

# Will the EU Taxonomy Regulation Foster a Sustainable Corporate Governance?

Law Working Paper N° 611/2021

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## Abstract

EU securities regulation has established a taxonomy of environmentally sustainable activities. This article discusses, from a law and economics standpoint, the potential of this taxonomy to support a sustainable corporate governance.

Corporate governance can be an efficient way to channel investor preferences towards sustainability because the concentration of institutional shareholding has lowered the transaction costs of shareholder action. However, there is a principal-agent problem between institutional investors and their beneficiaries, which may lead to greenwashing and insufficient or excessive concern for sustainability in corporate governance.

This article argues that introducing environmental sustainability into EU mandatory disclosure aligns the institutional investors' incentives with the interest of their beneficiaries and may foster the efficient inclusion of sustainability in corporate governance. The argument is threefold. Firstly, the EU taxonomy may curb greenwashing by standardizing the disclosure of environmental sustainability. Secondly, this information may become salient for the beneficiaries as the same standards define the sustainability preferences to be considered in recommending and marketing financial products. Thirdly, sustainability disclosure prompts institutional investors to compete for sustainability-minded beneficiaries. Being unable to avoid unsustainable companies altogether, institutional investors are expected to cater to beneficiaries' preferences for environmental sustainability by way of voice, instead of exit.

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Keywords: Environmental Sustainability, Law and Economics, Securities Regulation, Corporate Governance, Institutional Investors, Greenwashing, Voice v. Exit

JEL Classifications: G38, K22, Q56

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## 1. Introduction

Institutional investors are the largest owners of publicly held companies in the world (De La Cruz et al 2019). Taking a law and economics approach, this article analyses the role of institutional investors in pursuing a sustainable corporate governance and how especially EU securities regulation can foster this role. I look at sustainable corporate governance from the perspective of shareholders. This is different from how EU institutions understand the topic. The European Commission and the European Parliament (2021) have recently put forward a proposal to establish a sustainable corporate governance framework by way of director duties and other constraints on corporate decision-making. That approach to sustainable corporate governance is based on the idea that corporations need a commitment device, such as regulation, to have a purpose different from profit maximization and to stick to it.

Commentators have cautioned against the EU institutions' approach (Edmans et al 2021). The direct regulation of corporate decision-making, aiming to mediate between the conflicting interests of shareholders and non-shareholder constituencies (often referred to as "stakeholders"), risks undermining managerial accountability and efficient corporate governance. Therefore, this article

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takes a different approach to sustainable corporate governance, in which the role of regulation is also different as it is based more on mandatory disclosure to investors than on direct constraints on corporate decision-making.

The starting point of this article is that, within the limits established by law, corporations pursue whatever goals their shareholders choose. Traditionally, business corporations pursue profit to maximize the joint utility of their investors, and in this way, they contribute to the efficient allocation of resources (Friedman 1970). However, as argued by Hart & Zingales (2017), this is not a foregone conclusion. Profit maximization is insufficient to pursue investor welfare if investor preferences also include a concern for a common good that is undermined by profit maximization and whose damage is costlier to repair than to avoid, as with climate change.

In economics, the undermining of a common good is a negative externality. As in Paces (2021), this article defines sustainability in corporate governance as the correction of negative externalities, such as the adverse impact of corporate actions on the well-being of individuals having no contractual relation with the corporation, including future generations. Sustainability is otherwise an elusive concept because it confuses two already ill-defined notions. On the one hand, sustainability is often interpreted as the corporation's concern for stakeholders, without explaining how to balance the interest of these constituencies. On the other hand, sustainability is sometimes understood as a preference for long-term, as opposed to short-term, decision-making without specifying what counts as long or short and what interest is at stake in the computation. Focusing on shareholders' concern for negative externalities overcomes this ambiguity. It clarifies that sustainable corporate governance means limiting some specific, adverse impact of profit maximization on the society *to the extent that shareholders want this*.

Correction of negative externalities normally relies on taxes or regulation, which induce or compel companies to be more sustainable. On the contrary, the sustainable corporate governance approach is based on corporations voluntarily choosing to earn lower profit to reduce negative externalities because the shareholders so decide. The most prominent shareholders of publicly held corporations worldwide are the institutional investors. However, the ultimate owners – meaning, the corporations' residual claimants – are the beneficiaries of these investors. Clients of mutual funds, pension funds, and of comparable collective investment schemes are those bearing the financial consequences of what corporations do, and thus those who can decide to trade these consequences for negative externalities. The beneficiaries' concern for the externalities of publicly held corporations is ultimately what should matter for a sustainable corporate governance.

Institutional investors include a variety of financial intermediaries having different relationships with their beneficiaries. For instance, sovereign wealth funds manage assets on behalf of governments. Pension funds manage money on behalf of prospective retirees in different industries. Mutual funds manage money on behalf of their clients, whoever these are. This article focuses on mutual funds and will refer exclusively to the latter as institutional investors.

Varying legal mandates and political influences complicate the relationship between institutional investors other than mutual funds and their beneficiaries. Although mutual funds are also subject to different politics and legal rules in different jurisdictions, beneficiaries can choose freely whether and how much to invest in mutual funds. The possibility to switch between competing funds allows beneficiaries to discipline asset managers based not only on the financial return they provide, but also on how they meet their preferences in terms of sustainability. The world-largest institutional investors are asset managers such as Blackrock, Vanguard, and State Street. These are known as the 'Big Three'. They manage so-called 'families' of mutual funds, which include actively managed funds and funds passively tracking a market index (Fisch et al 2019). As I will explain in this article, actively and

passively managed mutual funds have different business strategies, which result in different incentives to pursue the interest of their beneficiaries.

As they can ‘fire’ the asset manager by switching between funds, mutual fund beneficiaries are effectively – albeit not formally legally – the ultimate owners of the publicly held companies in the mutual funds’ portfolios. This provides an opportunity and a challenge for corporate governance. The opportunity is that, compared to traditionally atomistic shareholders, the owners of the modern public companies are no longer too dispersed to matter. They hold shares through institutional investors which, in turn, are large shareholders that can influence corporate management. The challenge is that institutional investors are also profit-maximizing entities. Their incentives are not necessarily aligned with the interest of their beneficiaries. As a result, institutional investors may fail to pursue sustainable corporate governance even though their beneficiaries want it or may pursue sustainable corporate governance when beneficiaries do not want this. More subtly, institutional investors may pretend to pursue sustainability taking advantage of the ambiguity of its definition, as explained before.

This article claims that securities law can align the incentives of institutional investors with the interest of their beneficiaries, by ameliorating the ambiguity of the sustainability notion. EU securities regulation has specifically taken this stance in the context of the Sustainable Finance Action Plan (European Commission 2018). Aiming to encourage private investment in sustainable activities, the EU legislator has created a system of disclosure rules designed to communicate unambiguously whether and to what extent an investment is sustainable. This system is based on a unique regulatory taxonomy of sustainable activities and investments therein, which is being completed and will be applied from 2022. In this way, the beneficiaries will be able to choose institutional investors also based on how much they invest in sustainable economic activities, as defined by the EU. Short of the unavoidable imperfections of such a system, it purports to elicit investors’ preferences towards sustainability. This, in turn, will have consequences on the behaviour of institutional investors, which must cater to these preferences to attract their clients.

In this article, I will explore the consequences of the EU Taxonomy on the corporate governance behaviour of institutional investors. Because the EU Taxonomy currently includes only environmental sustainability, I will also focus on this and particularly on climate change. The advantage of limiting the analysis to climate change is that the strategies to cope with it are measurable, if only in terms of Greenhouse Gas emissions (GHGs). This approach further reduces the ambiguity about sustainability and allows studying more precisely the behaviour of institutional investors and their beneficiaries.

The remainder of this article is as follows. In the next Section, I will discuss the law and economics of sustainable corporate governance, in particular how investor preferences for environmental sustainability can be efficiently channelled through corporate governance as opposed to the political process. In Section 3, I will analyse the recent changes in EU securities regulation focusing on how they bring the EU Taxonomy of sustainable investment in the decision set of retail investors. In Section 4, I will move on to the implications for institutional investor’s role in corporate governance. Because the EU Taxonomy is not yet in force, it is impossible to study its impact empirically. Nevertheless, looking at the theory and the existing evidence, I will discuss how institutional investors are expected to react to the introduction of the EU Taxonomy. I will pay particular attention to the question whether institutional investors will respond to the increased saliency of sustainability for beneficiaries by way of voice or exit. Section 5 will conclude.

## **2. The Law and Economics of Sustainable Corporate Governance**

In this Section, I discuss the theory behind the control of negative externalities through corporate governance as opposed to government regulation.

In economics, firms such as corporations are assumed to maximize profit and, in doing so, to contribute to the optimal allocation of scarce resources, short of market failure. As a prominent example of the latter, firms produce negative externalities, such as GHGs, when their private cost is lower than the social cost. Governments try to correct externalities by increasing the price of input, by way of Pigouvian taxes, or limiting the quantity of input/output, by way of command-and-control regulation. Ronald Coase (1960) famously argued that externalities would self-correct in a world without transaction costs, and more importantly, that to correct market failure in a world of positive transaction cost one should compare how different institutional arrangements score in terms of transaction costs (Coase 1991). I will return to the transaction costs argument momentarily.

In the traditional economic framework, corporations should maximize shareholder utility by providing them with the highest possible profit, within the limits of regulation, taxation, and ethical norms (Friedman 1970). This isn't because all shareholders are selfish, but because the shareholders who care for other members of society are supposedly better off giving (a part of) their share of maximum profit to charity instead of getting a lower profit net of charity decided by someone else. Thus, governments should take care of aligning private cost with social cost whereas individuals should manage their non-monetary preferences. This approach, which dominated law and economics for decades, has two limitations. First, governments have proved not so good at policing externalities after all. Second, charity is insufficient to support individuals' concern for the well-being of society when negative externalities are costly to reverse.

As explained by Bénabou and Tirole (2010), governments face shortcomings in policing externalities. Governments' ability to effectively align private cost with social cost is affected by lobbying. Moreover, interjurisdictional externalities undermine the impact of individual government's action. Governments try to coordinate, but face higher cost of coordination than lobbying multinational firms. Finally, governments respond, albeit imperfectly, to the preferences of the median voter, which due to the ageing western population underweights the interest of younger generations. The second problem, highlighted by Hart and Zingales (2017), is that externalities are not always separable from the production process. If Walmart sells firearms that can be used in mass shootings of children, correcting this externality, for instance by patrolling schools and playgrounds, cost shareholders more than stopping selling firearms in the first place. A similar reasoning applies to climate change. Although investors may pay to offset CO2 individually, this isn't a solution in the aggregate at least to the extent that the technology to capture and store CO2 is not sufficient to avert the climate change problem.

There is therefore an economic case for investors trying and stopping companies from producing externalities. However, because investors face coordination problems like those of voters, if not more severe, one might doubt whether investors can fare any better in the control of externalities than citizens electing governments. This is a relevant question for policymakers deciding whether, in order to cope with negative externalities, they should focus on improving the regulatory process as opposed to corporate governance. In the spirit of Coase, I posit that the answer depends on comparative institutional analysis. Corporate governance is a good approach to correct externalities to the extent that the transaction costs are lower compared to correcting externalities via the political system or by way of charity.

Transaction cost is a broad concept. For the purposes of this analysis, it suffices to characterize it as the cost of operating an organization (Williamson 1991). To simplify, let's compare the political system, by which citizens make governments impose taxes and regulations on companies to internalize environmental externalities, with corporate governance, by which shareholders persuade the company's management to curb such externalities. As mentioned, transaction cost undermines government's control of externalities because of lobbying, international coordination, and the ageing

population. In corporate governance, transaction cost fundamentally depends on shareholder collective action problem. This cost used to be huge because shareholders had individually too small stakes to coordinate and influence management in a way or another. This explains the emphasis of the literature on minimizing agency cost (Jensen & Meckling 1976). Things have changed considerably with the institutionalization of savings. The bulk of retail investors now hold shares in the largest publicly held companies indirectly, via institutional investors. This fact has reduced the transaction cost of corporate governance significantly, arguably to levels lower than the transaction cost of the political system, at least as far as internalizing environmental externalities is concerned.

Large publicly held companies account for one-third of the top-100 CO<sub>2</sub> producers, which in turn are responsible for 71% of GHGs (CDP 2017). The Big Three institutional investors hold significant stakes in all these companies, as in thousands of smaller contributors to GHGs, established and operating in several different jurisdictions. The holdings of other institutional investors are similarly concentrated. In 2018, the firms included in the MSCI World index produced 56% of CO<sub>2</sub>. Institutional investors own collectively 45% of the capital of these MSCI firms, whereas the Big Three hold on average 4.8% (Azar et al 2021). Therefore, institutional investors *can* influence CO<sub>2</sub> abatement on a worldwide rather than on a national basis. Institutional investors potentially score better than governments also in terms of lobbying. Although institutional investors lobby too for a more favourable regulation, their efforts concentrate on financial regulation. They are less likely to be captured by an industry's vested interest than a government. As their holdings are diversified, institutional investors do not share the interest of large multinationals to lobby for a less stringent environmental regulation. Finally, because institutional investors must attract retail investors to their funds, it is plausible to consider them as a vehicle for retail investors' preferences for environmental sustainability, including the younger generations (Barzuza et al 2020).

Although institutional investors have reduced the transaction cost of sustainable corporate governance, institutional investors might still be ill-positioned to police environmental externalities because of legal issues, investor preferences, and agency cost. Firstly, the beneficiaries' concern for sustainability, if present, must be legally binding on the institutional investors. This is a surprisingly under-researched topic, which I leave for another day. In this article, I assume that mutual funds can include such a commitment in their contracts, to attract beneficiaries, and it will be legally enforceable. Secondly, there is the question to what extent the preferences of retail investors include a concern for environmental sustainability. Thirdly, there is an agency cost problem. For institutional investors to channel the preferences of their beneficiaries to the portfolio companies, not only should they be under a legal duty to do so, but also their incentives must be aligned with the beneficiaries' interest.

I am discussing the last two issues in turn.

First of all, there are three models on how investors may want corporations to incorporate environmental sustainability (Bénabou & Tirole 2010). The first is "Doing Well by Doing Good". A corporation incorporating climate risk (including 3 components: physical risk, regulatory risk, and technological risk) will eventually outperform competitors as soon as this risk is priced correctly (Krueger et al, 2019). As it assumes market myopia, this model implies no long-term trade-off between correcting externalities and financial performance. Following it, corporations reduce externalities anticipating a future in which these will be curbed more effectively. The second model, "Delegated Philanthropy", is more ambitious. It posits that investors expect corporations to pursue a prosocial goal, such as reduction of GHGs, even though this results in lower long-term returns. This theory implies curbing externalities more than needed to cope with future risks. The third model, "Corporate Philanthropy", posits that corporations should pursue a prosocial goal whether investors want it or not. As it disenfranchises shareholders, this model resonates with the recent proposal by EU institutions (European Parliament 2021) to regulate corporate decision-making directly. Both result in



potentially extreme agency costs that could undermine the goal of pursuing sustainability via corporate governance as opposed to public regulation. I am therefore not considering this model further.

Which model better represents investor preferences is hard to say. Having institutional investors between beneficiaries and portfolio companies sheds some light on this matter. Institutional shareholders who own well-diversified portfolios, like the Big Three, have incentive to pursue a Doing Well by Doing Good strategy. Institutional investors that do not actively manage their portfolios track market indexes. When these investors are large, they hold stock in virtually any company in the world. As diversified, universal owners, these investors are going to take the hit of climate risk in one way or another, so minimizing climate and other cross-cutting risks is unambiguously profitable for them. Index investors should thus incorporate climate risk in their decision-making and prompt portfolio companies to do the same. Borrowing from the language of portfolio theory, this universal ownership argument has been framed as ‘Systematic Stewardship’ as it echoes the systematic risk of a diversified portfolio (Gordon 2021). This approach matches the preferences of beneficiaries who only aim to maximize risk-adjusted financial return.

Beneficiaries of institutional investors may want more than financial return, however, namely Delegated Philanthropy. As framed by Hart and Zingales (2017), it is plausible to assume that investors also have ethical concerns for which they feel responsible – such as the investee corporation’s GHGs – and are willing to accept lower returns on this basis. This brings the question why mutual funds have not tried to attract such investors purporting to pursue (environmental) sustainability *at the expenses of financial return*. According to Hart and Zingales, this is because the fiduciary duties of managers are interpreted narrowly, at least in the U.S., preventing corporations and its institutional shareholders from pursuing non-financial interests. However, under the law of Delaware – the main law of incorporation in the U.S. – shareholders having no conflict of interest can vote also in ways that do not lead to profit maximization (Williams 2018). Although varying corporate laws frame this matter differently, including non-financial preferences of shareholders in corporate governance is generally not inconsistent with the management’s fiduciary duty to pursue shareholders’ best interest. Moreover, mutual funds subject to the same duty towards their clients could legitimately incorporate the non-financial preferences of their beneficiaries into their voting policies, if only they managed to aggregate these preferences consistently (Griffith 2020). In theory, mutual funds can do this by committing ex-ante to a certain sustainability policy to constrain the quest for financial return, or by polling beneficiaries ex-post on specific trade-offs, none of which is observed on a large scale.

If Delegated Philanthropy is legal, mutual funds’ failure to pursue it widely may have two explanations. One, there isn’t sufficient support from beneficiaries. Two, beneficiaries would support sacrificing return to internalize environmental externalities, in theory, but in practice they cannot appreciate the impact of their sacrifice – and compare mutual funds along this dimension – because the meaning of sustainability is ambiguous, and this ambiguity increases agency cost.

There is evidence that beneficiaries want Delegated Philanthropy. Some beneficiaries are prepared to give up financial return to reduce climate change externalities. Using the introduction of the Morningstar Globes rating – an unambiguous, visual indicator of Environmental-Social-Governance (ESG) sustainability – as a natural experiment, a finance study found that beneficiaries switched away from actively managed funds with the lowest ratings towards funds with the highest ratings (Hartzmark & Sussman 2019). Moreover, the authors attributed the choice by beneficiaries to nonpecuniary motives. Another finance study found that the introduction of the Morningstar Low Carbon Designation – another unambiguous label of environmental sustainability based on GHGs – not only had an even stronger impact than Globes on fund flows, but also triggered a reaction by fund managers who altered their portfolio composition to obtain the designation in the next period (Ceccarelli et al. 2020). Also in this study, the motivation of fund switch by beneficiaries is

nonpecuniary. While the jury is still out to decide how much beneficiaries care about sustainability, and whether they care enough to outweigh the preferences of those who focus on financial returns (Gantchev et al 2021), it is undeniable that a significant proportion of retail investors support Delegated Philanthropy, particularly in the context of climate change.

The key problem of sustainable corporate governance is, therefore, agency cost. It is expensive to align the institutional investors' incentives with the interest of their beneficiaries particularly when this interest includes a preference for sustainability. The reason for this incentive misalignment is that greenwashing is possible at relatively low cost. Institutional investors and their portfolio companies (the agents) may cheaply pretend to be environmentally sustainable, with beneficiaries (the principals) believing this. In the presence of greenwashing, mutual funds have incentive to acquire ESG labels as they compete aggressively on fund flows, but will not necessarily pursue environmental sustainability. While appeasing sustainability-minded beneficiaries, ESG labels may mean little in terms of sustainability. On this perspective, the rapid transformation of the mutual fund industry, in which inflows into ESG funds tend to exceed those into conventional funds (Bioy et al 2021a; 2021b), could exacerbate the agency problem. Even though the beneficiaries of institutional investors increasingly demand ESG funds, asset managers catering to this demand could engage in more greenwashing.

Greenwashing is borne out by the empirical evidence. In the U.S., mutual funds profiling themselves as ESG-oriented underperform non-ESG mutual funds on several sustainability measures, notably including the GHGs (Gibson et al 2021). Moreover, these funds are more expensive and financially less attractive than the non-ESG funds in the same family. Thus, on average, managers of ESG funds enrich themselves at the expenses of their beneficiaries, who accept lower financial returns in exchange for greenwashing. To be sure, there seems to be more going on in the mutual fund industry than greenwashing. For one, institutional ownership is associated with higher environmental sustainability of portfolio companies when the institutional shareholder is based in Europe, albeit not when it is based in the U.S. (Dyck et al 2021). In addition, a recent empirical study reveals that self-identified ESG funds in the U.S. are more active and selective on the sustainability of portfolio companies than non-ESG funds (Curtis et al 2021). Nevertheless, ESG labels remain unreliable. They reveal a different investment strategy than conventional funds, but this difference is not consistently reflected by lower CO2 emissions or other measures of negative externalities.

The greenwashing problem is twofold. First, there isn't a single ESG standard, but many, which diverge considerably. This incentivizes companies and institutional investors to arbitrage between ratings to get a good score at the lowest cost. Second, ESG combines different prosocial goals, most of which are hard to measure and even harder to weight against each other. Rating providers publish more granular information about the E, S, and G components, but this does not solve the problem. Unreliable ESG ratings undermine investor's ability to reduce negative externalities by picking certain institutional investors and, more broadly, the whole viability of a sustainable corporate governance. If institutional investors can pretend, at a low cost, to pursue environmental sustainability, that suffices to attract inflows from beneficiaries who care about climate change, but it won't contribute to averting it. Eventually, because it is too costly for retail investors to distinguish between reliable and unreliable ESG ratings, commitments to sustainability will lose credibility and the private-label ESG market might unravel because of adverse selection (Akerlof 1970).

Institutional investors can sometimes overcome greenwashing. A recent study (Azar et al 2021) found that the Big Three play an important role in reducing GHGs, despite managing mainly conventional index funds. These institutional investors do engage with the portfolio companies in which they have a significant stake, which are also among the world-largest contributors to GHGs. The engagements appear to be successful as large ownership by the Big Three is associated with a significant reduction of CO2 emissions by the portfolio companies. This evidence suggests that the Big Three can be

collectively credible about reducing negative externalities in certain circumstances. To support sustainable corporate governance more widely, other institutional investors should be able to distinguish themselves from greenwashing too.

The solution is to raise the cost of greenwashing, or else lower the cost of signalling sustainability relative to greenwashing (Spence 1973). The law can do this and, in this way, reduce the agency cost of institutional ownership and enable a sustainable corporate governance. To this purpose, law should support a commitment by institutional investors, recognizable by beneficiaries, to pursue the environmental sustainability of the portfolio companies. A straightforward way to support investors' commitment is to mandate disclosure of the environmental sustainability of the portfolios based on objective quantitative criteria, such as CO2 emissions. Manipulating these indicators is costly, if only because of the expected sanctions for misdisclosure, and the cost of greenwashing will be higher the harder to imitate the indicators are for unsustainable companies and asset managers. Regulation should also include rules of conduct to make sure that mandatory disclosure results in knowledgeable choices by retail investors, depending on their sustainability preferences. To date, no legal system supports such a commitment although the European Union is rapidly moving in this direction.

### **3. The EU Taxonomy Regulation as Curb on Agency Cost**

In this Section, I discuss how EU securities regulation can reduce the agency cost in the relationship between institutional investors and their beneficiaries. Based on the previous analysis, I assume that a few beneficiaries want to invest in environmentally sustainable financial products, leading directly or indirectly to lower GHGs, even though this results in lower returns. Institutional investors have incentives to cater to such preferences, but there is the greenwashing problem. It's just too tempting to pretend being environmentally sustainable and attract fund flows. Regulation can align these incentives with the interest of beneficiaries.

A prominent goal of securities regulation is investor protection (Armour et al 2016). This includes supporting retail investors' knowledgeable choice of investment products. Securities regulation traditionally pursues this goal by way of mandatory disclosure rules. This approach has long revealed its limitations, as retail investors neither read nor understand complex disclosures. Retail investors focus on salient information, which, however, can be manipulated by financial intermediaries and lead to mis-selling. The reaction of securities regulation has been to simplify disclosure, on the one hand, and complement it with conduct of business rules, on the other, increasingly putting on the financial intermediaries the responsibility to match their products with the retail investors' preferences.

Sustainability adds a degree of complexity to the matter. It is already difficult to interpret the financial preferences of unsophisticated investors. Guiding them to solve the trade-off between financial return and negative externalities is a daunting task. And yet, the European legislator has embarked on this task with the Sustainable Finance Action Plan (European Commission 2018). This has resulted in a significant overhaul of European Securities Regulation, introducing features unique worldwide, such as a regulatory taxonomy of sustainable economic activities.

It would be impossible to discuss the Action Plan comprehensively in this article. Siri & Zhou (2019) provide an excellent overview. In what follows, I focus on three characteristics that may align institutional investor incentives with the sustainability preferences of their beneficiaries, thereby reducing the agency cost of sustainable corporate governance. First, the *Sustainable Finance Disclosure Regulation* (SFDR 2019) has created a system whereby every institutional investor offering financial products in the EU must publish qualitative and quantitative information about the impact of their investments on sustainability. Second, the *Taxonomy Regulation* (TR 2020) has established a system whereby every investment, offered in the EU, that claims an impact on sustainability must

substantiate this claim *quantitatively*, in terms of a regulatory taxonomy of sustainable economic activities. Third, the overhaul of sectoral EU financial regulation, in particular the MiFID (2014), will mandate the inclusion of sustainability preferences – framed in terms of the above-mentioned regulations – in the suitability and product governance obligations of financial intermediaries. I illustrate these three aspects in turn.

The SFDR is pivotal in the EU regulation of sustainable finance. It applies to virtually every institutional investor and asset manager that offer financial products in the EU. Consequently, it applies to mutual funds, which are the focus of this analysis, wherever established (including in the U.S. and, therefore, managed by the Big Three) so long as they are offered in the EU. Fund managers subject to SFDR must disclose in their reports and websites how they tackle sustainability risk and the *Principal Adverse Impacts* (PAIs) of their investments on sustainability factors, detailed by secondary regulation. Institutional investors may choose not to disclose, but in this case, they must explain their choice. Extensive disclosures are mandated at the product level as well.

There are three types of financial products that can be offered in the EU according to the SFDR. First are art. 9, or so-called ‘dark green’ products, which have sustainable investment as their objective and must disclose how this objective is pursued concretely. Sustainable investments are those which contribute to an environmental or social goal, without harming any of these and featuring good governance practices – all notions specified by secondary regulation. Second are art. 8, or ‘light green’ products, which promote, among others, environmental or social characteristics and must disclose how these characteristics are met concretely. Third are all conventional financial products, which do not pursue sustainability, but must nevertheless disclose how they integrate sustainability risks into investment decision-making (art. 6) and their PAIs on sustainability factors (art. 7), unless they explain why either sustainability risks or PAIs are irrelevant for their investments.

The SFDR is in force since March 2021. The disclosure templates and the quantitative and qualitative indicators of PAIs are specified by Regulatory Technical Standards (RTS 2021) that will apply from 2022. The quantitative dimension is particularly important because, in principle, it enables retail investors to compare how institutional investors and their financial products score in terms of negative externalities. The indicators notably include the GHG emissions of investee companies, specifically scope 1 (direct emissions) and scope 2 (emissions from energy purchased), whereas the publication of scope 3 emissions (GHGs along the supply and value chain) is postponed until 2023 considering the current gaps in the data worldwide. However, sustainability is not only about limiting the harm to the environment or the society, but also about transitioning to technologies that generate fewer negative externalities. On the investments in transition, the SFDR mainly prescribes explanations by way of narratives, but crucially, it is complemented by the EU Taxonomy. Art. 3 TR defines environmentally sustainable economic activities and investments depending on whether they make a substantial, measurable contribution to improving one of the environmental objectives indicated by art. 9.

The Taxonomy Regulation is the first step of a very ambitious project of the EU, aiming to establish a full classification of sustainable economic activities based on standards endorsed by regulation. The project has started from environmental sustainability, focusing on two environmental objectives: climate change mitigation and adaptation. The pertinent standards will apply from 2022. For every activity considered, the standards set a quantitative threshold, typically but not exclusively in terms of GHGs, establishing whether the specific activity substantially contributes to the environmental objective. Looking at climate change mitigation, for example, activities may contribute directly (low to zero carbon transport), as transition activity (efficient electricity production), or as enabling activity (efficient building renovation). Listed activities are taxonomy-aligned if they perform above the threshold, otherwise they are not to be considered sustainable according to the Taxonomy (European Commission 2021a). Many activities are not included in the Taxonomy, although they may be

included at a later stage by the Platform on Sustainable Finance (2021) – a permanent expert group of the European Commission. An investment is taxonomy-aligned to the extent that it finances taxonomy-aligned activities. An investment’s degree of taxonomy alignment is a straight percentage immediately recognizable by retail investors.

The Taxonomy Regulation mandates disclosure of taxonomy alignment for several entities and financial products, adding a straightforward quantitative dimension to the broad coverage of SFDR. Entities subjects to the TR – which include the financial and nonfinancial firms subject to the Non-Financial Reporting Directive (NFRD 2014) – must disclose the proportion of their *turnover* and of their operating and *capital expenditures* that are taxonomy-aligned. In this way, all issuers and financial firms in scope – with the latter being expanded to all listed companies and financial intermediaries (European Commission 2021b) – will have to publish precise information about how sustainable they currently are (turnover) and aim to become (capital expenditures). This is important information, which feeds into the definition of environmental sustainability for both asset managers and the financial products they supply.

The Taxonomy also applies to the three categories of financial products defined by the SFDR. Dark green products will have to disclose the proportion of sustainable investment that is taxonomy-aligned with respect to a specific objective, as a percentage of all investments. Similarly, light green products will have to include such a disclosure to the extent that they promote environmental characteristics by including sustainable investments, specifying that the remaining portion of the underlying investments “does not take into accounts the EU criteria for environmentally sustainable activities”. Such a *negative disclosure* also applies to all the conventional products that make no sustainability claim. These will have to include a warning that the financial product “does not take into account the EU criteria for environmentally sustainable activities” (art. 7 TR).

In this context, all asset managers offering products in the EU will have to disclose how much of their total investments are taxonomy-aligned. Fulfilling this obligation will be challenging, particularly in the first years of application of the Taxonomy. Institutional investors must rely on issuers for this kind of information, but issuers will only be obliged to publish the proportion of taxonomy-eligible activities for the year 2022 (in 2023) and their taxonomy alignment for the year 2023 (in 2024). Moreover, Non-EU issuers are not subject to the Taxonomy and, as mentioned, many economic activities are not included in the Taxonomy. Thus, in the initial phase, a lot will depend on voluntary disclosures. The expectation is that institutional investors will have a strong incentive to calculate – and ask their investee companies to calculate – their degree of taxonomy alignment to avoid losing clients to competitors. At the same time, because the regulator has intentionally set the bar of environmental sustainability high (in line with the language ‘substantial contribution’ to climate change mitigation and adaptation), the first data on taxonomy-alignment are expected to be modest and only improve with time. Therefore, institutional investors managing mainly conventional index funds, such as the Big Three, might well disclose the taxonomy alignment of their products, too, if only to avoid the stigma of negative disclosure.

Mandating disclosure of the degree of taxonomy alignment, the EU taxonomy will reduce greenwashing. It will do so because the taxonomy alignment of a portfolio is a signal of environmental sustainability. Because it is a simple percentage of ‘greenness’, it is easily recognizable by beneficiaries who care about that. Moreover, the signal is credible because it is based on sustainability measures established and enforced by regulation. To be sure, these measures reflect a political compromise and thus may be flawed. A prominent example of this is the failure of the EU to set transition standards for natural gas and nuclear energy (Harvard-Williams & Tan 2021). Moreover, issuers will have quite some discretion in calculating the taxonomy alignment, which may reduce the credibility of the signal for issuers and institutional investors (Pettit & Walton 2021). Nevertheless, the

existing taxonomy measures are ultimately based on CO2 emissions, which make the signal costlier to imitate for companies that do not actually contribute to GHG reduction, and thus reduce greenwashing compared to the status quo. The Taxonomy thus ameliorates the adverse selection problem stemming from the ambiguity of private-label ESG indicators, discussed in the previous Section. In principle, the Taxonomy should also lead beneficiaries to a knowledgeable choice of institutional investors matching their sustainability preferences, thereby reducing agency cost. To this purpose, however, the Taxonomy should be salient to retail investors, a point to which I now turn.

As discussed in the previous Section, a significant proportion of retail investors are prepared to give up financial return in exchange for abatement of negative externalities. However, they are not necessarily alert to indicators such as PAIs or the degree of taxonomy alignment when they choose which mutual fund matches their preferences. And even if they are alert, they might fail to appreciate the consequences of these indicators on their investment choice. In short, retail investors must be guided to make knowledgeable investment choices (Pacces 2000). Most retail investors buy financial products through financial intermediaries, such as investment firms or, in Europe, banks providing investment services. A third, important aspect of the Sustainable Finance Action Plan is, therefore, the inclusion of investor sustainability preferences into the conduct of business rules governing the provision of investment services, particularly suitability and product governance.

Financial intermediaries offering advisory or asset management services must provide their clients with recommendations *suited* for their preferences about risk/return trade-off. With a recent amendment to the MiFID Delegated Regulation (Delegated Regulation 2021/1253), the EU legislator has included the consideration for the client “sustainability preference” in the suitability test. The sustainability preference will have to be expressed in terms of SFDR or the Taxonomy Regulation, indicating, in particular: i) a minimum proportion of taxonomy-aligned activities; or, ii) a minimum proportion of sustainable investment; or, iii) qualitative or quantitative elements of acceptable PAIs. In the provision of advised investment services, investment service providers will have to ask their clients whether they request a minimum sustainability threshold, and only then advise on the suitable risk/return combinations.

The suitability rule is important to enable unsophisticated investors to make investment choices consistent with their preferences. In the EU, however, this rule applies only to situations in which investors receive personalized recommendations. Retail investors seldom make choices in this way (Armour et al 2016). More often, they receive investment advice as marketing communications, which are excluded from the suitability rule and are prone to conflicts of interest. EU securities regulation has responded to this problem with *product governance*. Product governance is a form of principle-based regulation that puts on the investment service provider the responsibility to pursue the client’s best interest. Financial intermediaries must embed product governance in their internal procedures, notably including those governing the design and the marketing of financial products.

The Sustainable Finance Action Plan has reformed product governance, too, to incorporate investor sustainability preferences (Delegated Directive 2021/1269). All providers of investment services will have to include sustainability factors, as defined by the SFDR and the Taxonomy Regulation, in the definition of their target markets, and distribute financial instruments accordingly. Moreover, the sustainability factors of financial instruments will have to be presented in a transparent fashion to allow distributors to determine whether they are consistent with the client’s sustainability objectives.

It is too early to say whether product governance will effectively align with the sustainability preference of beneficiaries. This part the MiFID’s reform will be implemented differently by different EU member states. However, in theory, the combination of suitability and product governance completes the sustainable finance approach. Investment products will have to disclose objective and comparable measures of environmental sustainability. In offering these products to retail investors,

whether through formally advised or non-advised channels, banks and investment firms will have to make sure that these measures are aligned with the client's sustainability preferences. Conversely, beneficiaries of institutional investors will be prompted to indicate a minimum degree of sustainability that they consider acceptable, and then compare what is on offer in terms of risk/return trade-off.

Based on the EU Taxonomy and the related reforms, the overhaul of EU securities regulation will reduce the agency cost of environmentally sustainable investments via mutual funds. This potentially harnesses the role of beneficiaries' concern for environment sustainability in financial markets. Whether this reform will also have an impact on the environmental sustainability of publicly held companies and whether this impact is desirable will depend on the reaction of institutional investors such as asset managers. In the next Section, I discuss whether asset managers can be expected to implement a sustainable corporate governance, and if yes, in which way.

#### **4. Institutional Investors: Exit or Voice?**

In this Section, I look at the institutional investor's corporate governance response to the increased saliency of environmental sustainability for their beneficiaries. More specifically, I ask whether institutional investors will choose to exit the portfolio companies that drag down their sustainability scores, or rather use their voice to make these companies more sustainable.

Voice and exit are the two ways in which members can influence decision-making of an organization (Hirschman 1971): persuading the management or changing (threatening to change) organization. So long as the ownership of publicly held companies was dispersed, shareholders – including institutional investors – could only practice exit due to severe collective action problems. As we have seen, the concentration of institutional ownership has changed the situation. Institutional investors can use voice. In the context of climate change, it is debated whether that's the right thing for institutional investors to do. On the one hand, some legal commentators (Mahoney & Mahoney 2021; Gordon 2021) doubt whether institutional investors can legitimately pursue goals other than profit maximization, unless their funds have a specific ESG mandate, which would naturally lead to exit. On the other hand, economists have shown, albeit under simplifying assumptions, that voice is more effective than exit to correct negative externalities and maximize social welfare (Oehmke & Opp 2020; Brocardo et al 2021). The theoretical economic models confirm a simple intuition. Exit contributes to sustainability to the extent that it lowers stock price and raises funding cost, but the impact on decision-making is slow if the price effect is limited, for instance because less sustainability-minded investors buy the stock. Voice, instead, is all-or-nothing: a company will pursue sustainability if a majority of the shareholders or a key investor want it to do so.

So far, I have argued that the EU taxonomy and the related disclosure and conduct of business rules will enable retail investors to pick the mutual funds that match their sustainability preferences. Although – as I will explain later – other agency problems might remain, legitimacy concerns are superseded by institutional investors' commitment to pursuing environmental sustainability on behalf of their clients. Being enabled by the EU Taxonomy to commit more credibly, I predict that asset managers will increasingly pursue sustainable corporate governance by way of voice rather than exit. This is counterintuitive because the Taxonomy seemingly rewards investing in companies that are already green as opposed to greening environmentally unsustainable companies. However, the analysis of mutual fund business models suggests that voice will become the dominant strategy to achieve high levels of taxonomy alignment and attract sustainability-minded clients.

As a caveat, the question how institutional investors will respond to the Taxonomy cannot yet be answered empirically. The first reason is that, because most of the regulations described in the previous Section are not yet in force, institutional investors and their portfolio companies are still

figuring out how to adjust. This leads to a second reason. Although some beneficiaries of institutional investors care for reducing negative externalities, how many actually do and how much they are willing to sacrifice in terms of financial return is an empirical question whose answer, so far, has been undermined by greenwashing. Assuming, as I have done, that the reform of EU securities regulation will curb greenwashing, one would still have to wait for the first data on taxonomy-alignment to study the beneficiaries' demand for sustainable investments.

The institutional investors considered in this article – mutual funds – have an incentive to cater to their beneficiaries' preferences. This is because their income is a percentage of Assets Under Management (AUM). Mutual funds strive to increase beneficiaries' inflow and the return on their portfolios, which also attracts beneficiaries when it is comparatively higher than competing investments. How mutual funds pursue these goals depends on their business model. A key difference is whether mutual funds have an active or a passive management strategy. This longstanding distinction (Bushee 1998) is complicated by the fact that the large asset managers – including the Big Three – today combine active and passive strategies into so-called 'fund families.' Although this fact has important implications for sustainable corporate governance, particularly on the incentive to use voice, I will start discussing active and passive funds as if they were always separate institutional investors.

Active funds, when they invest in equities, are stock pickers. To attract beneficiaries, they can replace companies which they consider underperforming or insufficiently sustainable. Active funds must be able to offer beneficiaries an attractive risk/return combination net of their fees, which reflect the cost of screening the market for best performing companies. On the contrary, passively managed funds, which include index funds and so-called closet indexers (or quasi-indexers), simply track an index. To attract beneficiaries, they offer plain market returns in exchange for extremely low management fees, which is intuitive as their portfolios are essentially automated. However, passively managed funds cannot dump companies they do not like. They can engage with the companies they think are underperforming or insufficiently sustainable, but still belong to the index they track. Alternatively, index funds can change index, by creating new funds or repurposing existing ones for instance to include ESG requirements or sustainability indices (Pettit & Walton 2021; Fisch et al 2019).

The leading strategy of actively managed funds is exit. The competitive advantage of active fund managers lies in information on the expected performance (financial and nonfinancial) of stock they do and may invest in. It is more profitable for active funds to underweight the losers and overweight the winners than to enter costly engagements with the underperforming companies. This strategy also disciplines portfolio companies to the extent that management cares about stock price (Edmans 2009). Exit remains the dominant strategy to pursue environmental sustainability too. Asset managers that want to cater to the beneficiaries' demand for green funds can (threaten to) avoid the least sustainable companies (so-called 'negative screening') and pick the more sustainable ones, for instance focusing on best-in-class transition companies in the industries for which climate change is more material (Matos 2020). Because green funds currently attract more than half of European fund flows, it is expected that 25% of European funds will aim to be classified as art. 8 and art. 9 SFDR funds (Bioy et al 2021a), for which funds will have to show a significant degree of taxonomy-alignment.

The exit approach to environmental sustainability has limitations. Firstly, there are fewer companies that green funds can invest in. If the excluded companies are delivering higher risk-adjusted returns, these will be picked by conventional funds that will outperform green funds. The performance gap acceptable for sustainability-minded beneficiaries is an open question that cannot be resolved here, but is a matter of concern. Secondly, funds who cater to investors' demand for sustainable portfolios miss out in terms of risk diversification (Ceccarelli et al 2020). This implies that green funds may eventually underperform conventional funds on two counts, return *and* risk. Moreover, insufficiently diversified green funds make society bear more risk than efficient. Thirdly, negative screening of the



unsustainable companies is insufficient to internalize the externality. Exit impacts sustainability via the cost of capital and the managerial incentives depending on it. As shown by the economic theory, discussed earlier, in all realistic scenarios this impact is smaller than effect of voice on the redeployment of capital and fails to maximize social welfare.

Apart from the extreme case of changing index, index funds cannot exit, which makes them natural candidates for voice. However, the business model of passive funds suggests that they rather do nothing. Holding stock in thousands of companies, index funds cannot meaningfully engage with all of them. Even the Big Three asset managers have too limited staff to decide and execute engagements with portfolio companies (Bebchuk & Hirst 2019a), whereas smaller index fund managers simply follow the proxy advisors (Iliev & Lowry 2015). Moreover, engagement is expensive, but the business case of index funds is based on keeping cost low. Some index funds even advertise zero fees. Zero fees are partly subsidized by the income from stock lending, which further disincentivizes engagement as asset managers cannot vote lent out stock. Finally, and most importantly, index funds cannot profit from improving the performance of individual companies. Because index funds cannot overweight any company, all other investors can free ride on firm-specific improvements. Many commentators are therefore sceptical that index funds can ameliorate corporate governance, let alone lead to a sustainable corporate governance. According to Bebchuk and Hirst (2019a) index funds exacerbate the agency problem between companies and their ultimate investors. Rock and Kahn (2020) see a governance role for index fund managers when the stakes are high and the issues are widespread, but not on firm-specific matters. Gordon (2021) regards index funds as universal owners which want to minimize climate change and other cross-cutting risks because these are undiversifiable within their portfolios – but to economize on cost, would rather let activists take the initiative.

Despite the scepticism of the theory, the empirical evidence suggests that index funds use voice with at least some of their portfolio companies. Companies largely owned by index funds have a stronger corporate governance (Appel et al 2016) and are more successfully targeted by activists (Appel et al 2019). Moreover, global institutional ownership, of which more than one third is indexed (De La Cruz et al. 2019), correlates positively with ESG scores and this seems attributable to voice (Dyck et al 2019). Finally, to dissipate greenwashing concerns, significant ownership by the Big Three correlates with more engagements with portfolio companies and lower CO2 emissions (Azar et al 2021).

There are three reasons why index funds have incentive to use voice, and they can be expected to increasingly do so in the context of environmental sustainability after the EU Taxonomy. First is their sheer size, which makes voice powerful, but also less visible. Second is the fact that index funds compete for beneficiaries with active funds, including prospectively on the degree of taxonomy-alignment, which prompts them to do something in this respect. The third reason for voice is that especially the largest index funds belong to fund families that include active funds, making engagement cheaper and more beneficial. I discuss these reasons in turn.

Index funds have attracted an enormous amount of investment in recent years (Bioy et al 2017). As a result, large asset managers, particularly the Big Three, have gained high voting power. In the U.S., the Big Three hold collectively an average 20% stake in S&P500 companies, and about 16% in Russell 3000 companies (Bebchuk & Hirst 2019b). The figures in the UK are similar, but this isn't only an Anglo-American phenomenon (De La Cruz et al 2019). The 20 largest institutional owners, which typically include the Big Three and other index funds, own more than 25% of the average company in countries such as the Netherlands and Sweden and more than 15% in countries such as Italy, Germany, and France – only to mention the EU. Because many small investors do not cast their votes, these stakes often result in effective control by a handful of asset managers (Bebchuk & Hirst 2019b) particularly in companies with higher institutional ownership than average.

It is hard to imagine index funds sitting on such a power and not using it. And yet, the Big Three and other large institutional investors rarely vote against the management. This led many commentators to conclude that index funds do not use voice. But the story may be subtler. Large asset managers could be just careful about openly influencing corporate decision-making for fear that governments will curb their power if they consider it excessive (Coates 2018). Controversial issues are rarely put to a vote because normally it suffices for institutional investors to engage privately (McCahery et al 2016). Only the bigger conflicts, which cannot be settled, come to the fore – and then, the votes of the Big Three are decisive as the recent Exxon case reveals (Phillips 2021).

The sheer presence of large institutional owners is a credible threat that counts as voice, as it reflects behind-the-scenes engagement. This is enough to affect outcomes, including on environmental sustainability, because managers know that they would lose their job without index funds' support. Despite arguments to the contrary (Dharmapala & Khanna, 2021), this proposition holds true in countries with concentrated ownership too, because also in these countries not all publicly listed companies have a controlling shareholder – and even some that have it could, in principle, be outvoted by a coalition of institutional investors (Aminadav & Papaioannou 2020). Azar et al. (2021) found that ownership by the Big Three correlates with lower CO2 emissions also in countries with concentrated ownership and so does ownership by other index investors if they are sufficiently large.

Although index funds are influential, their incentive to pursue sustainability by voice is questionable. Holding a market index, they cannot profit from engaging with individual companies because competitors would free ride on the outcome. However, index funds can benefit from improving the performance of the indices they track *relative to actively managed funds*, engaging with companies on cross-cutting issues, such as environmental sustainability. Index funds compete with active funds and virtually any other investment option for inflows from beneficiaries (Fisch et al 2019). Active funds will soon be able to attract beneficiaries who pursue sustainable investment by offering green funds with a high degree of taxonomy alignment. Short of repurposing some of their funds towards ESG indexes, asset managers which track conventional indexes will not be able to exit companies that bring down their degree of taxonomy alignment. The only way for such index funds to compete for sustainability-minded beneficiaries, within a business model pursuing low-cost risk diversification, is to use voice efficiently and improve the taxonomy alignment of their portfolios. Having to keep cost low, index fund managers pick their battles. In particular, the Big Three engage only with the companies in which their stake is higher and for which CO2 is more material (Azar et al. 2021).

Index funds still face free riding by other index-trackers. Large asset managers, however, have an additional incentive to use voice: they operate so-called fund families – namely, derive income from managing index and active funds in different proportions (Morningstar 2017). For instance, the Big Three manage mainly index funds, but a significant part of their asset is actively managed. For Fidelity it is the other way around. Within families, mutual funds do not always vote in lockstep, but importantly, they may do so when they need to flex muscles. Operating fund families creates synergies reducing the cost of engagement and increasing its benefits (Fisch et al 2019). At BlackRock, for instance, engagement and investment teams share information on a platform called Aladdin (Azar et al 2021). The investment teams learn from engagement teams where companies will be going in terms of cross-cutting issues, whereas engagement teams learn firm-specific information from the investment teams. Index fund managers engaging with the companies on material sustainability issues generate returns for sister active funds that not only can rebalance their portfolios, but also benefit from higher inflows of sustainability-minded beneficiaries into the family. Active fund managers sharing information with engagement teams reduce the cost of tailoring general engagement policies to the specific company being engaged.

Synergies within fund families might result in conflicts of interest between beneficiaries. For instance, in the U.S., fund families appear to vote strategically, fostering the interest of active funds in contentious votes (Michaely et al 2021). However, voting is the tip of the engagement iceberg, particularly in the U.S. where shareholder proposals are not binding. Although more research is needed on this topic, U.S. funds and fund families committing to environmental sustainability oppose management more frequently both in shareholder proposals and in director elections (Curtis et al 2021).

Large index fund managers have the historic opportunity to use their voice to lead the transition towards environmental sustainability. After the reform of EU securities regulation, greenwashing will be reduced, however imperfectly. Beneficiaries will be able to select institutional investors not only based on financial performance (net of cost), but also depending on how they score in terms of the EU taxonomy and similar indicators, both currently (turnover alignment) and prospectively (capital expenditure alignment). Being committed not to exit, large index funds will have incentive to cater to this beneficiaries' demand by engaging with key portfolio companies to improve the taxonomy alignment. Active fund managers, which can exit, can be expected to use voice differently. Those participating in a fund family will likely follow the lead of index funds, where the bulk of voting power lies, albeit offering also green funds that underweight companies with a lower taxonomy-alignment – at least until they will score better. Independent funds may compete more aggressively on the degree of taxonomy alignment, but as discussed, funds pursuing this exit strategy risk underperforming conventional funds on both risk diversification and return, for instance if they 'green' too fast. In the end, the market will set the pace of transition that satisfies beneficiaries' preferences for environmental sustainability and financial return.

This leads me to a final point. A sustainable corporate governance driven by institutional investors may result in higher, instead of lower, agency cost (Mahoney & Mahoney 2021). Institutional investors pursuing alignment with the EU Taxonomy may monitor management less carefully and focus excessively on environmental sustainability at the expenses of financial performance. Not knowing the 'true' preferences of beneficiaries, whose revelation has been so far undermined by greenwashing, it is impossible to rebut this claim. However, after the EU taxonomy will have improved the alignment of institutional investors' incentives with the interest of their beneficiaries, it is reasonable to expect that agency cost of corporate governance will not become higher than is currently the case.

Institutional investors are monitors, not entrepreneurs. They can and arguably will, at least in Europe, prompt listed companies to reduce negative externalities to appease their sustainability-minded beneficiaries. However, institutional investors cannot tell their portfolio companies how to become more sustainable and how quickly. The transition to environmental sustainability is a fundamentally uncertain process, which belongs to the entrepreneur. In corporate governance, entrepreneurial choices are made by managers or controlling shareholders depending on the ownership structure (Pacces 2012). Institutional investors, with their large ownership, act as curb on agency cost. Although they have no views on their own on how to carry out the transition in specific industries and how quickly, institutional investors, often alerted by activists, may replace management that is sloppier – meaning either too fast or too slow – than competitors in the transition. And they can give a hard time to controlling shareholders too. Shareholder oversight is a healthy constrain on the controller's discretion when it fails to deliver the expected performance because of dishonesty or incompetence. That applies to environmental sustainability too. Sustainability-minded beneficiaries will pick the institutional investors that offer interesting returns along with taxonomy alignment. The market and future research thereof will reveal which combinations are in demand. Institutional investors, particularly large index fund managers, will have incentive to pursue those combinations. Therefore, within the limits of their

business model, asset managers will engage with the portfolio companies that more significantly depart from these combinations because of too little or too much sustainability.

## 5 Conclusion

In this article, I have analysed the potential of the new EU rules mandating sustainability disclosure to establish a sustainable corporate governance. I have argued that EU securities regulation has such a potential because mandatory disclosure is based on quantitative indicators, including a unique regulatory taxonomy of environmentally sustainable activities and investments. When this taxonomy will become effective, it will frame institutional investors' disclosure towards their beneficiaries in more credible and salient terms, curbing greenwashing.

In the absence of data on how the new mandatory disclosure rules will play out, this analysis has been based on theory. Institutional investors are expected to increasingly cater to the preferences of sustainability-minded investors by way of voice, instead of exit. On the one hand, large index investors will have to engage on cross-cutting issues broadly affecting their portfolio, such as environmental sustainability, because they will compete with active funds on the degree of taxonomy alignment. Active funds, on the other hand, will not be in the position to pursue taxonomy alignment only by way of negative screening because this undermines risk diversification. Both categories of institutional investors will, therefore, push corporate managers to be more environmentally sustainable, although it is impossible to predict at which pace. The pace of the transition will be set, in different industries, by the market revealing the desired combinations of environmental sustainability and financial return through the beneficiaries' choice of institutional investors.

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