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Net-Zero norms in sustainable finance: what explains asset managers' target-setting?

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ABSTRACT

A growing number of investors are adopting net-zero targets. Based on semi-structured interviews with 20 asset managers – primarily investing in public equities and fixed-income – this paper investigates the factors influencing target-setting. Novel to the literature, we show that investor coalitions have played a central role in the institutionalisation of net zero, including through the dissemination of 'best practice' guidance. However, significant variations are found in the degree to which asset managers have aligned with, or even exceeded, this guidance. To understand this heterogeneity, we propose a new typology, which distinguishes investors as hedgers, fast followers, and leaders. A combination of internal factors (such as resources and organisational values) and external pressures (including client preferences and regulatory contexts) are shown to explain these variations. Our analysis reveals that net-zero target-setting is largely a continuation of asset managers' past responsible investment practices, shaped by their existing capabilities, beliefs, and client bases.

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Net zero; investor; asset manager; decarbonisation; climate change; fiduciary duty; greenwashing; coalition; entrepreneurship; institutionalism

1. Introduction

Over the past decade, net zero has emerged as an increasingly important guiding objective for international climate policy and action (Hale et al. 2024). Net zero refers to a state where anthropogenic greenhouse gas emissions (GHGs) are balanced by permanent removals from the atmosphere. Achieving the Paris Agreement's goal of limiting warming to 1.5 degrees Centigrade implies reaching net-zero emissions between 2050 and 2060 (IPCC 2018; Allen et al. 2022). Since removals are expected to play a minor role, significant and rapid reductions in CO_2 emissions from human activities will be required.

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To align themselves with these objectives, a growing number of state, subnational and non-state actors have adopted net-zero targets. Invariably, these targets comprise interim- and long-term emission reduction commitments, accompanied by a strategy to achieve them. Amongst non-state actors, corporates in the 'real economy' have led in the adoption of net-zero targets, but they have been joined by a growing number of financial actors (Maio et al. 2023). These include the subject of the current paper, asset managers, whose role it is to manage investments on behalf of their clients. For instance, a study by ShareAction (2023) reported that 82% of sampled asset managers had set a net-zero target for 2050 or sooner.

The adoption of net-zero targets by asset managers is of practical importance. Asset managers are major sources of financed emissions (Dordi et al. 2023; Fraser and Fiedler 2023; Wang et al. 2024). They wield potentially considerable influence over decarbonisation through their capital allocation, valuation, and engagement activities (Pawliczek, Skinner, and Wellman 2021). The commitment of asset managers to net zero, and the nature of this commitment, potentially have non-trivial implications for investee companies and for low carbon transitions (Greig et al. 2023; Vulturius, Maltais, and Forsbacka 2024). Understanding why certain asset managers set more ambitious targets than others is of value to policy makers and others concerned with accelerating decarbonisation.

Net-zero target-setting by asset managers is also of scholarly interest. It can shed light on how financial actors respond to low-carbon norms in nascent institutional fields (Hale 2022). Of particular interest are how external pressures for net zero translate into organisational strategies, as well as how actors conform to, resist, and proactively shape emerging 'best practice' norms (Mendez and Houghton 2020). Net-zero targets further offer a window into sources of heterogeneity in financial actors' responses to the challenges of decarbonisation. They provide an opportunity to identify the internal and external factors that shape investors' decision-making and policy on net zero.

It is against this backdrop that the present paper investigates the factors influencing target-setting by asset managers. Empirically, we base our analysis on semi-structured interviews with 20 organisations that perform asset management functions and primarily invest in public equities and fixed income. The sample consists mainly of asset managers who invest on behalf of institutional investors (i.e. their external clients), alongside a smaller group of institutional investors managing their assets in-house. At the time of the research, these asset managers were in the early stages of setting net-zero targets. Theoretically, the paper is situated within new institutionalism, which is well-suited to exploring the influences shaping the spread of new innovations and organisational templates. Our findings show that institutional pressures led investors in the sample to adopt net-zero targets. However, considerable variations are found in the extent to which asset managers conformed to, or exceeded, best practice principles across different areas of net-zero target-setting. We identify various attributes – related to both the organisational characteristics of asset managers and the pressures they face – which help explain these differences.

The paper makes several contributions to the existing literature. First, we address a gap in current understanding regarding net-zero target-*setting* by asset managers. Past literature has explored how asset managers govern the climate-related behaviour of portfolio companies, focusing on different investment strategies, their efficacy, and factors driving

or impeding investor action on climate change (e.g. Balp and Strampelli 2020; Greenwood and Warren 2022; Glowik, Bhattiand, and Chwialkowska 2024). The concept of net zero appears in some of this work and takes centre stage in several studies (e.g. Bolton, Kacperczyk, and Samama 2022). Yet, to the best of our knowledge, no prior studies specifically examine the influences shaping target-setting by asset managers. A novel insight to emerge from the analysis is the central role of investor associations in the institutionalisation of net zero amongst asset managers. We also reveal how entrepreneurial asset managers have shaped collective expectations of appropriate net-zero targets.

Second, a related contribution is to advance a novel typology of asset managers' *strategic responses* to net-zero. Our three-fold typology differs from ones used elsewhere in the new institutionalist literature, which largely centre on forms of conformity and resistance (e.g. Gregorič et al. 2017). Our typology also features two categories which, to the best of our knowledge, have not featured in past work characterising investor responses within the domain of sustainable investment: hedgers and fast followers.

We also contribute to the literature by shedding light onto the reasons for heterogeneity in responses to the net-zero norm. Past empirical studies have investigated the determinants of net-zero target ambitions and strategic positioning – albeit for real economy corporates (Berger-Schmitz et al. 2023; Privato, Johnson, and Busch 2024). Our work extends these insights to a particular category of financial actor, namely, asset managers. Moreover, going beyond past studies on real economy corporates, we develop a theoretical framework for understanding different responses. A further contribution is to applied debates on the effectiveness of net-zero targets. We go beyond previous work which has offered external assessments of asset managers' climate-related action (e.g. Baines and Hager 2023; Carbon Tracker 2023b). Focusing specifically on targets, our analysis additionally sheds light onto the possible impact of the net-zero norm from the perspective of asset managers themselves. We find a non-trivial degree of scepticism – most pronounced among the fast followers and hedgers – about how net-zero targets can be put into effect. In short, many asset managers appear to be committing themselves to obligations which, to a greater or lesser extent, are currently seen as unimplementable.

The rest of the paper is organised as follows: Section 2 introduces asset managers and reviews several streams of literature concerned with their climate action, performance and net-zero targets. Section 3 introduces our theoretical framework for understanding the adoption and configuration of net-zero targets. Research design and methods are outlined in Section 4. Our results are presented in Section 5, followed by a discussion of our findings in Section 6. Conclusions are drawn in Section 7.

2. Net zero and asset managers

Our paper focuses on a particular category of investors: asset managers. As their name suggests, asset managers manage securities – such as public equities, bonds, and private assets – on behalf of asset owners (which include pension funds, mutual funds, insurance companies, sovereign wealth funds, and endowments and foundations), other organisations (e.g. companies and banks) and individuals. The primary role of asset managers is to invest capital to generate a positive return. Additionally, they may be expected to fulfil investment mandates related to environmental, social, and governance (ESG) aspects. For instance, asset owners may require their managers to integrate

ESG factors into investment decision-making, or to contribute to various climate-related objectives (PRI 2021). Indeed, such considerations may form part of the selection process for asset managers, as well as their performance evaluations.

Past work on asset managers, portfolio decarbonisation and net zero has addressed several interrelated themes. One stream of work has explored the strategies available to asset managers and other stakeholders. A major focus of debate has been the environmental effectiveness of two investment strategies: divestment (i.e. selling equity or debt in fossil fuel-intensive companies) and active ownership (i.e. engaging with portfolio companies on climate-related aspects and/or deploying shareholder voting rights to influence management decision-making) (Flammer, Toffel, and Viswanathan 2021; Buks and Sobański 2023; Shen, Linnenluecke, and Smith 2024). The literature further explores other investment strategies (e.g. reweighting of portfolios, climate-positive investments via new instruments), as well as complementary governance approaches (e.g. enhanced climate-related disclosure by investee firms and political advocacy) (Greig et al. 2023; Casady and Monk 2024; Gosling 2024; Roston et al. 2024). Additionally, scholars have begun evaluating the influence of collective investor initiatives, such as Climate Action 100+, as vehicles to accelerate substantive decarbonisation (McDonnell, Rempel, and Gupta 2022; Hastreiter 2024). Relatedly, the literature has sought to examine the implications of decarbonisation for financial performance, both at a theoretical and empirical level. Earlier contributions tended to focus on the impact of stranded assets, namely, assets which risk becoming prematurely devalued or converted to liabilities because of developments in areas such as carbon pricing (Ansar, Caldecott, and Tilbury 2013; Sen and von Schickfus 2020). More recent work has increasingly focused on whether – and, if so, how – investment portfolios can be aligned with the demands of both net zero and investors' fiduciary duty. Studies have reached mixed conclusions about the complementarities and conflicts between these requirements (Bolton, Kacperczyk, and Samama 2022; Gosling and MacNeil 2023).

A further stream of literature problematises the assumption that asset managers can be relied on to bring about significant reductions in real economy emissions within their portfolio companies. Amongst others, scholars have pointed to structural constraints which impede investor action on climate change, including the growing predominance of passive investing strategies, increasing concentration of assets amongst a handful of large asset managers and the need to keep stewardship costs low (Braun 2022). Questions have been raised about the incentives facing asset managers to act as 'stewards of the commons' (Serafeim 2017), not least because of the prioritisation of short-term value maximisation (Bebchuk and Hirst 2019). Several academic studies and NGO reports have further scrutinised asset managers' actions on climate change. These assessments find a notable degree of misalignment between asset managers' climate-related 'talk' and commitments, on the one hand, and their climate-related investments and practices, on the other (Baines and Hager 2023; Carbon Tracker 2023b; InfluenceMap 2023; Glowik, Bhattiand, and Chwialkowska 2024). Our paper complements this work by addressing a gap in the existing literature concerning the factors influencing target-setting by asset managers.

Net-zero target-setting by asset managers has taken place within a context where collective governance institutions have rapidly sought to codify, clarify, and periodically revise expectations of credible net-zero alignment (Gosling and MacNeil 2023; Williams

2023/2024). Many of these institutions have emerged and grown under the support of existing climate/environment-focused investor networks such as the Institutional Investor Group on Climate Change (IIGCC). These include the Paris-Aligned Investment Initiative (PAII) and the Net Zero Asset Manager Initiative (NZAMI) (see Figure 1). Initiatives such as PAII and NZAMI have involved commitments from members to set net-zero targets. They have also been sources of best practice approaches and methodologies for configuring and implementing commitments.

Our interest in the present paper is two-fold. First, we aim to understand the factors that have led asset managers to *adopt* net-zero targets. Second, and our primary focus, we explore: (a) variations in how asset managers have *configured* their net-zero targets; (b) and the determinants of their target-setting strategies. In the following section, we outline our theoretical approach.

3. Theory

Our theoretical starting point is a body of work known as new institutionalism. At its core is the idea that actors exist within organisational fields, which comprise 'a composite of constituents within the firm's external social, political, and economic environments' that 'forms around a central issue' (Hoffman 2001, 135). Within these fields, institutionalised ideas, norms, and expectations pressure organisations to conform to similar structures, forms, and practices (DiMaggio and Powell 1983). Conformity is driven by the quest for legitimacy, which, in turn, is necessary for organisational resources, success, and ultimately survival. This leads to institutional isomorphism – i.e. growing similarity over time – as organisations adapt to their institutional environment. We conceptualise net zero as a policy-cum-organisational norm that is becoming increasingly prominent within the organisational field of finance (Berger-Schmitz et al. 2023).

DiMaggio and Powell (1983) identify three sources of isomorphic pressure: (1) coercive pressures, which involve the exercise of power derived from hierarchy or resource dependence; (2) mimetic pressures, whereby, particularly under conditions of

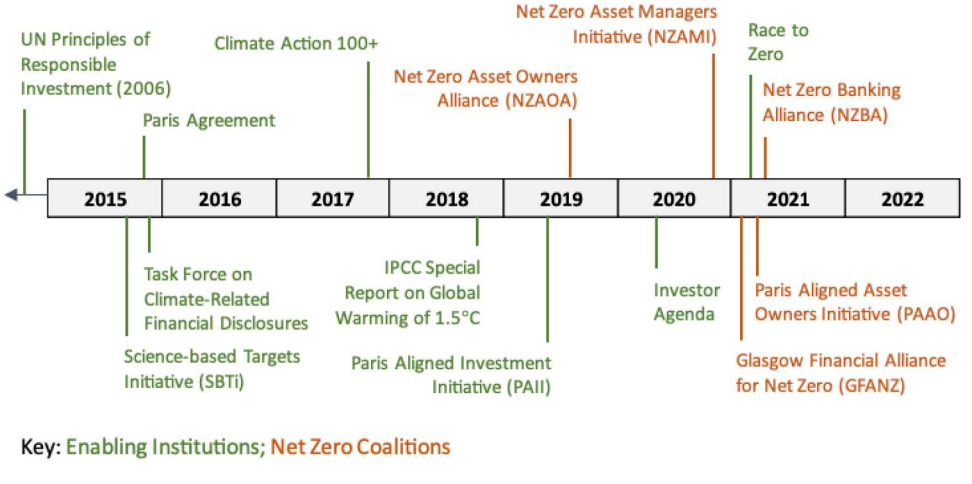

Figure 1. Timeline of net-zero coalitions and enablers. Source: Adapted from Pinko et al. (2021, p. 1).

uncertainty or ambiguity, organisations imitate peers – especially those viewed as successful or prestigious; and (3) normative pressures, which capture obligations, often originating from professional networks and organisations, to act in ways deemed appropriate, proper, or even moral (Boxenbaum and Jonsson 2017). Institutional pressures are theorised to influence which organisational forms and practices are adopted and how these are put into effect by prescribing templates of 'best practice' (Wedlin and Sahlin 2017).

While earlier applications of institutional theory primarily focused on conformity and homogeneity, later work recognised the possibility that organisations can respond differently to external pressures. One of the first scholars to reconcile institutionalist accounts of isomorphic behaviour with organisational heterogeneity was Oliver (1991). In a seminal article, she argued that institutional theorists had largely overlooked 'active agency and resistance in organisation-environment relations' (151). This gap could be bridged by recognising that organisations have agency and can strategically respond to external pressures. Oliver identified five strategies ranging from 'passivity' to 'active resistance' and hypothesised various predictors of strategic responses. Her contribution helped spawn a stream of literature which has sought to theorise the sources of organisational heterogeneity, often combining institutional and other theories (e.g. see Zhao et al. 2017). The significance of these works in the present context is that they suggest a need to pay attention to the factors that explain both conformity and difference in net-zero target-setting.

A substantial body of literature has applied the theoretical lens of new institutionalism to explain the organisational adoption of environment-focused innovations – albeit largely within the context of non-financial corporates. Examples include sustainability standards, voluntary reporting, and various environmental/climate management activities (Perkins and Neumayer 2010). Studies have also examined differences in corporations' strategic responses to sustainability-related pressures (Bui and Fowler 2019; Damert and Baumgartner 2018; Berger-Schmitz et al. 2023). Expanding on Oliver's (1991) framework of resistance and conformity, work has identified opportunity-seeking responses where actors leverage external environmental/climate pressures for competitive advantage (Pedersen and Gwozdz 2014; Clementino and Perkins 2021). Relatedly, scholars have explored the relationship between institutional pressures and sustainability performance (e.g. carbon emissions) (Cadez, Czerny, and Letmathe 2019).

To date, comparatively few studies have examined the environment-related behaviour of investors through the lens of new institutionalism (Louche 2004; Bengtsson 2008; Orsato et al. 2015; Hoepner, Majoch, and Zhou 2021; Bauckloh et al. 2023). Unsurprisingly given its relative novelty, none (to the best of our knowledge) have investigated net-zero target uptake and setting. Net-zero targets have several distinctive characteristics that could influence their adoption and configuration. Transitioning portfolios to net zero requires many investors to make significant reductions in their indirect, financed emissions (Fraser and Fiedler 2023). While some of these reductions can be achieved by divesting from carbon-intensive assets, doing so raises the prospect of constraining diversification, with implications for investment returns. Furthermore, divestment may not reduce real-world emissions, particularly if the underlying assets continue to operate. Another characteristic of net-zero targets is their flexibility. Net zero is widely understood as comprising a commitment to achieve net zero by a specified date and a

plan for how to achieve interim and long-term targets (Berger-Schmitz et al. 2023; Carbon Tracker 2023a). Beyond this, net-zero targets can be configured in multiple ways, according to different approaches, methodologies and criteria.

It is plausible that institutional pressures might propel asset managers to adopt net-zero targets. Coercive pressures could be exerted by asset owners on asset managers to set net-zero targets as part of their investment mandates (Moldovan et al. 2024). Mimetic pressures could also play a role, with the announcement of net-zero commitments by larger and/or more prestigious asset managers leading others to follow suit (Zelikson, Fawzi Shubita, and Wu 2020; Benz et al. 2020). Normative pressures to adopt targets could also emanate from trade associations and other professional bodies such as the IIGCC (Gond and Piani 2013; Marti et al. 2024).

Yet institutional influences are not only likely to drive the adoption of net-zero targets by asset managers. They are moreover likely to shape the conventions on which targets are based, and therefore their ambition, rigour, and credibility. This is consistent with new institutionalism's emphasis on how certain templates or prototypes become rationalised as best or appropriate practice. Institutional influences could therefore shape how asset managers configure their targets by formalising what constitutes an appropriate net-zero target, covering aspects such as timing, scope and measurement (Carbon Tracker 2023a). Although asset managers ultimately set their own targets, one possibility is that asset owners could require their asset managers to configure net-zero targets in ways aligned with specific best practice methodologies and approaches (Gosling 2024). It is also possible that asset managers could base their net-zero targets on existing exemplars or templates already configured by their peers. Another possibility is that guidance and standards developed by field-level actors such as investor associations could formalise best practice in target-setting (Gosling and MacNeil 2023). Our central concern in the present paper is with this process of target-setting and the influences shaping how asset managers configure their targets in terms of their investment, engagement and measurement approaches.

Despite pressures for conformity, we nevertheless expect variations in how asset managers configure their net-zero targets. This is consistent with evidence from practitioner studies on asset managers' net-zero alignment (e.g. InfluenceMap 2023; Mercer 2023). It is moreover consistent with past theoretical work which predicts heterogenous responses to institutional pressures (Oliver 1991). Drawing on this and related work, we posit two sets of factors that could explain variations in asset managers' strategic responses, and therefore the configuration of their net-zero targets. The first relate to asset managers' exposure to external pressures. Taking a cue from resource-dependence theory (Pfeffer and Salancik 1978), Oliver (1991, 162) hypothesises that the degree of dependence on 'pressuring constituents' may influence organisational responses to institutional pressures. Applied to net zero, asset managers' response could be shaped by their client's (i.e. asset owners) preferences (e.g. regarding sustainability), and relative dependence on them as a source of capital (Louche and Lydenberg 2011; Majoch, Hoepner, and Hebb 2017). Oliver (1991) also hypothesises that organisational responses may be shaped by actors' exposure to multiple and competing demand from different constituencies. Within the present context, this might arise because of (potentially contradictory) pressures: on the one hand, to conform to best practice expectations of net zero from certain asset owners; while on the other, pressures to maximise short-term investment

returns from other asset owners, leading to compromise-type strategies. Conflicting demands could also arise from asset managers' exposure to different regulatory, political and social requirements in different countries where they operate and/or have clients (Comyns 2018; Braun 2022). The relative strength of demand for climate action and value-maximisation in these environments could influence target-setting practices.

A second set of factors relate to organisational characteristics which influence asset managers' willingness and ability to respond to institutional pressures. An important attribute which could influence asset managers' response is the 'degree of consistency of institutional norms or requirements with organisational goals' (Oliver 1991, 164). Organisations are more likely to conform to institutional pressures where they are aligned, and more likely to resist where they are misaligned. A central goal of asset managers is to optimise returns in line with their fiduciary duty to clients (Gosling and MacNeil 2023). Adjusting to the requirements of net zero is likely to be more/less costly, disruptive and/or challenging for certain asset managers than others. Through its existing investments, an asset manager might be more exposed to assets which set-up a greater conflict between conformity to best practice in net zero *and* fiduciary duty. Conversely, other asset managers' portfolio composition and/or investment strategy may mean that net-zero alignment has less (or even no) impact on financial returns, allaying concerns over fiduciary duty (Bebchuk and Hirst 2019; Casady and Monk 2024). Asset managers' organisational resources might also influence the adjustment costs of net zero. Supporting this idea is work on the resource-based view (Barney 2001) and complementary assets (Christmann 2000) which suggests that firms' resources and capabilities influence their ability to translate environmental strategies into competitive advantage. Resources and capabilities in the present context might include the internal know-how, data capabilities and investment management skills required to decarbonise portfolios without negatively impacting financial performance.

Another organisational characteristic relates to values and beliefs. Actors are more likely to be receptive to institutional pressures which embody values and commitments that they subscribe to (Suddaby et al. 2010). Consistent with this idea, past work has shown that sustainable investment practices are shaped by investor values (e.g. about the importance of sustainability), as well as their beliefs (e.g. about the business case for sustainability-aligned investments) (Jansson and Biel 2011; Majoch, Hoepner, and Hebb 2017; van Zanten and Rein 2023). Applied in the present setting, asset managers' values, beliefs and attitudes – for example, about the importance of climate action or value of net zero – could influence their strategic response to external pressures, and the ambition and rigour of their net-zero targets. Theories of institutional entrepreneurship go further by suggesting that actors may seek to actively shape institutions in ways expressive of their values and beliefs (Dorado 2005). It is possible therefore that certain asset managers could attempt to proactively define expectations of best practice in net-zero target-setting.

Table 1 summarises these internal and external factors, and their expected influence on the configuration of targets in relation to norms of best practice. Note, the list of factors in the table is not exhaustive, and others could well inform how asset managers respond to net-zero norms.

Drawing together these strands, we posit that coercive, mimetic and normative pressures will lead asset managers to adopt net-zero targets. Yet the way they strategically configure these targets will be influenced by: (1) their exposure to different institutional

Table 1. Summary of potential factors that may influence asset managers' responses to external pressures.

Factors	Expected influence on targets	Related literature
Internal characteristics		
Resources and capabilities	Superior internal resources and capabilities allow asset managers to conform to best practice net-zero norms and even proactively shape them. Absence of enabling resources and capabilities more likely to result in asset managers partially complying with best practice expectations.	Backman, Verbeke, and Schulz (2017); Drempetic, Klein, and Zwergel (2020)
Existing business/ investment strategy	Asset managers whose portfolios can be aligned with the requirements of net zero without significantly impairing investment returns are more likely to conform to best practice norms in target-setting. Selective conformity more likely where existing portfolio composition or investment strategy gives rise to greater misalignment between requirements of net zero and fiduciary duty.	Bebchuk and Hirst (2019); Casady and Monk (2024); Ceccarelli, Ramelli, and Wagner (2024)
Values and beliefs	Supportive values and/or beliefs in the moral or instrumental case for investor climate action more likely to result in greater adherence to best practice norms in net-zero target-setting. Values and/or beliefs which are less supportive of net zero more likely to lead asset managers to partially conform to best practice.	Jansson and Biel (2011); Majoch, Hoepner, and Hebb (2017); van Zanten and Rein (2023)
External pressures		
Exposure to client demand(s)	Asset managers with a greater level of dependence on asset owners who demand net zero-aligned investment practices more likely to adhere to best practice norms in target-setting. Selective conformity more likely if asset managers are more dependent for capital from return-oriented (i.e. value-focused) asset owners, or face conflicting demands from their clients.	Oliver (1991); Sandberg et al. (2009); Louche and Lydenberg (2011); Majoch, Hoepner, and Hebb (2017)
Exposure to institutional environment(s)	Conformity to best practice norms in target-setting is more likely for asset managers operating, or serving clients, in regions/ countries/states which are more supportive of climate action. Conversely, selective conformity by asset managers more likely in environments which are less supportive, or even antagonistic toward, net zero and climate action.	Oliver (1991); Bengtsson (2008); Scholtens and Sievänen (2013); Hoepner, Majoch, and Zhou (2021); Braun (2022)

pressures and (2) their willingness and ability to respond to them. A combination of external (institutional) and internal (organisational) factors is therefore expected to shape asset managers' net-zero target-setting.

4. Methodology

A qualitative research approach was adopted focused on an expert interview strategy. This is well-suited to providing in-depth, contextualised understandings of the factors and processes shaping asset manager decision-making around net-zero targets (Clark et al. 2021). It also provided us with the flexibility to explore emerging themes and to adopt a quasi-abductive approach in parts of subsequent data analysis.

A purposive sampling strategy was used. The main inclusion criteria were: (a) the focal organisation undertakes asset management functions and (b) it had adopted, or was considering adopting, a net-zero target. Within this frame, we sought to enrol organisations with varying levels of ambition regarding target-setting. The final sample comprised 20 organisations, all of whom undertook asset management activities. These were typically fund managers who primarily invested in public equities and bonds across a range of sectors on behalf of institutional investors.[1] Four of these were also institutional asset owners (i.e. managing their assets in-house). Sixteen of the organisations were based in Europe– predominantly in the UK, which has the largest number of asset managers and assets under management (AUM) within the European macro-region (EFAMA 2024). The remaining four asset managers were US-based and operated globally. The sample included eight small (less than £30 billion AUM), seven medium (between £30 billion and £300 billion AUM), and five large asset managers (more than £300 billion AUM) (see Appendix A). In total, the AUM of our sample was approximately £4 trillion.

Access to the sample respondents was facilitated by a sustainability consultancy. An important benefit of this approach was that it was possible to collect data from a range of different asset managers, all of whom were known a priori to have varying levels of engagement with net-zero target-setting. We acknowledge that the sample is likely biased towards investors with more ambitious climate strategies. We also accept that our sampling approach may have led to a sample which is biased toward asset managers with other (unobserved) characteristics. Yet it ought to be noted that the aim of the study is not to offer statistically generalisable insights for the entire universe of asset managers. Rather, we seek to identify different types of response to the net-zero norm, and factors shaping these. It is possible that other responses and determinants exist. Indeed, our study says little about non-adopters of net-zero standards, and the reasons underpinning their decision-making. We nevertheless believe that our study provides valuable, preliminary insight into net-zero target-setting using data from asset managers which exhibit considerable diversity and represent a sizable portion of the European investment market.

One employee from each organisation was interviewed. The interviewees were either heads of responsible investment (RI) or worked specifically on their organisation's climate strategy. Most had been directly involved in formulating their organisation's net-zero target and so were able to speak about the factors that shaped this process. The interviews took a semi-structured approach and thus the topics of focus varied across the interviews. However, all interviews shared a basic structure involving: (a) an overview of the organisation's climate strategy and how it had evolved; (b) the processes involved in setting a net-zero target (including the guidance used and approaches that would be taken to achieve the target); (c) the motivations for setting a net-zero target and a climate strategy more generally (focusing on issues such as client demand, public pressure, and risk management); and (d) the external/ internal factors that had shaped the formulation of the organisation's net-zero strategy.

To categorise strategies, a framework was devised to assess asset managers' alignment with best practice guidance. The framework consisted of 10 criteria, involving target-setting, investment integration, engagement, and policy advocacy (see Appendix B). The criteria were derived from the ICAP Expectations Ladder (The Investor Agenda 2023) and the NZIF recommendations (IIGCC 2021). The choice to base the framework on

these expectations was two-fold. First, it became apparent during the research that guidance from these – and related – initiatives had played a central role in shaping investor understanding. Most organisations had in fact used these initiatives to inform their own net-zero targets. Second, it made it possible to evaluate the degree of alignment to what is widely considered as best practice, without making a normative judgement of what constituted an ambitious climate strategy. For each criterion, investors were classed as either 'no alignment' (0 points), 'partial alignment' (1 point), 'full alignment' (2 points) or 'beyond alignment' (3 points) depending on the extent to which they adopted the guidance. The final scores were used to categorise the investors into different groups.

Information on asset managers' strategies was mainly collected from their public sustainability reporting (including Taskforce on Climate-related Financial Disclosures (TCFD) and Principles for Responsible Investment (PRI) reports) to determine their climate strategies and commitments. Further clarifications were sought through the interviews. This framework was not intended to classify investors on their fixed position regarding their climate ambition. Rather, it sought to examine the varied ways that investors were responding to a rapidly evolving norm as it initially emerged. This included an examination of both the adoption of net-zero target-setting and the configuration of this target in the context of emerging best practice guidance. This process of classifying asset managers was undertaken in May 2023 at a time when many were still formulating their strategies and thus may not represent the current or future strategies.

Employing NVivo, the transcripts of interviewee responses were coded using thematic analysis (Braun and Clarke 2021). The Level 1 and Level 2 codes were largely the result of a quasi-abductive process which involved moving between the data and existing literature to generate thematic categories. Meanwhile, the Level 3 and Level 4 codes were derived from a more inductive approach, wherein key themes were selected from a preliminary reading of the transcripts (see Figure 2). Furthermore, the interview transcripts were organised into different cases depending on the overall points scored in the classification framework, the organisation's size (small, medium or large) and geography (Europe or North America).

5. Results

Table 2 shows how asset managers scored on their alignment with best practice guidance. Red fields indicate no alignment (0 points), orange denotes partial alignment (1 point), yellow fields signify good alignment (2 points), and green represents beyond alignment (3 points).

The results indicate a clustering of scores reflecting a high degree of alignment, with eight of the 20 investors scoring either 19 or 20 points. Nine investors scored below 19 points, exhibiting a broad range of scores from 7 to 18. Lastly, three investors attained scores notably above 20 points, demonstrating strategies that exceeded alignment across multiple categories.

5.1. Pressures influencing net zero

The interviewees highlighted the impact of various institutional pressures on the decision to adopt net-zero targets. Within our sample, normative pressures were consistently

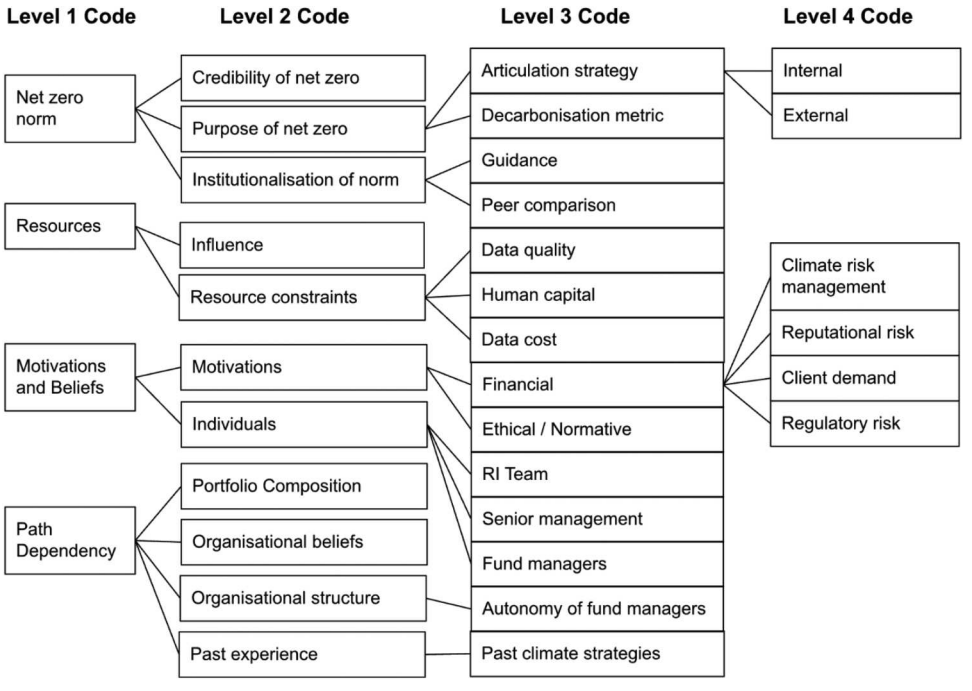

Figure 2. Coding tree. Source: Authors.

identified as the most significant, underscoring the role of professional associations and networks in institutionalising the net-zero norm within finance. The promotion of net zero by organisations such as IIGCC was instrumental in establishing targets as a 'legitimate', 'appropriate', and 'best practice' response for asset owners and managers to climate change. One asset manager (6) explained that, in choosing to set a net-zero target, 'We were following signs from the industry […] IIGCC had just released NZIF'. A significant number of asset managers in our sample were either IIGCC members or influenced by its guidance, underscoring the role of normative pressures in shaping both the adoption and configuration of net-zero targets. Notably, 16 out of the 20 interviewees interviewed were signatories to key net-zero initiatives. By publishing best practice guidance, such initiatives fostered a process of institutional isomorphism among asset managers. Nearly three-quarters of interviewees stated that their organisation closely adhered to net-zero guidance issued by investor networks, with 12 investors specifically referencing NZIF guidance.

The impact of two other institutional pressures – coercive and mimetic – was more selective, primarily affecting late adopters. Six asset managers, including four who were late signatories to net-zero initiatives, reported that coercive pressures from asset owners or wealth managers catalysed their net-zero commitment. For example, interviewee 10 mentioned receiving substantial pressure from wealth managers and financial advisors – described as their 'gatekeepers' – to establish a net-zero strategy. Several asset managers also mentioned the EU's Sustainable Finance Disclosure Regulation (SFDR) as a factor in their decision to adopt a net-zero target (3, 19, 20).

Table 2. Asset managers' responses to net-zero norms.

No alignment (0 points) Partial alignment (1 point) Full alignment (2 points) Beyond alignment (3 points)

Investor	Size	Net Zero Target			Investment			Engagement			Policy	Score
		1	2	3	4	5	6	7	8	9	10	
1	Small											26
2	Small											24
3	Small											23
4	Medium											20
5	Small											20
6	Medium											20
7	Medium											20
8	Medium											19
9	Small											19
10	Large											19
11	Large											19
12	Medium											18
13	Medium											17
14	Large											17
15	Small											16
16	Large											16
17	Large											13
18	Medium											13
19	Small											11
20	Small											7

Notes: For more information about the classification scheme, see Appendix B.

Indicative of mimetic behaviour, five asset managers highlighted that most of their peers were adopting net-zero targets, prompting them to set targets as a means of safeguarding their own reputation and legitimacy (7, 12, 15, 17, 20). Interviewee 17 described setting a target because 'we wanted to avoid people thinking that, because we haven't set a

target, we're not looking at this issue … '. These late signatories to net-zero coalitions were influenced by methodologies employed by early signatories, reinforcing NZIF's dominance as the preferred net-zero target-setting methodology. One asset manager (12) initially favoured the Climate Impact Management Systems (CIMS) guidance issued by the 2°C Investing Initiative for its action-oriented approach over emissions-centric ones. However, the limited adoption of CIMS by peers led them to opt for NZIF guidance instead.

5.2. Varied responses to the net-zero norm

Despite evidence of isomorphism around the net-zero norm, significant differences in how asset managers have configured their net-zero targets were observed. To better understand these variations, asset managers were categorised according to their aggregate scores. While this approach inevitably simplified a more complex reality, it allowed us to distinguish between three groups of asset managers based on their overall alignment with best practice guidance. The first group, scoring less than 19, comprised asset managers whose targets fell short of alignment. This group reflected a broad range of scores, between 7 and 18 points. The second group, reflecting a clustering of scores between 19 and 20, had net-zero targets that more closely followed best practice guidelines, albeit with some areas of misalignment. The third group, scoring markedly above 20 points, met or exceeded best practice guidance.

We originally intended to make use of Oliver's (1991) typology, or a modified version thereof, to categorise asset managers' responses. Following the analysis, it was felt that her constituent categories would not accurately capture common patterns of behaviour among investors, and the various motives and influences shaping these. Instead, using data from the interviews, we decided to characterise the asset managers in the three groups as hedgers, fast followers, and leaders.

Hedgers were asset managers seeking to hedge against the potential costs of adhering faithfully to best practice guidelines while still appearing responsive to the net-zero norm. Meckling's (2015) work on hedging as a strategic corporate political response to climate regulation served as inspiration for this category. Asset managers in the hedgers group exhibited hesitancy to fully embrace best practice net-zero approaches, often choosing to limit their policies to certain funds rather than adopting a portfolio-wide approach. Fast followers quickly sought to imitate many aspects of organisational best practice but did not contribute to the development of these best practices. Inspiration for this category comes from work on late-comer business strategies (Mathews, Hu, and Wu 2011). Lastly, as their name suggests, leaders took a proactive, pioneering approach. They were at the forefront of target-setting and took action to shape best practice guidance itself. Such behaviour aligns with scholarship on institutional entrepreneurship which recognises that actors can strategically and proactively intervene to create new institutions or transform existing ones (Levy and Scully 2007). It also aligns with past work which has documented how investors have engaged in collective efforts on environmental, social and governance (ESG) issues (Gond and Piani 2013; Yamahaki 2019; McDonnell, Rempel, and Gupta 2022). In the next section, we unpack these categories further, paying particular attention to their distinguishing characteristics.

5.3. Hedgers

Some asset managers were hesitant to adopt best practice net-zero guidance. They hedged by adopting a net-zero target, while compromising by selectively incorporating different elements. Hedging strategies were prominent amongst two sub-categories of asset manager.

The first were asset managers without the requisite resources. While three-quarters of all investors mentioned facing human capital constraints on their ability to interpret and use climate-related data, some appeared to be more affected than others. Specifically, reporting requirements emerged as a particular burden on the already limited staffing of small asset managers, three of whom cited this as a resource constraint (15, 19, 20). These all exhibited hedging strategies suggesting that reporting requirements stretched already finite resources. As one investor (12) described: 'I am alone in leading on our climate strategy […] I cannot set targets for every asset class at once'. Alongside staffing constraints, asset managers' capabilities were also limited by a lack of skills and experience in using climate-related data, especially among their internal fund managers. As one investor (19) stated, climate-related data is, 'not the kind of data they're used to looking at'. As a result, in organisations where fund managers ultimately control investment decision-making, a lack of familiarity with climate-related information may inhibit more ambitious net-zero strategies. Of the seven asset managers (6, 11, 13, 14, 18, 19, 20) who mentioned fund managers having full autonomy over investment decisions, five were classed as hedgers. In this context of unfamiliarity and limited resources, many hedgers turned to best practice guidance in shaping their strategies.

A lack of influence appeared to further restrict smaller asset managers' capacity to implement their net-zero strategies, curbing their ability to reduce emissions through engagement activities ('voice') and the threat of divestment ('exit') (Hirschman 1972). Larger asset managers potentially wield greater coercive power over investee companies – reflecting their bigger shareholding and engagement resources. Out of eight small investors interviewed, six stated that their limited size hampered their ability to influence companies (1, 2, 3, 9, 19, 20). One small asset manager (2) described that, 'we're less likely to be taken seriously … you represent just this little part of the market'. As a result, they typically relied on investor networks to conduct their company and policy engagement activities (2, 7, 12, 19, 20). Therefore, small size may not only constrain asset managers' human capital resources, but also their legitimacy and influence.

A second sub-category of hedgers lacked the motivations to adopt ambitious net-zero strategies, stemming from competing client and regulatory pressure. Within this conflicting task environment, net-zero target-setting sometimes acted more as a symbolic action to appease certain actors, rather than a substantive one to fundamentally decarbonise portfolios. While client demand was an especially strong motivation for late adopters of targets, certain clients also resisted the adoption of net zero. Five asset managers (all of them hedgers) mentioned client pushback against net-zero adoption due to fiduciary concerns (12, 14, 17, 18, 20). Interviewee 14, classed as a hedger, described how, 'As a global manager we had client pressure in all directions […] some don't want a target, but European and Australian clients see it as a bare minimum'. Such variations in

demand led certain hedgers to restrict climate approaches to specific funds to retain client choice. For instance, of the five asset managers who mentioned competing client demands, four had fossil fuel exclusions that were limited to individual funds (partial alignment on criteria 6), while the other had no exclusion policy at all. One interviewee (12) described how, 'if the client wants an exclusion, then there's a fund that offers it' while admitting that 'I am fully aware that for a credible net-zero strategy, you need a better fossil fuel policy'.

Another conflicting pressure contributing to hedging behaviour arose from different regulatory demands. Seven asset managers (six of which were hedgers) mentioned regulatory requirements surrounding climate risk disclosure, especially in the EU, as a key motivator in net-zero adoption. At the same time, all four asset managers operating globally stated that they faced legal risks over their investment decision-making. Three of these investors specifically highlighted that the litigious environment in the US made them vulnerable to legal action for failing to comply with their fiduciary responsibilities. For example, interviewee 16 described how, 'in the US we see a very different appetite'. Exposure to these different regulatory environments helps to explain why all four global investors in the sample were classed as hedgers (14, 16, 17, 18).

5.4. Fast followers

Despite observing patterns of isomorphism across all investors, some asset managers adopted best practice guidance more quickly and to a greater extent than others. These asset managers typically had the ambition to become leaders in the space and were in the process of developing internal capabilities to execute net-zero strategies. Several factors explain why they were both willing and able to respond quickly to emerging norms around net zero.

Firstly, the beliefs and motivations of various individuals played a crucial role. Specifically, senior management and the board in fast followers often aspired to be at the forefront of emerging climate investment practices, propelling the rapid integration of a net-zero strategy within the organisation. Of the seven asset managers who mentioned senior management beliefs (1, 3, 4, 8, 9, 13, 17), five were in either the fast followers or leaders' category. The degree to which fund managers possessed the skills and motivation to adopt net-zero strategies also impacted asset managers' ability to keep abreast of guidance. Three interviewees (5, 6, 9) all in the fast followers category, highlighted that their fund managers were naturally supportive of net zero. One investor (5) described how, 'we have always been climate-focused, so all of the portfolio managers are moving in the same direction'. They also stated that this resulted from the firms' existing history of RI integration, whereby fund managers had previous exposure to ESG data, processes and strategies. This distinguished them from hedgers who emphasised fund managers' lack of motivation and skills in RI.

Secondly, RI teams in fast followers were often better placed to influence fund managers. According to several respondents, fund managers can be naturally conservative, and therefore reluctant to incorporate new sources of information, metrics, and climate-aligned investment strategies. As a result, organisational structures, hierarchies, and relationships which grant RI professionals some influence over fund managers can be conducive to the (more rapid) adoption of ambitious (best practice) net-zero

strategies. For example, one impact investor (9) classed as a fast follower described how, 'the RI team sort of basically have a veto if the company doesn't pass our screening process'.

Certain asset managers were also better positioned to incorporate best practice net-zero guidance simply because of their portfolio composition. Asset managers whose portfolios were weighted more toward equity asset classes could set more extensive net-zero targets given that measurement and engagement methodologies are well-established in this asset class. Three interviewees (two fast followers and one leader) stated that their lack of diverse asset classes benefited them in creating a net-zero-aligned climate strategy (3, 4, 11). Investor 9 also added that investing in a small number of companies helped overcome resource constraints, stating that, 'our funds are typically very concentrated … so actually like we can be quite ambitious just because of the style of our investments'.

Fast followers therefore exhibited one or more characteristics which meant that they possessed the motive and organisational dexterity to quickly incorporate best practice guidance. What often stopped many of them from investing more resources to become leaders in the field were fiduciary considerations. In particular, three fast followers (7, 9, 10) expressed that they could not prioritise achieving their net-zero target if it ultimately threatened the returns they could achieve for their clients. One fast follower (9) highlighted that this could lead to an eventual backtracking of their commitments if policy incentives for net zero were lacking.

5.5. Leaders

In translating the norm of net zero into specific guidance and practices, a small number of asset managers acted as governance entrepreneurs (Boasson and Huitema 2017). These asset managers had leading roles in investor coalitions, such as the IIGCC, which positioned them to become founding signatories of the new net-zero coalitions (1). They also used their position to shape how other investors set and implemented their net-zero targets (1, 2). Target-setting methodologies were developed based on case studies of a limited number of leading investors, including themselves. By shaping normative guidance on net zero, these investors differentiated themselves from fast followers who simply adopted best practice norms.

The three asset managers classified as leaders shared certain common characteristics. All three were small (less than £15 billion assets under management) and had a niche client base centred on RI. Given that they marketed themselves as ethical investors, they were able to overcome many of the fiduciary considerations (i.e. around maximising financial returns) that hindered other asset managers from setting more ambitious net-zero strategies. One investor (2) described how, 'our clients are charities […] of course we want to be profitable but the mandate we have from our clients is to bring about real-world change'. At the same time, their small size also provided these asset managers with a strong motivation to undertake coalition-building as a means of increasing their influence over companies and policymakers. In response to being asked whether their small size constrained the ambitiousness of their approach, one interviewee (1) stated: 'No and precisely because our kind of MO [modus operandi] is to build coalitions, to develop frameworks that other investors will be willing to be associated with … '.

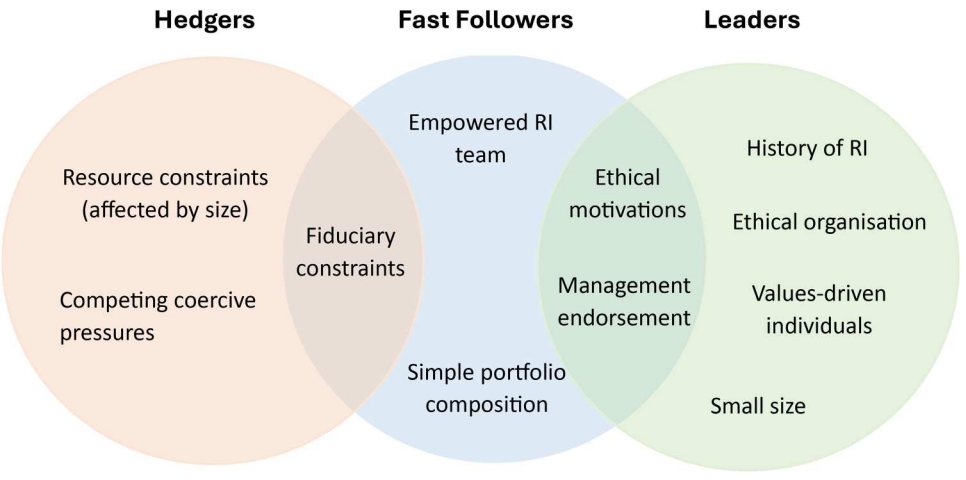

Figure 3. Key attributes of asset manager response categories. Source: Authors.

The leaders were strongly values-driven (Starks 2023), following on from a long history of RI. All mentioned environmental-cum-ethical motivations for their net-zero strategies. Their engagement activities with investee firms were not simply underpinned by efforts to manage financially material portfolio risk, and therefore instrumental motives. More importantly, they were driven by a desire to make a substantive impact on climate mitigation, i.e. by driving down real-world emissions. As one investor (3) noted: 'our focus on driving changes in the real economy so we use divestment as a last resort […] we prefer to focus on engagement'. Indeed, two of the three leaders did not mention material climate-related risks as a primary motive, indicative of a central concern with outward impact.

Such values-driven organisations naturally attract individuals who reflect similar beliefs. All three investors in the leaders' category mentioned that a particular individual in their RI team led to the formation of new investor networks. One interviewee (1) stated that, 'it takes interesting characters to build coalitions and drive change in effective ways'. Specifically, as information is often traded through informal networks between investors, individuals who are embedded within networks are likely to be able to harness connections for institution-building. The strategic positioning of individuals in investor networks can in turn enable their organisation to benefit from information sharing. Interviewee 3 described how their head of RI's leadership position in an investor network enabled them to be involved in discussions surrounding the implementation of net zero.

Summarising these insights, Figure 3 illustrates the factors that contributed to asset managers hedging, fast following or leading. Not every asset manager in each category exhibited all the characteristics. Moreover, as depicted by the overlaps, certain factors were shared by asset managers in more than one grouping.

6. Discussion

Our paper makes several important contributions. First, we foreground the importance of collective initiatives – such as IIGCC and NZAMI – in both the adoption and

configuration of net-zero targets by asset managers. Findings from the research draw attention to two important roles for investor coalitions in the institutionalisation of net zero. One is the promulgation and diffusion of norms, where norms are defined as 'a standard of appropriate behaviour for actors with a given identity' (Finnemore and Sikkink 1998, pg.891). Within the context of finance, we identify investor coalitions as sources of normative, isomorphic pressure (DiMaggio and Powell 1983). Asset managers have adopted net zero because of its professional legitimation by collective initiatives as a desirable organisational innovation. Another important role for investor coalitions has been to define, codify and, rationalise specific templates of organisational best practice. How investment professionals understand credible net-zero targets, and how they put them into effect, has been centrally shaped by the principles, guidance and standards emerging from investor coalitions. Within our sample, a large share of asset managers had used these best practice blueprints – covering investment, engagement and measurement – to inform the setting of their own net-zero target. Although many asset managers had only partially incorporated the requirements codified in best practice methodologies and approaches, the latter nevertheless emerged as core templates shaping the institutionalisation of net zero. Investor coalitions also provided a useful forum for investors to compare their net-zero targets with one another (6, 7, 12, 15) and discuss their approaches in peer working groups (1, 7, 14, 19). Beyond these formal spaces, information was often exchanged through informal networks between investors, such as WhatsApp groups (13, 14, 19).

In locating these roles, our paper contributes to a growing body of work concerned with the governance functions and impact of coalitions within sustainable finance (Gond and Piani 2013; Schoenmaker and Schramade 2018; Yamahaki 2019). Findings from the research lend weight to the idea that the 'work' of collective action institutions goes beyond collaborative engagements with corporates. In line with McDonnell, Rempel, and Gupta (2022)'s conceptualisation of governance functions, we show that coalitions play a role in signalling desired targets and actions; setting rules; and providing tools and assistance to achieve goals (3). Viewed through the lens of new institutionalism, investor coalitions perform important field-building functions (Marti et al. 2024). More specifically, they can shape the institutional context for investor action, and enrol them into collective projects of climate governance (Bartley 2014).

Relatedly, our findings highlight the important role played by individual asset managers as what the existing literature conceptualises as 'institutional' or 'governance' entrepreneurs (Boasson and Huitema 2017) within the nascent field of net zero. We thus show how target-setting within the asset management sector was propelled by a handful of organisationally nimble, ethically driven, and entrepreneurial investors, i.e. the 'leaders' in our sample. The idea that financial market participants may play entrepreneurial roles in advancing climate- and environment-related norms, standards and policies is not entirely new (Pfeifer and Sullivan 2008; Ahlström and Monciardini 2022; Perkins 2021; Spielberger 2024). A particular contribution here is to identify factors that led small asset managers with limited resources to shape best practice norms (guidance, standards, and benchmarks) through coalitions. These include organisational and personal values, client demand for net zero, and the need to amplify their influence via networks. Our results support Brown et al.'s (2009) assertion that institutional entrepreneurship emerges when under-resourced actors with strong motivations

attempt to leverage windows of opportunity to get more well-resourced actors engaged. Our insights into proactive leaders in the net-zero space are also consistent with Bauckloh et al.'s (2023) research into the PRI, a leading voluntary initiative in finance. Indicative of greater commitment, early signatories to the PRI are found to have shown a higher commitment to ESG integration performance than late joiners.

Another important theoretical contribution of the paper is to propose a novel typology of organisations according to their strategic response to net zero, comprising hedgers, fast followers, and leaders. A particular advantage of our typology is that it captures actors' behavioural intentions, i.e. to hedge against competing requirements, to rapidly adapt to best practice guidance, and to lead on net-zero target-setting. Our categories overlap with Oliver's (1991) typology widely used in the new institutionalism literature. Hedging is most like 'compromise', while fast following shares some similarities with 'acquiescence'. Our typology moreover advances on Oliver's framework which only captures variants of resistance and conformity. The leaders' category in our typology therefore captures proactive responses, wherein actors seek to institutionalise and shape norms. In the present setting, such opportunity-seeking behaviour differs from the one described in past work on corporate responsibility, in that it has been motivated by ethical imperatives rather than solely competitiveness concerns (Pedersen and Gwozdz 2014). The categories of 'leaders' and 'followers' has been jointly deployed in past work which has analysed the behaviour of investors. However, the focus of these studies has largely been on imitative dynamics in investment decision-making (e.g. Fong et al. 2011; Benz et al. 2020), together with investor stewardship (e.g. Cetemen et al. 2023; Artiga González and Calluzzo 2019). Moreover, our category of *fast followers* differs in important ways from followers, with the former aspiring to catch-up and even leadership. The three-fold typology advanced here is best understood as a way of categorising investors' behaviour toward new environment-related expectations.

We also contribute to the literature by identifying factors that explain these variations. More specifically, we show that strategic responses to the net-zero norm are the product of two sets of factors. One is asset managers' different exposure to institutional pressures – conceptualised as external influences. Some asset managers are subject to greater normative, coercive or mimetic pressures to adopt net zero, for example, reflecting the strength of client (i.e. asset owner) demands (Moldovan et al. 2024). We also show that the external environment can be a source of competitive pressures for economic efficiency (i.e. investment returns) which may conflict with institutional pressures (i.e. net-zero norms). A second set of factors are internal. Attributes of asset managers themselves are determinants of strategic responses. These internal attributes are conceptualised as shaping asset managers' receptivity to external pressures (e.g. managerial attitudes) and their ability to respond to them (e.g. reporting capabilities). Our findings corroborate the idea that firms possess agency in responding to institutional pressures (Zhao et al. 2017), although this may be constrained by their existing resources, capabilities, and competing stakeholder demands.

Based on our findings, Figure 4 provides a framework for understanding three strategic responses to the net-zero norm. The framework models institutional pressures as largely exogenous, with net-zero target-setting originating in asset managers' institutional environment. However, it also acknowledges the existence of institutional

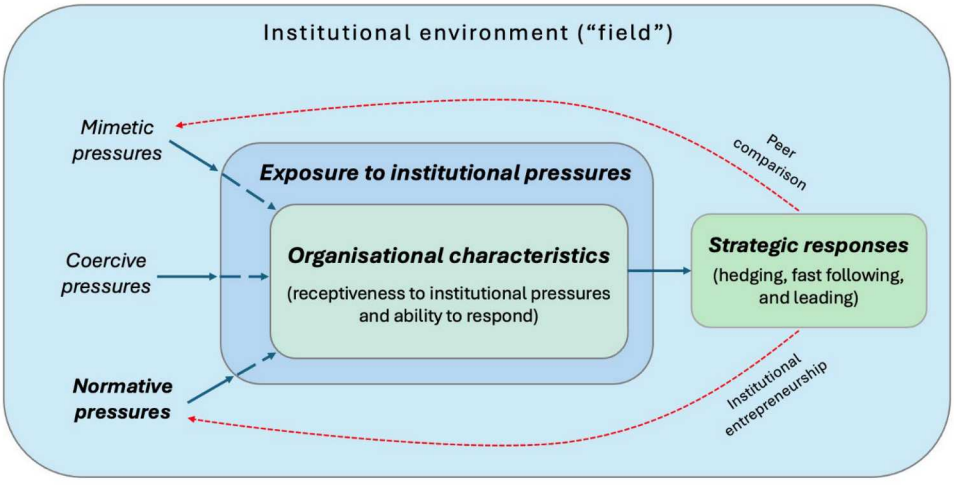

Figure 4. A framework for understanding the links between institutional pressures and strategic responses.

Notes: The dotted red lines which run from strategic pressures to (1) normative and (2) mimetic pressures indicate how asset managers' responses contribute to shaping net zero norms. Source: Authors

entrepreneurship, which shapes the institutional environment in which asset managers operate.

Our findings also reveal how net-zero target-setting in asset management differs from that in other economic sectors. Previous work on net-zero target-adoption by non-financial corporates suggests an important role for coercive (from societal and regulatory influences), mimetic, and competitive pressures (Berger-Schmitz et al. 2023). We found some evidence that coercive (notably, in terms of requirements from asset owners and disclosure regulation) and competitiveness considerations (notably, in terms of climate risk management) had contributed to asset managers' decision to set a net-zero target. Mimetic pressure also influenced how certain investors configured their target. However, the effect of coercive and mimetic pressures was largely restricted to hedgers, while competitive considerations were secondary to other factors. One explanation for these differences is that, except for a handful of high-profile asset managers such as BlackRock, investors have historically faced less public scrutiny over their climate-related activities (Hendersen 2020). Moreover, neither asset owners nor managers have been directly subject to carbon pricing or similar regulatory restraints, which provide a direct economic incentive for real economy corporates – especially in carbon-intensive sectors – to decarbonise. What marked out net-zero target-setting in our sample was the importance of normative influences – reflecting the importance of professional associations and networks within sustainable finance (Ahlström and Monciardini 2022; van der Zwan and van der Heide 2024).

A further contribution of our paper is to debates about the substantivity of climate-related targets. Net-zero targets by market actors have been met with a degree of scepticism, with accusations that they may be tantamount to greenwashing (In and Schumacher 2021; Aronczyk, McCurdy, and Russill 2024). Our results nuance these claims. We find evidence that some asset managers had set a net-zero target predominantly to

maintain their external legitimacy and meet external demands, doing so by only selectively incorporating best practice guidance or by limiting the scope of their net-zero commitments. The underlying goal for these hedgers was to strike a balance between the need to demonstrate a commitment to the net-zero norm, on the one hand, and to fulfil fiduciary duties to value-oriented clients, on the other. Such behaviour points to the possibility of 'policy-practice' decoupling (Bromley and Powell 2012) wherein organisations adopt a policy (here, net zero) but fail to put it into effect internally (Baines and Hager 2023; Glowik, Bhattiand, and Chwialkowska 2024).

However, responses from the interviews suggest that few asset managers were actively seeking to deliberately manipulate or deceive through their net-zero targets. Three investors (all hedgers) mentioned that the rise of greenwashing claims in the RI industry had made them hesitant to set net-zero targets (12, 17, 20). Moreover, even though four investors mentioned adopting their net-zero targets before developing a detailed methodology, they highlighted how they had done so initially as part of a communication strategy (6, 12, 17, 19). That is, it served as a tool to convey and integrate a common strategic goal throughout the organisation. A particular focus here was on fund managers who ultimately make investment decisions. As investor 6 noted, 'Having a commitment up front was important – it gives a top-down mandate so no discussion is needed about whether or not to have a climate plan'. In this sense, net-zero target-setting has played a performative role, intended to motivate, propel, and guide action internally (Dahlmann, Branicki, and Brammer 2019). In line with Christensen, Morsing, and Thyssen (2013), this goes *some* way in explaining why 'aspirational talk' on net zero may run ahead of realised practice.

We also nuance debates about greenwashing by drawing attention to the genuine challenges faced by investors in decarbonising their portfolios. Many investors expressed doubts about their ability to reach net-zero targets – with one respondent (12) stating that 'there is a tension between ambition and credibility'. Eight investors stated that their target was set under the assumption that the world would naturally decarbonise (5, 6, 8, 11, 13, 17, 18, 19). Three investors (11, 12, 17) also highlighted that, in a rushed attempt to set net-zero ambitions, potential conflicts between their targets and their fiduciary duties were not fully considered. This created the potential for backtracking if financial imperatives and net-zero targets are no longer compatible. The idea that net-zero alignment by asset managers may conflict with a strict interpretation of fiduciary duty receives some support in the academic literature (Gosling and MacNeil 2023; Roston et al. 2024). The results of this study suggest that these concerns are shared by professional investors. In doing so, our findings also lend weight to work which highlights various legal, structural, and economic constraints that may impede more radical investor action on climate change (Ameli et al. 2020; Balp and Strampelli 2020; Braun 2022; Riedl 2022).

7. Conclusions

Net zero has emerged as an increasingly prominent meta-norm within finance (Michie 2022; Klaaßen and Steffen 2023; Vulturius, Maltais, and Forsbacka 2024). Our study addresses a gap in current knowledge regarding net-zero target-setting by asset managers. Understanding why and how asset managers respond to the net-zero

norm is important in view of its growing role in governing capital flows for the real economy.

We find that no single factor explains the decision of individual asset managers to adopt a net-zero target. Rather, the decisions reflect differences in their history of RI, in their motivations, and in their capabilities. Consistent with institutionalist accounts of field change (Hoffman 2001), institutional pressures have played a role. Foremost among these have been normative pressures from investor networks and coercive pressures from clients (in particular, asset owners). Moving beyond institutionalist explanations of investor action (Hoepner, Majoch, and Zhou 2021), we also find evidence that asset managers have adopted net-zero targets for instrumental, efficiency-enhancing reasons related to climate risk management.

Regardless of the motive, a striking finding from the research was the degree to which targets had converged around guidance and methodologies emanating from investor coalitions (Kawabata 2023). Their preeminent role draws attention to the importance of collective action initiatives in institutionalising net zero – including by codifying and legitimating a common set of expectations around which investors can make sense of what constitutes alignment (Carbon Tracker 2023a). Taking a cue from Hale (2022), investor coalitions can be interpreted as part of the net-zero 'governance conveyor belt' which consolidates and scales best practice. The importance of coalitions also sheds light on an under-researched phenomenon of how *small* investors can amplify their influence by mobilising collective opportunity-structures (King 2008). In the present setting, a set of purpose-driven asset managers acted as norm entrepreneurs, collaborating with and through coalitions to shape and promulgate normative expectations.

Among the asset managers in our sample who had adopted, or were considering adopting a net-zero target, there were considerable differences in their alignment with templates of best practice. Investors categorised as hedgers selectively incorporated best practice principles, fast followers sought to keep pace by aligning themselves with many aspects of evolving guidance, while leaders went beyond codified expectations. A combination of internal and external factors was found to be important in determining asset managers' strategic response to the net-zero norm. The former include resources, managerial beliefs, and organisational values. External factors include regulatory contexts and client preferences.

What stood out from our analysis was how net-zero target-setting was largely a continuation of asset managers' existing practices. Investors at the forefront of RI integration emerged as leaders in net-zero target-setting; whereas those for whom RI was not a central element of their existing investment strategy were amongst the hedgers. That is, investors' approaches were largely a product of their histories, highlighting important path-dependencies in how financial actors respond to net-zero norms (Louche et al. 2019; Wagemans et al. 2024). Leaders therefore had long-established capabilities for RI, enabling them to integrate net zero into their existing climate strategies. Certain types of clients and employees were attracted toward these asset managers which, in turn, drove more ambitious climate strategies. Conversely, hedging behaviour was characteristic of asset managers with more limited capabilities for RI, and with client bases holding a more ambivalent attitude toward net zero.

The present study is not without its limitations. The sample cannot be seen as statistically representative of the population of asset managers. Moreover, it is biased toward investors that have set, or are in the process of setting, a net-zero target and therefore says little about factors that account for non-adoption. Our findings are furthermore biased toward asset managers operating in the European macro-region. It is also possible that respondents may have given biased answers to questions, for example, about their motives for target-setting and influence over collective norms. We nevertheless believe that our study usefully provides a set of response categories and factors that influence asset manager decision-making on net zero.

Our findings have implications for applied debates. They invite critical questions over the potential of self-regulation in finance, and specifically the net-zero norm, to spur real-economy decarbonisation at scale (Gosling and MacNeil 2023). Various investors expressed doubts over their ability to meet their targets given the pace of public policy change, raising concerns over the credibility of net-zero targets. This has begun to manifest in the backtracking of net-zero commitments by several asset managers and the suspension of the NZAMI. Even when individuals expressed ethical or strategic motives for adopting a net-zero strategy, multiple investors emphasised that their actions are ultimately constrained by fiduciary duties. Tensions between demands from clients for action on net zero and the need to maintain competitive returns help explain why certain investors may seek to avoid the full costs of alignment by only selectively incorporating elements of best practice. This suggests that more ambitious public policy, and in particular policies which raise the cost of carbon, remain vital to delivering on net-zero commitments. Public regulators can also set clearer signals by ensuring that consideration of long-term systemic risks is incorporated into definitions of fiduciary duty. Furthermore, to strengthen the transparency and accountability of net-zero targets, regulators could incentivise or mandate transition planning and plans by asset managers.

In contrast to several critiques of climate action (Fancy 2021; McDonnell, Rempel, and Gupta 2022; Baines and Hager 2023), our study did not find evidence that investors' self-regulation acts as a 'distraction' from more stringent public policy. In fact, multiple investors (N = 8) expressed a preference for stronger policy action, such as carbon pricing, to facilitate an 'orderly transition'. An alternative reading of the proliferation of net-zero norms is that it may be an attempt by private actors to fill a policy vacuum created by a lack of political will for more ambitious public climate policy (Ayling and Gunningham 2017; Elliott et al. 2024).

Note

1. This is in line with NZAMI (2024), which reports that the net-zero targets adopted by its members predominantly cover public equities and corporate fixed-income investments.

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Cora Buentjen is currently employed as a Research Analyst by Chronos Sustainability, which has provided consultancy services to several asset managers involved in the research. The main research, analysis and writing for the paper were undertaken while Cora was an MSc student at the LSE. The research was not part of any paid consultancy, and all interviews were undertaken based on informed consent. *Rory Sullivan* is the CEO of Chronos Sustainability, which has provided consultancy services to several asset managers involved in the research. Rory did not participate in the interviews and his involvement in the paper involved providing assistance with securing interviews, supporting interpretation of the interview findings, and providing feedback and comments.

Ethical declarations

This research was approved by the Department of Geography and Environment, LSE, under a Departmental (Ethics) Review, application #203290. Informed consent was obtained using a participant information sheet and signed consent form.

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Appendices

Appendix A: Characteristics of sampled asset managers

Table A1. Characteristics of sampled asset managers

Investor	Classification	Size*	Region of Origin	Type of Investor**
1	Leader	Small	Europe	Asset Owner / Asset Manager
2	Leader	Small	Europe	Asset Manager
3	Leader	Small	Europe	Asset Manager
4	Fast Follower	Medium	Europe	Asset Manager
5	Fast Follower	Small	Europe	Asset Owner / Asset Manager
6	Fast Follower	Medium	Europe	Asset Manager
7	Fast Follower	Medium	Europe	Asset Manager
8	Fast Follower	Medium	Europe	Asset Manager
9	Fast Follower	Small	Europe	Asset Manager
10	Fast Follower	Large	Europe	Asset Manager
11	Fast Follower	Large	Europe	Asset Manager

(*Continued*)

Table A1. Continued.

Investor	Classification	Size*	Region of Origin	Type of Investor**
12	Hedger	Medium	Europe	Asset Manager
13	Hedger	Medium	Europe	Asset Owner / Asset Manager
14	Hedger	Large	North America	Asset Manager
15	Hedger	Small	Europe	Asset Owner / Asset Manager
16	Hedger	Large	North America	Asset Manager
17	Hedger	Large	North America	Asset Owner / Asset Manager
18	Hedger	Medium	North America	Asset Manager
19	Hedger	Small	Europe	Asset Manager
20	Hedger	Small	Europe	Asset Manager

*Small = less than £30 billion AUM (assets under management); Medium = between £30 billion AUM and £300 billion AUM; Large = more than £300 billion AUM.

**Some asset owners undertook asset management functions in-house, in which case they were classified as both an asset owner and asset manager.

Appendix B: criteria for classifying asset managers

Table B1. Criteria for classifying asset manager strategies

Criteria	No alignment	Partial alignment	Full alignment	Beyond alignment
1: Signatory of a net zero alliance	Not a signatory to NZAMI, NZAOA or PAAO.	Late signatory.	Early signatory.	Founding signatory.
2: Portion of assets committed	No commitment to 1.5°C alignment.	Commits 50% or less of portfolio to 1.5°C alignment.	Commits more than 50% of portfolio to 1.5°C alignment.	Commits 100% of portfolio to 1.5°C alignment.
3: Interim targets	No interim targets.	Interim targets not in line with guidance.	Interim target of 50% decarbonisation by 2030.	Interim target of more than 50% or before 2030.
4: Climate integration	No integration of climate objectives in decision-making.	Supplements financial metrics with climate metrics (e.g. CO2e/ $m invested).	Supplements financial objectives with forward-looking metrics (e.g. percentage of portfolio with net zero targets).	Develops new climate metrics (e.g. for asset classes currently lacking metrics)
5: Climate solutions	No investment in climate solutions.	Invests in climate solutions within targeted funds.	Incorporates low-carbon opportunities considerations across equities portfolio.	Invests in low-carbon opportunities across various asset classes.
6: Fossil fuel exclusions	No fossil fuel exclusions for any funds.	Excludes certain fossil fuels from specific funds.	Excludes thermal coal, tar sands and Arctic drilling from entire portfolio.	Excludes all fossil fuels from entire portfolio.
7: Corporate engagement commitment	No corporate engagement target or commitment.	Sets engagement commitment without explicit target.	Sets a target to engage most of their portfolio to meet 1.5°C-alignment.	Sets a target to engage the entire portfolio of relevant asset classes to meet 1.5°C-alignment.
8: Bilateral engagement	No bilateral engagement.	Engages with companies to ensure better management and disclosure of GHG* emissions.	Supports climate resolutions at companies whose strategies are not aligned with the goals of the Paris Agreement.	Files climate resolutions at companies who have not responded appropriately to engagements.
9: Collective engagement	No participation in collective engagement initiatives.	Joins collective engagement initiatives that encourage better governance and disclosure of GHG emissions.	Actively participates in collective engagement initiatives that encourage companies to establish 1.5°C-aligned business strategies.	Leads collective engagement initiatives that encourage companies to establish 1.5°C-aligned business strategies.
10: Policy advocacy	No policy advocacy.	Policy advocacy undertaken solely through involvement in investor networks.	Policy advocacy undertaken both independently and through investor networks.	Involved in the formation of new investor networks or leads existing networks.

*GHG: greenhouse gas.