on social risks – collected a data sample of 222 social risk events in the month of August 2019 (a month chosen at random to reflect a general level of social risk events). In that brief period, it registered a myriad

A myriad of social risks



Source: Larcker, David F. and Tayan, Brian, Blindsided by Social Risk: How Do Companies Survive a Storm of Their Own Making? (July 21, 2020). Rock Center for Corporate Governance at Stanford University Closer Look Series: Topics, Issues and Controversies in Corporate Governance No. CGRP-85, Available at SSRN: https://ssrn.com/abstract=3655261, DBS of issues spanning (a) customer, market, or product interactions, (b) environmental, social, or political issues, and (c) corporate policy, employment, or workplace practices.

Covering blind spots. It is therefore vital that investors adopt means to measure how companies fare in terms of social risk exposure – to protect against risks that can so easily fly under the radar. Avenues by which social risk can quickly translate into financial risk include (i) wholesale boycotts of a company's products or services, (ii) expedient firing of company executives, which then incur expensive rehiring and transitioning costs, (iii) punitive regulatory fines for social violations, and (iv) costly product recalls or rebranding exercises to repair goodwill.

American chocolate maker Milton S. Hershey once said that "business is a matter of human service". Businesses must therefore not forget that it is human trust and values that grant the license for any company to remain in operation for the long run. Unfortunately, such social capital takes years to build, but only seconds to break. Investors consequently need to give social risk the attention it deserves.

Key investment implication(s):

- *Social risks to increasingly feature as a factor for financial performance due to increased cultural sensitivities and mechanisms for virality.*
- *Such risks are inapparent, and investors require more deliberate measures to identify social risk exposure.*

Governance factors – What lies beneath

Complacency kills. The anecdote was once told of a man who fell off a skyscraper. On his way down past each floor, he could be heard repeatedly reassuring himself, saying, "so far so good!" While this story is told in jest, it describes rather closely the complacency that dominates the investment landscape when it comes to corporate governance waivers. Most investors are lulled into a false sense of security by modest incremental gains from prices and dividends (so far so good), ignoring the asymmetry of governance risks that may see principal investment amounts drop to nothing at the sudden revelation of internal lapses. Several high profile controversies in the last decade include:

1. **BP's (BP LN) Deepwater Horizon oil spill of 2010:** Despite a history of accidents in the 2000s, the company still lacked a system of internal governance to ensure adequate protection for their employees and the environment. This culminated in the fire and explosion of the Deepwater Horizon rig in 2010, killing 11 workers and setting off one of the worst oil spills in US history. The company took charges of c.USD41b related to the accident, which resulted in asset disposals, dividend suspensions, and significant board changes.

2. **Volkswagen (VW) (VOW GR) emissions scandal of 2015:** The US Environmental Protection Agency (EPA) discovered that VW had cheated emissions tests using "defeat devices" which contained software that would detect laboratory testing environments and automatically reduce emissions. Investigations revealed governance lapses that permeated even the upper echelons of management.


Source: Unsplash

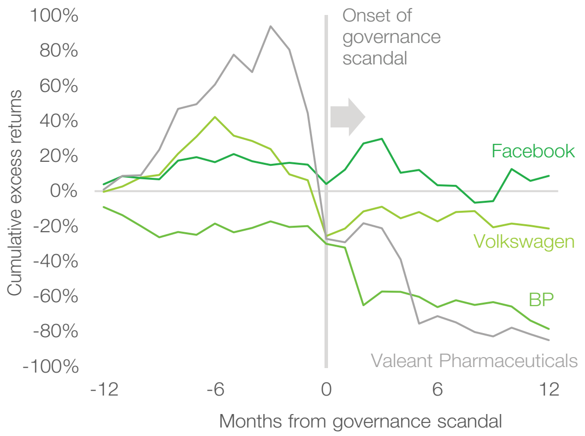
earth’s
climate bore
the brunt of
unsustainable
growth

3. **Valeant Pharmaceuticals (VRX GR) (now Bausch Health (BHC US)) scandal of 2015:** Investigations revealed a strategy of acquiring other small pharmaceutical companies and raising prices of their drugs instead of investing in organic R&D. Valeant had also controlled a chain of pharmacies called Philidor , which it used to inflate the size of its order book and book higher profits.

4. **Facebook 's (FB US) data privacy lapses of 2018:** Headlines revealed lapses that allowed the harvesting of data from millions of Facebook users without their explicit consent . The data was allegedly used by Cambridge Analytica to craft targeted ads to sway the outcome of the Brexit referendum and US presidential elections of 2016 . CEO Mark Zuckerberg was eventually called to answer to the US Congress concerning the lapses that led to such breaches in personal privacy.

Avoid picking pennies in front of a steamroller. Companies lacking a good governance framework would often have returns in line with the market prior to scandal emergence, but upon occurrence, it can take up to several years to fully recover from the losses incurred. In that sense, paying attention to governance factors is akin to buying insurance. It requires the regular investment of additional time and effort to analyse the effectiveness of governance frameworks, but occasionally the investor sees large payoffs in terms of loss avoidance in a crisis.

Governance risks are asymmetric to the downside



Source: Bloomberg, DBS

Key investment implication(s):

- *Governance risks are asymmetric to the downside; occasionally the investor can see large losses at the revelation of corporate lapses.*
- *Analysing governance factors is an additional dimension to improve the risk-return profile of an investment portfolio.*

Source: Unsplash

E.S.G.

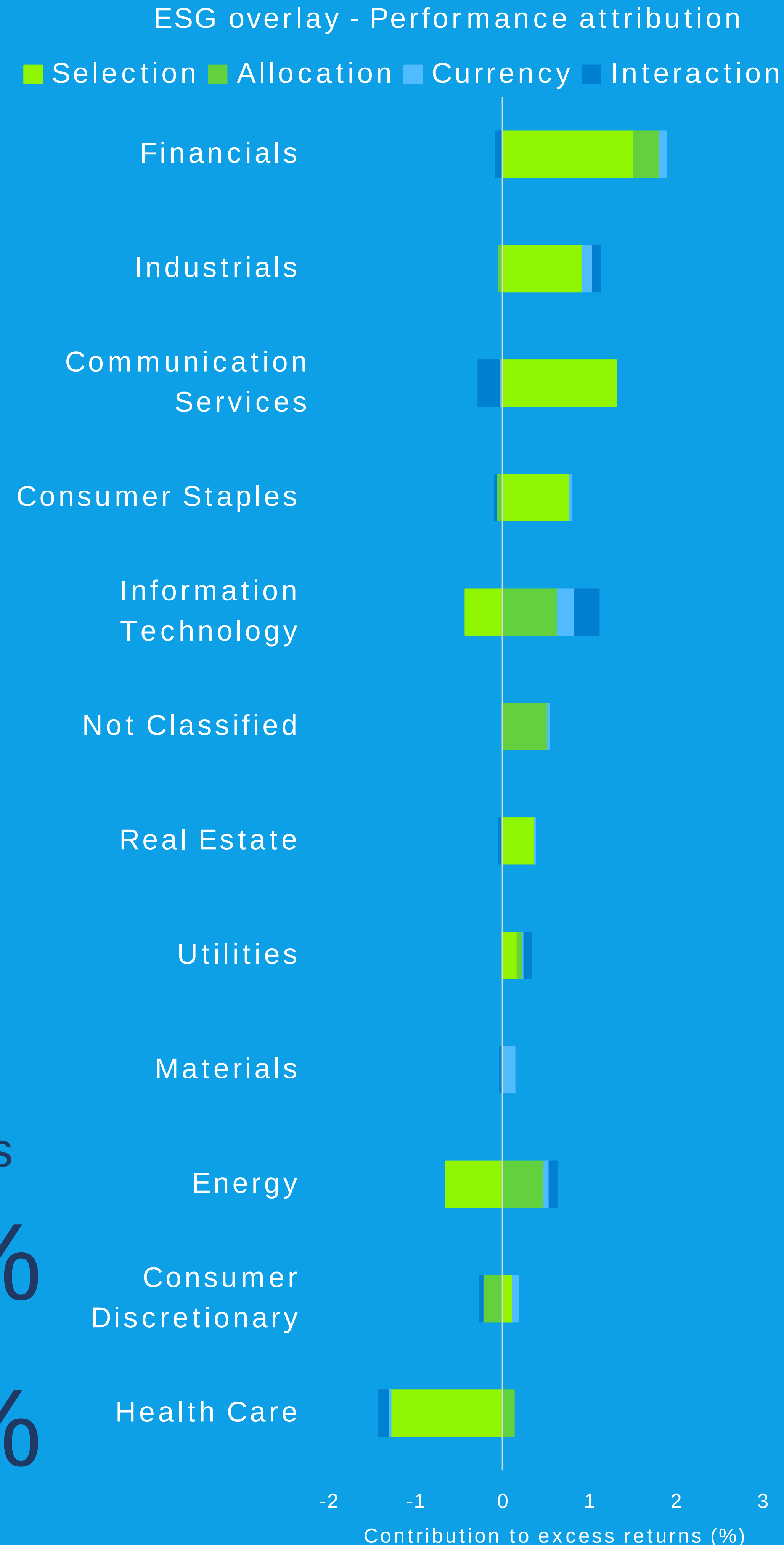
the time is now.

Levels of CO_2 in the atmosphere today are unprecedented in the last 800,000 years

Generational Ideology Shift

	Gen Z	Boomers
% saying that earth is warmer because of human activity	54%	45%
% saying government should do more to solve problems	70%	49%

ESG for Alpha Generation



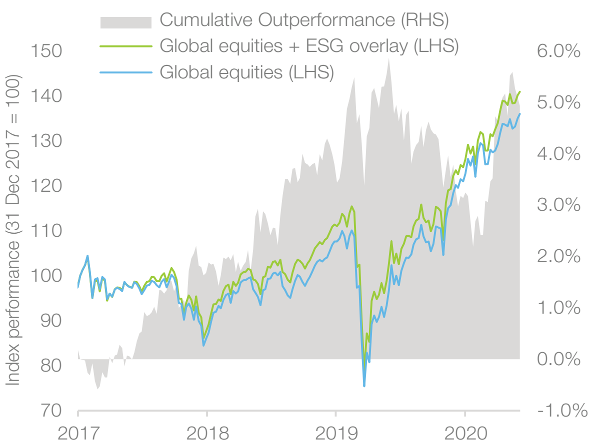
ESG Investing – Performance attribution

There is a false dilemma in choosing between sustainable investing and higher returns. As each factor in the ESG framework is well supported by transformational macro trends with respective investment implications, it is only natural to then observe if an ESG overlay had indeed contributed to excess returns for the average investor. We compare the performance between the (a) Global equities index and the (b) Global equities index (with ESG overlay); the ESG overlay having a 50% sector representation but with companies that have the highest ESG ratings in each sector of the parent index. As things stand, using an ESG overlay had distinctly generated additional alpha, with the latter accumulating a sizeable outperformance against the former since 2017.

Looking closer under the hood. Conducting an attribution analysis of the relative performance between the two indices over the same period reveals several interesting insights. The ESG overlay had allowed greater success in security selection across the Financials, Industrials, Communication Services, and Consumer Staples sectors, substantiating the fact that companies with higher ESG scores may have also had a penchant for outperformance or loss avoidance. The ESG overlay had also been successful in sector allocation, being Overweight in outperforming sectors such as Information Technology while simultaneously Underweight in underperforming sectors such as Energy.

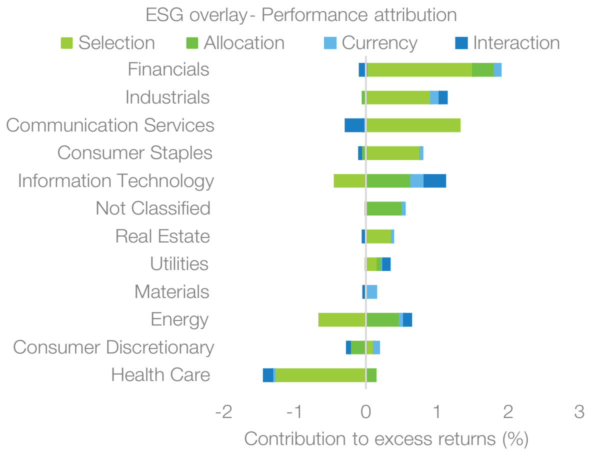
One shortcoming, however, is that the ESG overlay had underperformed in terms of security selection in the Health Care sector, suggesting that a deeper analysis of other trends and niche factors are required to pick winners in this area.

Doing well by doing good



Source: Bloomberg, DBS

ESG overlay for alpha generation

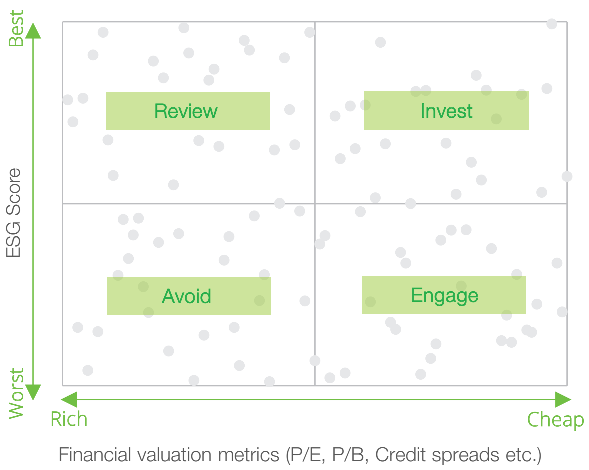


Source: Bloomberg, DBS

ESG Investing – Conclusion

ESG integration in investment decisions. The structural nature of the above macro trends and decent track record of outperformance warrants that investors look at ESG as an investment style, in addition to being a force for good. A good start would be to simplify investments into four quadrants to facilitate decision-making, quadrants split by (a) how well a company scores on ESG metrics, and (b) how the same companies fair in terms of traditional financial valuation metrics.

ESG investing decision quadrants



Source: DBS

The case is simpler when it comes to overvalued companies with poor ESG scores and undervalued companies with good ESG scores – we avoid and invest in them, respectively. However, complexities rise in the other two quadrants:

- **Overvalued companies with good ESG scores – Review.** We review traditional financial metrics encompassing valuation, momentum, and technical factors to assess if there remains further upside to the position. After all, investment performance relies on more than just a good ESG score.
- **Undervalued companies with poor ESG scores – Engage.** We engage with the data that contributed to the low ESG scores, estimating the likelihood that these ESG factors would translate into financial investment risk and the expected timeframe of such an impact. Where possible, it helps to engage with management to ascertain if they had taken the necessary steps to address those risks in a manner that allows for a potential upgrade of those ESG scores.

Healing investing to heal the world. The degradation of the planet, increasing ideological fractures in society and surge in disreputable corporate behaviour are perhaps signs of a coming end – the end of the age of shareholder maximisation and accumulation of financial capital as the ultimate objectives of human enterprise. In light of this coming revolution, ESG investing may perhaps be that once-in-a-generation opportunity to reposition finance and investing as a restorative power to the global economy, reversing the pervasiveness of greed and excess that has come to embody the industry over many years.

More than just generating a fair return, the investor now gets to play a part in caring for the climate, championing social good, and discouraging wayward corporate practices. No matter how small these acts may appear at the outset, their combined impact would reverberate throughout the generations to come. We find the words of anthropologist Margaret Mead particularly apt in closing:

“Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it is the only thing that ever has.”

Source: Unsplash

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