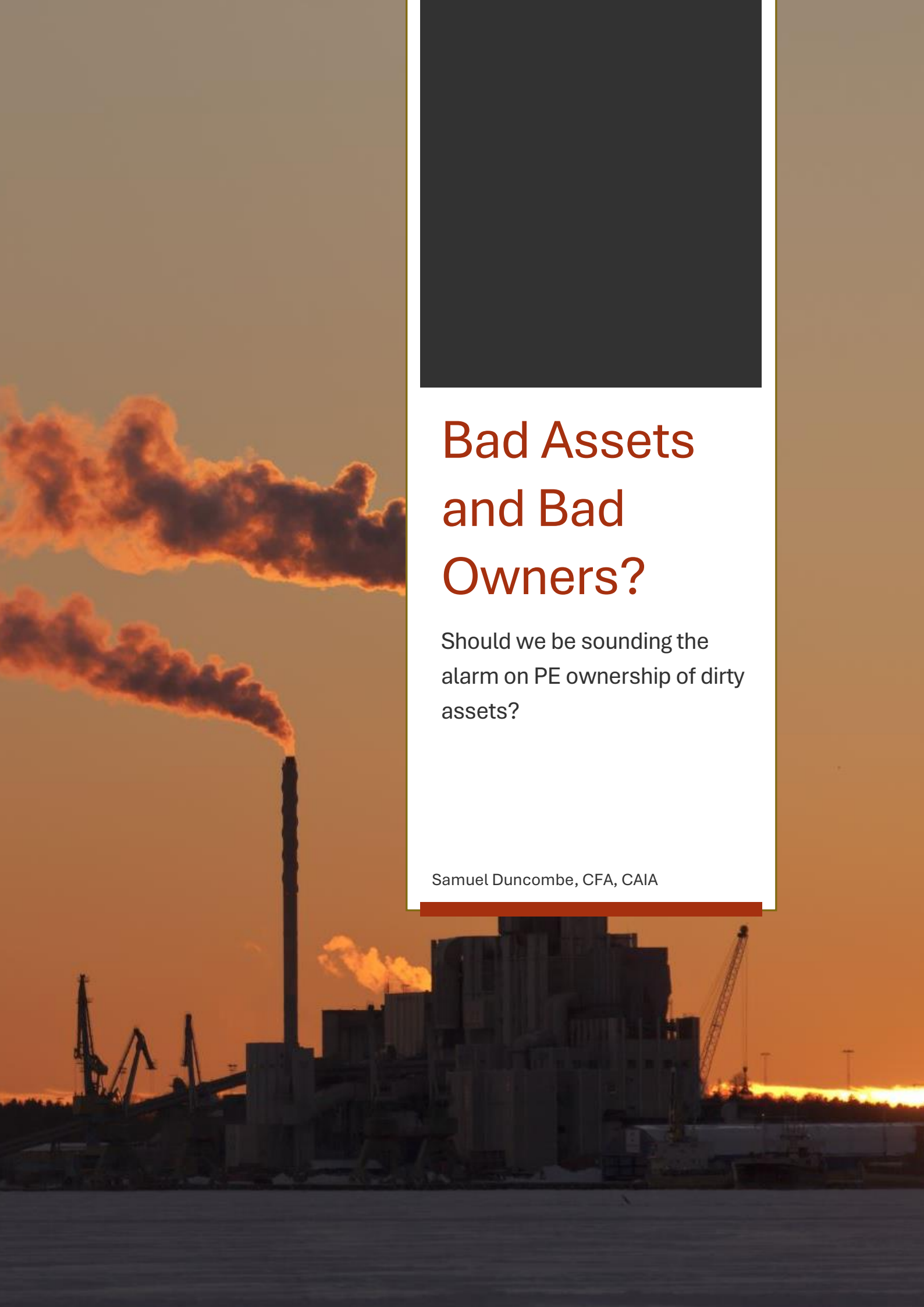

Bad Assets and Bad Owners?

Should we be sounding the alarm on PE ownership of dirty assets?

Samuel Duncombe, CFA, CAIA

Bad assets and bad owners?

Should we be sounding the alarm on PE ownership of dirty assets?

Executive Summary

- Concerns have been raised that the sale of polluting power plants to private equity funds, not subject to public reporting requirements, has an adverse environmental impact
- However, lack of public reporting obligations does not equate to lack of scrutiny, as large investors have a well-documented interest in good ESG practices
- The academic literature does support the hypothesis that publicly listed owners of polluting assets seek to divest these to appease shareholder pressure, and that such assets are likely to land in the hands of less transparent owners
- Importantly, sales to private equity ownership are not associated with detrimental environmental outcomes

Introduction

Whether and to what extent sustainability should be included in investment decisions will almost certainly continue to be debated for many years to come. The trend in recent years has, however, been undeniable, with investor interest in sustainability reaching new heights. This poses a challenge to publicly listed companies, particularly those in heavily polluting industries. Management teams must commit to reducing emissions or suffer shareholder discontent and, potentially, disinvestment and downward pressure on share prices. But reducing emissions is not always an easy task and there is only so much a company can do to persuade the public that their carbon-fired power plant is environmentally palatable. Much easier perhaps to simply sell such assets: no need to report those pesky emissions and an important step on that commitment to net zero for management to brag about in the next earnings call!

Unsurprisingly, not everyone is convinced. Brown-spinning, as the practice has been christened, has become the focus of both media and activist attention. The cynical view is simple and compelling: publicly listed corporations under pressure from shareholders to clean up their act sell their most polluting assets to private equity[1] or other shady privately held companies, who are not subject to the same scrutiny or public disclosure rules and can exploit the polluting assets to their full financial potential without concern for the environment. The expectation is, of course, that society and the natural environment suffer as a result of such transactions. Mainstream media outlets have raised the alarm, including leading publications such as the FT [2] and the

[1] Or private infrastructure. For the remainder of this text, private equity can be considered to include private infrastructure funds unless explicitly stated otherwise.

[2] The other climate risk investors need to talk about (ft.com)

Economist [3] : activists are even calling for regulatory intervention[4].

So how big is this issue? Should regulators intervene? And should investors be concerned that allocations to private equity contradict their desire to invest sustainably?

A common sense response

The brown-spinning argument crucially rests on the assumption that private equity owned businesses can exploit polluting assets without public or shareholder scrutiny. While not untrue, this argument is flawed. Private equity fund managers (GPs) are not exempt from the pressure to go green. The money that they invest predominantly comes from institutional investors such as pension funds, insurance companies and other large investors – many of whom are directly or indirectly linked to the public purse[5]. These investors have adopted their own ESG [6] policies and require transparency from the GPs they invest with. Research from academic[7] and industry[8] sources demonstrates that institutional investors scrutinise GPs' ESG credentials before investing and that GPs have been incorporating ESG practices in response to investor pressure. Mechanisms exist for GPs to be tied to their commitments, including agreements being formalised contractually in side letters, and limited partner advisory boards whose consent is required when GPs wish to pursue investments outside of their stated mandates.

Legislative developments in recent years aimed at combatting "greenwashing" serve to further align GPs' actions with their promises and, ultimately, the sustainability wishes of their investors. For example, many investors have restricted their investments to SFDR[9] article 8 or 9 funds – thereby encouraging GPs to adopt the restrictions that these classifications entail[10].

This dynamic undermines a core assumption of the brown-spinning argument, at least in relation to private equity-backed buyers. They may not be subject to the same public disclosures as stock market listed corporations, but it would be disingenuous to suggest that they operate without scrutiny.

A case can also be made that it is simply in GPs' best interests to manage their portfolio companies in a climate conscious way. One of the defining characteristics of private equity funds is that they are not permanent capital vehicles. GPs only have a few years post-acquisition before they must find a way to exit their portfolio companies and return cash to their investors. Generally speaking, this means a sale to another buyer. Higher emissions, or other ESG weaknesses, could lead to a much reduced interest from potential buyers and, ultimately, a lower valuation. Most optimistically, this argument could even see PE ownership as a mechanism for positive change as GPs enact ESG-improvements, such as emissions abatement, as a value creation lever to achieve higher exit multiples.

These arguments call into question the brown-spinning hypothesis, but the case is not conclusive. For a start, PE firms will always have more information about their own

[3] https://www.economist.com/finance-and-economics/who-buys-the-dirty-energy-assets-public-companies-no-longer-want/21807594
[4] Private Equity Climate Risks 2022 Scorecard & Report | Private Equity Climate Risks Private Equity Climate Risks (peclimaterisks.org)
[5] Including for example, public retirement funds or the European Investment Fund
[6] Environmental, social and governance
[7] See for example Zaccone and Pedrini (2020)
[8] Preqin (2020): Preqin-Investor-Outlook-Alternative-Assets-H1-2020.pdf
[9] In March 2021, the European Commission introduced the Sustainable Finance Disclosure Regulation (SFDR) to create a level playing field for financial market participants with relation to sustainability
[10] Based on industry feedback during the writing of this article

portfolio companies than their investors and may be able to obfuscate the true level of emissions or overstate abatement efforts. It is not without reason that "greenwashing" has become the focus of regulators' attention.

What does the science say?

Fortunately, however, we can go further than probing the assumptions of the brown-spinning narrative. In recent years, a body of academic literature on the topic has emerged. A thorough analysis by Ran Duchin, Janet Gao and Qiping Xu (Duchin et al., 2022), to be published in the prestigious *Journal of Finance*, provides a comprehensive analysis of the market for polluting plants. The authors make use of the Toxic Release Inventory (TRI) data from 2000 to 2020. The TRI captures more than 600 chemicals that adversely affect human health or the environment. While not exclusively focused on environmental pollution, the approach provides a rich dataset. The data are granular, measured at the plant level, rather than at the level of the corporate owner, for polluting plants in the United States. By combining these data with various other sources, the authors are able to examine what happens when these assets are divested. The results do, in part, lend support to the brown-spinning narrative presented above: firms are more likely to divest polluting plants following ESG risk exposure and more pollutive plants are more likely to be divested. The authors also show that management teams are significantly more likely to discuss improvements in their environmental policies in earnings calls following divestitures; sellers' efforts are found to be rewarded with notably better ESG ratings, too.

So far, the findings read very much like the brown-spinning playbook. The authors, though, find no evidence that a plant's pollution levels change around divestitures. An important caveat to this research is that financial buyers, including private equity funds, are excluded from the dataset. For our purposes then, Duchin et al. (2022) strongly indicates that corporate divestitures of polluting assets occur as predicted by the brown-spinning hypothesis. However, it also calls into question the predicted negative consequences of higher pollution levels and leaves unanswered questions regarding the role of private equity.

We can explore this developing area of research further to gain a better insight. In a recent working paper, Zoey Yiyuan Zhou examines specifically how greenhouse gas (GHG) emissions change at US powerplants when they are divested (Zhou, 2022). By combining GHG data from the Environmental Protection Agency with various financial databases, the author is able to explore some particularly pertinent questions: most interesting for our purposes is the roles that shareholder pressure and buyer type play in divestment decisions and subsequent emission levels. Similar to the findings in Duchin et al. (2022), the results are largely in line with the brown-spinning hypothesis: there is a positive association between the scrutiny of climate-conscious shareholders and GHG-emitting plant divestitures. Increased emissions are observed in power plants after these are sold to independent, private buyers. Importantly, however, this does not hold for private equity buyers. In summary then, Zhou (2022) adds further weight to the argument that brown-spinning does occur, but without implicating private equity as the guilty party.

One accusation we have not yet explored is that private equity owners could extend the life of polluting power plants, thereby increasing total GHG emissions. In essence, plants which would otherwise be decommissioned could be sold to private equity, out of the public eye. From a theoretical perspective, this claim clashes somewhat with the finite duration of private equity funds: it seems counterintuitive that a private equity fund which has an expected

duration of no longer than 12 years [11] will operate a power plant for longer than a conglomerate with an indefinite life. However, occasionally private capital vehicles, such as some private infrastructure funds, can have durations of 20 years or more, so the concern is still worth exploring. Here too, we can look to the emerging scholarly literature for some insight. Specifically, a recent working paper by Aleksander Andonov of the University of Amsterdam and Joshua Rauh of Stanford University (Andonov & Rauh, 2023) examines the topic of decommissioning, using a dataset of US electricity producing plants. The authors find no statistically significant evidence that private equity owners decommission plants later than domestic listed corporations, the traditional owners of such assets.

While the main focus of our analysis is to evaluate the credibility of the prevailing brown-spinning narrative, it is worth noting that some studies have found a positive relationship between power plant efficiency and private equity ownership. Andanov and Rauh (2023) find that plants owned by PE, institutional investors, and foreign listed corporations operate more efficiently, consuming less fuel. Echoing these findings, Xuanyu Bai and Youchang Wu (Bai & Wu, 2023), both of the University of Oregon, report that private equity-backed buyouts reduce CO_2 and NOx emissions, when scaled for output, by 4.2% and 9.0% respectively. Perhaps less intuitively, one working paper, Kumar (2024), even finds that private equity acquisitions of fossil fuel plants increase the development of solar generation assets in their vicinity. Critics may be well advised to consider the possibility that private equity involvement in the sector could have some environmental benefits.

Conclusion

Private equity does not enjoy the best reputation with the general public. No surprise then that the sector's involvement in polluting assets has been met with a fair degree of scepticism and, in some cases, alarm. There are, however, good reasons to believe that private equity firms do not act with the wanton disregard for the environment that critics accuse them of: principal among these is the well-documented environmental focus of large investors into private equity funds. The academic literature lends support for much of the "brown-spinning" hypothesis in general, but private equity does not appear to play the role its critics have predicted. Climate-conscious investors can, on this point at least, breathe easy, while activist groups and regulators should proceed with caution.

[11] This reflects a typical PE fund structure of 10 years plus two years of extensions

Bibliography

Andonov, A., & Rauh, J. D. (2023). *The Shifting Finance of Electricity Generation*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4287123

Bai, X., & Wu, Y. (2023). *Private Equity and Gas Emissions: Evidence from Electric Power Plants*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4364437

Duchin, R., Gao, J., & Xu, Q. (2022). *Sustainability or Greenwashing: Evidence from the Asset Market for Industrial Pollution*. https://ssrn.com/abstract=4095885

Kumar, M. (2024). *Getting Dirty Before You Get Clean: Institutional Investment in Fossil Fuels and the Green Transition*. http://dx.doi.org/10.2139/ssrn.4580631

Yiyuan Zhou, Z. (2022). *Shareholder Pressure and GHG Emissions Leakage: Evidence from Divested Plants*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4262193

Zaccone, M. C., & Pedrini, M. (2020). ESG factor integration into private equity. *Sustainability (Switzerland)*, *12*(14), 1–15. https://doi.org/10.3390/su12145725

About the author

SAMUEL DUNCOMBE, CFA, CAIA

After more than a decade working in the investment industry, I am now dedicating myself to bringing new and cutting-edge academic research to the practitioner side.

- ***s.duncombe@dcapitalinsights.com***
- ***+49 (0)1522 5831602***
- ***linkedin.com/in/samuel-duncombe-cfa-caia-3b892735***

I am **expressly grateful** for the helpful comments and suggestions by: **Dr. Vaska Atta-Darkua** (Assistant Professor of Finance, Bucknell university), **Mr. Christian Stütz** (Treasury Manager, Sparkasse Rhein Neckar Nord), **Mr. Benjamin Chadwick** (Partner, Selinus Capital)