The Obstructive Role of Scope 3 Data in Portfolio Construction

A Call for Industry Change

Using revenue-based estimated Scope 3 data in portfolio construction is misguided. Any claimed environmental benefits are unfounded, and from a financial perspective, we would argue it is irresponsible.

November 2022

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Abstract

In this report, we demonstrate that integrating estimated Scope 3 data into portfolio construction will lead to portfolios that are tilted towards low revenue companies. This results in portfolios with unattractive investment characteristics and has the potential to undermine any claimed environmental benefits.

Scope 3 emissions (S3) are those associated with the upstream and downstream activities of a company's own operations, and are not covered by Scope 1 and 2 emissions (S1+2). Due to S3 encompassing the entire value chain, S3 can outweigh S1+2 by several orders of magnitude and will more accurately describe a company's total impact on the climate than combined S1+2. Unsurprisingly then, S3 is of increasing interest to companies, investors, and regulators: the EU, for example, plans to introduce obligatory S3 integration in its Paris-Aligned Benchmark policies over the next few years.

Currently, there are two significant issues with Scope 3 data. Firstly, the poor rates of S3 disclosure, and secondly, the inferior quality of the data that is reported. To overcome these issues and fulfil market demands, major data providers, such as MSCI and Bloomberg, produce datasets based on in-house estimation models, often using a revenue-based model. This type of model uses life-cycle analysis tools to create industry-averaged intensity factors which are then multiplied by a company's revenue (as an estimator of corporate activity), to model emissions across the categories of S3.

In this whitepaper we show that, by using an estimation-based methodology, portfolios minimising Carbon/EVIC (enterprise value including cash), are simultaneously minimising Sales/EVIC. We believe that when such methodologies are used in portfolio construction, it leads to unintended and undesirable outcomes for the environmental risk and returns profile, an issue of concern for both the environment and for investors.

For the environment, the estimated Scope 3 footprint will have, at best, a loose relation to the company. Take two clothing manufacturers for example; Manufacturer A is using cotton which has been shipped half-way across the world, and Manufacturer B is using sustainably and locally sourced materials. If both companies make the same amount of revenue each year, then, using revenue-based estimation, both companies will receive the same Scope 3 score. From an environmental perspective, using estimated Scope 3 data is nigh-on meaningless.

"From an environmental perspective, using estimated Scope 3 data is nigh-on meaningless."

The same story is echoed for investors. We show that portfolios that are optimised to minimise an estimated Scope 3 footprint, direct investors towards companies with low revenues (after adjusting for size). Investors are overweighting companies that have a higher share price than would be expected for the revenue that they produce. Going back to the clothing manufacturer example above, Manufacturers A and B have vastly different business models, but similar levels of revenue, and therefore similar estimated Scope 3 figures. It is possible that Manufacturer A has a higher enterprise value, and thus a lower Scope 3/EVIC ratio, making it the most attractive option for a low-carbon portfolio. In this case, not only has an investor selected the company with the least sustainable business model, but they have also overpaid for it. Manufacturer B has asimilar revenue figures but a lower enterprise value.

"We show that portfolios that are optimised to minimise an estimated Scope 3 footprint direct investors towards companies with low revenues"

Using revenue-based estimated Scope 3 data in portfolio construction is therefore misguided. Any claimed environmental benefits are unfounded and from a financial perspective we would argue it is irresponsible.

What Are Scope 3 Emissions?

Greenhouse gas emissions are divided into three brackets by the Greenhouse Gas Protocol, the internationally used accounting tool. These brackets, or scopes, are known as Scope 1, Scope 2, and Scope 3. Scopes 1 and 2 target the emissions within operational control of the company, respectively the emissions coming from the company's own operations and the emissions coming from its electricity use. Scope 3 emissions, on the other hand, incorporate all the indirect emissions that take place within the company's supply chain and value chain, but which remain outside of its operational control[1].

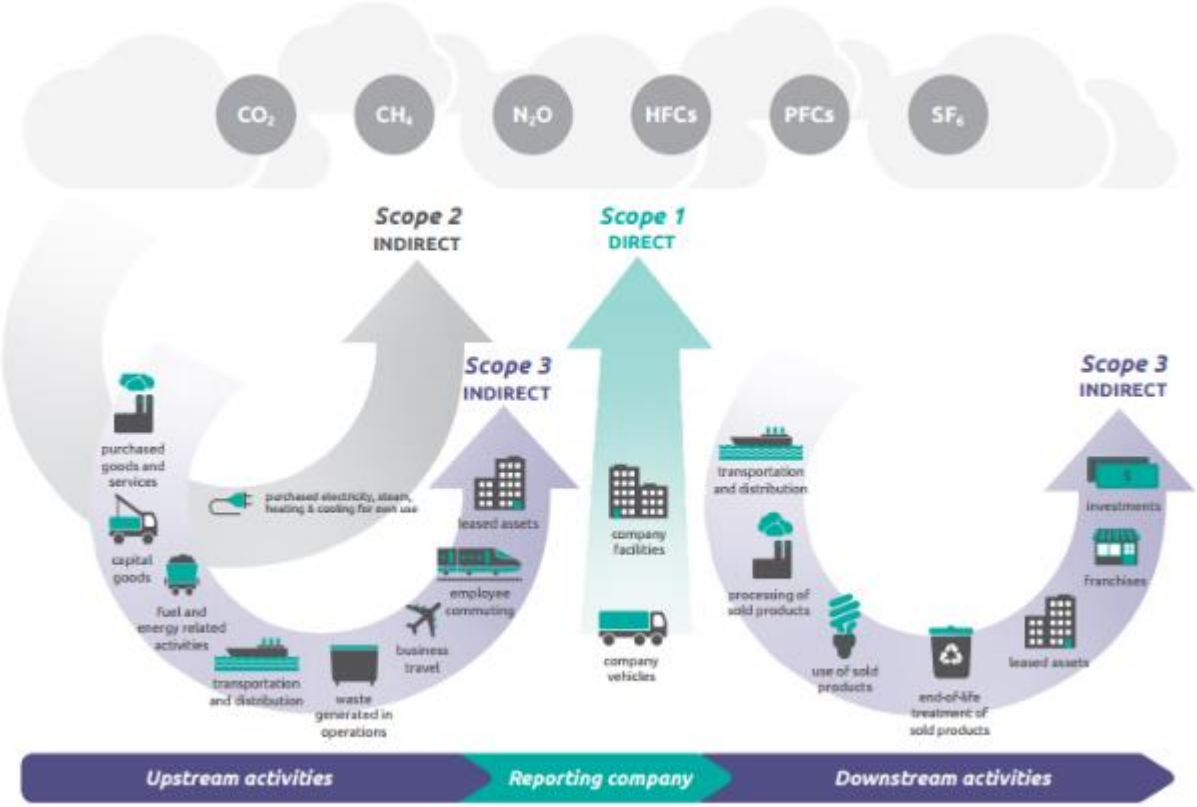


Figure 1 - www.ghgprotocol.org

Scope 3 has fifteen subdivisions, these include purchased goods and services, employee commuting and business travel, use of sold products, upstream and downstream transportation, and investments, to name a few.

Often, the bulk of companies' emissions come from their Scope 3 emissions, with research showing that a company's indirect emissions are up to 11.4 times higher than the emissions in its own operations.[2] However, it is important to keep in mind that a company's emission profile will be dependent on the sector it operates in. To give an obvious example, an Oil and Gas company such as BP would have a disproportionate amount of its emissions resulting from the Scope 3 category 'use of sold products', driven by the combustion of its sold fossil fuel products. Food producers' Scope 3 emissions on the other hand, are driven by carbon intensive upstream processes such as farming, and downstream emissions are linked to retailers such as energy intensive supermarkets. In other sectors, Scope 3 emissions may be minimal compared to the company's direct emissions.

[1] Briefing: What are Scope 3 emissions? | The Carbon Trust
[2] CDP_SC_Report_2021.pdf

It is also important to note that most emissions will show up on a number of companies' greenhouse gas inventories. The tailgate emissions of a logistics company, moving goods from a seller to a purchaser, will be their own Scope 1 emissions, but will be the Scope 3 emissions for both the truck manufacturer, the seller, the purchaser, and also for the Oil & Gas company providing the fuel. All these third parties will have specific difficulties in assessing the magnitude of those Scope 3 emissions, and the final figure will be based on varying assumptions. On the other hand, measuring its Scope 1 emissions is inherently more accurate for the logistics company.

It is essential for companies to evaluate their Scope 3 emissions alongside their Scope 1 and 2 emissions and assess their role in managing and reducing these emissions. By doing so, companies can identify and understand the risks and opportunities associated with value chain emissions, identify GHG reduction opportunities, set targets and track progress, and engage value chain partners.

There are inherent limitations to its use though, as the GHG Protocol sets out in its Scope 3 reporting standard. The standard is intended to enable companies to track GHG emissions over time, but it is not designed to support comparisons between companies due to the differences in inventory methodology, or differences in company size or structure. While it can be a valuable tool for companies to track progress, its investor use is less obvious.

How Are Scope 3 Emissions Measured and Reported?

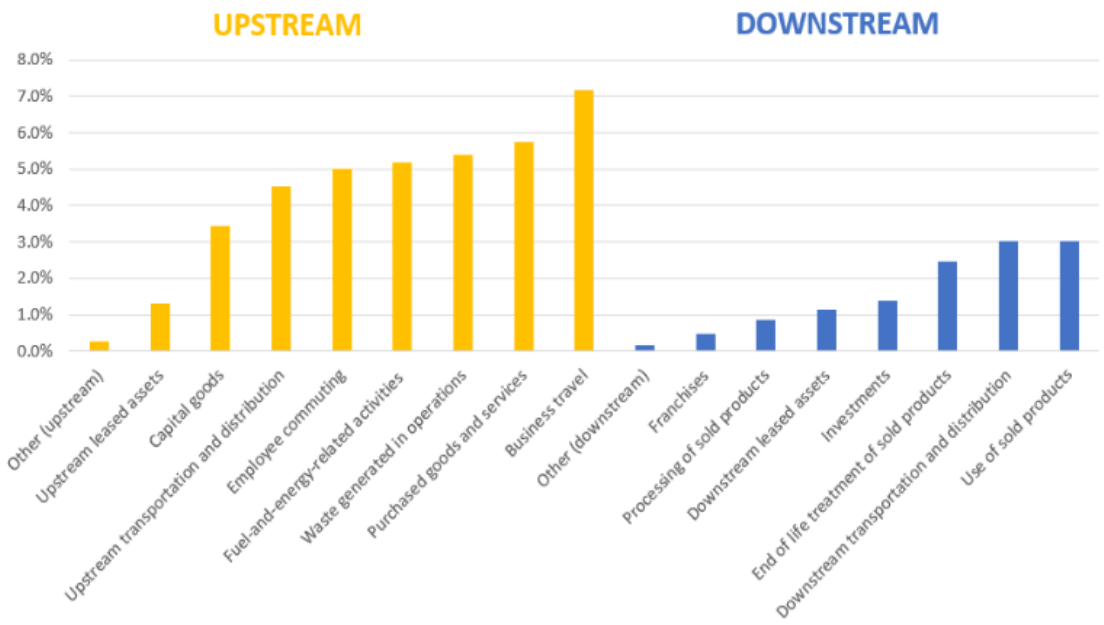
Measuring and reporting Scope 3 emissions is fundamentally more complex and challenging than Scope 1 and 2. To help corporates navigate these challenges, the GHG protocol suggests multiple methods for measuring or estimating the various Scope 3 Categories, which users can select based on which data they have available.

Apple is a good example of a company that prioritises the use of primary data from its upstream suppliers and downstream consumers. Apple estimates its upstream transportation and distribution (Cat.4) emissions based on primary data from eighty percent of its logistics partners. Similarly, Apple collects detailed energy consumption data from its products and uses models for each product based on daily usage patterns derived from historical customer use data to estimate emissions from the use of sold products (Cat.10). These methods, utilising primary data, result in the most accurate figures, but are obviously time-intensive and costly to the company.

Some companies take a more modelled approach. For example, ArcelorMittal uses a hybrid method to estimate emissions from purchased goods and services (Cat. 1), using no data from its suppliers. The company argues that with a large, but unsteady number of suppliers, localised emissions factors for each good and service, multiplied by the spend on each supplier, is a better estimate of emissions than one using primary data.

When localised emissions factors are not available, the GHG protocol suggests using a global average emission factor for each activity, derived from environmentally extended input-output tables, to estimate emissions. These 'spend-based' methods are the least preferred type by the GHG protocol.

All the above methods to derive a Scope 3 figure are mandated by the GHG Protocol, and navigating the different methodologies used, and therefore the quality and the comparability of the data, is near impossible.



Source: MSCI ESG Research LLC

Figure 2. Share of Companies in the MSCI ACWI IMI Reporting Emissions in each Scope 3 Category as of 31/3/20

However, self-disclosed Scope 3 data does not always follow the suggestions of the protocol. SKF, for example, a company that makes bearings and valves for a wide array of machines, when considering their emissions related to use of sold products (Cat. 10), have not tried to estimate this figure at all. Rather, they reported an almost arbitrary number of ten million tonnes CO2e to "indicate the magnitude of the use phase impact".

While we understand that the GHG Protocol needs to allow flexibility to accommodate for different corporate environmental reporting maturities, current methods seem inherently problematic for investor use. Not only do they result in comparing apples to oranges, but it is also inherently difficult to identify good (or bad) management actions through these figures. In some cases, what is being compared between companies is the choices they make during the estimation process rather than the emissions themselves.

The extent of differences in estimation and reporting practices is doubly problematic given that the actual number of companies disclosing Scope 3 data is small (Fig. 2). MSCI estimates that fewer than 25% of the MSCI ACWI IMI produce a Scope 3 figure[3], let alone a full Scope 3 inventory.

How Do Data Providers Try to Get Around These Issues?

Given the importance of understanding a company's Scope 3 emissions, large data providers have stepped in to try and solve the issues of poor coverage and poor comparability. MSCI, for example, produces a data set that estimates emissions for each company across the categories of Scope 3. However, when comparing these estimated Scope 3 values to self-reported data in the MSCI World, we have found that not a single reported datapoint matches its estimated value. Further, the differences between the self-reported value and the estimated value is often several orders of magnitude. Table 1 shows the average differences between reported values and MSCI estimated values of firms upstream and downstream Scope 3 emissions. While the average percentage difference of downstream values is largely driven by the values of ING Group (2,368,468,467% difference) and Johnson Matthey (22,757,142% difference), removing these two outliers still leaves an average percentage difference between estimated and reported values of 74,268%.

MSCI World total: 1493

Upstream data points	Average % difference	Downstream data points	Average % difference
956	30613.44%	761	3216288%

Table 1. Number of Reported Scope 3 Data Points and Average % Difference From MSCI Estimation. Source: MSCI ESG Research LLC; Osmosis Investment Management

The method used to create this estimated data varies across sector and category. In the Automobiles and Oil & Gas sectors, where the approach covers some 80% of total emissions, (Fig. 4), MSCI follows a robust method (that they term 'bottom-up') that utilises company specific information multiplied by specific,

[3] https://www.msci.com/www/blog-posts/reported-emission-footprints/03060866159

known emissions intensity factors. For example, an automobile company's Scope 3 emissions from use of sold products is calculated as the product of the number of cars sold and the known emissions intensities of that company's cars. In the majority of sectors, however, this bottom-up approach is used for less than 20% of data points and on an economy wide level, the 'bottom-up' approach covers only 34% of emissions.

When data is insufficient for use in the 'bottom-up' methodology, MSCI defaults to the 'top-down,' revenue-based method. Indeed, the remaining 66% of Scope 3 emissions from the MSCI World are estimated under a 'top-down' approach that multiplies the company's revenue by a sector-specific intensity factor, similar to the GHG protocol's 'spend-based method'.

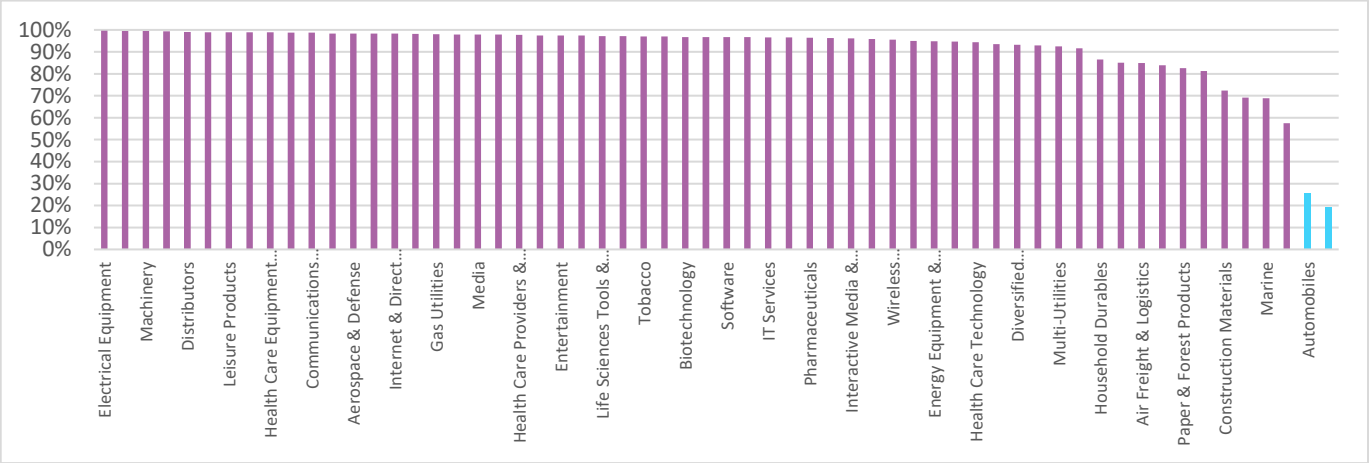


Figure 3. per sector percentage of sum of scope 3 emissions calculated under a 'top down' approach. MSCI ESG Research LLC; Osmosis Investment Management

Given the use of a sector-specific emissions factor, revenue becomes the variable that distinguishes between companies, not the choices that management teams make to select less carbon intensive upstream suppliers or to encourage more efficient use of their products. We explore the impacts on creating a portfolio using a dataset built on this method in the next section.

Conclusion

Given the push from regulators to include Scope 3 into financial products, and the reality of poor self-disclosure of Scope 3 data by companies, the industry should question whether the estimated datasets that are currently available are up to the task. While everyone wants to identify those companies that are managing environmental impact, (within their own operations, their supply chains or through their products), it is essential to fully understand the methodology used and the implications it will have on constructing portfolios.

Investing and Estimated Scope 3 Data

The Problem With Integrating Estimated Scope 3 Data Into Investment Portfolios

Our hypothesis is that creating low-carbon portfolios by using popular estimated datasets, constructed to minimise the total carbon footprint, invariably leads to a selection of companies that have lower sales then their peers, effectively making a low-sales portfolio.

We know that on average, Scope 3 emissions dwarf Scope 1 and 2 emissions for most companies, so a total footprint reduction will be largely driven by a Scope 3 reduction.

$$Scope\ 1 + Scope\ 2 + Scope\ 3\ \approx Scope\ 3$$

Most methodologies aim to minimise total footprint over a financial indicator, scaling the figures to account for size of the company. For this exercise, we pick EVIC (Enterprise Value Including Cash), as it's the preferred metric used by the EU regulations, however, this can be replaced by any other scaling metric.

$$\frac{Scope\ 1 + Scope\ 2 + Scope\ 3}{EVIC} \approx \frac{Scope\ 3}{EVIC}$$

The total Scope 3 figure is the sum of a companies' 15 Scope 3 categories. From previous chapters, we know that most of these individual Scope 3 category figures are a function of revenue times a conversion factor, which is constant within a sector.

$$Scope\ 3 = \sum_{1}^{15} Scope\ 3\ categories = \sum_{1}^{15} conversion\ factor * sales = conversion\ factor * sales$$

As long as you are comparing companies within the same sector, Scope 3 becomes linearly dependent on a companies' sales figure.

$$Scope\ 3\ \approx sales$$

Ultimately, this indicates that a portfolio designed to minimise its carbon footprint, will lead to a portfolio that seeks out companies with lower sales versus its peers.

$$minimize\ \frac{\text{Scope 1} + \text{Scope 2} + \text{Scope 3}}{\text{EVIC}} \rightarrow minimize\ \frac{Sales}{EVIC}$$

We've derived the hypothesis from our understanding of Scope 3 data and estimation models detailed in the introduction. In the next chapters we will test out whether this relationship still exists using actual Scope 3 data received from data vendors.

As mentioned in the introduction, Scope 3's cradle to grave nature makes it comparatively much larger than Scope 1 and Scope 2 but also much more difficult to measure. This difference in magnitude causes a very high correlation between the Scope 3 emissions and the total carbon footprint of a company, or the sum of Scope 1, 2 and 3 after adjusting for company size.

We test this hypothesis by calculating the total carbon footprint over EVIC for each company in the MSCI World index, as well as its Scope 3 over EVIC. Within our Osmosis sector definitions, we then rank the companies from high to low using both total footprint over EVIC and Scope 3 over EVIC, before plotting the rank of each company, within its sector, using both indicators.

The result of this exercise is shown in Figure 4. We can clearly see that most companies fall on the straight line through the intercept, indicating that a company's total footprint rank is nearly identical to its Scope 3 rank[4].

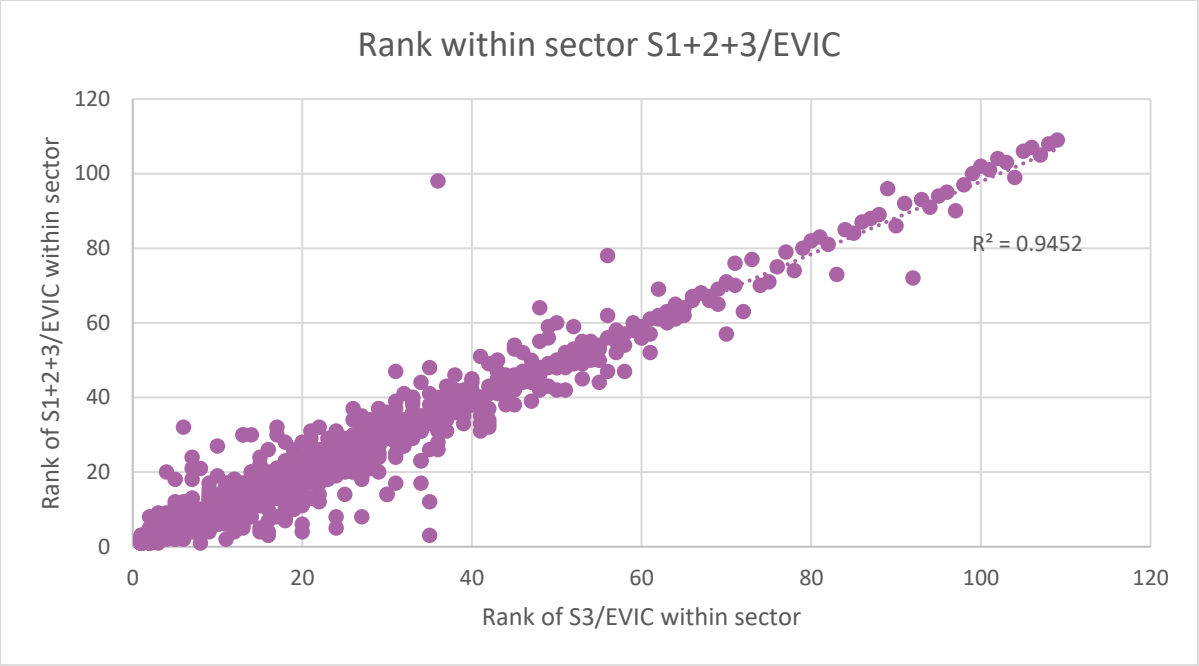


Figure 4 – Source: Scope 1,2,3, and EVIC from MSCI. Sector from Osmosis.

Clearly, Scope 3 emissions have an outsized impact on a company's total carbon footprint. This is problematic due to their inaccurate nature, particularly in comparison to the more easily measurable and, arguably more material, Scope 1 and 2 emissions.

[4] All the sector neutralisation has been performed on an Osmosis Sector basis. As the industry multiplication factor is based on the industry classification of the entity estimating Scope 3 data, there will be some discrepancies between the conversion factors used within each Osmosis Sector.

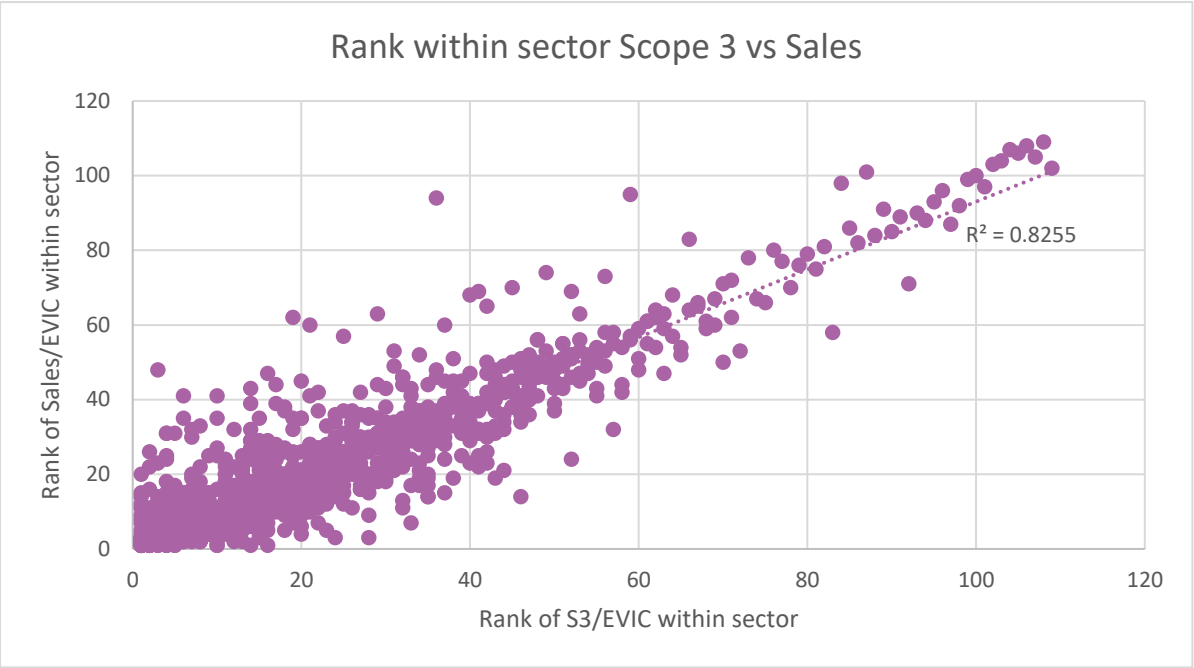


Figure 5: Source: Scope 3, EVIC, and Sales from MSCI. Sector from Osmosis.

Having established that a company's total carbon footprint is largely driven by its Scope 3 footprint, we look at establishing its relationship to the company's sales. As before, for each company in our sample we calculate its sales intensity (over EVIC), and accordingly rank companies within sectors. For each company, we plot the Sales/EVIC rank as well as the Scope 3/EVIC, as shown in Figure 5, and again can see that both ranks are highly correlated. Indeed, this suggests that within sectors, a "low Scope 3" company will be a "low sales" company, and vice versa.

Bringing the two parts together, we are able to conclude that finding low carbon companies, using estimated datasets, will ultimately lead to companies with lower sales than their peers.

What Do Portfolios Constructed Using an Estimation Methodology Look Like?

Despite the potential problems associated with estimating Scope 3 using a revenue-based model, it is still used in industry portfolios. To demonstrate the drawbacks of using the estimated datasets, we constructed sample portfolios using carbon emissions data taken from a major data provider. These data were size adjusted using EVIC.

Using the MSCI World as an initial universe, two portfolios were created. The first using total carbon footprint, or $Scope\ 1+2+3/_{EVIC}$, which we will refer to as the low-carbon portfolio. The second using $Sales/_{EVIC}$, which we will refer to as the low-sales portfolio.

Factor	Low Carbon vs High Carbon	Low Sales vs High Sales
Beta	0.38	0.59
Book-to-Price	-0.41	-0.36
Dividend Yield	-0.51	-0.53
Earnings Quality	-0.28	-0.22
Earnings Variability	-0.10	0.06
Earnings Yield	-0.64	-0.61
Growth	0.19	0.24
Investment Quality	-0.48	-0.57
Leverage	-0.35	-0.33
Liquidity	-0.06	0.01
Long-Term Reversal	-0.39	-0.52
Mid Capitalization	-0.12	-0.12
Momentum	-0.36	-0.42
Profitability	-0.02	-0.06
Residual Volatility	0.15	0.19
Size	0.17	0.15

Table 2: Source: Osmosis Analysis

Both $Scope\ 1+2+3/_{EVIC}$ and $Sales/_{EVIC}$ were normalised and ranked on an Osmosis sector basis. Within each sector, we selected the companies at the bottom halves of the rank and combined them into a low-carbon portfolio and low-sales portfolio. Conversely, companies in the top halves of the rankings were selected to create respectively a high-carbon portfolio and a high-sales portfolio. As the rankings are sector-based, there are no sector over- or underweights between the low- and high-portfolios, and stocks were weighted based on their rank.

The comparisons between the low- and high-carbon and low- and high-sales portfolios demonstrate how akin the portfolios are: Low carbon portfolios look very similar to low sales portfolios. From a factor perspective the similarities are striking, with the exposures between the low carbon vs high carbon, and low sales vs high sales portfolios having very similar magnitudes across all 16 GEMLT risk factors. As an example, compared to the 'high' portfolios, both the 'low' portfolios have strong negative exposure to

Earnings Yield, defined by MSCI as describing 'stock return differences due to various ratios of the company's earnings relative to its price'. The low portfolios also have a strong negative exposure to Investment Quality, defined as 'uncertainty around company operating fundamentals (sales, earnings, cash flows) and the accrual components of their earnings'.

"The comparisons between the low- and high-carbon and low- and high-sales portfolios demonstrate how akin the portfolios are: Low carbon portfolios look very similar to low sales portfolios"

All the factors that represent Quality and Value are negative, while those that represent Volatility are positive. This shows that portfolios constructed with estimated scope 3 data have neither a value nor a growth bias. This is in line with the hypothesis that portfolios that minimise Scope 3 over EVIC (using an industry multiplier methodology) are not providing meaningful environmental reductions and are instead, just targeting the companies that make less money through sales compared to their share price. In a theoretical environment, our hypothesis appears to be sound.

What Does a Live Fund Constructed With Scope 3 Data Look Like?

The analysis in the previous section was conducted on a theoretical basis based on in-house research. In this section we tested our hypothesis using a live fund.

To investigate if scope 3 data influence portfolio construction, we needed to take a portfolio without scope 3 reductions and compare its characteristics vs its reduced version. One live and popular example of a portfolio agreed on by most industry experts is the MSCI World index. The MSCI World is an index constructed by MSCI to represent the general developed market without any factor biases and is market cap weighted. MSCI has recently launched another spinoff of the World Index which targets a reduction in scope 3 emissions called the MSCI World Climate Paris Aligned Index. The index does not actively target any factor or country exposures differently from MSCI World, so any active style characteristics expressed in the Paris Aligned Index vs the MSCI World will be due to the bias of the Scope 3 score reduction.

To assess the style differences, we conducted a hypothesis test to see if the MSCI World Climate Paris Aligned Index (as shown by using BlackRock's iShares MSCI World Paris-Aligned Climate Fund, which has the MSCI World Climate Paris Aligned Benchmark Select Index as its benchmark) differs from MSCI World for each style proxy. The test would check if two means were significantly different to each other for each proxy given the proxy's adjusted standard deviation (adjusted to have a Gaussian normal distribution z score). This is a standard methodology used in the industry to check for factor differences between portfolios.

We commenced the test by fetching the fundamental data of the underlying securities in both indices, calculating both portfolios' means for each factor, and then dividing the difference by the factor's adjusted standard deviation to get the z score of that factor.

$$z_{i\ score} = \frac{M_{pi} - M_{bi}}{\sigma_i \sqrt{\sum_{s=1}^{s=n} (w_s)^2}}$$

Where:

- M_{pi} is MSCI World Climate Paris Aligned Index factor (i) mean
- M_{bi} is MSCI World factor (i) mean
- σ_i standard deviation of factor (i)
- s is the number of securities in MSCI World
- w_s is the weight of securities in MSCI World

A z score less than 0.5 in magnitude in either direction demonstrates that there is no statistical significance to the difference in exposure between the two portfolios.

A z score between 1 and 2 positive or negative demonstrates that MSCI World Climate Paris Aligned Index has exposure to that factor more or less than MSCI World, respectively.

A z score above 2 or below minus two demonstrates the exposure is quite significant and could be deliberate.

Below are the results of the factor test for the holdings as of the end of December 2022 after accounting for any sector factor biases by removing the sector mean factor value from each security before calculating the z score.

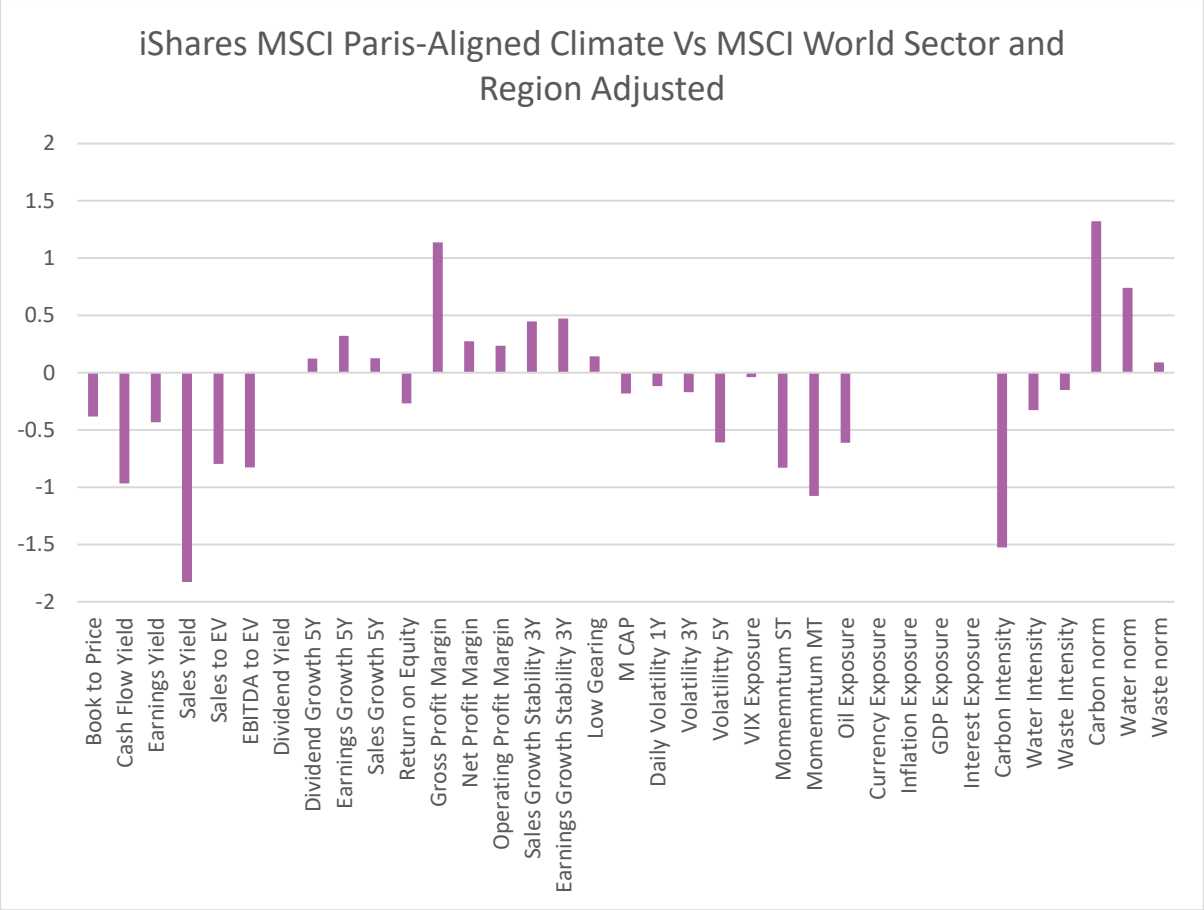


Figure 6: Data taken from S&P CapIQ. Graph created by Osmosis.

This graph shows that the MSCI World Climate Paris Aligned Index exhibits an observable negative sales yield bias, which means it is more exposed to securities with lower sales yield, and cash flow yield to a certain extent, than the MSCI World. A sales yield is the annual sales per share divided by the share price of a company. A natural negative value exposure is usually accompanied by positive growth factor exposure as growth companies tend to be expensive compared to the sales they make on the hope that earnings growth is rapid. However, this is not the case and we can see that the earnings and sales growth are in line with MSCI World. We can also see that the MSCI World Climate Paris Aligned Index exhibits a negative momentum exposure against the MSCI World, which means that the different securities in the MSCI World Climate Paris Aligned Index did not perform as well as the ones in the MSCI World. The MSCI World Climate Paris Aligned Index has a lower carbon intensity versus the MSCI World, but at the cost of having expensive, poor performing stocks.

"The MSCI World Climate Paris Aligned Index has lower carbon intensity versus the MSCI World, but at the cost of having expensive, poor performing stocks."

Looking into the sales yield exposure through time, we can see that the factor has been consistently underweight in the MSCI World Climate Paris Aligned Index vs MSCI World.

Figure 7: Data taken from S&P CapIQ. Graph created by Osmosis.

Conclusion

Investors seeking to minimise the total carbon footprint of their portfolios, using off-the-shelf Scope 3 emissions data, will be disappointed. Not only is it impossible to identify positive management action through this dataset, but it is also likely to lead to portfolios with large unintended consequences.

We fundamentally believe that companies that manage their environmental impact better than their peers will deliver greater shareholder value. However, to identify these companies, accurate measurement is vital. Given that for most companies, complex Scope 3 emissions dwarf Scope 1 and 2 emissions, this is far from straightforward. Intricacies surrounding availability, collecting, and calculating emission data from across a company's whole value chain, and then reporting it in a single figure, means that data quality and comparability is extremely low.

To fulfil market demands, major data providers such as MSCI and Bloomberg have tried to overcome these issues. However, our in-depth analysis on the estimation methodologies used raises considerable concern. At least two thirds of the Scope 3 emissions in the MSCI World data set are estimated using a revenue-based model, meaning that the Scope 3 figure is derived by multiplying the company's revenue with an industry specific intensity factor. Such a process may identify the biggest sources of GHG emissions, but this methodology makes it impossible to identify positive corporate actions, or those companies that are actively managing the emissions across their value chain.

Given that Scope 3 emissions encompass the majority of a company's total carbon footprint, and that it is based on a revenue figure, we hypothesised that any portfolio designed to minimise carbon emissions (Scopes 1, 2 and 3) would yield a portfolio with companies that have lower sales then their peers.

The association between Scope 3 emissions and sales was confirmed by our research, We were able to demonstrate that ranking companies within sector based on total carbon footprint/EVIC is correlated to ranking these companies using sales/EVIC, yielding a R2 value of 0.83. Our analysis also showed that portfolios minimising total carbon footprint/EVIC look remarkably similar to portfolios constructed to minimise sales/EVIC. Our hypotheses were further backed-up using a live fund analysis comparing BlackRock's iShares MSCI World Paris-Aligned Climate Fund (which utilises estimation data) to the MSCI World.

Our research has lead us to conclude that an over-reliance on revenue in estimation models leads to investment in companies that have comparably lower economic activity and sales versus their peers, and in many cases inferior resource management. The result is self-defeating from both a financial and an environmental perspective.

Osmosis' Approach to Scope 3 Integration

Since its launch in 2009, Osmosis has exclusively focused on identifying those companies that generate more economic value versus the natural resources they consume. We aim to identify those companies that manage their natural resource consumption better than their peers, and therefore have focused on the natural resource consumption directly under management control. Naturally, Scope 1 and 2 emissions have been the main focus.

We've always believed that for a just transition we need a whole-economy solution, not discriminating 'for or against' sectors. This philosophy underlies the Osmosis approach to measuring emissions and provides a partial solution to the Scope 3 conundrum. We don't consider the use phase emissions of cars produced when assessing a car manufacturing company. However, we have many companies with huge car fleets in our portfolios, from telecommunications companies like BT, to retailers such as Tesco. The emissions from the cars on the road will therefore be considered when assessing these company's Scope 1 emissions. Similarly, while we don't incorporate Transportation and Distribution as a Scope 3 factor, we will assess transportation companies within our Industrial Transportation sector, picking efficient companies over inefficient ones.

There are certain Scope 3 categories we would never consider when evaluating a company's performance, because the data is either immaterial, or outside of management's control. Our investment philosophy fails to see the importance of emissions stemming from employee commuting to a company's valuation, even if high-quality data would be available.

Other Scope 3 categories are relevant under our philosophy and are integrated either directly or indirectly via our model. Business travel emission data is well reported, and very comparable. Moreover, how employees travel for business purposes and the frequency with which they do so is something a company has control over. In our framework, we therefore bring Business Travel Scope 3 emissions back onto the environmental balance sheet.

The relevance of other Scope 3 categories to our model is highly dependent on the investee company's business model. Elements such as Franchises and Leased Assets could be material, but data to quantify this is currently not yet available to include in our models. We are actively engaging with companies where these categories are especially important and hope to improve our model as companies start to measure and report data.

The Scope 3 category 'Waste Generated in Operations' on the other hand is brought back onto the environmental balance sheet. However, we do not look at this through a carbon lens but focus on collecting primary data to quantify this impact. Our three-factor approach includes waste generation, a purer indicator of this impact, rather than trying to convert it back into a figure with a tCO2e unit.

Given the complexity of calculating, reporting, and integrating Scope 3 emissions into portfolios, we strongly believe in this more granular approach. Environmental impacts do not need to be brought to a carbon-figure for them to be relevant, and we advocate that there are purer forms of integrating Scope 3 effects into portfolios. While it doesn't necessarily fit our investment thesis, if an investor would like to incorporate the use phase-emissions of car manufacturers, a weighted average mile-per-gallon figure for the company's car sales would be a purer, better indicator of a 'good' company than something converted to a tCO2e value. Similarly, analysing and incorporating the energy efficiency scores of household goods would give a better indicator of the indirect environmental impacts a company has then an equivalent CO2 figure.

This approach requires a deep understanding of environmental impacts within each sector and targeted sector-specific metrics but is vastly superior to integrating an off-the-shelf estimated dataset.

Important Information

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