Insights
Environmental, Social & Governance (ESG)

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What's Next? Why ESG is More Relevant than Ever

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The popularity of ESG investment strategies has only increased during the COVID-19 pandemic and we expect this trend to continue. In particular, we will see an increasing focus on climate and green bond investing as investors seek to mitigate climate risks and have a positive real-world impact.

ESG in the Post-Pandemic World

It is almost a cliché to say that we are living in unprecedented times. In a short period, the COVID-19 pandemic has transformed — perhaps forever — the way we live, work and relate to one other. An interesting finding reveals investors' concerns. Google Trends shows web searches for the term 'unprecedented' in the Finance category shot up to record levels as the pandemic was spreading.

As the pandemic emerged early in 2020, searches for the term 'ESG' in Bloomberg articles also rose rapidly. We believe this is far from a coincidence. By incorporating ESG considerations in their portfolios, investors can mitigate material non-financial risks, including those social risks that are relevant to companies' response to the pandemic. More on the 'S' in 'ESG' shortly.

First let's consider the hard numbers. How have ESG integration strategies performed during the pandemic thus far? Incorporating ESG factors in the investment process impacts on security selection, portfolio construction and asset allocation so we would expect some impact. Is ESG integration conducive to long-term value creation?

Morningstar have recently conducted research on the performance of almost 5,000 sustainable open-end and exchange-traded funds versus traditional peers and their findings are below:

58.8% of sustainable funds delivered **higher returns** than equivalent conventional funds over the past decade	US ESG Large-Cap Blend Equity Funds: More than **80% beat their traditional peers** over 10 years
Average excess returns of **up to 1.83%** during **coronavirus sell off**	Greater survivorship rates: **72% of ESG funds that were available 10 years ago** still exist, compared with 46% for traditional funds

Source: Morningstar, How Does European Sustainable Funds' Performance Measure Up?, June 2020. https://morningstar.com/content/dam/marketing/emea/shared/guides/ESG_Fund_Performance_2020.pdf?utm_source=eloqua&utm_medium=email&utm_campaign=&utm_content=23126.

Their results show most sustainable funds have outperformed their traditional peers over multiple time horizons — both during the recent challenging market conditions and over a 10-year period. Particularly notable is the 26% difference in survivorship rates for ESG funds over traditional funds over 10 years. We believe such meta-studies are a prudent way to assess overall ESG performance.

COVID-19 and the Significance of Social Criteria

The pandemic has first and foremost highlighted the importance of social factors for investors. Often regarded as vague, immeasurable or even insignificant in the past, social factors have emerged as critical in companies' and governments' response to the pandemic.

Using the framework of the Sustainability Accounting Standards Board (SASB), the following material social issues specific to COVID-19 can be identified:

- **Access & Affordability**
  Example: Drug pricing
- **Labour Practices**
  Examples: Flexible working hours, working from home, shift work
- **Employee Health & Safety**
  Examples: Maintain safe workplace during crisis, contactless delivery
- **Supply Chain Management**
  Examples: Externalities created by suppliers through their operational activities
- **Competitive Behaviour**
  Example: Avoidance of monopolistic behaviour
- **Critical Incident Management**
  Example: Remote work infrastructure

The SASB framework can help investors understand the impact of such material ESG issues on their portfolios.

Climate Change: Among the Greatest Investment Risks

Has the pandemic derailed environmental initiatives and efforts to tackle climate change? We would answer emphatically no. If anything, the pandemic has acted to open people's eyes to the urgency of environmental threats.

We view climate change as a 'slow-burning' pandemic, that is, a more imperceptible threat than the COVID-19 pandemic, but with potentially worse consequences. As public and investor perception changes in response to the climate threat, an increasing body of research shows the pace of the energy transition away from polluting fossil fuels and towards renewable energy. The fossil fuel industry faces the threat of overcapacity, declining oil prices and stranded assets. Recently, BP wrote down up to $17.5 billion of its oil and gas assets as it took a more bearish view of oil prices amid the global pandemic.

Finally, some governments continue to re-evaluate fossil fuel subsidies and carbon taxes, while regulatory agencies are progressing with sustainability regulation. Notably, the European Parliament has just approved the EU Taxonomy Regulation, which will be fundamental to the realisation of the European Green Deal, which aims to boost private sector investment in green and sustainable projects.

We believe climate change is one of the greatest risks in investment portfolios today. These risks will impact companies in almost all segments and industries — not just the obvious polluters.

Below we summarise the key risks arising from climate change:

Systemic Risk
to financial markets as they seek to digest impact on economic growth, societal disruption and energy-mix change

Country Risk
to petro-states that fail to reinvent themselves in time

Corporate Risk
in sectors across the world, from drilling to diesel engines, from transport to banks

Asset Value at Risk
Investors have to digest vast amounts of potentially stranded fossil fuel assets

Fossil fuel and related sectors compose up to a quarter of all equity and debt markets

Source: State Street Global Advisors, as of end of February 2020.

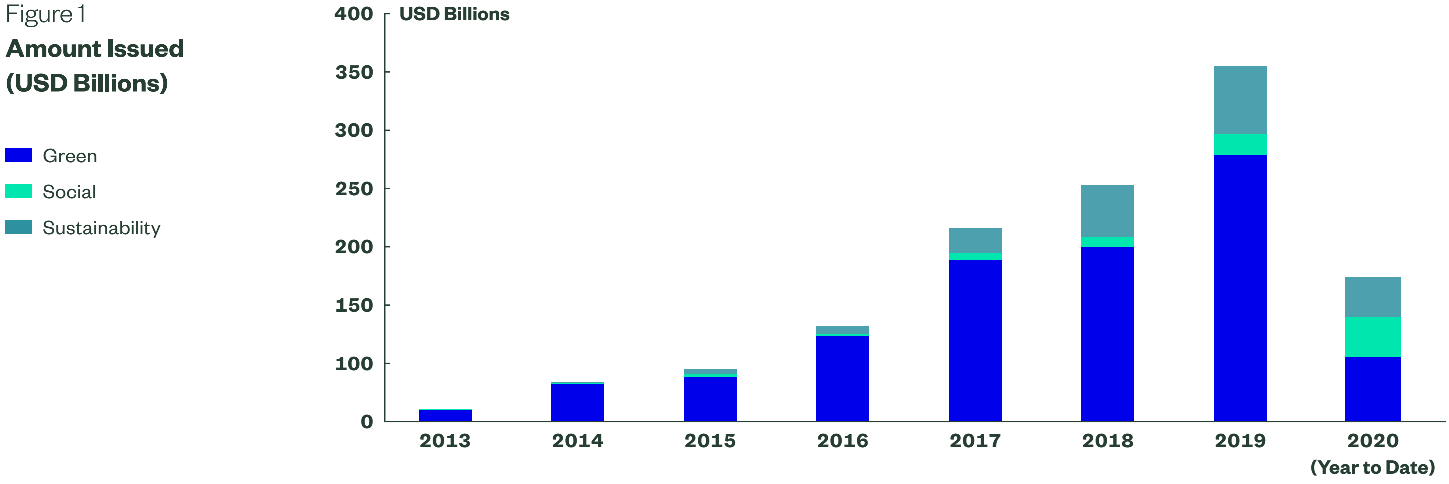
Investors can mitigate climate risks through a variety of sustainable and low carbon investment strategies, and green bond investing. For investors wanting to "green" their portfolios, we summarise the key characteristics of various climate-aware strategies in the Appendix.

Here, we focus on the potential to have positive impact through investment in green and social bonds.

Green and Social Bonds

The market for labelled green, social and sustainability bonds has grown rapidly in terms of new issuance, as shown in the chart below:

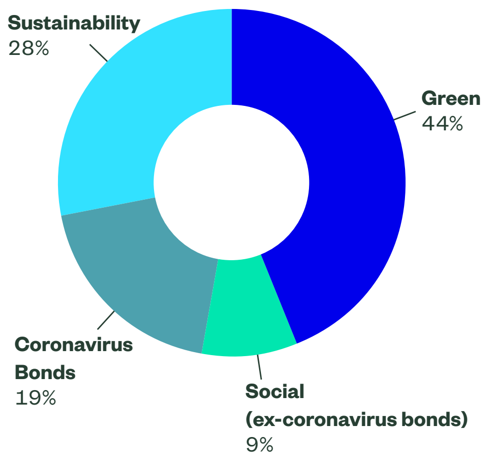
Figure 1
Amount Issued (USD Billions)



Source: State Street Global Advisors, Climate Bonds Initiative. Data as at 26 May 2020.

The chart below splits social bonds into those issued as a response to the pandemic ('coronavirus bonds') and social (ex-coronavirus) bonds:

Figure 2
New Issuance in 2020



Source: State Stree Global Advisors, Climate Bonds Intiative. Date as at 26 May 2020.

The most striking trend this year has been the rapid growth in social bond issuance, from an average of 4.4% in the five years prior to the crisis, to 28% in 2020, driven by issuance from supranational development banks.

Social bonds follow a similar set of principles and quality-of-information requirements as green bonds, but proceeds are used to support social projects in areas like health, education, and affordable housing. This makes them an attractive investment for impact-orientated investors.

Going forward, and as the crisis eases, we expect green bond issuance to remain a dominant part of the impact bond market. Green bonds offer the most transparent and effective route to mobilise capital needed to support the transition to a low-carbon economy.

Challenges of Green Bond Investing

While the green bond market represents a growing and attractive opportunity set, investors may face challenges that we highlight below:

- **Small Size**
  Despite recent growth, green bonds constitute only 0.6% of the standard Global Aggregate Bond Index

- **Lack of Issuer Diversification**
  This is still a young market with issuance still largely from governments and supranational organisations, such as the European Investment Bank. Notably, the corporate green bond market is growing rapidly

- **Low Liquidity**
  Liquidity and pricing transparency can, at times, be a challenge because not all securities are frequently traded

- **Rapidly Changing Universe**
  This can lead to unstable risk exposures

Climate Investing Solutions

Below, we outline State Street Global Advisors' climate framework for fixed income investors. Our climate bond strategy follows a systematic and transparent process that enables investors to align their portfolios with the Paris Agreement goals.

Climate Bond Strategy

	Low-Carbon	Mitigation			+ Adaptation	
	1	2	3	(4 — Optional)	5	6
Objectives	**Minimise** Carbon Emission Intensity	**Minimise** Fossil Fuel Reserves	**Minimise** Brown Revenues	**Minimise** ESG Risks	**Build** Resilient Portfolio	**Maximise** Green Bonds & Green Proceeds
Metrics	CO_2 emissions per $m revenues	Embedded CO_2 per million tonnes	% revenues from extractives activities	1. UNGC Norms 2. Controversial Weapons 3. Swedish Ethical Council 4. Severe Controversies 5. Thermal Coal 6. Artic Oil & Gas 7. Oil Sands 8. R-Factor™ 9. Tobacco	Score on climate change preparedness	Certified green bonds % revenues from low-carbon tech
Improvement*	↓ 72%	↓ 100%	↓ 100%	∞	↑ 4.1%	↑ 3.4x

Source: State Street Global Advisors. The information contained above is for illustrative purposes only.

* The data displayed for the Climate Bond Strategy is a hypothetical example of Back-Tested results based on the Bloomberg Barclays Euro Corporate Bond Index for illustrative purposes only and is not indicative of the past or future results of any State Street Global Advisors product. Back-tested results are not indicative of the past or future of any State Street Global Advisors product. The portion of results through 31 March 2020 represents a back-test of the Climate Bond Strategy model, which means that those results were achieved by means of the retroactive application of the model which was developed with the benefit of hindsight. All data shown above does not represent the results of actual trading, and in fact, actual results could differ substantially, and there is the potential for loss as well as profit. Please reference Back-tested Methodology Disclosure for a description of the methodology used as well as an important discussion of the inherent limitations of back-tested results.

The framework incorporates two key 'modules':

1. **Exclusion Screening**

   a. **Carbon Emission Intensity** — Target carbon intensity reduction of c70% relative to the baseline benchmark.

   b. **Fossil Fuel Reserves** — Remove issuers with significant reserves.

   c. **Brown Revenues** — Remove issuers with significant revenue derived from environmentally damaging extract activities.

   d. **Adaptation Score** — We assess companies' stated position on climate change, and greenhouse gas emission targets and action plans. We then rank them on a scale and remove those that fail to meet minimum score.

   e. **Norms — based & Product Involvement Exclusions**

      — United Nations Global Compact Norms

      — Thermal Coal

      — Tobacco

      — Controversial Weapons

      — Arctic Oil & Gas

      — Swedish Ethical Council

      — Oil Sands

      — Severe Controversies

      — R-Factor™ Laggards

2. **Positive Tilt to Green Bonds**

All green bonds in the baseline universe are retained and the market value weight of those green bonds is scaled up by a factor of at least 2.5x the baseline universe weight. After exclusionary screening, the end weight improvement is typically 3.4x the baseline universe exposure[1].

In summary, the Sustainable Climate framework is for investors who have a benchmark-focused risk and return objective and are seeking to be aligned with the goals of the Paris Agreement. It offers an investment solution that uses best-in-class data, facilitates greater allocation to green projects and those bond issuers playing a bigger part in the low-carbon transition, while also screening out issuers associated with high ESG controversies and other ESG issues. It is a systematic and transparent approach, which delivers broad and highly diversified investment exposure.

1 The improvement of 3.4x is based on the example of the Bloomberg Barclays Euro Corporate Bond Index. The exception of a green bond being retained is if the issuer of the green bond is identified as being engaged in controversial weapons, SEC, Extreme Controversies and UNGC violations.

Appendix

Going Green — Options to Consider

	Green Bonds	Low-Carbon	Climate
Typical Benchmark(s)	Bloomberg Barclays MSCI Global Green Bond Index	Any standard IG or HY credit benchmark which include corporate bonds	Any standard IG or HY credit or aggregate benchmark which include corporate bonds
Capacity/Scalability	Low, concentrated and less liquid	Very high, broad, diversified, liquid	Very high, broad, diversified, liquid
Transparency	Very Good — seeks to invest in all securities included in benchmark	Good — invests in a sub-set of the index determined by one climate input metric. Carbon intensity data from S&P Trucost.	Good — invests in a sub-set of a standard index determined by 5 or more climateinput metrics
TEV versus Benchmark	Very Low (subject to portfolio size but TEV is typically <10bps)	Low–Medium	Medium–High
Drawbacks/Disadvantages	Narrow universe (just 0.6% of the standard global IG bond universe)	Low coverage for treasury, govt-related and securitised sectors	Climate metrics have low coverage for treasury, govt-related and securitised sectors. Climate input metrics can make the strategy more complex
Best Suited For Investors...	Committed to investing in environmentally beneficial projects by governments, govt-related/ supranational organisations, and corporates	Investments with carbon intensity reduction objectives (e.g., 50% Carbon Intensity Reduction) and with low tracking error versus baseline corporate index	Future orientated — seeks to align with Paris Agreement and flexibility for future regulations
			Reduces exposure to companies with high carbon emissions, fossil fuel assets and brown revenues
			Overweight exposure to green bonds and companies with green assets

TEV = Tracking Error Volatility. Diversification does not ensure a profit or guarantee against loss.

About State Street Global Advisors

Our clients are the world's governments, institutions and financial advisors. To help them achieve their financial goals we live our guiding principles each and every day:

- Start with rigour
- Build from breadth
- Invest as stewards
- Invent the future

For four decades, these principles have helped us be the quiet power in a tumultuous investing world. Helping millions of people secure their financial futures. This takes each of our employees in 27 offices around the world, and a firm-wide conviction that we can always do it better. As a result, we are the world's third-largest asset manager with US $2.69 trillion* under our care.

* AUM reflects approximately $50.01 billion USD (as of March 31, 2020), with respect to which State Street Global Advisors Funds Distributors, LLC (SSGA FD) serves as marketing agent; SSGA FD and State Street Global Advisors are affiliated.