Institutional Investors and Corporate Carbon Footprint: Global Evidence

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ABSTRACT

Climate-aware institutional investors are assumed to affect the transition towards a low carbon economy by exercising their prerogatives as owners of global companies. Investors concerned with climate change can influence investee companies’ carbon footprint by voting at shareholder meetings on climate-related issues and by actively engaging with executives and board members. We study to what extent institutional investors’ ownership affected corporate carbon emissions in 68 countries for the period of 2007 to 2018. Results show that institutional investment on average does not appear to lead to a carbon footprint reduction. However, institutional investors are associated with a limited reduction of carbon footprint for the highest polluters in the sample. These results suggest that climate-driven responsible investors can complement but not substitute national and international climate policies.
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1. Introduction
While national governments pledged to reduce their greenhouse gas emissions under the Paris Agreement, delivering on those aims will require significant changes in the production and in the consumption of energy by the sources of these emissions, primarily companies. The financial system is growingly aware of the risks posed by climate change (Krueger et al., 2020) and, accordingly, many financial actors are making investments decisions to reduce their exposure to assets – primarily securities issued by companies – particularly sensitive to climate risks. Because public and private pension schemes, private equity funds, insurance companies, sovereign wealth funds, mutual funds and other institutional asset managers have a long-term investment horizon, the reduction of medium to long-term risks such as climate change is for them of paramount concern (Gibson et al., 2021; Krueger et al., 2020). Moreover, many of those institutional investors also have substantial direct and indirect exposure to sectors that are particularly exposed to climate risks, such as infrastructure and energy.

Initiatives to promote the integration of sustainability into investment decisions are gaining momentum. For example, the vast majority of global institutional investors have now signed the United Nations’ Principle for Responsible Investments (UNPRI), committing to integrate ESG factors, including climate change, in their asset management operations. Disclosure of assets’ exposure to climate risks is emerging as a new practice with the growing diffusion of dedicated reporting frameworks such as the Task Force on Climate-Related Financial Disclosures (TCFD). Financial regulators, including central banks, are looking into ways to embed climatic change risks in their supervision and financial stability mandates. In this context, to what extent institutional investors can actually affect investee companies on delivering towards the Paris Agreement goals is a pressing financial and policymaking question.

Active ownership by institutional investors encompasses both engaging with the management and boards of directors of investee companies and proxy voting on issues concerning governance and performance, including those related to the environmental strategy (Dimson et al., 2015; 2019). The effectiveness of active ownership is receiving increasing attention in literature (Dyck et al., 2019; Broccardo et al., 2020). Active ownership approached vary widely across investors and geographies, but they usually involve mobilizing the public opinion and the media, in particular to bring attention to proxy votes on environmental-related issues at upcoming shareholders’ meetings. Other active ownership initiatives are carried out behind the scenes and consist of discreet dialogues and interactions between investors and management and/or board directors.

Climate-focused active ownership engagements are conducted either independently or through collaborative endeavors (Dimson et al., 2019). Some dedicated platforms include the Carbon Disclosure Project (CDP) and major investor networks focused on climate change, such as the European Institutional Investors Group on Climate Change (IIGCC), the Asia Investor Group on Climate Change (AIGCC), the Australia/New Zealand Investor Group on Climate Change (IGCC) and the Investor Network on Climate Risk (INCR). These collaborative engagements aim to encourage companies to disclose their climate change strategies (e.g. the CDP information requests), to set emission reduction targets and to take action on sector-specific issues such as gas flaring in the oil and gas sector. Examples of engagement objectives in this area include ensuring compensation policies are consistent with environmental targets, and requiring improved disclosure and target setting from companies on their carbon price assumptions.

Whether active engagement by climate-aware investors can actually affect investee companies’ carbon footprint is an empirical question with relevant implications for climate policymaking. In particular, assessing the relationship between climate-aware investors and carbon footprint would shed light on the ability of finance to contribute to the transition towards a low carbon economy as a complement, or even as a substitute, of climate policymaking. Importantly, institutional investors own assets that are not currently or effectively covered by existing...
national climate policies. Also, even in jurisdictions with a carbon taxation mechanism in place institutional investors are owners of businesses currently not included for instance in cap & trade frameworks. Therefore, climate-aware institutional investors can potentially complement or even substitute, in many ways, the existing national and international carbon policies.

We study to what extent institutional investors’ ownership affected corporate carbon emissions in 68 countries for the period of 2007 to 2018. Results show that institutional investment on average does not appear to lead to a carbon footprint reduction. However, institutional investors are associated with a limited reduction of carbon footprint for the highest polluters in the sample. Thus, responsible investors can help the decarbonization of investors but are unlikely to play a major role in the low carbon transition unless their active ownership becomes more effective.

The paper is structured as follows. Section 2 presents a literature review and develops the research hypotheses. Section 3 describes the applied methods and sample used for the analysis. Section 4 presents the results of the empirical analysis. Section 5 discusses the interpretation of the findings and concludes.
2. Literature Review and Hypothesis
Carbon emissions are increasingly material to the financial performance of companies and investors (Bolton and Kacperczyk, 2021). Institutional investors may be motivated by a mix of financial and/or social motives to reduce their portfolios' carbon exposure (Boermans and Galemia, 2019). Investors have therefore two possible strategies in promoting socially desirable outcomes in companies (Broccardo et al., 2020): exit (divestment) and voice (engagement). In this paper we study the role of institutional investors who report to (UNPRI) engaging on climate issues with investee companies. We are therefore able to provide a quantification of the “active ownership” effect on corporate carbon footprint by climate-aware institutional investors.

The tools used to achieve such goal are carbon targets, scenario analysis, enhanced disclosure. Typically, active ownership by institutional investors encompasses both engaging with the managers of investee companies and proxy voting on issues concerning the environmental and sustainability strategy (Dyck et al., 2019). Active ownership approached vary widely across investors and geographies, but they usually involve mobilizing the public opinion and the media, in particular to bring attention to proxy votes on environmental-related issues at upcoming shareholders’ meetings. Other active ownership initiatives are carried out behind the scenes and consist of discreet dialogues and interactions between investors and management and/or board directors (Dimson et al., 2020).

According to Celik & Isaksson (2013) the definition “institutional investor” constitutes a wide range of investors who are commonly characterised as a legal entity, but are heterogeneous in their “business models”, which constitutes many features such as their investment horizon, their purpose, beneficiaries and investment strategy.

Starks et al. (2017) state that investor horizon is a main determinant of investors’ CSR preference. CSR investments are merely costs on the short term that yield returns in the long term (Graves & Waddock, 1994; Starks et al., 2017) and therefore short-term investors tend to position themselves opposite to long-term investors in CSR investment decision-making processes (Cox et al., 2008).

Another main determinant of investors’ CSR preference is investors’ feeling of “psychological ownership” (McNulty & Nordberg, 2016). Psychological ownership reflects an “emotional investment” that creates “a feeling of possessiveness” and long-term commitment with the investee. Contrary to psychological ownership stands “legal ownership”, which reflects a legal right based and purely financial relationship with the investee (McNulty & Nordberg, 2016).

Psychological ownership is fundamental to other images of ownership such as universal ownership (McNulty & Nordberg, 2016). Universal owners (typically public pension funds and insurance companies) hold large diversified portfolio’s that practically represent a stake in the global economy, which implies that portfolio constituents absorb each other's external costs (Kiernan, 2007). Moreover, universal owners' investment decisions also need to reflect long-term non-financial interest of their constituents. Such investors are generally more exposed to stakeholder pressures (i.e. regulatory pressure, responsibilities to beneficiaries) (Cox et al., 2008). As such, the universal owner takes “investment approach agitated for change at investee companies but with larger social and economic purposes in mind” (McNulty & Nordberg, 2016). Others believe that institutional investors’ preferences only serve the maximization of short-term profits (Porter, 1992). In practice, the institutional investor community contains both types of investors. Investors can apply a variety of direct and in-direct strategies to improve their ESG footprint. Indirect strategies include for example thematic investments and negative and positive screening. Negative (positive) screening involves the exclusion (inclusion) of particular investments based on a set of ESG criteria. Thematic investments refer to portfolio specialization in a particular ESG topic (e.g. sustainable energy) (OECD, 2017). Shareholder engagement is a primary reason why investors use ESG information (Amel-Zedah & Serafeim, 2012). In principle, all equity investors are expected to engage with their investee, which compromises the monitoring of the firm, gathering new information and
spreading this information throughout the market, thereby using the rights attached to their equity ownership. This provides for the optimal functioning of capital markets and resource utilization across the economy (Celik & Isaksson, 2013). However, such ownership engagement introduces costs and benefits that not all investors are equally willing to get involved with.

Traditionally, the “actions taken by shareholders with the explicit intention of influencing corporations’ policies and practices”, which some refer to as “active ownership” (McNulty & Nordberg, 2016), address issues that exclusively are of interest to shareholders, such as issues relating to takeovers and business strategies (Dimson et al., 2015). Active ownership, however, is a multi-used term in literature that refers to different concepts of ownership engagement. Dimson et al. (2015) define active ownership more narrow as a form shareholder engagement that addresses ESG issues in the interest of a broader set of stakeholders. For the purpose of clarity, the remainder of this paper refers to Dimson’s definition as responsible ownership.

McNulty & Nordberg (2016) distinguish between two sorts of voice. The first is expressed through private dialogue and relationship building. The other expression of voice is based on a public-formal actions and the use of shareholder rights. Dyck et al. (2017) state that shareholder engagements relating to firm’s ES performance occur likely in the form private dialogue. David et al. (2007) provide contradictory evidence and explain: “activism can trigger managers to engage in political activities to safeguard their discretion, potentially diverting resources and reducing CSR.” However, over recent years, responsible ownership has strongly emerged, which has proven successful (Dimson et al., 2015). Further, research shows that foreign long-term IO improves corporate governance structures around the globe (Aggarwal et al., 2011; Bena, Ferreira, Matos & Pires, 2017), and IO tends to positively affect CSR (Cox et al., 2004; Cox et al., 2008; Dimson et al., 2015; Dyck et al., 2021; Keckses et al., 2016; Neubaum & Zahra, 2006; Uchida & Motta, 2015).

Summarizing, carbon emissions become increasingly material to financial performance. Shareholders may be motivated by a mix of financial and/or social motives to reduce their portfolios’ carbon exposure. This paper investigates whether institutional ownership (IO) affects firm’s carbon footprint. Scholars assume that IO volume is a proxy for the salience level of investors and thus their potential to evoke corporate changes (Neubaum & Zahra, 2006). This paper follows that assumption to quantify the independent variable of interest. The two main metrics to assess firms’ climate footprint are alternatively the carbon intensity (the ratio of emissions over sales) and total emissions. Therefore, using those two specifications the studied hypothesis is articulated as follows:

Hyp.1a: Institutional ownership is negatively associated with firms’ carbon-intensity

Hyp.1b: Institutional ownership is negatively associated with firms’ carbon-emissions.
3. Data and Methodology
To what extent the commitment to address climate of such large segment of the global institutional money can help deliver on the Paris Agreement targets is an underexplored empirical question. We first explore what actions and tools investors undertake to factor climate considerations in their operations. We obtained the portion of the 2018 survey to the signatories of the United Nations' Principle for Responsible Investments (UNPRI) reporting their dealings with climate change risks and opportunities. The survey respondents have a cumulated Assets under Management (AuM) of about 71 trillion USD, considering that according to some estimate the global AuM of such investors is about 79 trillion USD globally, the survey can be considered fairly representative (about 90% of the world total). Table 1 shows that investors accounting for 26% of the AuM seek their investee companies to reduce carbon footprint, such percentage is therefore expressing the quantity of AuM that is reported to be mobilized in active ownership operations. Moreover, Table 1 also shows that investors are actively managing their holdings’ exposure to climate change risks by using various tools such as carbon footprinting, scenario testing, and enhanced disclosure on emission risks.

We explore what determines the adoption of climate-related activities and operating tools by the investors reporting to UNPRI. Table 1 shows the results of a logistic regression where the dependent variable is equal to 1 if the investor reports having adopted the activity/tool and equal to 0 otherwise.

The independent variables are: 1) the dummy “Asset Owner” which is equal to 1 if the investor reporting to UNPRI is an asset owner, equal to 0 otherwise; 2) the “Reporting years” which expresses the total number of years the investor has reported to UNPRI; 3) and the “AuM” captures the dollar value of the total assets managed or owned by investors reporting to UN PRI. We also include controls for the region where the investor is headquartered.

Table 2 shows that the size and the seniority in reporting consistently show a positive and statistically significant relationship with the likelihood of investors adopting climate-related activities and operating tools. While the cumulated experience in UNPRI reporting points towards the existence of early strong commitment in responsible investments, the size seems to points towards the existence of economies of scale as only the larger investors might have sufficient organizational and financial resources to create and run active ownership operations.

### Table 1: Activities and tools used by institutional investors reporting to UN PRI in 2018

This table shows the amount of Assets under Management (AuM) of the institutional investors reporting to UN PRI. Data is from the UN PRI Survey 2018.

#### Panel A: Activities undertaken by investors to respond to climate change risk

<table>
<thead>
<tr>
<th>Activity</th>
<th>AuM (USD Trillion)</th>
<th>AuM/Total AuM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setting carbon reduction targets for portfolio</td>
<td>4.71</td>
<td>7%</td>
</tr>
<tr>
<td>Established climate change sensitive asset allocation strategy</td>
<td>6.36</td>
<td>10%</td>
</tr>
<tr>
<td>Targeted low carbon/ climate resilient investments</td>
<td>17.79</td>
<td>25%</td>
</tr>
<tr>
<td>Reduce portfolio exposure to emissions intensive holdings</td>
<td>15.67</td>
<td>22%</td>
</tr>
<tr>
<td>Used emissions data or analysis to inform investment decisions</td>
<td>18.46</td>
<td>26%</td>
</tr>
<tr>
<td>Sought climate change integration by companies</td>
<td>18.51</td>
<td>26%</td>
</tr>
<tr>
<td>Total AuM</td>
<td>71 billion USD</td>
<td>100%</td>
</tr>
</tbody>
</table>

#### Panel B: Tools used by investors to manage emission risks

<table>
<thead>
<tr>
<th>Tool</th>
<th>AuM (USD Trillion)</th>
<th>AuM/Total AuM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon footprinting</td>
<td>18.03</td>
<td>26%</td>
</tr>
<tr>
<td>Scenario testing</td>
<td>6.92</td>
<td>10%</td>
</tr>
<tr>
<td>Disclosure on emission risk</td>
<td>9.21</td>
<td>13%</td>
</tr>
<tr>
<td>Target setting for emission risk reduction</td>
<td>11.27</td>
<td>16%</td>
</tr>
<tr>
<td>Encourage internal/ external portfolio managers to monitor emission risks</td>
<td>16.72</td>
<td>24%</td>
</tr>
<tr>
<td>Emissions risks monitoring/reporting are formalized into contracts when appointing managers</td>
<td>4.67</td>
<td>7%</td>
</tr>
</tbody>
</table>

To study the actual effect of institutional ownership of climate-aware investors on the climate footprint of invested companies, we obtain firms’ annual carbon emissions data from Thomson Reuters ASSET4. Specifically, data are obtained from all constituent firms of the full ASSET4 universe list for the period 2007 to 2018. This timespan covers all available ASSET4 data and was chosen to maximize the dataset, anticipating that carbon emission data is relatively unavailable. Thomson Reuters reports scope 1 and 2 carbon emission data in their disclosed form under variable code ENERDP023. In case a firm does not disclose such emission data, Thomson Reuters estimates the CO2 emissions according to various models, reported under variable ENERDP123. This study complements disclosed emission data with Thomson Reuters’ estimates to maximize the number of observations. This yields an initial sample of 7373 firms. Data on firms’ institutional shareholdings is from Orbis. Table 3 displays the descriptive statistics.
This study adopts an OLS regression model with lagged values for the dependent variable. The regression equation is the following:

$$CF_{it} = \alpha + \beta IO_{it-1} + \gamma' Y_{it-1} + \Lambda + \epsilon_{it}$$

where $CF_{it}$ is the carbon footprint (measured alternatively as emissions of CO$_2$ or as the ratio of emissions of CO$_2$ and revenues) of company $i$ at time $t$, $IO_{it-1}$ is the institutional ownerships of company $i$ at time $t-1$, and $Y_{it-1}$ represents a collection of control variables for firm $i$ at time $t-1$. $\Lambda$ includes time, country, and industry fixed effects.
4. Results
We investigate whether institutional ownership impacts the carbon footprint (in terms of both emissions and carbon intensity) of investee companies. Table 4 reports the simplest models estimated using the lagged log of Emission (column 1) and the lag of carbon intensity (column 2). The interpretation of the coefficients should be intended as an impact on the percentage of emissions.

First of all, the table shows that institutional ownership coefficient has the hypothesized sign. However, considering the emissions volume there is no statistically significant effect. On the contrary, focusing on carbon intensity we observe the carbon intensity decreases by 0.1% for each 1% increase in ownership by institutional investors. Therefore, for one standard deviation in institutional ownership the carbon intensity decreases by -1.75% annually.

At a more granular level, Table 5 illustrates the difference between the bottom and top quarter of the distribution of the emissions and carbon intensity. Results suggest that in the bottom quartile of the distribution the institutional ownership makes no difference, the coefficient is indeed not significantly different from zero. If we observe the quartile of “heavy polluters”, it is possible to see that the coefficient is negative and significant for both the dependent variables which are used in this piece of research. For what concerns the emissions, the coefficient (-0.006) suggests that for each 1% increase in institutional ownership there is a decrease of CO2 of 0.6%. Considering one standard deviation increase in ownership we have a robust decrease of approximately 10.5% in emissions. When carbon intensity is considered, the effect is smaller in magnitude but still statistically significant; an increase of 1% in institutional ownership determines a carbon intensity reduction of 0.4% (one standard deviation increase in institutional ownership leads to a -12.7% in carbon intensity.

Table 4: Regression results: emissions and carbon intensity

<table>
<thead>
<tr>
<th>Variables</th>
<th>Log Emissions</th>
<th>Log Carbon Intensity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td>Coeff./se</td>
<td>Coeff./se</td>
<td></td>
</tr>
<tr>
<td>Institutional Ownership</td>
<td>-0.000 (0.001)</td>
<td>-0.001*** (0.001)</td>
</tr>
<tr>
<td>Sales</td>
<td>0.637*** (0.010)</td>
<td></td>
</tr>
<tr>
<td>Tobin’s Q</td>
<td>-0.011 (0.007)</td>
<td>-0.036*** (0.007)</td>
</tr>
<tr>
<td>Asset Tangibility</td>
<td>2.701*** (0.040)</td>
<td>2.740*** (0.041)</td>
</tr>
<tr>
<td>Asset Size</td>
<td>0.283*** (0.014)</td>
<td>-0.034*** (0.010)</td>
</tr>
<tr>
<td>Leverage</td>
<td>-0.004 (0.008)</td>
<td>-0.003 (0.008)</td>
</tr>
<tr>
<td>Earnings</td>
<td>-0.014* (0.008)</td>
<td>-0.017** (0.008)</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.781 (26010.334)</td>
<td>-2.978 (21492.527)</td>
</tr>
<tr>
<td>Observations</td>
<td>22114</td>
<td>22137</td>
</tr>
<tr>
<td>R-sq</td>
<td>0.745</td>
<td>0.592</td>
</tr>
<tr>
<td>Country</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Year</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Industry</td>
<td>YES</td>
<td>YES</td>
</tr>
</tbody>
</table>

Variables are transformed as indicated to improve data distributional properties. Regression estimates include robust standard errors, clustered at country-level. Data are from Thomson Reuters ASSET4; Worldscope & Orbis. Significance levels reported in superscript: *** is significant at 1%; ** is significant at 5%; * is significant at 10%.
Table 5: Regression results: emissions and carbon intensity by quartile
Variables are transformed as indicated to improve data distributional properties. Regression estimates include robust standard errors, clustered at country-level. Data are from Thomson Reuters ASSET4; Worldscope & Orbis. Significance levels reported in superscript: a is significant at 1%; b is significant at 5%; c is significant at 10%.

<table>
<thead>
<tr>
<th></th>
<th>Top 25% Emitters</th>
<th>Bottom 75% Emitters</th>
<th>Top 25% Emitters</th>
<th>Bottom 75% Emitters</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Log Emissions</td>
<td>Log Emissions</td>
<td>Log Carbon Intensity</td>
<td>Log Carbon Intensity</td>
</tr>
<tr>
<td></td>
<td>Coeff./se</td>
<td>Coeff./se</td>
<td>Coeff./se</td>
<td>Coeff./se</td>
</tr>
<tr>
<td>Instit. Ownership</td>
<td>-0.006***</td>
<td>-0.000</td>
<td>-0.004***</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.000)</td>
</tr>
<tr>
<td>Sales</td>
<td>0.220***</td>
<td>0.533***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.042)</td>
<td>(0.020)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tobin’s Q</td>
<td>-0.054</td>
<td>-0.003</td>
<td>0.050***</td>
<td>-0.031***</td>
</tr>
<tr>
<td></td>
<td>(0.039)</td>
<td>(0.016)</td>
<td>(0.011)</td>
<td>(0.006)</td>
</tr>
<tr>
<td>Asset Tangibility</td>
<td>1.427***</td>
<td>2.628***</td>
<td>0.182**</td>
<td>2.316***</td>
</tr>
<tr>
<td></td>
<td>(0.144)</td>
<td>(0.082)</td>
<td>(0.073)</td>
<td>(0.037)</td>
</tr>
<tr>
<td>Asset Size</td>
<td>0.315***</td>
<td>0.388***</td>
<td>0.006</td>
<td>-0.051***</td>
</tr>
<tr>
<td></td>
<td>(0.048)</td>
<td>(0.029)</td>
<td>(0.017)</td>
<td>(0.009)</td>
</tr>
<tr>
<td>Leverage</td>
<td>-0.020</td>
<td>0.031</td>
<td>0.121***</td>
<td>0.004</td>
</tr>
<tr>
<td></td>
<td>(0.039)</td>
<td>(0.031)</td>
<td>(0.035)</td>
<td>(0.006)</td>
</tr>
<tr>
<td>Earnings</td>
<td>0.037*</td>
<td>-0.021</td>
<td>-0.011</td>
<td>-0.019***</td>
</tr>
<tr>
<td></td>
<td>(0.020)</td>
<td>(0.017)</td>
<td>(0.013)</td>
<td>(0.007)</td>
</tr>
<tr>
<td>Constant</td>
<td>3.940***</td>
<td>0.195</td>
<td>-0.365</td>
<td>-1.689**</td>
</tr>
<tr>
<td></td>
<td>(1.018)</td>
<td>(1.303)</td>
<td>(0.749)</td>
<td>(0.736)</td>
</tr>
<tr>
<td>Observations</td>
<td>5369</td>
<td>16880</td>
<td>5309</td>
<td>16828</td>
</tr>
<tr>
<td>R-sq</td>
<td>0.493</td>
<td>0.548</td>
<td>0.282</td>
<td>0.445</td>
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<tr>
<td>Country</td>
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<tr>
<td>Year</td>
<td>YES</td>
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</tr>
<tr>
<td>Industry</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
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</tbody>
</table>
5. Conclusions
This study attempts to measure what impact climate-aware institutional shareholders have on firms’ carbon footprint. Thereby, this paper responds to a request from Louche et al. (2016) to assess the impact of (low-carbon) investment practices on climate change. This study analyses panel data of 6392 firms from 68 countries from the period between 2007 and 2018 on the impact of shareholders on their investees’ carbon-sales intensity. Across full sample, we find that institutional shareholders do not reduce in a meaningful way their investees’ carbon footprint but they contribute to the carbon emission reduction for the most polluting companies. However, even for the highest emitting companies in our sample the reduction of carbon footprint has a limited magnitude.
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About EDHEC-Risk Institute
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Academic Roots & Practitioner Reach
EDHEC Business School is actively pursuing an ambitious policy to produce academic research that is both practical and relevant. This policy, known as "Research for Business" and now labelled "Make an Impact", aims to make EDHEC an academic institution of reference in a small number of areas in which the school has reached critical mass in terms of expertise and research results. EDHEC is putting its academic expertise to work in addressing some of the major issues affecting society, most notably the climate emergency. EDHEC initiatives in the fields of sustainable finance and sustainable business are expected to be major contributions to the response to the sustainability challenges facing our economy.

In 2001, EDHEC Business School created EDHEC-Risk Institute, a premier academic centre for industry-relevant research in investment management, which has developed a portfolio of research and educational initiatives in the domain of investment solutions for institutional and individual investors.

The institute, in partnership with industry leaders, boasts a team of permanent professors, engineers and support staff, as well as affiliate professors and research associates. Their collective work has a particularly significant footprint in the areas of factor investing, retirement investing and sustainable investing. Its philosophy is to validate its work by publishing in international academic journals, as well as to make it available to the sector through position papers, published studies, online courses, on-campus workshops and global conferences.

To ensure the wide dissemination of its research to the investment industry, EDHEC-Risk also provides professionals with access to its website, https://risk.edhec.edu, which has more than 120,000 visitors and is devoted to asset and risk management research, with a focus on investment solutions. Finally, its quarterly newsletter is distributed to over 100,000 readers.

Building on the cutting-edge research of its faculty, EDHEC-Risk Institute creates programmes to help executives level up their financial expertise on topics of considerable interest in the asset management industry: factor investing, goal-based investing, sustainable investing, but also data science and machine learning.

EDHEC-Risk’s mission is to give participants an edge in today's fast-changing landscape, with programmes designed to help them convert theoretical concepts into practical results. Courses are run in different formats to match the market’s needs: 100% online, on-site, blended or bespoke programmes. To date, 2,500 professionals have chosen EDHEC-Risk Institute to help them address their challenges.

As part of its policy of transferring know-how to the investment industry, EDHEC-Risk Institute set up Scientific Beta, an original initiative to boost the take-up of the latest advances in smart beta design and implementation by the whole investment industry. On 31 January 2020, Singapore Exchange (SGX) acquired a majority stake in Scientific Beta, a transaction that vindicates the school’s “Make an Impact” model and its focus on producing research that is useful for both students and businesses. EDHEC-Risk Institute also contributed to the launch of EDHEC Infrastructure Institute (EDHECinfra), a spin-off dedicated to benchmarking private infrastructure investments. EDHECinfra is now a provider of research and indices on unlisted infrastructure investments.

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Publications and Position Papers (2018-2021)
2021 Publications

2020 Publications
• Le Sourd, V. and L. Martellini. The EDHEC European ETF and Smart Beta and Factor Investing Survey 2020 (September).
• Fays, B., Lambert, M., and N. Papageorgiou Risk Optimizations on Basis Portfolios: The Role of Sorting (June).

2019 Publications
• Martellini, L. and V. Milhau. Factor Investing in Liability-Driven and Goal-Based Investment Solutions (December).

2018 Publications
• Goltz, F. and V. Le Sourd. The EDHEC European ETF and Smart Beta and Factor Investing Survey 2018 (August).
• Mantilla-Garcia, D. Maximising the Volatility Return: A Risk-Based Strategy for Homogeneous Groups of Assets (June).
• Martellini, L. and V. Milhau. Smart Beta and Beyond: Maximising the Benefits of Factor Investing (February).