HSBC Global Asset Management

Reducing carbon exposure in passive strategies

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Introduction

Climate change is becoming an increasingly important consideration for investors. This is driven by emerging regulatory and supervisory requirements on climate-risk management disclosure and an increasing focus from policy-makers and civil society. Even in the midst of the covid-19 crisis we are seeing calls for a green recovery and a continued focus on climate action.

Here we take a look at some typical approaches to reducing carbon exposure in passive strategies – fossil fuel exclusion, carbon emissions tilting and fossil fuel tilting – and help investors navigate the growing number of low carbon indices.

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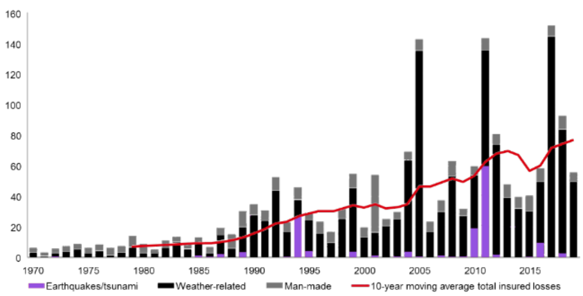
Climate risks are on the rise

Climate action failure made it to the top five risks, by likelihood and impact over the next ten years, in the 2020 World Economic Forum Global Risks Perception Survey. This is perhaps no surprise if we look at the rising impacts and costs of climate change.

Data from the reinsurer SwissRe shows a clear upward trend in insured losses. Weather-related losses represent the largest proportion in recent years, over $80 billion in 2018 and almost double that in the year prior, dwarfing losses from earthquakes and man-made catastrophes. These weather-related losses are driven by tropical cyclones, hurricanes and so-called 'secondary perils' such as heat waves, dry spells, wildfires and floods, all of which had catastrophic effects in 2019.

SwissRe Catastrophe-related insured losses (1970-2019)

In USDbn, at 2019 prices



Source: Swiss Re Institute, December 2019

We are currently on track for at least a 3 degree Celsius global temperature increase by the end of the century. This is twice the 1.5 degrees set out as an ambition by the Paris Climate Agreement and the cap the Intergovernmental Panel on Climate Change (IPCC) has set out to limit the most severe economic, social and environmental impacts. Climate change is leading to more frequent and more severe physical climate risks.

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Financial regulators increase focus on climate-related risks

Recognising the impact of climate change on the financial system, the Financial Stability Board-backed Taskforce on Climate-related Financial Disclosures (TCFD) was established in 2015. The taskforce identified two major categories of risk – physical risks, resulting from both weather-related events and longer term shifts in climate patterns, and transition risks, encompassing policy, legal, technology and market changes as the result of a shift to a low carbon economy.

Disclosure recommendations – comprising governance, strategy, risk management and metrics and targets – were published in 2017 and are supported by financial regulators across the European Union, Australia, Hong Kong, Japan, Singapore and South Africa. In February, Mark Carney, UN special envoy for climate action and finance, announced the COP26 private finance strategy which included pathways to mandatory TCFD-aligned reporting. Central banks and supervisor members of the Network for Greening the Financial System (NGFS) have already begun climate-related stress testing.

How are we measuring carbon exposure?

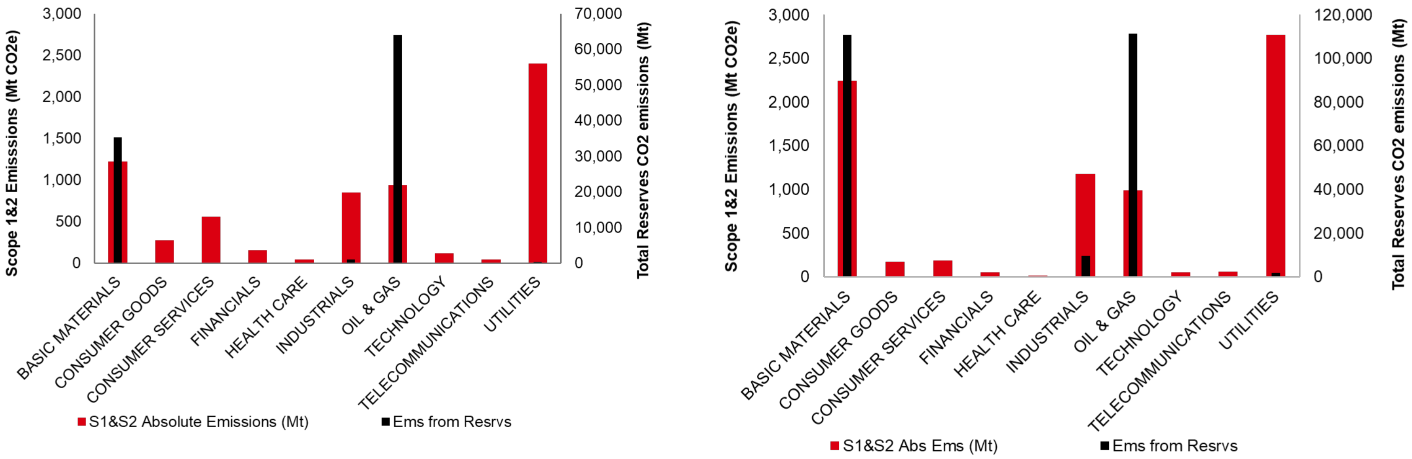
Carbon emissions

The TCFD recommends that organisations report their scope 1 and scope 2 greenhouse gas (GHG) emissions and, if appropriate, scope 3 emissions and the related risks. The Greenhouse Gas Protocol provides the most widely used international accounting tool for GHG emissions from corporations. Emissions are classified into three 'scopes' – direct operational emissions (scope 1), purchased electricity, steam or heat (scope 2) and emissions that result from the activities of the company, but occur from sources not owned or controlled by the company (scope 3). In a number of key sectors, scope 3 is where the bulk of the emissions are to be found – whether in the fuel consumed by cars in the auto sector or the fossil fuel reserves of the oil and gas companies. However, robust scope 3 data is still at an early phase and generally limited to fossil fuel reserves or heavily modelled.

Measuring absolute scope 1 and scope 2 GHG emissions in carbon dioxide equivalents (CO_2e) for the constituents of the FTSE developed and emerging market indices shows us that, on this measure, the largest exposures are in the utilities (over a third), basic materials, industrials and oil and gas sectors. Collectively these sectors account for more than 80 per cent developed and over 90 per cent of emerging market emissions.

Figure 1: Sector absolute carbon emissions – Scope 1&2 and fossil fuel reserves

FTSE Developed **FTSE Emerging**



Source: FTSE Russell, TruCost; April 2020

Fossil fuel reserves

As outlined above, while scope 1 and scope 2 emissions are important, these do not capture carbon emissions across the value chain. Fossil fuel reserves, as in those emissions from proven and probable reserves of oil, gas and coal, represent a meaningful set of scope 3 emissions. These fossil fuel reserves may face the risk of being 'stranded', that is no longer able to earn an economic return prior to the end of their economic life as a result of changes associated with the transition to a low-carbon economy. From figure 1, we can see that carbon emissions associated with fossil fuel reserves are 15 times those of scope 1 and 2 emissions for the FTSE Developed Market Index and 30 times those in the FTSE Emerging Market Index.

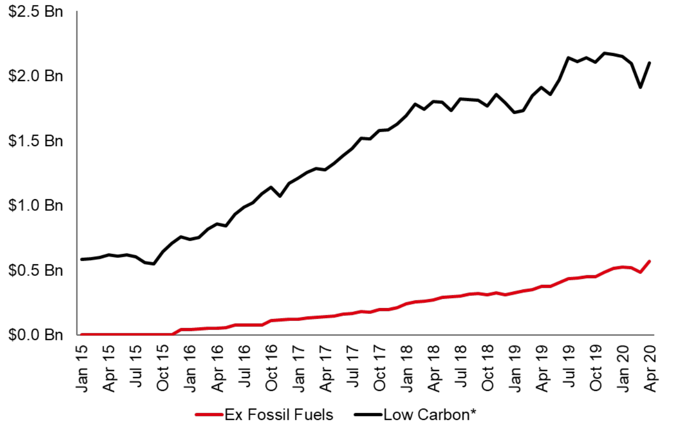
These two metrics – carbon emissions and fossil fuel reserves – represent a good place to start when looking at carbon exposure.

Growth in low carbon indices

The growth in low carbon indices has come somewhat later than broad ESG indices but we are now seeing a gradual increase in assets under management.

Figure 2: ETFs tracking ESG and low carbon indices over the last 5 years

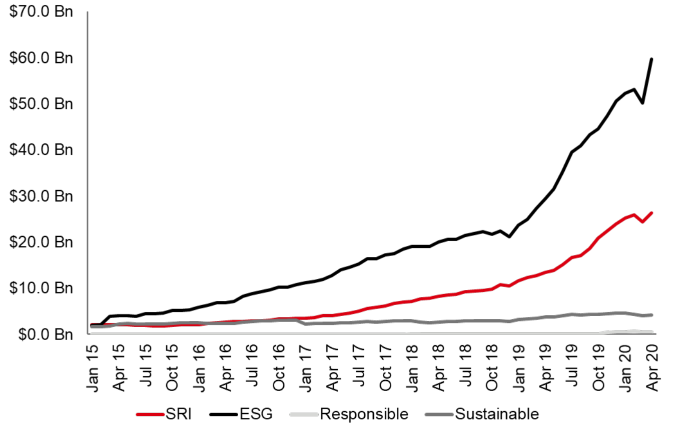
AUM in Passive Funds: "Ex Fossil Fuels" vs "Low Carbon"



Sourced from Morningstar. Universe set to all passive funds. Ex Fossil Fuels defined as having strings "Fossil", " ex * Oil", " ex * Gas" or " ex * Coal" in their name. Low Carbon defined as having the string "Carbon" in their name, but with carbon trading indices removed.

* Low Carbon also includes Carbon Efficient and Sustainable Carbon funds

AUM in Passive Funds: "SRI"vs "ESG" vs "Responsible" vs "Sustainable"



Sourced from Morningstar. Universe set to all passive funds. Categories defined via string searches on fund names as follows: " SRI ", " ESG ", " Responsible", " Sustainable".

The early low carbon indices focused on the exclusion of fossil fuels. Growth in assets was given a boost by a growing fossil fuel divestment campaign. This first came to prominence following student campaigns in America demanding their university endowment funds divest from fossil fuels. Public commitments to divest have now been made by faith-based organisations, philanthropic foundations and local governments worldwide. The civil society Fossil Free campaign estimates that the value of institutions making divestment commitments, including full and partial commitments, totals approximately $1 trillion.

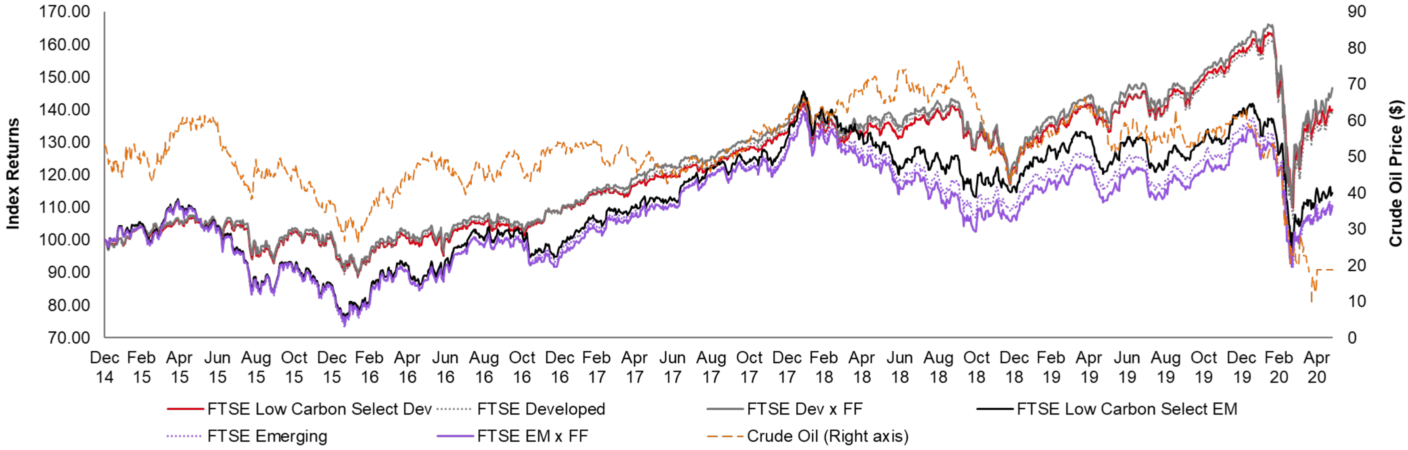
Low carbon indices have also been developed that incorporate carbon emissions metrics and fossil fuel reserves through tilting as well as exclusions.

Exclusion versus tilting

Given the distribution of carbon emissions and fossil fuel reserves, exclusions may be the most straight-forward approach to reducing carbon exposure. However, from a risk management perspective, any exclusion introduces biases, and excluding all fossil fuel exposed stocks can introduce significant divergence. This can be a particular problem for ETFs tracking such indices, if they are being used as building blocks for a broader portfolio rather than a stand-alone product.

The oil and gas sector currently represents 4 per cent of the FTSE Developed Market Index and 7 per cent of the FTSE Emerging Market Index by market cap. However, with the recent volatility in oil prices and previously higher index weights, excluding this sector can have a notable impact on the return profile.

Figure 3: Returns based on excluding versus tilting on fossil fuel reserves



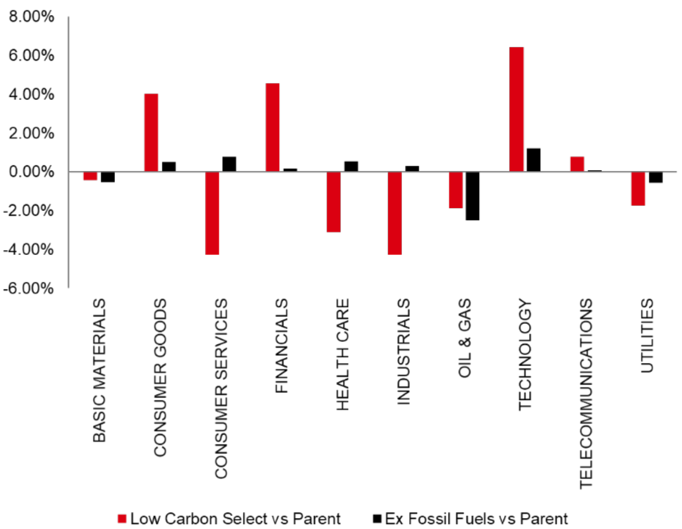
Source: FTSE Russell & Bloomberg. May 2020

An alternative approach is to tilt based on both carbon emissions and fossil fuel reserves while aiming to minimise tracking error. One example is the recent FTSE Low Carbon Select Indices. While these indices also exclude stocks based on business involvement in certain sectors (weapons, tobacco, thermal coal extraction and generation, nuclear power generation), they use a tilting approach to increase their ESG score, and minimise carbon intensity and fossil fuel reserves.

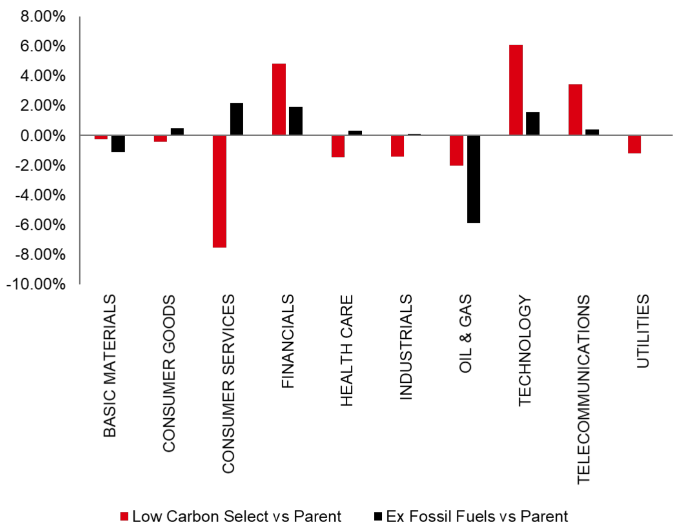
This approach can deliver a significant reduction in the weighted average carbon intensity, a metric which measures exposure to carbon-intensive companies, while limiting significant sector over or under weights (see figures 4 and 5). This is the current TCFD recommended metric for asset owners and asset managers to report.

Figure 4: Sector over and underweight relative to the parent of different approaches

Developed - Sector Exposures

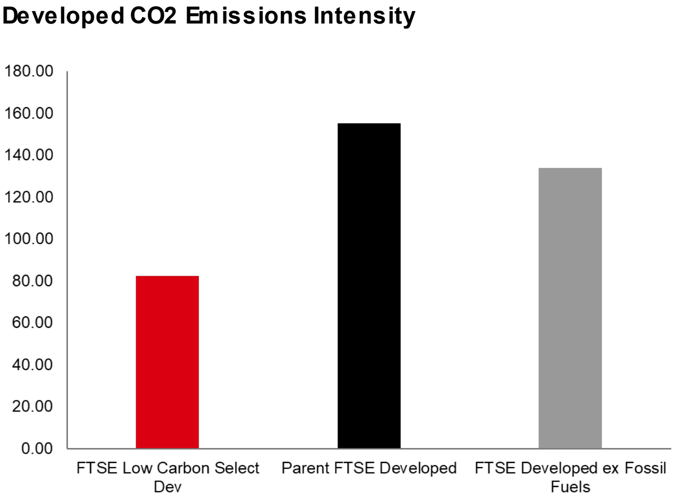


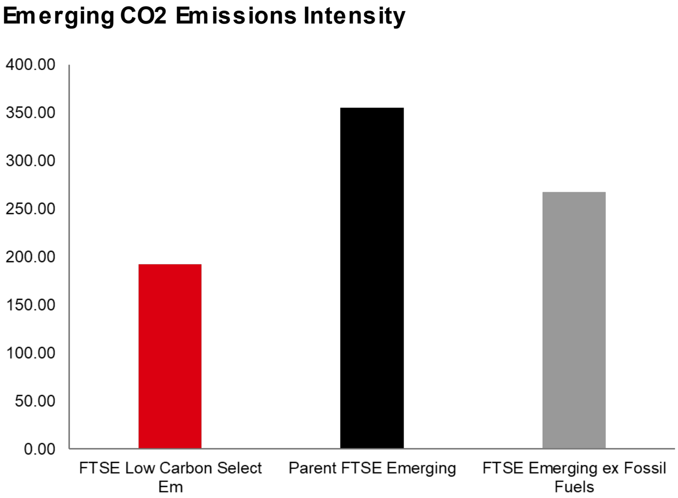
Emerging - Sector Exposures



Source: FTSE Russell April 2020

Figure 5: Relative weighted average carbon intensity





Source: FTSE Russell, TruCost, May 2020

The importance of stewardship

Another benefit of retaining some exposure is to use the shareholding to vote and engage on company plans to decarbonise. This vote provides the shareholder with rights, and a responsibility to hold the management of a company to account. Active stewardship can be used effectively to drive improvements in long-term business strategy and performance. Divesting from a company means the investor has opted out of any potential improvement or opportunity to influence the company to drive improvement. Investors have significant ability to influence the actions of companies through engagement and stewardship activities and thereby deliver emissions reductions in the real economy. We have seen notable shifts in company strategy due to engagement on climate issues by investors through initiatives such as ClimateAction100+. Stewardship, undertaken by the asset manager, is becoming an increasingly important consideration in the choice of ETFs.

Summary

Reducing carbon risk exposure will continue to be a central focus for investors in active and passive strategies alike. Low carbon indices are likely to continue to evolve whether by incorporating additional climate risk metrics or targeting opportunities such as green revenues. The recent EU regulation on Climate Transition Benchmarks, Paris-aligned Benchmarks and sustainability-related disclosures for benchmarks will undoubtedly play a part in shaping the landscape over the coming years.

Stewardship is an increasingly important consideration as investors, actively engaging on the issue of climate change, have an important role in encouraging more climate-resilient business strategies, capital allocation and real economy emissions reductions.

For investors looking to use ETFs for tactical asset allocation or portfolio building blocks, tilting with limited exclusions may be a more effective way to target a reduction in carbon intensity while minimising tracking error.

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