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ESG METRICS IN CEO COMPENSATION: INCENTIVES AND SUSTAINABILITY IN THE MAJOR EU ECONOMIES

by Federico Fornasari* and Nicolò Galasso**

Abstract

In recent years, ESG (environmental, social, and governance) metrics have been incorporated into CEOs' compensation plans, sparking a debate about their potential to enhance sustainability and the risks they pose to firms' financial performance. This paper provides a comparative analysis of the adoption of ESG-linked executive compensation in listed companies across the major EU economies—France, Germany, Italy and Spain—between 2018 and 2022. Using a hand-collected dataset, this paper illustrates how ESG-linked remuneration has become widespread, its proportion in terms of total compensation, the metrics it encompasses and how it is structured. Moreover, the paper shows that ESG (as well as financial) targets are almost always achieved by CEOs and that corporate economic performance has not worsened as ESG-related pay has increased. The analysis suggests that cherry-picking targets and greenwashing may be prevalent, casting doubt on the effectiveness of CEOs' pay in fostering sustainability, while this governance structure has not hindered economic performance so far.

JEL Classification: K22, M12, M52.

Keywords: CEO remuneration, ESG, corporate governance.

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* Bank of Italy, Economic Structure Department.

** Ca' Foscari University of Venice.

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1. Introduction

CEO compensation is one of the most discussed issues in corporate governance, due to its significant potential impact on firm performance and the economy, influencing investment, employment, innovation and inequality. As a powerful incentivizing tool, performance based compensation[1] has been a strong factor in influencing the so called "shareholder value turn" in corporate governance[2]. However, no consensus has been reached on optimal CEO pay practices.

Scholars have argued that as CEO pay structures have been instrumental in maximizing shareholder value, they could similarly be used to enhance a company's performance in areas beyond stock price. The integration of ESG factors within executives' remuneration packages has been called upon also by institutional investors[3]. Both shareholders rights directive II (SHRD II) and corporate governance codes in France, Germany Italy and Spain have encouraged the consideration of ESG factors when designing remuneration packages, while the largest corporations in these economies have introduced ESG metrics, linking portions of executive pay to social and environmental outcomes (e.g., CO2 emission targets, employee satisfaction, compliance with ethical standards in developing countries)[4].

This paper delves into the structure of CEO ESG remuneration across major EU economies, relying on a hand collected dataset based on remuneration policies, remuneration reports, and economic performance data of the largest listed companies across countries (France, Germany, Italy, and Spain) and sectors. For the first time, the paper describes the evolution of ESG-linked remuneration connecting remuneration practices to the targets achievement rates and actual economic performance data, which allows to take an empirically grounded stance on the theoretical debates about ESG-linked pay and corporate performance. Empirical evidence on the effects of ESG-linked remuneration remains mixed, both on its effects on sustainability[5] and financial

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Thanks for comments and discussion to Antonio Accetturo, Audinga Baltrunaite, Sauro Mocetti, and Ottavia Pesenti. All errors remain our own.

[1] D. R. Fischel, "The Corporate Governance Movement", *Vand. L. Rev.* (1982), 35, 1259, 1263.

[2] B. Holmstrom and S. N. Kaplan, "The State of U.S. Corporate Governance: What's Right and What's Wrong?", *J. Applied Corp. Fin.* (2003), 15, 8.

[3] See: https://corpgov.law.harvard.edu/2021/04/25/esg-investors-increasingly-seek-accountability-and-outcomes/

[4] C. Flammer et al., "Corporate governance and the rise of integrating corporate social responsibility criteria in executive compensation: Effectiveness and implications for firm outcomes", *Strategic Management Journal* (2019), 40, 7, 1098; B. Hong, Z. Li, D. Minor, "Corporate governance and executive compensation for corporate social responsibility", *J. Bus. Ethics* (2016), 136 (1), 199–213.

[5] The recent surge in both voluntary and regulatory ESG actions has made it difficult to isolate and analyse the causal impact of ESG incentives. Additionally, measuring ESG performance itself is challenging due to a lack of standardized data. Some studies suggest that ESG-linked compensation improves sustainability metrics, while others argue that it has little to no impact. R. Eccles., I. Ioannou., and G. Serafeim, "The impact of a corporate culture of sustainability on corporate behaviour and performance", *NBER Working Paper Series* (2012); A. Kolk and P. Perego, "Sustainable bonuses: Sign of corporate responsibility or window dressing?" *Journal of Business Ethics* (2014), 119(1), 1–15. H. Nguyen et

performance[6], and this paper does not make any causal claims on any of these two effects, as the data available are too scant. However, some inferences can be made from the correlation between ESG-related pay institutional structure and economic performance data. Whilst we confirm some of the facts discovered also by previous studies, the granularity of the data allows us to take a different view on several points.

The main results of the paper can be summarized as follows.

Between 2018 and 2022, along with legislative and soft law amendments, the diffusion of ESG remuneration has steadily increased: in 2022 almost 90% of the companies provide for ESG remuneration and generally set 3 metrics per CEO to attain (while the corresponding figures in 2018 were about 25% and 1.5 metrics per CEO, conditional on having ESG remuneration policies). In 2022, in Italy the share of companies providing for ESG factors in variable remuneration is relatively lower (82,5%) than in the other main EU economies, but Italian companies set on average more targets (3.3). Most of the metrics are quantitative, even though totally generic metrics are still present; moreover, not all of the quantitative metrics provide for a target. In this regard, EU dynamics align with US trends[7]; despite the progress made, the factors and metrics adopted remain often generic and difficult to assess externally[8].

The weight of incentives linked to ESG has increased. While in 2018 companies provided solely for short-term incentives, in 2022 companies set both short and long-term incentives and the total weight of ESG-linked remuneration has increased compared to total remuneration. Italy is the country with the highest share of companies providing for ESG-related long-term incentives (almost 70%), while Germany is the only country where ESG-related incentives are awarded only if financial targets are met, an institutional mechanism that subordinates ESG-metrics to financial ones.

The most common metrics concern carbon emission reduction, consistently with the fact that, at least in the EU, there is a clear business case for companies to start the

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al., "Sustainability targets in executive remuneration contracts and corporate sustainability performance in the United Kingdom and European Union", *Environment systems and decisions* (2023), 43, 393 ss.; S. Cohen et al., "Executive compensation tied to ESG performance: international evidence", *ECGI working paper* (2023); B. Hong, Z. Li and D. Mino, "Corporate governance and executive compensation for corporate social responsibility", *J. Bus. Ethics* (2016), 136, 1, 199–213; C. Flammer, B. Hong, D. Minor, "Corporate governance and the rise of integrating corporate social responsibility criteria in executive compensation: effectiveness and implications for firm outcomes", *Strateg. Manag. J.* (2019), 40 (7), 1097–1122; A. Tsang, K. T. Wang, S. Liu and L. Yu, "Integrating corporate social responsibility criteria into executive compensation and firm innovation: International evidence", *Journal of corporate finance* (2021), vol. 70; K. Maas, "Do corporate social performance targets in executive compensation contribute to corporate social performance?", *J. Bus. Ethics* (2018),148 (3), 573–585.

[6] A. Tsang, K. T. Wang, S. Liu and L. Yu, "Integrating corporate social responsibility criteria into executive compensation and firm innovation: International evidence", *Journal of corporate finance* (2021), vol. 70; S. Cohen et al., "Executive compensation tied to ESG performance: international evidence", *ECGI working paper* (2023).

[7] L. Bebchuk and R. Tallarita, "The Perils and Questionable Promise of ESG-Based Compensation", *The Journal of Corporation Law* (2022), vol. 48, 68 ff.

[8] M. Dell'Erba and G. Ferrarini, "ESG & executive remuneration in Europe", *European business organization law review*, vol. 25, (2024), 472.

green transition. Regarding the sector of activity, significant differences exist across industries. However, it is unclear whether companies focus on metrics where they excel (cherry-picking) or aim to address particularly problematic areas. Based on the rate of target achievement, the former interpretation appears more likely.

In all countries, the vast majority of companies fully attained their short-term variable compensation targets in 2022, often exceeding them. While the financial target achievement rate deserves further investigation, the ESG targets rate of attainment suggests that the targets are not demanding, either because companies cherry-pick metrics where they perform better or because the targets are undemanding altogether.

Finally, indicators of economic performance (turnover, productivity, profitability and number of employees) have not worsened as ESG remuneration has increased. This result might depend on several causes which need not to be mutually exclusive. First, a success on the ESG front does not hamper economic success of the company; second, ESG targets might be totally undemanding and therefore do not require any modification to the business model (as the rate of achievement suggests), or might be a mere example of greenwashing; third, CEOs might easily dedicate part of their attention to sustainability issues without hampering companies' economic performance. Also, this evidence suggest the ESG targets are limited, at best, to win-win cases.

The paper proceeds as follows: after a description of the evolution of CEO compensation at the EU and national levels (par. 2), we discuss our main empirical results (par. 3), followed by the conclusion (par. 4).

2. Between hard and soft law: CEO's remuneration in the EU

Optimal remuneration models study CEO pay setting as a function of CEO value to the company, limited by participation and incentive compatibility constraints[9] and address how companies should set executives' pay[10]. Law and economics models look at

[9] A. Edmans, D. Gosling and D. Jenter, "CEO compensation: evidence from the field", *Journal of financial economics* (2023), 3, 150.

[10] While these models offer normative guidance on the ideal structure of CEO pay, they don't always fully capture the complexity of real-world compensation packages. Surveys provide additional insights that enrich both optimal contracting and corporate governance theories. A recent extensive survey revealed that directors (who serve on compensation committees) and investors have differing views on the objectives and constraints of CEO pay. Directors prioritize attracting top talent (although they may overestimate the consequences of not offering the compensation package they deem ideal), whereas investors are more concerned with incentivizing future CEOs. However, both groups seem to agree that the main drivers for CEOs are not just financial compensation, but intrinsic motivation and personal reputation. Achieving performance targets acts as a form of ex post recognition. While these findings may not fully apply to countries with concentrated ownership—especially when the CEO comes from a controlling family—they broaden our understanding of CEO pay from both a descriptive and normative perspective and help explain some of our empirical results; A. Edmans, D. Gosling and D. Jenter (2023).

CEO pay through the lenses of incentives[11] and agency costs[12]; however, as they highlight market failures that may require regulatory intervention[13], they have been particularly influential in the policy debate.

In the last decade, in response to agency costs arising in the pay-setting process, European policymakers have acted on both the structure of executive compensation and the process for setting it. With regard to structure, SHRD II tries to promote a more long-term approach to the variable part of remuneration. With regard to the process, independent directors and shareholders have been empowered by different EU Commission communications, SHRD II and corporate governance codes in order to address agency costs and to enhance the chances of an optimal pay-setting process.

In recent years, the practice and regulation of CEO pay have evolved to acknowledge the significant environmental and social impact of corporations, as well as the complexity of regulating international operations along value chains through national law alone. Since executive compensation can be a powerful tool to steer corporate behaviour, linking a portion of variable pay (both short- and long-term) to specific ESG metrics can help direct corporate actions toward a more sustainable economy. Some authors have advocated for tying part of CEO compensation to ESG factors, while critics argue that this could increase agency costs without meaningfully advancing sustainability due to inefficiencies in designing ESG pay packages. In the EU, regulatory action has accompanied these policy discussions.

With regard to the structure of the remuneration, SHRD II represents a significant step forward compared to previous recommendations of the Commission[14] as it links shareholder engagement in the determination of executive pay with the pursuit not only of long-term company objectives but also of sustainability goals[15]. This marks a clear shift from past trends: not only the focus is shifting away from short-term success in favour of long-term goals, but there is also a growing emphasis on factors beyond the pure shareholder value maximization, with a stronger promotion of corporate social responsibility.

Article 9a(6) of SHRD I as amended by SHRD II provides specific guidelines regarding the criteria to be used for evaluating the performance of directors. SHRD II indeed provides that the remuneration should contribute to the company's sustainability and

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[11] M C. Jensen and K. J. Murphy, "Performance Pay and Top-Management Incentives", *J. Pol. Econ.* (1990), 98, 225; M C. Jensen and K J. Murphy, "CEO Incentives – It's Not How Much You Pay But How*", J. Applied Corp. Fin.* (1990), 3, 36; B. Holmstrom, "Managerial Incentive Problems – A Dynamic Perspective", *Rev. Econ. Stud.* (1999), 66, 169.

[12] R. Kraakman et al., "The anatomy of corporate law", *OUP* (2017).

[13] A. Edmans and J. Gabaix, "Executive compensation: a modern primer", *Journal of economic literature* (2016), 54(4).

[14] See Commission Recommendation of 30 April 2009 on remuneration policies in the financial services sector, 2009/384/EC and Commission Recommendation of 30 April 2009 complementing Recommendations 2004/913/EC and 2005/162/EC as regards the regime for the remuneration of directors of listed companies, 2009/385/EC.

[15] See whereas (29) of Directive (EU) 2017/828 and Art. 9a of Directive 2007/36/EC as amended by SHRD II.

that when variable pay is awarded the company should "indicate the financial and nonfinancial performance criteria, including, where appropriate, criteria relating to corporate social responsibility"[16]. The remuneration policy must also explain how the adopted criteria contribute to the achievement of the objectives, including sustainability goals, outlined in the policy itself[17]. Despite the explicit reference to the need for remuneration policy to contribute to the pursuit of long-term company interests and sustainability, serious doubts about its prescriptive force exist given the breadth of meaning and the vagueness of the terms used[18].

The concept of sustainability enshrined in SHRD II is different from that of the previous Commission communications, and it takes on an autonomous and distinct meaning from the long-term objectives of the company. While the Commission recommendation 2009/385/EC suggested the inclusion of non-financial parameters in executive pay, such as regulatory compliance, the use of such parameters was instrumental in ensuring the long-term viability of the company. For example, with regulatory compliance, the objective was evidently to avoid legal and reputational risks and ensure the long-term success of the company. The concept of sustainability outlined in the SHRD II, instead, constitutes an autonomous objective that diverges from long-term viability and stands as the ideal endpoint of a complex normative evolution that has come to view executive pay as a tool to align the interests of directors not only with those of shareholders but also with those of stakeholders[19].

National legislations implementing the directive take into consideration the sustainability of the company as an autonomous legal concept distinct from the long-term viability of the firm. The implementing laws of all the Member States analyzed in this study reflect the novel role of executive remuneration, especially variable remuneration, in fostering not only the financial success of the firm, but also its long-term viability and sustainability[20].

Furthermore, also the corporate governance codes of all of the countries we analyze have provided for directors' remuneration to enhance the sustainability of companies. This is the case of the Italian Corporate Governance Code, reformed in 2020[21], and of the French one, which since 2018 has recommended the use of criteria related to social

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[16] Art. 9a(6) of Directive 2007/36/EC as amended by SHRD II.

[17] *Ibidem*.

[18] I. Capelli, (2020) 557.

[19] I. Capelli, (2020) 561.

[20] See for Italy, Art. 123-ter(3-bis) T.U.F and art. 84-*quarter* Regolamento Emittenti; for Germany §87I2 AktG; for Spain Art. 529 novodecies(3)(d) Ley de sociedades de capitales and for France L. 225-37-3 Code de commerce.

[21] Art. V, Principle XV, Corporate Governance Code, January 2020. For a detailed analysis of the notion of sustainable success introduced by the Corporate Governance Code and the historical and regulatory context in which it developed, please refer to E. Ginevra, "Il Codice di Corporate Governance: Introduzione e Definizioni (con un approfondimento sul "Successo sostenibile")", *Rivista delle Società* (2023), II, 1038 ff.; G. Strampelli, "Soft law e fattori ESG: dai codici di corporate governance alle corporate e index guidelines", *Rivista delle Società* (2021), II, 1100 ff.

and environmental sustainability in executive pay determination[22]. The German and Spanish corporate governance codes contain similar provisions too[23]. The adoption of specific provisions in the national corporate governance codes has significantly contributed, along with the previously described regulatory changes at EU level, to shifting the behaviour of listed companies in these countries, pushing them to integrate ESG factors into executive pay.

The persuasive power of corporate governance codes lies in the comply-or-explain mechanism[24] to which companies generally must abide by to list on major stock exchanges. Essentially, this regulatory framework requires companies to either comply with the best practices outlined in the Code or explain any deviations, creating a legal and social imperative for companies to comply with best practices[25]. Moreover, corporate governance codes clarify that adherence must be comprehensive, covering all its rules, with any deviations from specific recommendations needing to be justified, including the reasons, sources, timing, and alternative measures adopted[26].

Corporate governance codes also exert influence by shaping institutional investors preferences and proxy advisers recommendations[27]. For example, if corporate governance codes prioritize stakeholder protection, best practice recommendations to include non-financial ESG targets in executive compensation can swiftly change local firms' pay practices by guiding investor voting and engagement[28].

In conclusion, a complex regulatory framework has emerged, in which CEO remuneration is no longer solely tied to financial factors and the concept of shareholder value maximization but is also viewed as a tool to promote the sustainability of the company and to consider interests beyond those of shareholders. However, shareholders' interests remain paramount, as they appoint directors (directly or indirectly) and have the final say on the pay-setting process.

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[22] Para. 24.1.1., Corporate Governance Code of Listed Corporations, June 2018. On this topic see V. Magnier, "L'apport de la soft law dans la construction des règles relatives à la rémunération des dirigeants de sociétés cotées: le code AFEP-MEDEF", M. Storck and T. De Ravel D'Esclapon, S. Rousseau (eds.) "La rémunération des dirigeants des sociétés cotées et le vote contraignant des actionnaires. La loi « Sapin 2 » du 9 décembre 2016" (2018), Strasbourg; B. François, "La RSE et les enjeux climatiques au cœur de la version révisée du Code AFEP-MEDEF", *Revue des Sociétés* (2023), 258 ff.; C. Malecki, "Sustainable corporate governance: the French approach", *Environmental Liability - Law, Policy and Practice* (2024), vol. 28, 1 ff.

[23] For the Germany see G.I, Principle 23, German Corporate Governance Code, December 2019; for Spain see III.3.6., Good Governance Code of Listed Companies, June 2020.

[24] On the comply or explain mechanism see: G. Bachmann, "Disclosure of Corporate Governance by Codes", in V. Tountopoulos and R. Veil (eds.), "Transparency of Stock Corporations in Europe", Hart Publishing (2019), 63 ff.; K. Sergakis, "Deconstruction and Reconstruction of the 'Comply or Explain' Principle in EU Capital Markets", *Journal of Accounting, Economics, and Law: A Convivium* (2015), 233 ff.; M. Gargantini and M. Siri, "Corporate Governance Codes", *Bocconi Legal Studies Research paper Series* (2023), 20 ff; E. Ginevra (2023), 1028-1029.

[25] P. Marchetti, "Codici di condotta, corporate governance, diritto commerciale", *Rivista del Diritto Commerciale* (2019), I, 27.

[26] E. Ginevra (2023), 1030.

[27] S. Gomtsian, (2024), 165.

[28] *Ibidem.*

3. Empirical evidence on ESG-based remuneration

In order to empirically investigate the inclusion of ESG factors in remuneration packages, we build a novel dataset that allows us to assess both the remuneration structures adopted by companies and their correlation with companies' performance[29].

We consider companies that are part of the major stock market indices (DAX40, CAC40, FTSE/MIB, IBEX 35) of the main EU economies (France, Germany, Italy, and Spain)[30]. The dataset includes 40 companies each for France, Germany, Italy, and 35 for Spain. The companies are spread across the financial (33), information and communication technology – ICT (13), industrial (87), and utilities (22) sectors. This selection allows us to cover a significant number of firms across different markets and sectors, thereby ensuring that our findings are representative of the EU largest corporations.

We analyze the 2018 and 2022 fiscal years, with the former representing the year prior to the full implementation of the Shareholder Rights Directive II (SHRD II) and the latter being the most recent fiscal year for which remuneration reports were available at the time of the analysis - a year when some of the distortions caused by the pandemic were expected to have dissipated. The collected data enable us to adopt a comparative perspective on how ESG incentives vary across countries and sectors of activity, as well as to address theoretical and policy-relevant questions.

3.1. Measures of total CEO pay in 2022

The average CEO's fixed remuneration component is strikingly similar across the four countries, ranging from €2.2 million to €2.6 million. In contrast, the variable components (related to both short- and long-term incentives), and therefore the total potential remuneration, differ markedly across countries (table 1). However, the differences observed in the average variable components at the country level are almost entirely explained by the varying size and sector composition of companies in different countries[31].

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[29] Our dataset is different from the one analysed by M. Efing et al., "All hat and no cattle? ESG incentives in executive compensation", *CEPR Discussion paper series* (2024).

[30] The dataset includes 40 companies each for France, Germany, Italy, and 35 for Spain. The companies are spread across the financial (33), information and communication technology – ICT (13), industrial (87), and utilities (22) sectors.

[31] In a regression analysis, available upon demand, the average remuneration (both fixed and total potential) is strikingly similar across countries when we account for industry and size in the four countries, suggesting that the largest companies within sectors benchmark their remuneration to each other.

Table 1

CEO remuneration in 2022 (millions of euros)

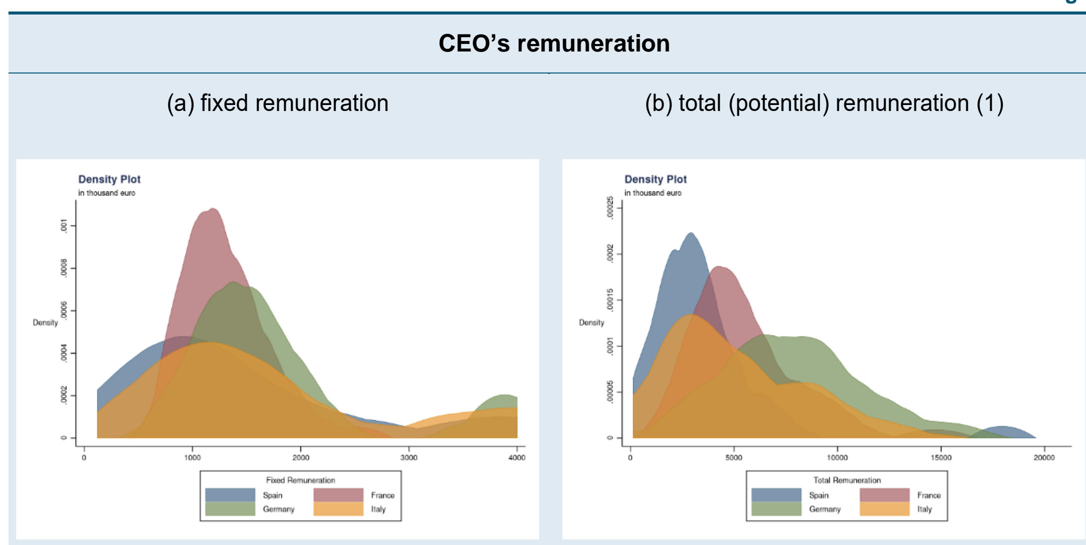
	France	Germany	Italy	Spain
Fixed remuneration	2,21	2,59	2,43	2,44
Short-term variable remuneration	1,50	1,37	1,01	0,90
Long-term variable remuneration	1,39	2,42	1,25	0,63
Total (potential) remuneration	5,10	6,39	4,68	3,97

Source: Remuneration report

Despite being very similar on average, we find that the distribution of remuneration among companies varies significantly across countries. Italy shows the greatest dispersion, both for fixed and total potential remuneration, while France and Spain exhibit less dispersion with regard to total potential remuneration (fig. 1).

Fig. 1

CEO's remuneration



Source: Remuneration policies and remuneration report
(1) Total potential remuneration sums fixed and variable long and short-term remuneration, calculated as if the variable remuneration targets are 100% achieved by the CEO.

3.2. The scope of ESG variable pay

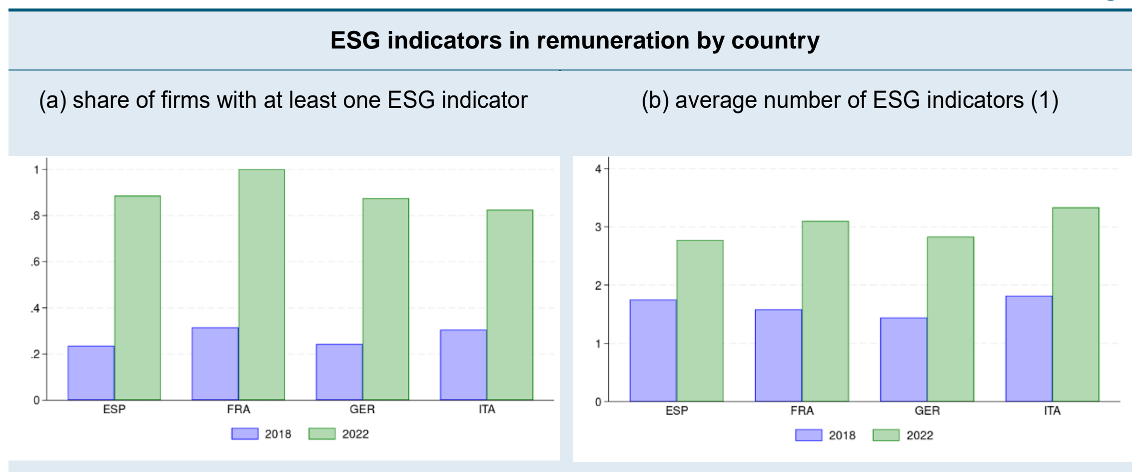
Regulatory amendments are strictly correlated with the increased adoption of ESG factors in CEO remuneration policies between 2018 and 2022[32]. In 2018, only around 25% of companies included ESG performance as a factor in the variable pay for their CEOs. Fast forward to 2022, and the vast majority of the companies (approximately 90%) link part of the remuneration to ESG metrics, despite some differences between countries. In France, almost all companies incorporate ESG metrics, while in Italy, Germany, and Spain, the share is slightly above 80% (fig. 2.a).

Not only the number of companies which include ESG metrics in CEO remuneration has increased significantly between 2018 and 2022, but also the average number of metrics along which CEOs are assessed, which stood at around three metrics per company (fig. 2.b). The number of metrics is relevant, because it is a proxy for the function of ESG-related incentives. A high number of indicators suggests a broad commitment to promoting sustainability. Conversely, a small number of metrics may indicate a focused approach, targeting issues that are either highly critical to value creation or sustainability. However, this approach could also reflect the selection of goals that are easy to achieve, primarily driven by marketing objectives, which stands in stark contrast to the genuine pursuit of sustainability.

Fig. 2

ESG indicators in remuneration by country

(a) share of firms with at least one ESG indicator | (b) average number of ESG indicators (1)



Source: Remuneration policies.
(1) The average number of indicators is calculated only for companies having at least one ESG indicator.

The number of metrics is quite homogeneous across sectors (fig. 3).

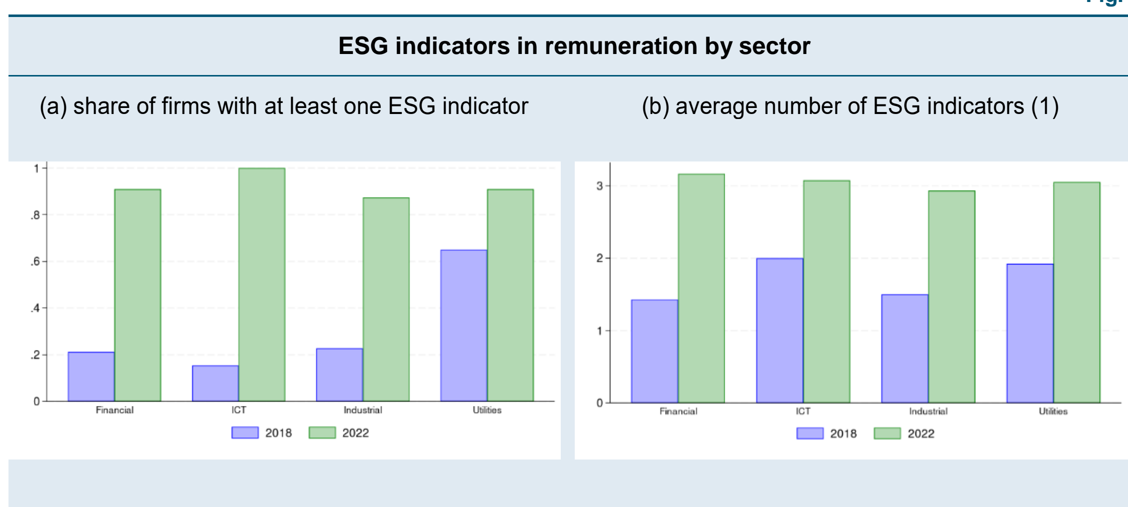
[32] S. Aresu, R. Hooghiemstra and A. Melis, "Integration of CSR Criteria Into Executive Compensation Contracts: A Cross-Country Analysis", *Journal of Management* (2023), vol. 49, no. 8, 2770.

Fig. 3

ESG indicators in remuneration by sector

(a) share of firms with at least one ESG indicator

(b) average number of ESG indicators (1)



Source: Remuneration policies.
(1) The average number of indicators is calculated only for companies having at least one ESG indicator.

3.3. Short-term and long-term ESG incentives

The connection between ESG performance and CEO pay has not only become more widespread but has also evolved. In 2018, ESG metrics were mainly incorporated into short-term (ST) variable compensation plans and companies rewarded their CEOs based on achievements achievable within a short timeframe, typically a year or less. By 2022, a notable shift toward integrating ESG performance into long-term (LT) variable compensation plans occurred. As a result, the share of companies including ESG metrics in their long-term compensation plans surged from a mere 5% in 2018 to over 50% in 2022 (table 2). This change might give the impression that companies are increasingly recognizing the importance of environmental and social issues, which are often better measured over longer periods[33], and are incentivizing their leaders not just for immediate ESG outcomes but for sustainable, long-term impacts: however, such an optimistic interpretation should be validated by further empirical data not currently available and contradicts what is found for short-term schemes.

[33] On this topic see M. Dell'Erba and G. Ferrarini (2024), 472. Conversely, the authors highlight that not all targets need long-term horizons; even multi-year strategies can be broken into short-term stages. For instance, Aéroports de Paris set a target for reducing greenhouse gas emissions, part of a long-term plan, but it could be implemented within the short-term creating yearly incentives that support long-term strategies. Additionally, the authors emphasize that short-term targets are easier to monitor, assess and adjust, reducing the issues caused by the vagueness of long-term commitments.

Table 2

ESG metrics in short and long-term variable remuneration
Percentage of companies in the dataset

	France	Germany	Italy	Spain
2018 ESG ST	30,0%	17,5%	22,5%	20,0%
2018 ESG LT	2,0%	7,5%	7,5%	5,7%
2022 ESG ST	97,5%	62,5%	80,0%	82,8%
2022 ESG LT	52,5%	60.0%	67,5%	42,8%

Source: remuneration policies.

Variations also emerge regarding the weight of ESG factors in relation to overall compensation. In 2018, when ESG metrics were considered, they accounted for about 13% of short-term variable compensation and less than 20% of long-term variable compensation. By 2022, these figures had risen to 18% and 22%, respectively (fig. 4.a/b).While these variations may not seem particularly significant, they are actually relevant. In 2018, ESG-related variable pay was granted by only a small subset of companies, with almost no provisions for ESG long-term incentives. By 2022, however, the number of companies providing for ESG remuneration had become widespread (growth on the extensive margin): as a consequence, the total remuneration linked to ESG factors has increased dramatically (fig. 4.c/d). This broader uptake, combined with the increase in ESG-linked pay, has led to a substantial rise in the ESG component of total remuneration. There are significant differences across countries though: Germany and Italy provides for 20% of ESG-related short-term incentives, while France and Spain provides for around 15%. With regard to total long-term compensation, Germany, France and also Italy companies link a bit less than 25% to ESG metrics, while Spanish companies provides for less than 20% (however it should be remembered that only around 50% of the companies in our sample provides for long-term ESG incentives). Germany stands out from the other analyzed countries, as its companies make extensive use of multipliers linked to short-term ESG metrics[34]. This means that the bonus tied to achieving sustainability goals requires the simultaneous achievement of financial objectives. Unlike other countries, German companies thus end up subordinating environmental and social goals to the attainment of the company's financial interests.

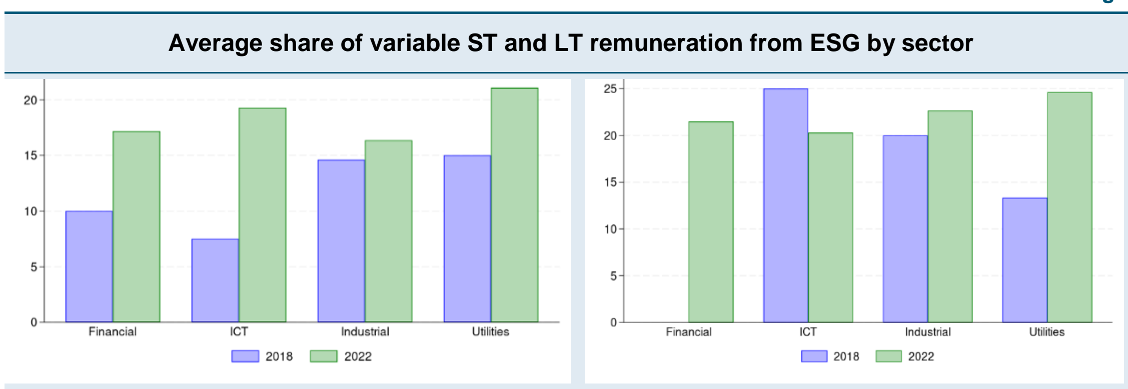
[34] In many remuneration policies adopted by German companies, the pursuit of ESG factors only becomes relevant when financial targets have been met. ESG remuneration is in fact a multiplier for that part of variable remuneration linked to the achievement of financial targets. If the latter goals are not achieved, the achievement of ESG goals is not relevant for the CEO's remuneration.

Fig. 4

Source: Remuneration policies.
(1) The average number of indicators is calculated only for companies having at least one ESG indicator.

Both short-term and long-term remunerations linked to ESG objectives have increased in all sectors. Utilities companies are those tying the largest share of both short-term and long-term remuneration to ESG factors, and the other sectors are relatively similar (fig. 5.a/b).

Fig. 5



Source: Remuneration policies.
(1) The average number of indicators is calculated only for companies having at least one ESG indicator.

3.4. How ESG metrics are designed

In order to be effective, ESG metrics must be challenging and specific. They should focus on areas where corporations should improve, which might depend both on sector and firm-specific factors. However, a primary issue with introducing ESG metrics into CEO compensation is that these metrics are often generic and difficult to review and compare. This problem arises because such metrics can lack specificity, making it challenging to objectively measure and evaluate their effectiveness, despite SHRD II explicitly requests companies to disclose how these metrics contribute to sustainability.

The design of the target is crucial to assess the effectiveness of ESG metrics. Therefore, we have differentiated metrics in two categories: "quantitative" metrics[35] and "qualitative" metrics[36].

In 2018 almost all the ESG metrics were qualitative, while in 2022 the majority were quantitative metrics, with the only exception of Spain, where qualitative and quantitative parameters are almost even. Although there has been a significant increase in metrics referring to quantitative parameters compared to 2018, this progress is tempered by the rise in the use of entirely generic and hard-to-evaluate statements (fig. 6.a).

If we consider the companies by sector of activity, rather than by their country of incorporation, significant differences exist (fig. 6.b). At the lower end of the spectrum, stand companies in the industrial sector, which provide for less metrics and almost a balance between qualitative and quantitative metrics. At the other end of the spectrum are ICT companies, which provides for more than three metrics and almost always quantitative ones. Financial companies provide for almost three metrics, but many of them are qualitative, while utilities companies rely more on quantitative indicators. It is difficult to draw conclusions from these data, but the fact that industrial companies provide for less and more qualitative indicators, while we might have expected them to be particularly concerned by ESG issues, might suggest that ESG factors are picked by companies that already perform well, rather than being a catalyst for change.

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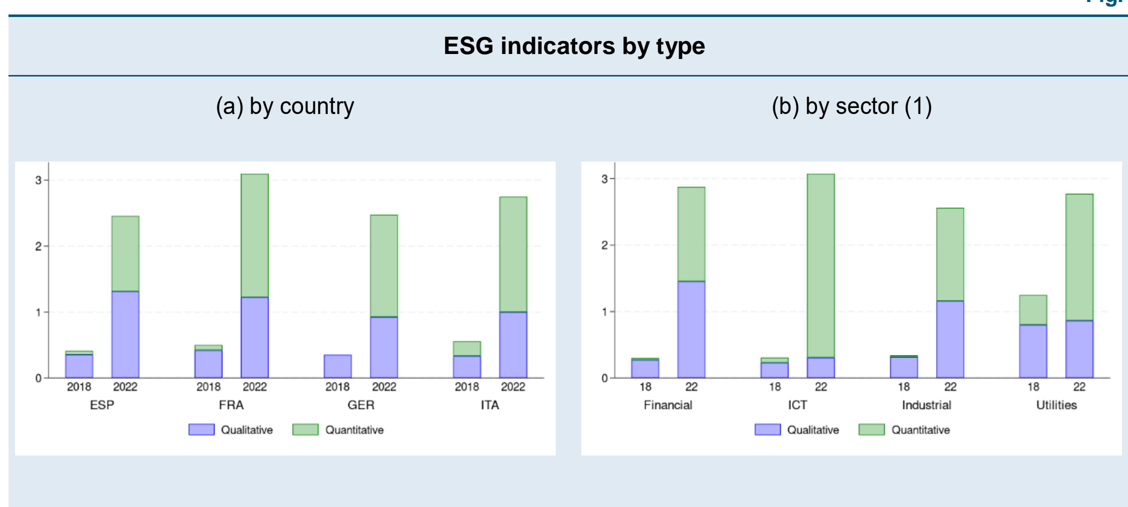
[35] We define a quantitative metric in CEO remuneration as a measurement based on numerical data reflecting the CEO's performance against specific ESG factors. Examples include achieving reduction in Scope 1, 2 and 3 GHG emissions, improving diversity in the firm by a certain percentage, or meeting governance compliance scores. These metrics are clearly defined and objectively measurable.

[36] We define a qualitative metric in CEO remuneration as an assessment of non-numerical aspects of the CEO's contribution to ESG goals. This may include the CEO's role in fostering a sustainable corporate culture, driving social responsibility initiatives, or championing ethical governance. Such metrics are based on subjective evaluations, stakeholder feedback, or internal assessments.

Fig. 6

ESG indicators by type



Source: Remuneration policies.
(1) The average number of indicators is calculated only for companies having at least one ESG indicator.

However, to make an ESG metrics binding it is not sufficient to establish the metrics, but it is crucial to fix a target which shall be achieved by the executive. A critical issue is that when companies adopt quantitative ESG metrics, they do not always set targets in their CEO remuneration policies and without clear targets, it is difficult to hold companies accountable for their ESG performance. In all the countries considered, the majority of quantitative metrics also provide for targets and compared to the 2018 data, 2022 shows an increase. However, there is some heterogeneity between countries: Italy is the country where it is most common not to provide for targets, while in Germany they are set most of the times.

3.5. Which issues are tackled by ESG remuneration?

Two different views of the scope of ESG metrics have emerged. On the one side, some authors have argued that in order to be effective, ESG metrics in CEO compensation should be comprehensive and encompass the whole range of ESG topics[37]. On the other side, others have argued that ESG metrics should focus on the areas where the company creates more harm.[38] Previous empirical studies found that companies in the EU and the US focus solely on a limited subset of ESG issues, but their assessment of this empirical finding differs. US economic and legal literature argues that it shows the inadequacy of CEO compensation to enhance stakeholders welfare[39], while European scholars assess that companies appear to focus on the most relevant stakeholders rather than considering the full heterogeneity of stakeholder categories[40].

[37] L. Bebchuk and R. Tallarita (2022), 120-131.
[38] M. Dell'Erba and G. Ferrarini (2024), 470-71.
[39] L. Bebchuk and R. Tallarita (2022), 120-131.
[40] M. Dell'Erba & G. Ferrarini (2024), 470-71.

In the charts below we identify nine different categories of metrics that encompass environmental, social, and governance factors (fig. 7). The executive compensation policies of EU companies do not consider all different categories of stakeholders, but focus on specific areas. These results are consistent with practices in the United States among companies in the S&P 100[41] and on a global level[42].

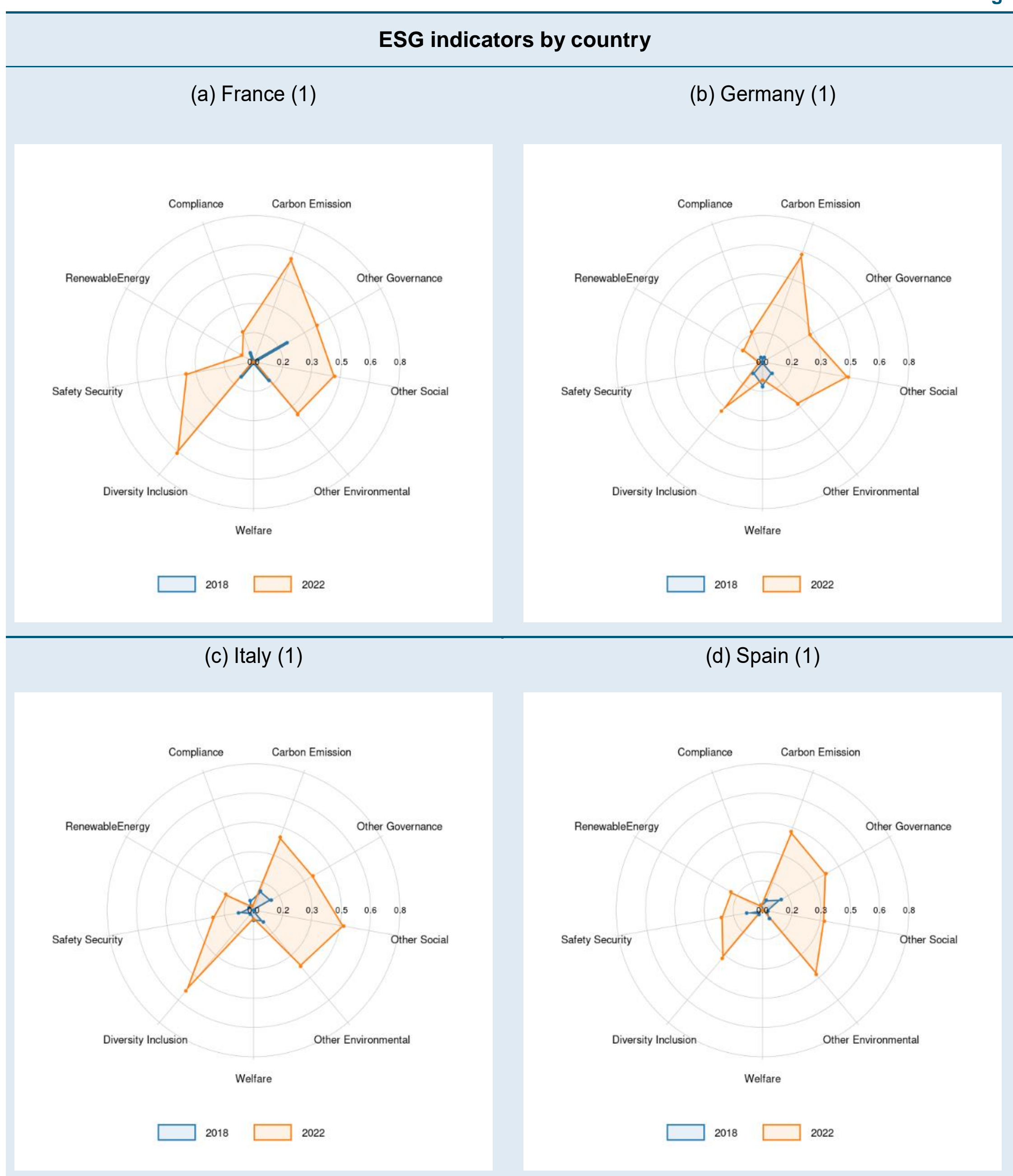
The most common target adopted in all of the countries (despite with a lower intensity in Italy and Spain) concern the reduction of carbon emissions: that's significant because it is directly related to an operational improvement which has a positive impact on stakeholders and can contribute to positive economic performance, particularly if the Paris agreement is fully implemented by signatories' countries. If governments push forward with the green transition, a clear business case for carbon emissions reduction exists. Diversity and inclusion is another widely adopted target, particularly in Italy and France. Finally, the "other" (environmental, social, or governance) category, which encompasses a range of company specific measures, is widespread in every country.

A striking finding is that companies in Germany, which is the country where stakeholders have greater influence in corporate governance (employees appoint members to the supervisory board which appoints directors), target less social factors compared to the other countries, but rather focus on carbon emissions (at the highest rate in our sample). In Germany, while the reduction of carbon emissions may represent a positive commitment to improve environmental performance for companies with a large carbon footprint, the exclusion of social factors from compensation might mean that CEO's incentives are not considered an important instrument in advancing employees' welfare. Likely, when other corporate governance mechanisms to enhance stakeholders' interests exist, CEO incentives play a secondary role.

[41] L. Bebchuk, R. Tallarita (2022), 124.

[42] S. Cohen, I. Kadach, G. Ormazabal and S. Reichelstein "Executive Compensation Tied to ESG Performance: International Evidence", *ECGI Finance Working Paper* (2022), no. 825.

Fig. 7



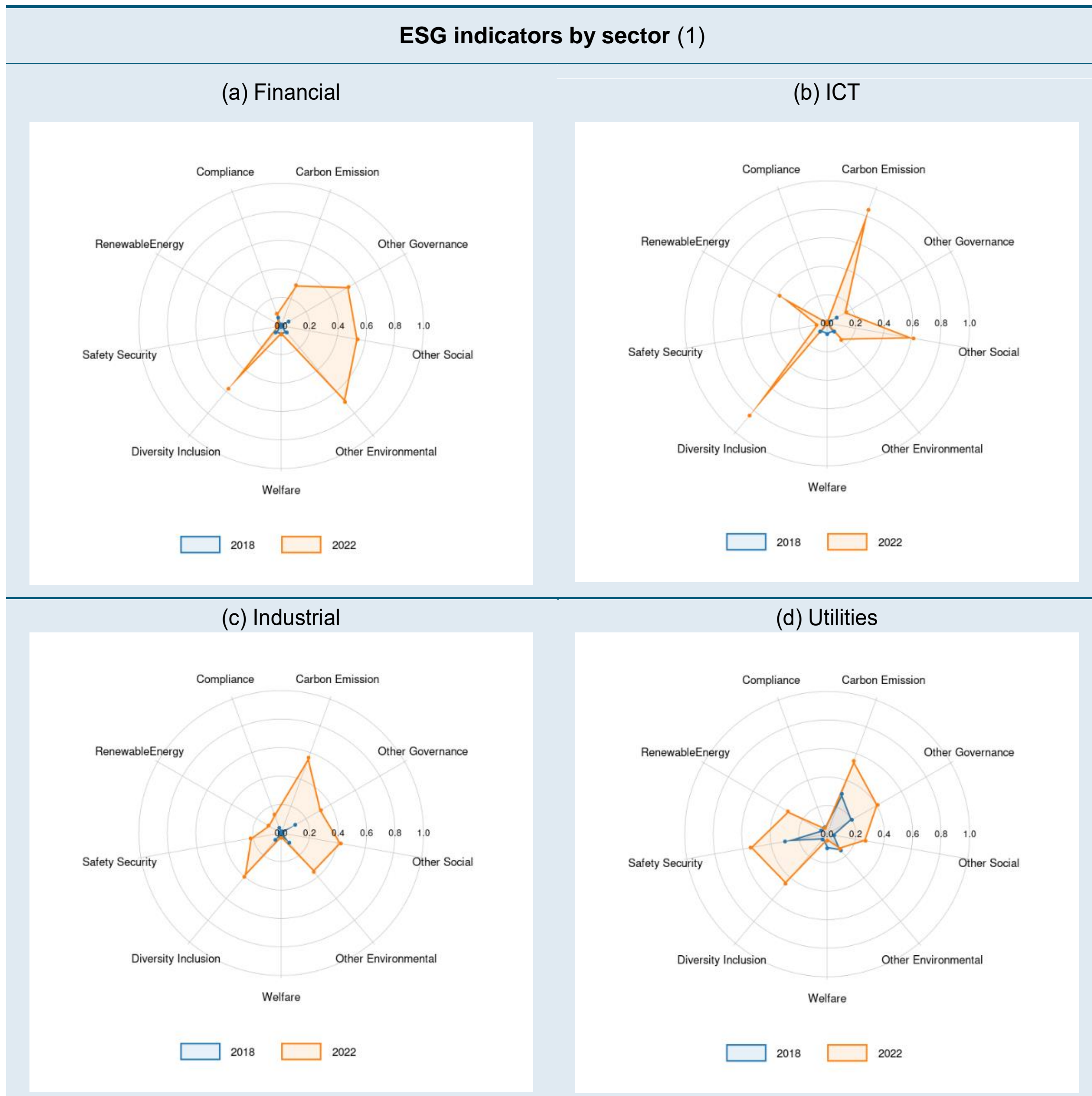
Source: Remuneration policies.
(1) The average number of indicators is calculated only for companies having at least one ESG indicator.

Turning to the sectoral analysis of the topics covered by ESG metrics, there is more homogeneity within sectors than within country. This might indicate that large companies benchmark their pay practices against competitors and possibly select ESG metrics based on sector-specific characteristics. However, this does not clarify whether companies engage in cherry-picking or choose the areas where they need the most improvement.

ICT and financial companies focus more on diversity and inclusion, which might be understood as a tactic to compete on the labour market and as a value enhancing strategy. ICT companies focus the most also on carbon emission reduction, which is the most

adopted metric also by industrial and utilities companies. Financial companies are the ones which rely more on the "other" category, particularly on the other environmental: it is unclear whether this is culprit of vague environmental promises (greenwashing) or whether this corresponds to the role that intermediaries might play in the green transition, as provider of finance and financial services rather than direct polluters (fig. 8). It is difficult to understand whether companies target metrics where they are particularly strong (cherry picking) or whether they try to address issues which are specifically problematic.

Fig. 8



Source: Remuneration policies.
(1) The average number of indicators is calculated only for companies having at least one ESG indicator.

3.6. Rate of achievement

Generally, studies of CEO performance do not take into account the rate of achievement of the performance targets by the executives[43]. That is unfortunate because it is probably the best proxy, even if it acts with hindsight and is prone to bias, to infer how challenging a performance target is. The analysis of remuneration reports, where companies have to disclose also the rate of achievement of variable pay targets, allows to assess the rate of achievement by CEOs of their short-term targets, both financial and ESG-linked. In 2022, for both financial and ESG targets, the vast majority of firms fully achieved their goals, often exceeding them[44] (with German firms having the lowest achievement rate, as shown in Table 3). Indeed, CEOs might still receive at least partial compensation even if they do not fully meet their targets, and they may be overcompensated if they exceed them.

The picture is so rosy that might lead to the bleak conclusion that the observed achievement rate is due to the fact that performance targets were not at all challenging when they were set. Accordingly, short-term incentive schemes resemble a form of fixed remuneration more than a variable one, with the variation mostly concerning overperformance.

Table 3

Companies where CEOs fully achieve short-term targets

	France	Germany	Italy	Spain
2022 financial targets	84%	75%	84%	88%
2022 ESG targets (1)	86%	83%	94%	96%

Source: remuneration report
(1) The average rate of achievement is calculated only for companies having at least one ESG indicator.

With regard to short-term financial performance targets, these results challenge the conventional assumption behind CEO pay models and corporate governance theory which looks at CEO's pay as an incentivizing factor. This finding does not concern the core of this paper, but deserves deeper and more accurate research in the future. With regard to ESG factors, such a high rate of achievement indicates that the metrics are not challenging for CEOs. The consequence is probably that they do not involve any significant change along the path of sustainability and the improvement of stakeholders' welfare.

[43] A notable exception is A. Badawit and R. Bartlett, "ESG Overperformance? Assessing the Use of ESG Targets in Executive Compensation Plans", available https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4941016 (2024).

[44] We consider a target achieved if the CEO fully attains (100%) the specified target; however, it is very common for CEOs to exceed their targets. A target achievement of more than 100% occurs when the company's performance exceeds the target set by the remuneration policies.

Nonetheless, it is interesting to read together the achievement rates of financial and ESG metrics. Contrary to common assumption, the increase of the weight of ESG factors within CEOs compensation has not worsened (if anything, it is the contrary) the rate of achievement of financial performance metrics. CEOs do not appear to be distracted by their ESG related tasks in pursuing economic and financial success of the company. Of course this result might depend on several causes which need not be mutually exclusive. First, a success on the ESG front may contribute also to the financial success of the company; second, ESG targets are simply so vague and so unchallenging that they do not distract CEOs and do not require any significant modification to the business model (greenwashing, etc.); finally, that CEOs might easily dedicate part of their attention to sustainability issues without hampering companies' financial performance.

Whatever the favourite interpretation of the data, the analysis of the rate of achievement raises doubts about how challenging short-term incentives plans are, but also seems to counter one of the main critiques directed at ESG pay, that it hampers financial performance. In order to investigate further that question, we turn to economic performance of the corporations of our sample.

3.7. ESG-based pay and corporate performance

A constant theme by the critics of the integration of ESG metrics into CEO remuneration is that this worsens corporate performance through two different channels[45]: first, it risks increasing agency costs, because of the discretion of CEOs in pursuing non-financial objectives and the additional remuneration might be the result of agency costs itself; second, it distracts CEOs from their main tasks. Generally, this idea is put forward as a theoretical discussion rather than an empirical claim, as accurate studies on the economic effect of ESG remuneration since it has become so widespread are still lacking.

In order to assess the economic effect of ESG remuneration we merged our hand-collected database of ESG-linked incentives at the firm level, with the economic performance information about companies from the Eikon dataset. This merge allows to assess at the firm level whether an increase in the weight of ESG related factors is correlated to economic performance. As we have explained above, between 2018 and 2022 many companies have inserted ESG performance metrics in their variable pay schemes, and even companies which already provided for them in 2018 have generally increased the significance of ESG factors in the whole pay package.

We analyse the correlation between ESG variables and economic performance measured by turnover, profitability, productivity, and the number of employees. According to the agency costs hypothesis of ESG pay, economic performance indicators (particularly the productivity and profitability ones) should worsen as ESG-linked pay increases. However, none of that happens; if anything, economic performance slightly

[45] L. Bebchuk, R. Tallarita (2022).

improves, albeit in a statistically insignificant way. This assessment does not rely on financial markets metrics, but on firm-level accounting ones, which are not influenced by the (potential) increase in demand for shares deriving from an improvement of the ESG rating of the company or the perceptions by market participants about the potential beneficial effects of ESG improvements on long-term performance of the company. There is no negative correlation between the increase in the weight of ESG related variable pay for firms and their economic performance (fig. 9).

While this evidence seems to contradict the fears of agency costs theorists, it is subject to multiple (not mutually exclusive) interpretations, as the evidence about the achievement rate of both financial and ESG-related targets, ranging from the positive effects, albeit small, on economic performance of ESG factors, to the unchallenging nature of ESG factors, to the capacity of CEOs to attend also these tasks.

Future studies should investigate the reasons for these results, despite the difficulty of disentangling different effects which might likely coexist: ESG target might be undemanding and do not involve any real change in corporate business conduct, ESG improvement might benefit also financial and economic performance, or simply put CEOs might pursue both at the same time without the two influencing each other. Whatever the explanation, our empirical analysis has showed that the current system does not impair companies' economic performance, even in the short run.

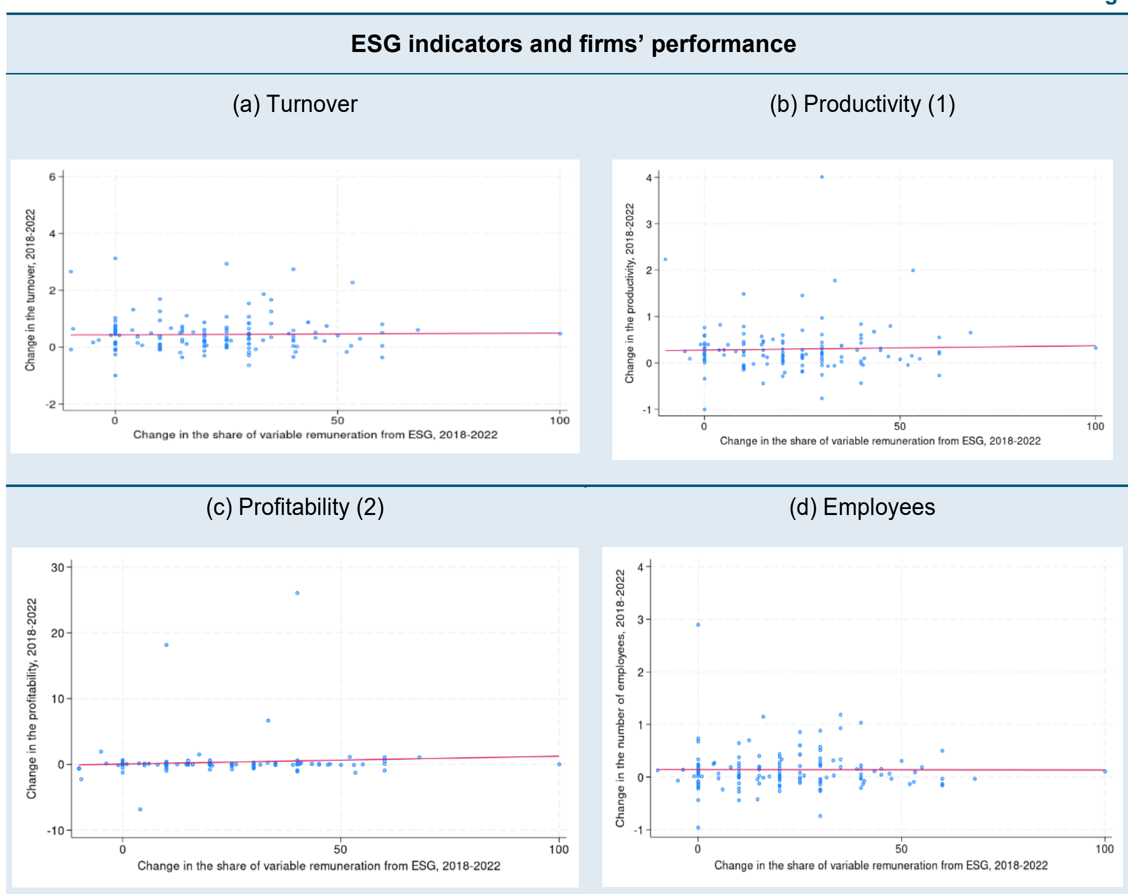


Fig. 9

ESG indicators and firms' performance

Source: Remuneration policies and Eikon dataset.
(1) Productivity is calculated by dividing turnover by the number of employees. (2) Profitability is calculated by dividing turnover minus expenditures by turnover.

4. Conclusion

This paper has analysed the diffusion of ESG metrics in the pay packages of the CEOs of France, Germany, Italy and Spain between 2018 and 2022. It has provided novel empirical evidence on the functioning of ESG-linked CEO remuneration, including with regard to the economic effect of the introduction of ESG factors in pay packages as well as the rate of achievement of financial and ESG targets: the consideration of these data is essential to move from a merely theoretical discussion to a more empirically grounded one.

The paper found that the increase in ESG-related CEO's pay is not correlated to a worsening corporate performance. At the same time, ESG metrics are not challenging, it is likely that companies cherry-pick the more favourable metrics and that greenwashing is widespread. Although not conclusive, the empirical evidence casts doubts on the effectiveness of CEO's remuneration to foster sustainability. Policy makers should therefore be under no illusion on the transformative power of ESG-linked incentives.