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Cutting to the chase on ESG

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Cutting to the chase on ESG

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Abstract

In this study we conduct a thorough analysis of the performance metrics associated with the sub-criteria that comprise environmental, social, and governance (ESG) pillars, focusing on equity markets. Our research reveals that, in a context of growing mistrust in ESG, the aggregation of extra-financial indicators and the reliance on a global ESG score may conceal opportunities at a more granular level. Indeed, we showcase that sub-pillars of E, S and G yield more differentiating returns compared to global ESG score, which holds across Eurozone, North America and Emerging Asia since 2021. In North America, the Waste and Biodiversity pillar rallied over the period. In Eurozone and Emerging Asia we point at a dependence from the Emissions and Energy performance on commodity prices: companies with controlled emissions profile outperform their browner peers when commodity prices are high. This emerging selectivity is also reflected in flows. While responsible investment funds experienced a net outflow in 2022 and 2023 for the first time since ESG inception in the early 2010s, the strategies with the highest levels of conviction were the most resilient in terms of flows.

Keywords: ESG, environmental, social, governance, ESG scoring, ESG rating, asset pricing, active management.

JEL classification: G11, G3, Q1.

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Guillaume Burnichon joined Amundi in July 2023 as an intern in the Quant Portfolio Strategy team of Amundi Investment Institute (formerly known as the Quantitative Research Team of Amundi). His work focuses on creating, managing and updating time-series databases to build an automatic dashboard giving multiple insights on ESG performance. Guillaume is a student at Paris-Dauphine PSL University, pursuing a Master degree in applied mathematics, specialized in market finance. He also holds a Bachelor degree in mathematics at Paris-Dauphine PSL University (2022).

Theo LE GUENEDAL

Théo Le Guenedal, PhD joined Amundi's Quantitative Research team in December 2018, to work on the performance of ESG investing in the equity market. Since then, he has been involved in an extensive research project on the incorporation of ESG factors and climate risks into asset allocation strategies. More recently, Théo has been focusing on the integration of advanced climate metrics, stress tests, and analytics in investment tools at Amundi Technology's Innovation Lab.

Théo completed his Ph.D. thesis entitled "Financial Modeling of Climate-related Risks" in Applied Mathematics at the Institut Polytechnique in December 2023. This research covers both transition and physical risks. A segment of his work on transition was recognized with the GRASFI Best Paper Prize for Research on Climate Finance, a distinguished honor sponsored by Imperial College London, in 2020. On the subject of physical risks, Théo also made significant contributions to the academic domain of physical risk assessment by creating the Tropical Cyclone Generation Algorithm.

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Frédéric Lepetit is Head of Equity Quant Portfolio Strategy within Amundi Investment Institute (formerly known as the Quantitative Research Team of Amundi). He joined Société Générale Asset Management in 2006 as quantitative analyst on the Equity side and expanded the scope of his activity to the volatility asset class area after the SGAM-CAAM merger in 2010. His areas of research cover ESG and factor investing. Prior to joining Amundi, he was consultant to French leading Asset Management companies at FactSet Research Systems from 1999 to 2006.

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Lauren Stagnol, PhD is an Equity Quantitative Researcher at Amundi Investment Institute (formerly known as the Quantitative Research Team of Amundi). She conducts research projects and develops tools and strategies closely linked to portfolio management platforms. She joined Amundi in 2014 as a Fixed-Income Quantitative Researcher for three years. From 2017 to 2020, she was a Bond Portfolio Manager at Candriam in Bruxelles managing euro aggregate and smart beta portfolios. In 2020, Lauren re-joined Amundi as a Quantitative Researcher. Her areas of research cover smart beta, factor investing, sustainable investing, big data based economic and geopolitical narratives in both fixed income and equities.

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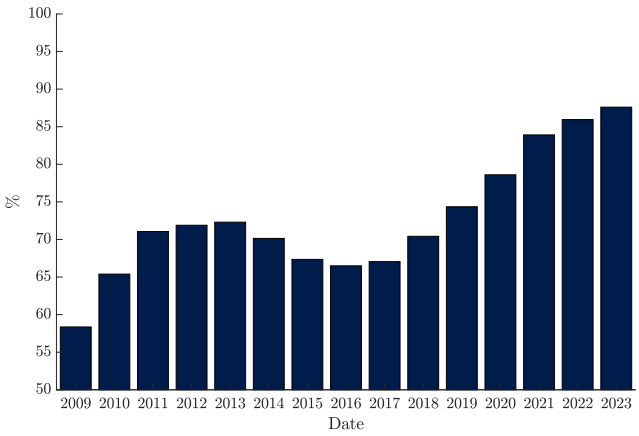
Key takeaways

- The true performance within ESG has derived from the more granular elements composing ESG and E, S and G pillars across the Eurozone, North America and Emerging Asia equity markets between July 2021 and September 2023.
- For the Eurozone and Emerging Asia, on the E pillar, we found that Emissions & Energy's performance depends on commodity prices. It showcases how the sector neutralities that can be embedded within ESG scores are not enough to immunize ESG performance from macro sensitivities.
- In North America, the anti-ESG movement has not translated into alarming losses. In fact, the Waste & Biodiversity pillar of the environmental score pulled out strong performance over the period, indicating that investors may have deserted the top level ESG in their investment styles but have not abandonned ESG in their investment philosophy, as we can witness with the development of thematic and impact investing.

1 Introduction

The effects of the integration of ESG in equity and bonds investment strategies and risk management have been widely monitored by practitioners and theorized by academics in the recent years (e.g. Dorfleitner *et al.*, 2020; Friede *et al.*, 2015; Giese *et al.*, 2019; Oehmke and Opp, 2023). As such, environmental, social, and governance (ESG) ratings, scores and controversies have become very topical in the financial sector. This growing interest from finance practitioners is mirrored by companies' own evolution relative to sustainability. For instance, an increasing number of companies formalized Corporate Social Responsibility (CSR) committees within their organization (see Figure 1). As stated by Eccles and Taylor (2023), a chief sustainability officers' role is more and more aligned with the long term value creation of companies.

Figure 1: Share of MSCI World Companies having a Corporate Social Responsibility Committee



Sources: MSCI, Eikon Refinitiv, Amundi Investment Institute.

With ESG in the spotlight, its financial performance quickly became a topical question. From a theoretical perspective, positive expected return associated with strong ESG credentials is not consistent with the fundamental risk-return paradigm of the modern financial theory (Sharpe, 1964). Indeed a risk premium should compensate investors holding assets exposed to a systematic risk. Therefore, in theory, and in the context of a transition to a net zero economy, assets with strong ESG performance should not benefit from a positive risk premium. Conversely, brown assets should command a positive premium to compensate for regulation, carbon tax or stranded asset risks, for example. This hypothesis is corroborated by Ben Slimane *et al.* (2020) who found that, on the green bond market, an instrument's "*greenness*" is associated with a negative premium. Similarly, Bolton and Kacperczyk (2021) point at higher returns for higher CO_2 emitters. However, from a practical viewpoint, companies with strong ESG achievements have outperformed in the past. This phenomenon is rooted in an increasing demand for such assets, which exceeds the *a priori* negative theoretical risk premium. Pástor *et al.* (2021) propose a theoretical framework where the outperformance of green vs. brown can be explained by an "unexpected shifts in ESG concerns of firms' customers and market investors". Pedersen *et al.* (2021) extend this analysis by constructing a responsible efficient frontier and suggest that the expected future returns of ESG-aware or ESG-motivated investors are negative because they optimize their

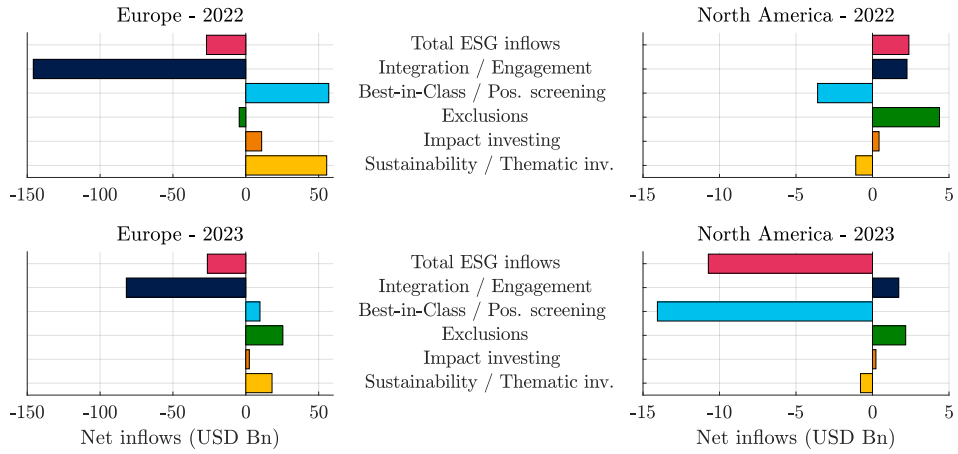
portfolios with non-pecuniary preferences, *i.e.* they are willing to sacrifice returns for a more responsible portfolio.

Besides the debate on the expected performance of ESG assets, the concept itself has been under scrutiny and even under attacks more recently. One of the features of ESG (also known as Socially Responsible Investment or Corporate Social Responsability) for practitioners has long been the dispersion of the multiple rating sources. The world's largest pension fund challenged two ESG rating providers over differences in their evaluation of 430 Japanese companies (Government Pension Investment Fund, 2017). Eccles and Stroehle (2018) provide a cultural background explanation to the "why" question for the dispersion. By looking into the social origins of the ESG rating vendors with a 30-year timeline of consolidation in the industry, they identify a shift from "values" to "value". Berg *et al.* (2022) follow-up on the proposition of Chatterji *et al.* (2016) and introduce a normalized taxonomy of ESG indicators in a proposition that mirrors the normalization efforts of fundamental financial databases to provide a homogeneous representation of companies (Dai, 2012). The authors answer the "what" question for the dispersion by identifying the difference in the choice of indicators for the same ESG item as the main source of divergence. They also emphasize that it is not illegitimate for raters to use different methodologies, as ESG ratings are intended for users with diverse needs and perspectives. In addition to rating dispersion, conflicts of interest have been researched in the ESG rating space (Agrawal *et al.*, 2023; Li *et al.*, 2022), adding to the concerns on the conflicts of interest from the Credit Rating Agencies (CRA) following the subprime crisis (Voss, 2012; White, 2009). Similar to the EU regulation on the CRAs (The European Parliament and the Council of the European Union, 2013), the EU started an initiative to exactly "strengthen the reliability and comparability of ESG ratings" (European Commission, 2023), in addition to the Official Journal of the European Union (2022) directive on corporate sustainability reporting. Either seen as a lack of expected normalization or a necessity to provide various analytical perspectives, ESG assessment dispersion is triggering questions.

Beyond its measurement issue, sustainable investing has sparked an anti-ESG movement, particularly in the US (Barboni, 2023). Figure 2 illustrates a direct consequence of this emerging distrust in ESG. Large outflows[1] have been recorded on sustainable funds in 2022 and 2023 in Europe and in 2023 in North America. The relevance of ESG criteria in assessing the risk of an investment, but also, in assessing the fiduciary duty, is in the spotlight. This movement occurred in a context characterized by politicization of board rooms themselves (Fos *et al.*, 2022), blurring the lines between actual ESG defiance and "culture wars" (Eccles, 2023). Either way, the financiary duty's definition varies across regions and may be interpreted in many different ways, and the same holds for the relevance of ESG in its assessment. Nevertheless, it is interesting to highlight that despite the anti-ESG movement, capital outflows have been concentrated in the strategies with the lowest ESG conviction (Integration/Engagement for Europe and Best-in-class/Positive screening for North America), and that, conversely, the ESG funds with the strongest convictions have been resilient or even benefited from positive flows, both in Europe and North America. Leaving this debate aside, the aim of this paper is to present the historical performance of ESG since 2021 in equity markets across a wide geographical range. Our analyses goes beyond the traditional E, S, and G split, by looking at the performance of specific sub-pillars. To address the issue of dispersion in ratings, we rely on the methodology of Berg *et al.* (2022) to compute proprietary scores derived from multiple ESG ratings.

[1] Include only open-ended funds (mutual funds, ETFs and Index tracking strategies). Exclude money market funds.

Figure 2: Net flows on SRI strategies



Sources: Broadridge GMI, Amundi Investment Institute.

The paper is structured as follows. In Section 2 we describe such a rating system and review its performance over the 2014-2021 period in 3. Section 4 provides an update of the performance for the overall ESG dimension, environment, social, and governance pillars but also the sub-pillars that constitute them. We also evaluate performance's sensitivity to the macroeconomic environment. Finally, Section 5 concludes.

2 Breaking down ESG rating and performance

2.1 The sub-pillars approach for assessing ESG

Our proprietary scoring applies a different weighting scheme to each ESG criterion depending on a company's sector of activity. The process retains the most relevant ESG metrics, sourcing from multiple sources. These criteria can be both cross-sector and sector specific. Table 1 presents the main cross-sector sub-pillars on which we focus in our performance evaluation. Indeed, returns linked to a specific criterion that applies only to one industry are less intelligible. By structure, ESG, pillars' (E, S and G) and sub-pillars' scores are normally distributed across sectors. While aggregate ESG scores provide a broad-brush view of a firm's sustainability practices, additional insights can be gained by carefully analyzing the individual components of environmental, social, and governance pillars. For instance, in light of environmental regulatory pressure, an investor might decide to invest in companies with strong environmental performance. Indeed a company with a high score on the environmental pillar is likely to be already aligned with new regulations, potentially attracting investors relative to its –less aligned– peers, as the market adjusts to such new regulations. By decomposing ESG into its constituent elements and understanding the temporal and market context, investors can better align their strategies not only with the prevailing conditions but also with anticipated future trends, potentially enhancing returns while adhering to responsible investment principles.

2.2 Performance measurement

In line with classical asset pricing methodology (Fama & French, 1993), our approach to track the performance of investment strategies in equity markets is based on the same principle already outlined in Bennani *et al.* (2018), and subsequently applied in studies like Drei *et*

Table 1: The main sub-pillars from Amundi's ESG scoring system

Pillar	Code	Name
Environment	E10	Emissions & Energy
	E50	Biodiversity & Pollution
Social	S20	Health & Safety
	S30	Working conditions
	S40	Labour Relations
	S60	Supply chain - Social
	S80	Community involvement & Human Rights
Governance	G10	Board Structure
	G20	Audit & Control
	G30	Remuneration
	G40	Shareholders
	G60	Ethics
	G70	ESG Strategy

Source: Amundi Investment Institute.

al. (2019) and Lepetit *et al.* (2021). This approach, a direct adaptation of the method by Fama and French (1993), involves constructing five quintile portfolios using various criteria, ensuring an equal distribution of stocks across different sectors. Each quintile represents a segment of the index based on its rating in specific extra-financial criteria, with the first quintile (Q_1) reflecting the performance of the best-rated segment and the fifth quintile (Q_5) representing the performance of the worst-rated stocks.

3 Historical performance of ESG and sub-pillars until 2020

We have been conducting research dedicated to the regional performance of ESG and its sub-pillars for a decade. Our key findings, based on our ESG scoring system, are summarized in Table 2. The remainder of this section focuses on the most recent stylized facts we have observed in the equity market, particularly during the pandemic.

3.1 ESG

From a practitioner perspective, using our scoring methodology, we have long identified ESG as a tracking error risk for both equity and credit (Berg *et al.*, 2014). Consistent with this viewpoint, we found that ESG can be considered as a candidate risk factor for the equity market since 2014, although this result only holds for the Eurozone (Bennani *et al.*, 2018; Drei *et al.*, 2019). Similarly, in the fixed income universe, we point to a strong outperformance for ESG scoring over the same period. (Ben Slimane *et al.*, 2019). On the other side of the coin, we also highlighted the diversification benefits of ESG integration on both asset classes, a decade ago (Berg *et al.*, 2014).

In terms of historical financial returns, Bennani *et al.* (2018) decomposed ESG performance from 2010 to 2017 into two time segments, unveiling a marked enhancement in ESG integration in equity markets after 2014, but with significant differences across regions. During this period, an increasing trend in the ESG-related regulation was observed, particularly in the EU, which may have driven customers' preferences (Drei *et al.*, 2019; Roncalli, 2022). After the election of Trump in 2016, the markets showed a transatlantic divergence, with

Table 2: Timeline of findings with Amundi's ESG scoring system

Date	Notion	Finding	Source
		Equities	
2014	ESG can be diversified	Importance of systematic bias correction in ESG integration 2005-2013: higher tracking error in US relative to EMU 2005-2013: ESG integration can be diversified	Berg *et al.* (2014)
2018	The 2014 Break	ESG is tracking error risk 2010-2013: ESG inv. penalizes both low TE and active ESG inv. 2014-2017: ESG investing is a source of outperformance	Drei *et al.* (2019)
	ESG as a risk factor	ESG is a candidate risk factor in Eurozone, not in North America	Bennani *et al.* (2018)
2019	The Transatlantic divide	Eurozone and North America are displaying divergent trends	Drei *et al.* (2019)
	ESG investment complexity increases	New themes are emerging rapidly (Social) ESG goes beyond the exclusion of worst-in-class stocks The Q4 puzzle on the E pillar in Eurozone	Drei *et al.* (2019)
2020	ESG News integration	ESG-sorted portfolios are better sorted using ESG News (TVL) Solving the Q4 puzzle	Taleb *et al.* (2020)
	Covid-19 effects	Social in North America	Lepetit *et al.* (2021)
		Bonds	
2014	ESG can be diversified	Importance of Systematic bias correction in ESG integration 2005-2013: higher Tracking Error in US relative to EMU 2005-2013: ESG integration can be diversified	Ben Slimane *et al.* (2019)
2019	The 2014 Break	2014 Break in Credit confirmed	Bennani *et al.* (2018)
	Credit Specifics	ESG and Credit Rating ESG and the Cost of Debt	Ben Slimane *et al.* (2020)
2020	Covid-19 effects	ESG acting as a hedge in Covid-19	Ben Slimane *et al.* (2020)

Source: Amundi Investment Institute.

North America lagging behind in sustainable aspects, as noted in Drei *et al.* (2019). As one of the Trump administration's achievements was to exit from the Paris Agreement, it was expected that progress in ESG pricing would be deferred until the Biden administration enacted ESG-related policies. Unexpectedly, the Covid-19 pandemic served as an ESG catalyst in North America (Lepetit *et al.*, 2021).

3.2 Environment

Lepetit *et al.* (2021) show that during the peak of the Covid-19, the environmental pillar in North America suffered with negative performance. But the election of Joe Biden, and the U.S. rejoining the Paris Climate Agreement, reversed this trend with an outperformance of the Emission & Energy sub-pillar.

3.3 Governance

Lepetit *et al.* (2021) argue that during the Covid-19, governance emerged as a distinguishing feature. With the economic demand shock, North American companies turned primarily to the credit markets for financing, a trend also witnessed by Halling *et al.* (2020). During the pandemic, the credit spread difference –function of companies' E, S and G pillars

performance– previously ranging from 5 to 10 basis points widened to between 20 and 40 basis points, with the governance factor showing the widest differential. On average, firms with superior governance ratings secured financing at rates 40 basis points lower than the peers with weaker performance on the G pillar. Investors, looking beyond ESG considerations, logically favored economically viable companies with lower market access costs, which coincidentally were also leading in terms of governance.

3.4 Social

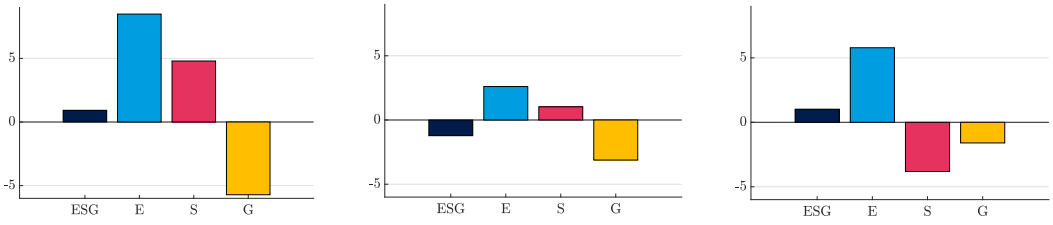
During Covid-19, the absence of government safety nets for companies in the US heightened the importance of the social pillar (Lepetit *et al.*, 2021). Indeed, investors favored firms committed to workforce stability in the midst of market turbulence. In the European Economic and Monetary Union (EMU), investors were genuinely concerned about the expansion of corporate social responsibility along with the supply chain. This advocates the rising scrutiny of companies' ESG practices.

4 Performance of ESG and sub-pillars since 2021

In this section, we present the financial performance of long-short portfolios (Q_1 vs. Q_5) both at the aggregate (E, S, G and ESG) and more granular levels. In the spirit of Lepetit *et al.* (2021), we examine the Eurozone, North America and Emerging Asia. North America includes Canada and the United States of America, while Emerging Asia covers China, India, Indonesia, South Korea, Malaysia, the Philippines, Taiwan and Thailand. The financial performance is computed on a daily basis from July 2021 to September 2023, while scores are updated monthly.

4.1 ESG

Figure 3: ESG annualized performance (2021–2023) in different regions



(a) Eurozone (b) North America (c) EM Asia

Source: Amundi Investment Institute.

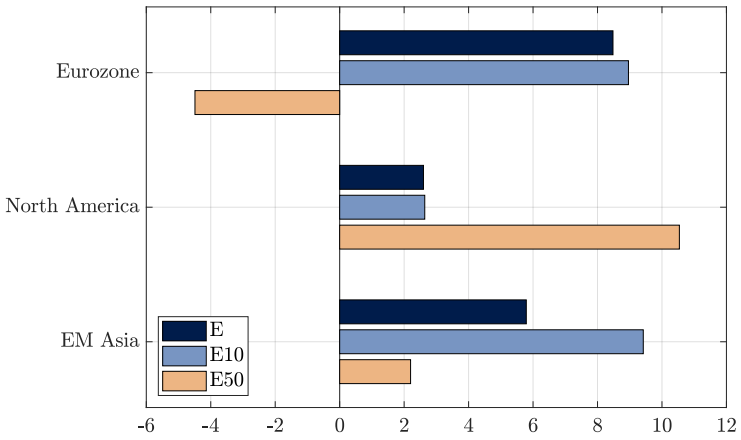
Results at the aggregate ESG level and at the level of E, S and G pillars are presented for each region in Figure 3. Focusing on ESG as a whole does not showcase significant outperformance over the period. However, it overlooks the disparate contributions of each individual pillar. In particular, the environmental component has shown resilience and positive performance across various regions, reflecting the growing emphasis on sustainable practices at the global level. In contrast, the governance pillar has not been a driver of outperformance in these regions. As long as the social pillar is concerned, the results are more heterogeneous, suggesting that its impact on performance must be nuanced and may

depend on specific regional or sectoral factors. It warrants a more granular analysis to fully comprehend their investment implications. While the performance of E and S pillars remains strong in the Eurozone, we observe weakest dynamics in North America. In Emerging Asia, the solid outperformance of companies with sound environmental score must be highlighted, contrasting the poor figures observed on the social front.

4.2 Environment

We have seen that between July 2021 and September 2023, the environmental pillar was leading the others in all regions. Two main dimensions are appraised within the the environmental score, namely Emissions & Energy (E10) and Biodiversity & Pollution (E50). In Figure 4, we present the annualized performance of the E pillar and sub-pillars for different regions.

Figure 4: Annualized performance (2021–2023) of the E pillar and sub-pillars



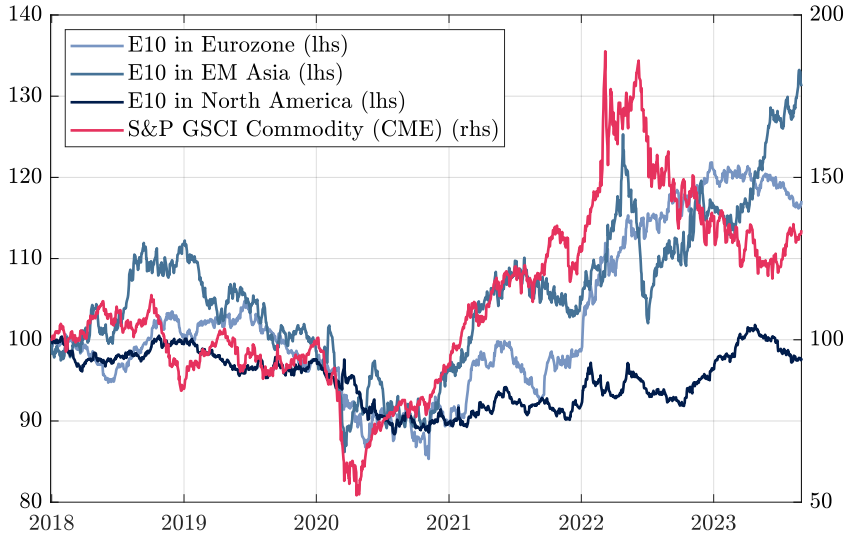
Source: Amundi Investment Institute.

First, in both the Eurozone and Emerging Asia, we note the outperformance of the E10 sub-pillar. This pillar is particularly driving the performance of the environmental dimension. In North America, the figures testify of a complete different story, with a striking outperformance of the Biodiversity & Pollution (E50) sub-pillar. Waste management is the modern version of efficiency criteria (Guenster *et al.*, 2011; Klassen & McLaughlin, 1996; Sinkin *et al.*, 2008), that has been rewarded in North American markets. This outperformance is particularly interesting, suggesting that investors in North America have been looking into specific environmental components over the recent period even as ESG –as a whole– has been under scrutiny and heavily challenged in the US.

The dichotomy we observe, between the strong performance of the E10 pillar in Emerging Asia and the Eurozone compared to North America, where it somehow lagged behind, encourages us to undertake further analysis. In Figure 5, we compare their respective historical performance on a daily basis since 2018.

In the Eurozone and Emerging Asia regions, the very high commodity price inflation in the context of the energy crisis has prompted investors to shift away from assets associated with high carbon emissions. Indeed, such environment is a positive performance catalyst for the E10 emissions sub-pillar, meaning that companies that perform well on this dimension

Figure 5: E10 sub-pillar versus a broad commodity index



Source: Amundi Investment Institute.

have benefited from a higher return compared to their carbon-intensive peers. On the other hand, E10 in North America is much less sensitive to commodity prices due to the lower contribution of the energy component to total inflation, as the US is a producer and exporter of energy.

Table 3: Granger causality test

Lag	Eurozone		North America		Emerging Asia	
1	GSCI → E10		E10 → GSCI	**	E10 → GSCI	***
2	GSCI → E10		E10 → GSCI	*	GSCI → E10	**
3	GSCI → E10	**	E10 → GSCI	*	E10 → GSCI	*
4	GSCI → E10	***	E10 → GSCI		E10 → GSCI	***
5	GSCI → E10	***	E10 → GSCI		GSCI → E10	***
6	GSCI → E10	***	E10 → GSCI		GSCI → E10	***
7	GSCI → E10	***	E10 → GSCI		GSCI → E10	***
8	GSCI → E10	**	GSCI → E10		GSCI → E10	***
9	GSCI → E10	**	GSCI → E10	*	GSCI → E10	***
10	GSCI → E10	***	GSCI → E10		GSCI → E10	***

Notes: ***, ** and * denote Granger Causality identification running from one timeseries to the other at the 1%, 5% and 10% significance levels respectively.

Source: Amundi Investment Institute.

To evaluate such hypothesis, we present in Table 3 the results of the Granger causality tests, between a broad commodity index (namely the S&P GSCI commodity index) and the daily E10's (Emissions & Energy) performances in each region. Granger causality test essentially verifies whether the values of one timeseries are helpful for predicting another timeseries (Granger, 1969). Using 1 week (5 open days) or 2 weeks (10 open days) lags in 1^{st} difference, we identified significant Granger causalities (at the 1% level) running from the commodity index to the performance of E10. These results only hold for the Eurozone and Emerging Asia, corroborating the heightened sensitivity of the Emissions & Energy pillar

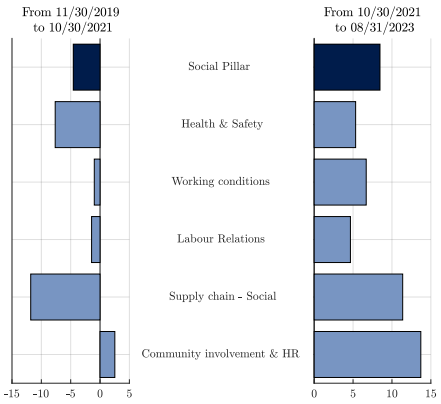
to commodity prices in these regions.

4.3 Social

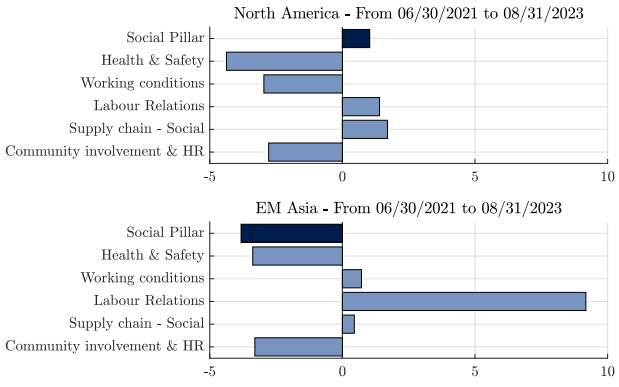
Examining the social criterion, Figure 6a shows that during the Covid-19 crisis, the highly protective social models of European countries diverted investors away from the best-rated companies from a social perspective. Indeed during the heights of the pandemic, all pillars from the social dimension underperformed, meaning that companies with poor social performance actually yielded a higher return than their peers, with sounder practices on these topics. However, post-Covid-19, social recovered with all its sub-pillars contributing to a positive performance in the Eurozone region, notably led by the Supply chain – Social and Community involvement & HR sub-pillars.

Figure 6: Annualized performance of the social pillar and its subcomponents

(a) EMU



(b) North America and EM Asia



Source: Amundi Investment Institute.

In North America, the social pillar yielded a weaker performance than in the Euro area, but still in positive territory, as shown in Figure 6b. This milder performance came after a very solid momentum for the pillar during the Covid-19 crisis, as acknowledged in Lepetit *et al.* (2021). In the most recent period, the positive performance of the aggregated social pillar was driven by the Labor relations and Supply chain – Social dimensions. In fact, since 2019, the latter pillar has been delivering sustained performance (Lepetit *et al.*, 2021), corroborating investors awareness on the importance of transferring social values within the whole supply chains. Surprisingly, the social pillar did not benefit strongly from the great resignation phenomenon, investors not rewarding companies with strong social commitments.

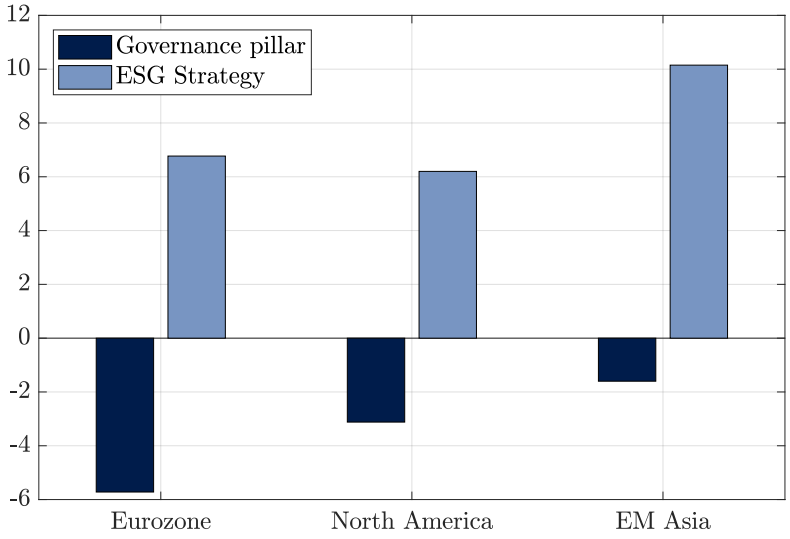
In Emerging Asia, the social pillar has been strongly lagging, with only the Labor relations sub-pillar standing out. Understanding the phenomenon requires further research.

4.4 Governance

As far as governance is concerned, the performance associated with the ESG strategy sub-pillar over the past two years has been very consistent and positive in each region, which contrasts with the negative return of the broader G pillar, as shown in Figure 7. Investors appear to be increasingly concerned about the integration of extra-financial aspects into

corporate strategy and the functioning of their management bodies. This suggests that there is a real awareness that good performance on traditional governance indicators may no longer be enough, highlighting the need for true ESG values integration with a company strategy.

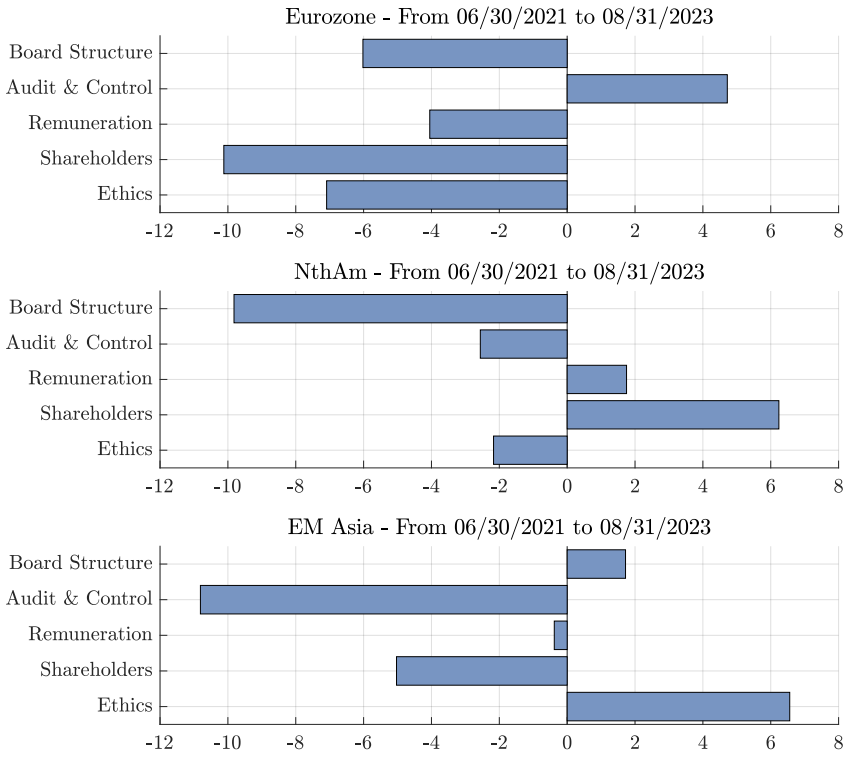
Figure 7: Annualized performance (2021–2023) of the G pillar and ESG Strategy sub-pillar



Source: Amundi Investment Institute.

Breaking through other governance pillars also reveals interesting results, as shown in Figure 8. Notably, no single sub-pillar is associated with positive performance in all regions over the past two years, suggesting region-specific concerns from an investor perspective. In the Eurozone, only Audit & Control reached positive territory. Note that the sub-pillar has produced a remarkable performance (5.1% annualized) since the beginning of 2014. In North America, Board structure is the most heavily sanctioned sub-pillar, while Shareholders is highly rewarded by investors. In Emerging Asia, Ethics is favored to the detriment of Audit & Control and Shareholders. We witness that while Board Structure and Ethics appear to be secondary issues in the Eurozone and North America, there are becoming increasingly important for Emerging Asian investors. This phenomenon could be explained by the higher proportion of family-owned companies in Asia, which puts the nomination of board members under scrutiny (Teen & Phan, 2001). Audit & Control performance has been a drag in the region for the last couple of years which may translate less mature regulatory frameworks and standards across the region.

Figure 8: Long-short performance of governance sub-pillars



Source: Amundi Investment Institute.

5 Conclusion

Examining the first layer - the surface - of financial performance, ESG, and to a lesser extent, the E, S and G pillars have not been the most important differentiators in terms of financial performance over the studied time window, while the more granular sub-pillars comprising the E, S and G dimensions have been genuine differentiators in distinguishing winners from losers across regions (North America, Eurozone and Emerging Asia). We find that despite the sector neutrality, inherited from the ESG score construction, ESG returns can be exposed to other factors, such as the macroeconomic environment. In particular, we identified a dependence of the Emissions & Energy pillar to commodity price movements. Then, focusing specifically on North America, the remarkable performance of Biodiversity & Pollution and ESG Strategy sub-pillars is a strong indicator that ESG investing has not been halted in North America despite the strong politicization and accusations of "wokeness which have been thrown at the ESG concept" (Ramaswamy, 2021), but has evolved, as emphasized by the positive flows towards thematic and high ESG conviction funds in the region. From a broader and global perspective, the differentiation of the sub-pillars in recent years suggests that exposure to specific areas of ESG can be a successful investment strategy. A more granular approach supports the development of thematic or impact investing products that would be sustainable, also financially.

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