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Special Issue: Greenwashing





To Net or Not to Net, That Is the

Question: A Regulatory Review for Calculating the ESG Impact of Hedge Fund Portfolios

Jason Mitchell



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KEY FINDINGS

- Sustainable finance regulation has largely overlooked alternatives, particularly hedge funds, given the greater complexity of strategies and asset classes. However, regulators are now expanding their scope to recognize the role that hedge funds can play in sustainable finance.
- The role of short selling in sustainable finance, especially in a net zero context, has been increasingly discussed and debated among regulators, market participants, investor initiatives, investor trade organizations, and ESG data providers. There is a concern that hedge funds may, intentionally or unintentionally, employ short selling to misrepresent their real-world impact, which is distinct from exposure to financial risk.
- Short selling can affect the cost of capital and engagement as channels of influence on corporate behavior. However, there are nuances that should be considered, namely the efficacy of short selling among different asset classes to affect the cost of capital, the time-varying aspect of short selling, and the limitations that short sellers face when engaging corporates.
- UK, US, and EU regulators have each signaled their leaning in different manners. The EU, as the regulator with the most mature regulatory framework, appears to establish a compromise that balances safeguards against greenwashing with the mechanics of portfolio management and reporting.

ABSTRACT

Sustainable finance regulation has largely overlooked alternatives, particularly hedge funds, given the greater complexity of strategies and asset classes. However, regulators are now expanding their scope to recognize the role that hedge funds can play in sustainable finance. The role of short selling in sustainable finance, especially in a net zero context, has been increasingly discussed and debated among regulators, market participants, investor initiatives, investor trade organizations and ESG data providers. There is a concern that hedge funds may intentionally or unintentionally employ short selling to misrepresent their real-world impact which is distinct from exposure to financial risk. This article summarizes these arguments and traces the signals from UK, US, and European regulators. It contributes to the discourse by providing considerations to the channels of influence, specifically the efficacy of short selling among different asset classes to affect the cost of capital; the time-varying aspect of short selling; and the limitations that short sellers face when engaging corporates. Last, the EU—as the regulator with the most mature regulatory framework—appears to establish a compromise that balances safeguards against greenwashing with the mechanics of portfolio management and reporting.

ver the past decade, sustainable finance has undergone a tremendous amount of growth and maturation. The formation of investor-led initiatives like the United Nations-supported Principles for Responsible Investment (PRI) helped to organize what had, up to then, been disparate, atomized interests of sustainable investors. At the same time, market-driven efforts around environmental, social, and governance (ESG) criteria have advanced from investor frameworks to standards and, in cases like the Sustainable Accounting Standards Board (SASB)-influenced International Sustainable Standards Board (ISSB), are now under regulatory consideration.

In theory, these developments should alleviate concerns about greenwashing, the practice of making unsubstantiated or false claims about the environmental or ESG attributes and capabilities of an investment product. Although greenwashing concerns predate the emergence of sustainable finance regulation, recently introduced regulatory regimes like the European Union's Sustainable Finance Disclosure Regulation (SFDR) have activated it within the asset-management community. Despite specific guidelines for what actually qualifies as greenwashing, traditional mis-selling rules have generally provided a solid footing for regulators—particularly the US Securities and Exchange Commission (SEC)—to begin to establish more prescriptive rules for sustainable investing. Indeed, recent high-profile cases brought against DWS Group, Goldman Sachs Asset Management, and BNY Mellon by the SEC have elevated greenwashing from largely a reputational risk to regulatory and litigation risks subject

Greenwashing is complicated by the fact that sustainable finance regulations are still being defined. The European Commission, for example, continues to refine rulemaking around the EU SFDR, which is in its third year and now entering its more prescriptive Level 2 phase. For many market participants, the degree of regulatory revisionism supports the perception that the rules are being changed in the middle of the game.

Following the introduction of the EU SFDR, several national regulators are now also proposing their own sustainable finance regulatory frameworks. Indeed, the old compliance dictum—do what you say, and say what you do—sounds straightforward, but it is increasingly clear that there is a lot of nuance and even disagreement in what the actual doing should look like. Some regulatory regimes are proposing broad, principles-based approaches; others assume a more prescriptive approach. Some concentrate on enhancing corporate and investor ESG disclosures but others have emphasized labelling regimes. Some, like the EU, prioritize directing capital flows to support the climate transition and others, like the UK, focus on consumer protection.²

Regardless of the approach, a common thread throughout national regulatory efforts is a specific interest in providing protections against greenwashing. Thus far, regulators have focused on traditional, long-only strategies, with an emphasis on corporate issuer securities within equities and fixed income. This approach prioritizes the greatest amount of asset-under-management ground and establishes the broadest baseline for institutional investors against the best data available. It also means that more complex asset classes and strategy types have gone largely overlooked. The fact that other frameworks like the Taskforce on Climate-Related Finance Disclosure (TCFD) effectively ignore short-side exposures only contributes to the notion that hedge funds are an overlooked investment strategy type (Climate Disclosure

 $^{^{1}}$ Regulators and market participants have increasingly raised greenwashing concerns in asset management, including Andrew (2022), Bain (2020), Flood (2022), Johnson and Kerber (2022), Lee (2020), Segal (2022), and Uranaka et al. (2023).

 $^{^2}$ In the European Commission's (EC) (2018) "Action Plan: Financing Sustainable Growth," the EC specifically cites its aim to "...reorient capital flows toward sustainable investment in order to achieve sustainable and inclusive growth."

Standards Board 2018). If left unaddressed, ESG investors may struggle to gain exposure to the diversification benefits of alternative strategy types and asset classes.

However, with either enforced or proposed disclosure and labelling frameworks rolled out, regulators are now beginning to expand their focus to areas such as alternatives—including hedge funds—which often make use of more complex instruments like derivatives.3 Regulators—including most recently the UK's Financial Conduct Authority (FCA)—have recognized the role that hedge funds can play in sustainable finance. The hedge-fund practice of short selling has come under attention by industry participants and regulators, alike, for how it can align with sustainable investment frameworks, its channels of influence on corporate behavior and its reporting expectations under different risk lenses.

This article first outlines the main arguments within the sustainable short-selling debate, specifically the treatment of reporting short selling that potentially carries greenwashing implications in a net zero context. Second, it contributes to the discussion with additional considerations around the channels of influence, specifically the time-varying aspect of short selling and the limitations for engagement. Last, the article provides an arc to the discussion, linking disparate views in what has become an active debate within the industry alongside regulatory signals to demonstrate that, although greenwashing will be an overriding factor, there are signs of a compromise owing to the mechanics of portfolio management and reporting.

BACKGROUND

One of the concerns that has emerged relates to the susceptibility of hedge funds to agency problems in the context of greenwashing. An agency problem describes a conflict of interest where one party acts to serve in its own interest, potentially resulting in misaligned incentives and behavior. Academic research has previously examined this agency problem linked to liquidity, investment returns, and performance reporting.4 In a recent paper, academics highlight the hedge-fund agency problem related to responsible investing. Despite underperforming their peers on a risk-adjusted basis, hedge-fund signatories to the PRI accumulate greater investor flows. maintain higher assets under management (AUM) and, as a result, benefit from higher fee revenues (Liang et al. 2022). The authors note that "some fund managers could deceptively endorse the PRI to attract flows from responsible investors while not incorporating ESG into their investment decisions. To put it bluntly, managers may engage in greenwashing. In that case, the endorsement of responsible investment should be symptomatic of agency problems" (Liang et al. 2022).

The Institutional Investors Group on Climate Change (IIGCC), an investor initiative representing more than 375 members with more than \$51 trillion AUM that develops frameworks for achieving net zero for institutional investors, asks hedge funds "to commit to avoid greenwashing in all their investment activities, including avoiding the use of derivatives and shorts to mislead on the true influence and impact of the strategy" (Institutional Investor Group of Climate Change 2022). By extension, an agency problem could potentially arise if a hedge fund greenwashes with the intent to misrepresent the environmental or net zero impact of its portfolio to increase assets under management or its management fees. For example, greenwashing could take

³In 2022, the European Sustainable Finance Platform's Sub-Working Group 5 advanced recommendations for how to address derivatives in the context of the EU Taxonomy to the European Commission for review. A decision by the European Commission is not expected until 2024 at the earliest.

⁴Academic work that addresses hedge fund agency problems related to returns, liquidity, and reporting includes Aggarwal and Jorion (2010), Ramadorai (2013), and Aragon and Nanda (2017).

the form of an investor including the high carbon-intensive shorts in portfolio exposure to claim a "negative carbon emissions" profile or, inversely, an investor ignoring shorts that have a particularly low carbon intensity.

For hedge funds, which collectively manage more than \$3.8 trillion (Hedge Fund Research 2022) in AUM, the debate around the technical, almost-pedantic merits of how to treat and report short positions in a sustainable finance context has been polarizing. In 2022, a number of institutional investors debated how to treat short selling, a strategy that sells a security without ownership, via borrowing with the objective of covering or buying it back at a lower price to profit from the spread.⁵ Investors utilize short selling for a number of purposes, primarily to hedge risk or bet on a decline in the value of an asset. Short selling in an ESG context has the potential to reward investors for discovering ESG risks, including carbon risks, that have been mispriced by the market. Moreover, investors can use short selling as a means to influence corporate behavior and improve corporate governance. The debate expanded to include investor initiatives, investor trade organizations, and ESG data providers who have all produced independent papers outlining their methodological opinions.

At its core, the discussion centers on the distinction between two forms of risk: financial materiality versus double materiality. Financial materiality represents the risk that, for instance, climate change or increasing carbon emissions will have on an investment portfolio. Double materiality—sometimes called an inside-out, outside-in perspective—factors in both the risk that climate change will have on a portfolio and the impact that a portfolio's holdings will have on the environment and society. For example, a double materiality approach would argue that investors in Boohoo, the fast fashion apparel manufacturer, would have been well served to proactively identify and understand the company's poor working conditions within its supply chain before those conditions manifested into a modern slavery investigation, resulting in a 23% decline in its share price (Nilsson et al. 2020). The distinction between financial materiality and double materiality represents a fundamental divide between regional applications of ESG.

For the United States, financial materiality is fixed in definition and rooted in American securities law and regulation. 6 For Europe, where double materiality underpins the EU's Non-Financial Reporting Directive (NFRD), the concept of materiality is more dynamic and malleable, which explains its expansion into double materiality (European Commission 2020). European investors are obliged to conduct double-materiality-style, do-no-significant-harm (DNSH) tests under the EU SFDR, while the US is entrenched in a financial materiality construct as a matter of historical case law. In a podcast episode in 2021, former SEC Commissioner Allison Herren Lee, who was responsible for establishing the SEC's Climate and ESG Enforcement Taskforce, characterized the concept of double materiality as a false dichotomy (Mitchell 2021). Her argument is that ESG externalities are ultimately temporal in nature; the carbon emitted into the atmosphere by a company will return as an environmental risk so long as it is financially material.

Proponents of the netting approach adopt a similar philosophical position to former Commissioner Allison Herren Lee in that materiality lies primarily at the firm enterprise level rather than externalities to society and the environment at large.

⁵ For the exchange by institutional investors discussing the treatment of short selling in a net zero context, see Mitchell (2022a), Lenders (2022), Slocum and Cappucci (2022), and Asness (2022).

⁶Materiality was first introduced in the US Securities Act of 1933 and applied by the SEC in a financial context as "those matters as to which an average prudent investor ought reasonably to be informed before purchasing the security registered." Rooted in Supreme Court Justice Thurgood Marshall's ruling of TSC Industries v. Northway in 1976, the language was updated in Rule 405 of the Securities Act in 1982 and later amended in 1999 to state that a "matter is material if there is a substantial likelihood that a reasonable person would consider it important."

There are three predominant arguments for netting. The first addresses the cost of capital as a channel of influence on corporate behavior. It argues that the sole focus on long exposure implies that there is no direct impact on the cost of capital from short selling. This article conceptually recognizes this argument, but finds that there are financing mechanism-specific and time-varying considerations that fund managers can leverage to augment the impact on the cost of capital.

Proponents also advance the notion that the disaggregation of longs and shorts adds to complexity, particularly for asset owners and allocators who allocate across a wide range of underlying asset managers. In other words, the complexity of disaggregating long and short exposures generally offsets the benefit of netting, which is minimized across many managers. The last, and perhaps the most compelling, argument is that netting resolves the potential for double counting carbon emissions. It applies a traditional, ledger-style accounting approach where total market exposure to financed emissions must ultimately net to zero. The IIGCC itself admits to this challenge, conceding that "...the essential element is clarity over the purpose for which the metric is to be used—financial risk management or real economy alignment of influence and impact" (Institutional Investor Group on Climate Change 2022).

Given this context, the distinction between financial materiality and double materiality carries important implications for reporting portfolio exposure in a net zero context. Financial materiality focuses on economic risk and will naturally net long and short positions to produce a net exposure to climate and ESG risks. With its second lens assessing real-world, socio-environmental impact, double materiality seeks to provide transparency by reporting disaggregated long and short exposures to carbon emissions but ultimately measure its real-world impact based on the long exposure of a portfolio. Real-world impact can best be described as recognizing the positive and negative externalities of a portfolio's investments. In sum, impact-oriented investments are made with the explicit intention to produce positive, measurable socio-environmental outcomes combined with a financial return. However, this approach ignores the potential impact that short selling can have on the cost of capital of a corporate issuer, which this article later addresses.

This approach focuses on the long exposure because impact metrics generally are not expressed as negative values, unlike financial metrics. For example, social impact indicators like work fatalities, gender pay gap, and carbon emissions are expressed as positive values because a negative work fatality value or a gender pay gap value does not reflect the nature of real-world impact.8 By extension, fund managers would not present their fund as short or workplace fatalities or the gender pay gap. On the other hand, financial metrics that measure economic risk using metrics like carbon intensity or water intensity can be expressed as a positive, neutral, or negative value based on the portfolio exposure.

Although all investors manage portfolios looking through an economic, risk-based lens, ESG investors—in particular, signatories to net zero initiatives who commit to reducing the financed emissions of a portfolio in line with the Paris Agreement by 2050—aim to invest through an impact lens.9 For signatories to net zero investor initiatives, net zero intrinsically represents an exercise in double materiality.

⁷ See the Global Impact Investing Network definition at https://thegiin.org/impact-investing/needto-know/#what-is-impact-investing.

⁸Impact indicators are complicated and vary according to their focus. Product and service-related impacts are generally expressed as positive impacts, particularly in the social realm. However, the impact of a company's operations from a biodiversity perspective are expressed as negative impacts as they generally detract from biodiversity. An exception to this general rule would be a forestry business.

⁹According to the Partnership for Carbon Accounting Financials (PCAF nd), financed emissions represent "...the absolute emissions that banks and investors finance through their loans and investments." It is the measure of an investor's ownership of tonnes of GHG carbon dioxide equivalents divided by firm enterprise value including cash (EVIC) or tCO2e/EVIC.

Net zero investor signatories commit to managing down the carbon emissions in their portfolios through approaches that may include implementing carbon constraints or excluding carbon-intensive corporates, investing into the energy transition based on forward metrics like capital expenditure plans, engaging with corporates, or integrating climate risk into strategic asset allocation decision making. Although the ownership principle relates to the primary financing of a business or economic activity, many still consider that the ownership principle is implied through secondary equity or debt markets—avenues used by a majority of investors—where channels of influence can play a meaningful role on corporate behavior.

Moreover, it is now generally accepted by many market participants and investor organizations that short selling is not equivalent to carbon offsetting. 10 Indeed, even the integrity of carbon offsets, themselves, is under tremendous scrutiny. 11 Yet, the accounting approach where shorts are netted against longs, in effect, fungibly treats shorts as carbon offsets by minimizing exposure to financed emissions. In other words, exposure does not equal real-world impact. Accordingly, one concern from the sustainable finance industry is that applying a risk-based accounting approach to net zero has the potential to misrepresent its underlying impact. For instance, a hedge fund strategy that is carbon neutral or carbon negative on a risk-adjusted basis could present itself as having immediately achieved net zero without having to implement IIGCC-recommended net zero tools like exclusions, corporate engagement, and investment into the energy transition to reduce financed emissions. In another example, a hedge fund could maintain high carbon exposure on the long side—for the sake of argument, well in excess of its comparable long-only benchmark—yet offset entirely or more by higher short side carbon exposure to present itself as carbon neutral or carbon negative, respectively. Again, an investment risk lens supports this netting approach, but there are industry concerns that it misrepresents the impact on the financed emissions themselves. In other words, economic exposure by itself is not equivalent to real-world impact.

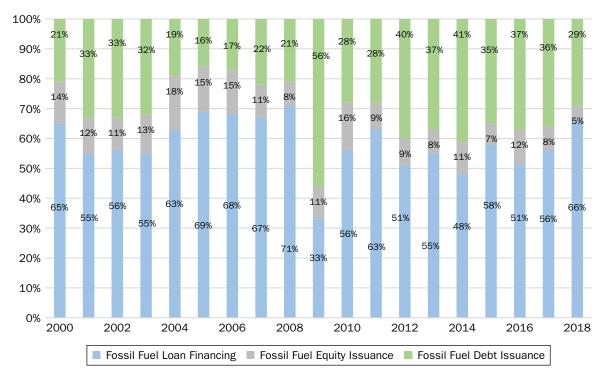
CHANNELS OF INFLUENCE

Another thread of the discussion recognizes two channels of influence or mechanisms by which investors affect corporate behavior to contribute to positive sustainability outcomes. The first channel represents an investor's ability to influence asset prices and the underlying cost of capital. The second channel is an investor's ability to employ stewardship practices including engagement, collaborative action, shareholder activism, voting, and other rights to effect positive change around corporate social and environmental performance.

¹⁰The UN-convened Net Zero Asset Managers Initiative makes clear that carbon offsets relate to "long-term carbon removal where there are no technologically and/or financially viable ways to eliminate emissions." Among industry participants, short selling appears to have been used interchangeably with carbon offsets and carbon permits as a means for investors to achieve net zero objectives in Palazzolo et al. (2020). However, this position is later reversed in Asness (2022), which states that "reducing your holding of a big carbon emitter does not immediately change the underlying firm's emissions, nor does it magically remove CO2 from the atmosphere. Thus, it would be wrong to think of it as a direct 'offset' in the sense that most seem to mean it." For other articles arguing this point, see Close (2022) and Guthrie (2023). In Mitchell (2022b), Sadan states that shorts do not have "anything to do with voluntary carbon markets."

¹¹ For recent examples, see Paul (2023), Weston and Greenfield (2023), and Hodgson and Nauman (2021).

EXHIBIT 1 Global Financing of Fossil Fuels at the Financial Center Level by Asset Class, 2000-2018



SOURCE: Cojoianu et al. (2023). The authors also maintain a public dashboard of the dataset. Link.

However, there are real-world considerations for both channels to acknowledge. First, cost of capital as a channel of influence continues to be debated. 12 The effectiveness of public equities relative to other forms of financing is arguably a less powerful means for investors to affect corporate behavior. Exhibit 1 depicts global financing flows split among debt issuance, equity issuance, and loan financing using the global fossil fuel industry as an example. In 2018, loan financing represented 66% of overall fossil fuel financing, compared to debt issuance of 29% and equity issuance of 5%. Relative to debt, equity issuance remains a persistent minority across the time series. Given the higher degree that corporates borrow and issue debt relative to equity, it would be much more effective for fund managers to leverage the cost of the capital channel through the debt. Indeed, there is a powerful argument to differentiate financing mechanisms in this respect so that the combination of shorting listed credit and engaging with the creditor banks responsible for loan financing represents a much more effective avenue for fund managers to impact corporates' cost of capital than focusing on the cost of equity.¹³

There are also important nuances to the effectiveness of short selling on the cost of capital. Conceptually, just as the accumulation of shares by an investor lowers an issuer's cost of capital, shorting shares of an issuer should increase its funding costs. This logic contributes to a perception of equivalency between divestment and short

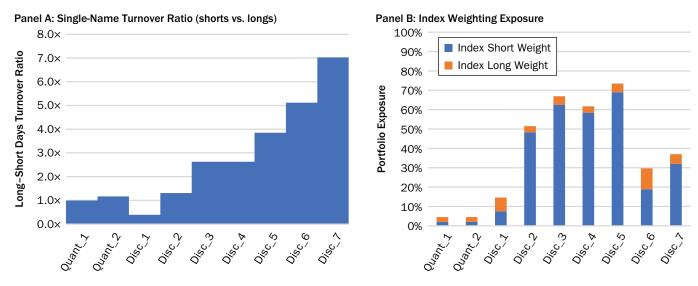
¹²A number of studies conclude that divestment and short selling do not represent an economically significant impact on the cost of capital (Berk and van Binsbergen 2021 and Ferenc 2022). In June 2022, the Managed Funds Association (MFA) and Copenhagen Economics (2022) produced a paper that argues that short selling has the potential to reduce capital investment in emissions-heavy companies.

¹³There are successful examples of institutional shareholders engaging with banks in order to reduce fossil fuel financing (White and Jessop 2022, ESG Today 2023).

EXHIBIT 2

SOURCE: Man Group.

Long-Short ESG Positioning Considerations



NOTES: Panel A: represents the ratio short side vs long side turnover ratio in single names. Quant_1 represents a Man Numeric systematic long-short strategy. Quant_2 represents a Man GLG systematic long-short strategy. Disc_2 to Disc_7 represent Man GLG discretionary long-short book strategies. Trading activity for the period Jan 2017 to Jan 2019. Panel B: represents the weighting of long and short-side indices. Quant_1 represents a Man Numeric systematic long-short strategy. Quant_2 represents a Man GLG systematic long-short strategy. Disc_2 to Disc_7 represent Man GLG discretionary long-short book strategies. Trading activity for the period Jan 2017 to Jan 2019.

selling as channels of influence on the cost of capital (Rehnberg 2022). However, divestment represents the long-term, structural exit of capital from an issuer and short selling represents a temporal or time-varying effect. This effect is subject to potential exogenous and endogenous pressures like issuer-specific short squeezes, macro-oriented covering, stock recalls, and changes in borrowing costs that will be reversed as the investor buys back the position. Hence, covering a short position reverses the cost of capital flow, ultimately reducing funding costs for a firm.

The time-varying aspect of short selling is particularly evident for discretionary long-short managers. Exhibit 2 illustrates data from seven long-short managers compared to two quantitative strategies. Because it is difficult to procure timely hedge fund short-side information, we use several portfolios managed by our firm to overcome this barrier and to gain a rough approximation of general hedge fund portfolio manager behavior. The discretionary managers exhibit a significantly higher turnover of single-name shorts relative to single-name longs. One potential explanation is that discretionary managers generally make structural, longer-term investments on the long side and manage for shorter-term, financial risks on the short side, to protect against the risk of a catalyst or earnings-induced short squeeze, stock recall, or increase in borrowing costs. Rules-based quantitative strategies are often more symmetrically positioned in trading, but their turnover can often be much shorter term in nature. In addition, discretionary managers appear to rely on index hedges rather than single-name shorts to hedge portfolio risk, potentially because of the lower risk of being short squeezed. Index shorts also pose their own limitations for ESG strategies. The passive breadth of index shorts weakens the intentional impact to the cost of capital argument and the ability to directly and effectively engage with index constituents.

As the second channel of influence, active engagement is a widely recognized approach employed by many asset managers and activists in an effort to improve corporate governance and ESG behavior. A number of hedge funds are notable for

taking highly visible positions to engage publicly with corporate managements and boards of directors. For example, Engine No. 1, a relatively small US-based hedge fund, organized a shareholder campaign, collaborating with other investors to propose the replacement of several Exxon directors. Chris Hohn, head of The Children's Investment Fund, has criticized prominent asset owners for low levels of shareholder resolution filing activity (De Meulemeester 2022). Even small hedge funds, such as Bluebell Capital, with small shareholdings have managed to engage with large, multi-billion-dollar corporations to call for improvements to corporate governance and environmental practices.14 It is important to note that this form of hedge-fund activism is almost always expressed through long positions, not short selling, which gives activists access to voting rights and enhances their ability to engage. Moreover, activist strategies generally seek to extract long-term financial gain or to achieve a reduction in risk from engagement activities. Hence, being positioned short may potentially mean an investor loses the financial gain or risk-reduction benefit if their engagement activity is successful. The lack of alignment is another argument for why engaging on the short side presents its own challenges.

There are also other limitations for stewardship as an engagement channel for hedge funds. Although quant strategies systematically vote, they generally focus on breadth at the expense of engaging with specific companies on ESG issues. Discretionary hedge fund strategies often engage with companies given their portfolio concentration, but the use of synthetic exposure (swaps and CFDs, for instance) means that voting rights are forfeited. Moreover, short positioning, in contrast, obviously does not imply ownership, potentially weakening the channel of influence. Although engagement with short positions is conceptually possible, sensitivity around short positioning and the risk of short squeezes means that hedge funds generally do not conduct high-profile activist engagement campaigns and that evidence of such engagements are rare.

THE EMERGENCE OF GREENWASHING CONCERNS AND REGULATORY SIGNALS

In a paper published in 2015, Threshold Group and Trucost first proposed a means of environmental reporting for long-short strategies (Salo and Hokanson 2015). The paper outlined a reporting methodology where only the financed emissions of the long side of a portfolio are reported and the short-side exposure is ignored. Interestingly, the paper goes on to recommend the following:

Short positions and short derivatives positions do not provide an actual reduction in GHG emission production, which raises a question as to whether or not to 'net' them against long positions. We believe the answer depends on the user's perspective. In any case, gross exposure (long plus short) and net exposure (long minus short) should ideally be presented for each contract type separately before being aggregated or 'netted off.' Netting should only occur for common contract types and for the same underlying investment for simplicity, due to difficulties in matching up similar (but not identical) contracts and underlying assets. (Salo and Hokanson 2015, 10)

In other words, transparency, simplicity, and commonality are overriding first principles to provide disclosure. Although the exact usage of "contract type" is ambiguous. the authors appear to propose first separating gross long and gross short exposures

¹⁴Bluebell's activist campaigns include pushing Solvay to reduce its carbon emissions by 2050. https://www.solvay.com/en/press-release/solvay-and-bluebell-capital-partners-reach-settlement-andissue-joint-statement.

before being aggregated or netted. 15 Perhaps more important is the case for limiting netting to the "same underlying investment for simplicity." This proposal is important because it reemerges as a potential explanation for how European regulators appear to be reconciling similar reporting inconsistencies, which this article later addresses.

MSCI followed in April 2022 with a paper, based on industry consultation and internal research, that recommends a policy of transparency where long and short carbon metrics are shown separately. In the paper, MSCI first introduces greenwashing concerns, writing that, "While this creates additional reporting and interpretation burden, this approach would help mitigate the risks of misreporting and greenwashing allegations, and avoid potential conflation of intent, impact, ownership and risk management into any one aggregation scheme" (Mahmood et al. 2022).

In May 2022, the IIGCC published a discussion paper, "Incorporating Derivatives and Hedge Funds into the Net Zero Investment Framework." Given its international, multistakeholder representation, particularly of investors who have committed to the Net Zero Asset Manager Initiative (NAZMI) and the Net Zero Asset Owner Alliance (NZAOA), the IIGCC is a highly relevant policy signal that regulators will likely consider. The paper marks the second, and perhaps even more explicit, linkage between greenwashing and the potential for misrepresentation by netting off short positions in a real-world impact context:

By separating out reporting on measures of real-economy influence and measures of financial risk, we encourage a more nuanced understanding of portfolio risk and influence. Making sure financed emissions continue to be highlighted without netting off short positions should help discourage greenwashing. Investors need to campaign to educate policy makers, the public and the media on the distinction between the real economy influence and portfolio exposure and risk figures. (Institutional Investor Group on Climate Change 2022)

In effect, the IIGCC appears to recognize the utility of netting from a portfolio risk exposure perspective while also cautioning investors against netting exposures to promote real-world impact. This comment should not come as a surprise. The IIGCC is an investor initiative and is obliged to consider both real economy portfolio effects and the net zero impact on CO2 emissions. Nonetheless, this reverts to the distinction between financial materiality and double materiality that this article covers earlier.

In short, regulators have increasingly adopted sustainable finance frameworks to protect against greenwashing. Although the EU has been the most specific given its ongoing rules-setting for SFDR and the EU Taxonomy, both the UK and the US appear to have signaled their own preferences for how to treat short selling. It is in investors' interest for policymakers to converge around a common approach to short selling to avoid regulatory fragmentation.

US SECURITIES AND EXCHANGE COMMISSION (SEC)

Despite the singular emphasis on financial materiality, the SEC requested responses to their proposed rules regarding reporting short exposures in its enhanced ESG disclosures released in May 2022. The wording of the SEC's comment appears

 $^{^{15}}$ In addition to long-side reporting, the Threshold Group and Trucost paper also makes a case for reporting the sum of gross long and short exposures. In 2021 following a half year of consultations with market participants including asset owners, asset managers, and hedge funds, MSCI presented a number of approaches to the market, including grossing and netting (and their variants), across a range of ESG metric types along with discussion on the risk vs. real-world implications of each approach.

to suggest some degree of concern about the usage of netting to report portfolio carbon emissions exposure.

The SEC (2022) states that "if a fund engages in a short sale of a security, the proposed requirements do not include a provision that would permit the fund to subtract the GHG emissions associated with the security from the GHG emissions of the fund's portfolio that are used to calculate the fund's WACI [weighted-average carbon intensity] or carbon footprint."

This is consistent with the principles behinds its traditional mis-selling rules and the proposed ESG-named fund rules, which push for greater transparency. According to its 2023 regulatory agenda, the SEC plans to finalize the rules within its ESG enhanced disclosures in October 2023.

UK FINANCIAL CONDUCT AUTHORITY (FCA)

Benefiting from the lessons learned from the EU SFDR, the FCA's sustainable finance framework—the sustainability disclosure requirements (SDR)—provides a more focused approach around disclosure and labelling, specifically addressing alternative strategies (FCA 2022b). Even prior to the release of the SDR consultation paper in October 2021, the FCA published an open letter to CEOs of hedge fund and private equity firms (FCA 2022a). While acknowledging the growth of ESG within alternative strategies, the FCA stated that it will increasingly scrutinize firms' ESG claims as part of the regular review of its supervisory strategy. The letter also alludes to agency problems and conflicts of interest where it cites firms that have bypassed their internal processes to increase AUM.

The FCA recognized the role of short selling and derivatives to contribute to positive sustainability outcomes. The FCA also makes a concerted effort not to disadvantage any investment strategy or asset class within the SDR framework. However, its initial comments point to a broad, transparency-driven approach, rather than a prescriptive one. Specifically, the FCA asks firms to explain how short selling aligns with the product's stated sustainability objective, but it does not ask how market participants should think about it. This could be interpreted as overly broad, but it is clear that the FCA is evolving its approach and expectations.

Responding to comments about the need for transparency and reporting methodologies with regard to long and short positions, the FCA stated: "At this stage, we do not propose to set specific parameters for the use of short selling in the context of our sustainable investment labels. However, we propose guidance to clarify that, where relevant to its investment policy and strategy, a firm must explain how short selling aligns with or contributes to the sustainable investment product's stated sustainability objective" (FCA 2022b).

Nonetheless, the FCA has made comments that would seem to suggest some sense of rulemaking proclivity. In a podcast recording, FCA Director of ESG Sasha Sadan qualified guidance for reporting short positions:

What we [FCA] want is for a consumer to understand how ... if they shorted an oil and gas stock, they can't short it and then say that's reducing carbon emissions because that oil and gas stock doesn't even know that you're short it, it couldn't care less because someone else has bought that stock. And that's just not actually anything to do with voluntary carbon markets. So we've got to make sure that it's just more transparency for now. Of course, as we get going we will evolve this and so will the industry. And also as there's more metrics out there, sustainability metrics because I want alternative strategies to also put some metrics out there that are linked. (Mitchell 2022b)

The statement has several implications. First, the comment suggests an awareness of the netting discussion and the potential for misleading carbon exposure in a real economy context. Second, it is clear that FCA rule-making is an evolving process where hedge funds will likely be expected to provide transparency through the development of sustainability metrics that are distinct from economic risk metrics. Because the SDR is designed around consumer protection, it could be argued that the standards for hedge funds will remain high, because this regulation does not cover sophisticated and institutional investors.

THE EUROPEAN COMMISSION AND EUROPEAN SUPERVISORY AUTHORITIES

In November 2022, the European Supervisory Authorities (ESAs) published an extensive response to questions on SFDR and its level 2 delegated regulation (also known as the regulatory technical standards or RTS) (European Supervisory Authority 2022).¹⁶ In it, European regulators provided the most detailed guidance yet for how to treat short selling within the rulemaking for SFDR, specifically the exercise of principle adverse impacts (PAIs) of an investment portfolio. The PAIs are a set of sustainability indicators composed of fourteen mandatory corporate indicators alongside two additional indicators for sovereigns and two real estate-specific indicators; the list expands to a further forty-six additional voluntary indicators of which firms must select two indicators on which to report. PAIs allow investors to measure and monitor the negative impacts of the securities they invest in across a broad scope of environmental and social criteria that include but are not limited to scope 1, 2, and 3 GHG emissions; renewable and nonrenewable energy sources; gender pay gap metrics; biodiversity; hazardous waste; water intensity; and deforestation impacts.

Asked how short positions should be incorporated within the SFDR's PAI indicators, the ESAs provided this guidance:

The rules do not specify separately any particular instruction for the disclosure of short positions with regard to the principal adverse impact disclosures in Annex I of the Delegated Regulation. The ESAs are of the view that publishing short positions separately from the main calculation would not help the comprehensibility of the PAI disclosures. The calculations for short positions should apply the methodology used to calculate net short positions laid down in Article 3(4) and (5) of Regulation (EU) No 236/2012 of the European Parliament and of the Council. The principal adverse impacts of long and short positions should also be netted accordingly at the level of the individual counterpart (investee undertaking, sovereign, supranational, real estate asset), but without going below zero.

The ESA guidance is significant for several reasons. It aligns with the existing methodology that the European Commission has already outlined for use in the

 $^{^{16}}$ It is worth noting that ESA Q&A documents are not a primary piece of legislation like Article 2(17) SFDR and delegated regulations. Although the ESA Q&A document does not carry the status of law, there is nonetheless a general expectation that market participants follow its guidance. In addition, the ESAs reconfirmed their guidance on the treatment of netting on April 12, 2023, in their "Joint Consultation Paper: Review of SFDR Delegated Regulation regarding PAI and financial product disclosures." They also ask for practitioner views about extending the netting methodology as applied to PAIs and the Taxonomy to the calculation of sustainable investments. In the context of SFDR, a sustainable investment represents an investment that promotes environmental and/or social objectives that does not do significant harm to the environment or society.

EU taxonomy. 17 However, critics would say that establishing alignment between SFDR and the EU taxonomy conflates the objectives of the two distinct pieces of regulation. The EU taxonomy is risk oriented; it is designed to minimize reputational and environmental risks through the enhanced reporting of green economic activities based on the EU's Nomenclature of Economic Activities (NACE) statistical classification system. Netting economic activities in this respect is logical because it represents the risk to the investment portfolio that the underlying business and economic activity risks reflect.

The SFDR's PAI indicators, on the other hand, are impact focused and not a risk metric like the EU taxonomy. PAI indicators are intended to provide real-world impact metrics for an investment portfolio, so it is surprising to see that the ESA guidance applies the same netting treatment to EU taxonomy risk and PAI impacts. Given the complexities and revisions the European Commission has had to make to its sustainable finance regulation, one explanation for this may be that—similar to the recommendation for simplicity from the Threshold and Trucost paper (Salo and Hokanson 2015)—it represents a pragmatic, keep-it-simple approach to align the reporting treatment of short positions between the SFDR and EU taxonomy, rather than operate with two independent methodologies. Of course, another explanation is that it simply reflects the uncoordinated conflation of the SFDR and EU taxonomy frameworks by different EU bureaucratic stakeholder groups.

Exhibit 3 depicts all fourteen mandatory PAIs of the EU SFDR. Although the PAIs are named eponymously on the basis of their real-world impact, the reality is that a number of indicators can serve dual uses in terms of expressing exposure to financial risk and to impact. The author has included two columns characterizing each PAI according to its financial risk and impact materiality, but these are open to interpretation. Nonetheless, the point of the exercise is to demonstrate that the utility of metrics can vary according to different regulatory and jurisdictional interpretations, as well as investor preferences. For example, some PAI indicators, like total GHG emissions, can signal financial risk when multiplied by a regional price of carbon per ton, as well as convey real-world impact through the use of channels of influence to manage down emissions. However, other PAI indicators like gender pay gap, board gender diversity, and exposure to controversial weapons are more suited to a double materiality-style of social-environmental impact than of portfolio risk exposure. To this end, a heuristic to differentiate PAI indicators between their materiality to financial risk and to impact could simply be the indicator's meaningfulness as a negative value. A portfolio with negative carbon intensity represents meaningful economic risk exposure, but negative values for impact indicators like board diversity, gender pay gap, and UNGC violations are less meaningful beyond reputational concerns.

Nonetheless, the ESAs appear to include several greenwashing safeguards into their guidance, which suggests an effort to balance greenwashing considerations with the real-world mechanics of portfolio management and reporting. First, the ESAs stipulate that netting may be used but strictly on a same-name, single-issuer basis. In effect, this collapses the ownership in different trading instruments of a single issuer for situations where investors may box a position as a hedging strategy or net

¹⁷ European Commission, April 6, 2022. "Commission Delegated Regulation Supplementing Regulation 2019/2088 of the European Parliament." Refers to Regulation (EU) No 236/2012 of the European Parliament and of the Council of 14 March 2012 on short selling and certain aspects of credit default swaps (OJ L 86, 24.3.2012, p. 1) which states: "The degree to which investments are into environmentally sustainable economic activities shall be calculated by applying the methodology used to calculate net short positions laid down in Article 3(4) and (5) of Regulation (EU) No 236/2012 of the European Parliament and of the Council."

EXHIBIT 3 EU SFDR Principle Adverse Impacts (PAIs)

	PAI	Metric	Financial	Impact
1	Total GHG emissions	(Scope 1, 2, 3 emissions)	Х	Х
2	Carbon footprint	Carbon footprint	Х	
3	GHG intensity of investee companies	GHG intensity of investee companies	Х	
4	Exposure to companies active in fossil fuel sector	Share of investments in companies active in the fossil fuel sector	Χ	
5	Share of nonrenewable energy consumption and production	Share of nonrenewable energy consumption and nonrenewable energy production of investee companies from nonrenewable energy sources compared to renewable energy sources, expressed as a percentage	X	
6	Energy consumption intensity per high impact climate sector	Energy consumption in GWh per million EUR of revenue of investee companies, per high impact climate sector	Χ	
7	Activities negative affecting biodiversity sensitive areas	Share of investments in investee companies with sites/ operations located in or near biodiversity sensitive areas where activities of those investee companies negatively affect those areas		Х
8	Emissions to water	Tons of emissions to water generated by investee companies per million EUR invested, expressed as a weighted average	X	Х
9	Hazardous waste ratio	Tons of hazardous waste generated by investee companies per million EUR invested, expressed as a weighted average	Χ	Х
10	Violations of UN Global Compact principles (UNGC) and OECD guidelines	Share of investments in investee companies that have been involved in violations of the UNGC principles or OECD Guidelines for Multinational Enterprises		Χ
11	Lack of processes and compliance mechanisms to monitor compliance with UNGC principles and OECD guidelines	Share of investments in investee companies without policies to monitor compliance with the UNGC principles or OECD Guidelines for Multinational Enterprises or grievance/complaints handling mechanisms to address violations of the UNGC principles or OECD		X
12	Gender pay gap	Average unadjusted gender pay gap of investee companies		Χ
13	Board gender diversity	Average ratio of female to male board members in investee companies		Х
14	Exposure to controversial weapons	Share of investments in investee companies involved in the manufacture or selling of controversial weapons		Χ

SOURCE: European Supervisory Authorities (2021).

single positions against their index constituent. 18 Although investors can tactically box positions, it is worth noting that investment portfolios rarely hold the same position on both long and short sides. Again, this ESA single-issuer definition contrasts with the general investment risk view of netting that represents the net total long exposure of all securities against the total exposure of all short securities across all instruments.

According to EU policymakers, long and short exposures of different securities and exposures cannot be broadly netted against one another at the portfolio level. Although EU policymakers have not disclosed their rationale for this, it may represent a pragmatic, yet very narrow, solution to align reporting methodologies. As a second greenwashing control, the ESAs indicated that a negative carbon value is not viable as a same-name, single-issuer exposure may be netted, "but without going below zero." This allows hedge funds to benefit from their short exposure, but it limits their ability to overclaim from net short exposure.

¹⁸Boxing a trading position represents simultaneous ownership of both long and short positions in the same security. Boxing a position was frequently practiced as a tax-deferral strategy to offset capital gains taxes prior to the Taxpayer Relief Act of 1997. However, investors may still box positions in order to hedge them while remaining either net long or net short.

EXHIBIT 4 EU Taxonomy and SFDR Representative Approach to ESG Exposure (same-name basis, single issuer basis)

	Exposure			
Instrument	Α	В	С	D
Long cash equities	+100	+100	+100	+50
(-) Short cash equities	0	-45	-100	-45
(-/+) Index constituents [via derivatives]	0	-10	-10	-30
(-/+) Derivatives	0	-5	-20	+5
Net exposure	+100	+40	0	0

Exhibit 4 illustrates four different examples to demonstrate how netting works on a single, same-name basis in the EU taxonomy and the SFDR. Column A represents the carbon emissions of a long portfolio of cash equities. Column B represents the netting effect that collapses exposure. It is important to highlight that the EU instructs fund managers to net synthetic long and short exposures first before netting against long cash-equities exposure. Column C represents an example of the greenwashing control where exposures are stopped out at a zero value, which effectively prevents investors from claiming to manage a "carbon negative" exposure from an impact perspective, although Column C would clearly be short carbon from a portfolio risk perspective. Like Column C, Column D reflects the net position where the investor owns a combination of synthetic long and short positions but ultimately reports a value of zero because of the underlying negative exposure of −5.

CONCLUSION

Over the past several years, regulation has emerged as one of the predominant themes in sustainable investing. As these regulatory frameworks continue to mature, regulators are now expanding their focus to include more complex, alternative asset classes and strategy types. Importantly, policymakers are acknowledging hedge funds for the constructive role that they can play in sustainable finance. One of the implications of this expansion is that regulators will increasingly scrutinize hedge-fund portfolios for evidence of ESG overclaiming and introduce methodologies to protect against greenwashing.

Central to the discussion is the distinction between a portfolio's exposure to economic risk and its exposure to real-world impact as manifested by the financial materiality versus double materiality approach. On a first principles basis, reporting disaggregated exposures would support greater transparency and would appear to be another middle ground of compromise. 19 Indeed, the IIGCC formally recommends "that investors measure and report gross long, gross short and net emissions metrics" with the provision that transparency should reveal how these metrics address carbon net financial risk, as well as impact to the real economy (Institutional Investor Group on Climate Change 2022).

In sum, the discussion about the treatment of short selling in the context of sustainable finance has proved incredibly productive. This is vital, as there will likely be greater demand for strategies that employ short selling as sustainable investing

¹⁹ In "Short Selling and Responsible Investment", the Alternative Investment Management Association (2020) writes that investors and data providers may wish to report long and short exposures separately "to properly reflect their investment activities." In "The Use of Short Selling to Achieve ESG Goals," the Managed Funds Association (2022) offers both a netting and a disaggregated reporting approach.

matures. Regulators, market participants, investor trade organizations, investor initiatives, and ESG data providers have all contributed toward the formation of a single reporting standard or multiple reporting forms based on transparency.

And although regulators have largely welcomed the role that hedge funds can play, it remains unclear how they will determine the reporting standards around short selling, particularly given the jurisdictional considerations for materiality and its implications for greenwashing. The SEC and the FCA have yet to formalize their ESG rule-making approach for short selling, although they appear to have respectively signaled their own leaning in comments. At the same time, recent guidance from EU policymakers suggests a compromise that combines several greenwashing controls with single-issuer, same-name netting under the SFDR and EU Taxonomy frameworks.

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