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ESG DISCLOSURE AND EMERGING TRENDS IN RESPONSIBLE INVESTMENTS: HOW ASYMMETRIC INFORMATION MAY IMPACT STABILITY AGAIN

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Abstract. Environmental and social sustainability together with sound governance have increasingly attracted interest from consumers and investors, paving the way for the so called ESG finance. ESG criteria seem to reshape the way companies, investors and consumers behave. While laudable, the acceleration of ESG finance may raise concerns relating to the robustness underpinning this new set of financial products, as well as the reliability of ESG-related information released by companies to design their public profile. A new breed of ESG ratings and rankings is enriching the metrics used by investors and consumers to make informed financial and investment decisions. Nevertheless, such ratings and rankings depend on the individual disclosure strategies adopted by companies. The scope of this article is to complement available data about individual emissions declared by companies with their ESG disclosure level, particularly focusing on the Environment. This leads the authors to build a new metric, deputed to reduce asymmetric information hopefully, and to favour responsible investment. Starting from ESG related information publicly available, a new disclosure adjusted pollution index (namely the "GHG Scope-1 DAdj index") is built. The empirical analysis performed in the second part of the contribution, based on this new index, suggests that the rush to ESG finance may possibly be generating leeway for new forms of asymmetries and potential distortions in investment decisions as well as providing ground for speculative approaches in financial product development that heighten concerns and new risks for investors. A handful of companies from our sample become less obvious choices for responsible investors once their environmental record is assessed through the GHG Scope-1 DAdj index.

Keywords: ESG finance, asymmetric information, investor protection, GHG Scope-1 Disclosure Adjusted Index, Carbon-Backed Green Products.

JEL Classification: G1, G2, O1, Q5.

Introduction

Sustainable finance has been a growing phenomenon in the last decade, with an increasing number of financial intermediaries and institutional investors embracing investment approaches that take into consideration metrics pertaining to environmental impact and protection, social aspects, features and mechanisms of governance of their investment and related companies. The growing interest from retail investors and their increased social and environmental responsibility has also generated momentum in the development of the Environmental, Social and Governance (ESG) finance that is now increasingly becoming mainstream. At the same time quite a persistent debate arose in the literature about ESG disclosure (also posing the *greenwashing* theme) as a consequence

of being transparency levels mostly unregulated and managed by companies themselves.

ESG finance gained therefore traction with regulatory bodies and the community of practice of finance, banking and financial intermediation.

The uptake of ESG finance has also triggered the development of ESG-related indexes, rankings and indicators that allow investors to make more informed investment decisions also on the basis of ESG ratings. While low degrees of convergence among those indexes (Eccles & Stroehle, 2018; Mc Cahery et al., 2020; Widyawati, 2020)¹ is preventing consensus on their reliability and

debate arose in the literature about ESG disclosure
o posing the *greenwashing* theme) as a consequence

1 Recent literature highlights how those ESG rating and rankings may be affected by low disclosure and convergence.

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comparability, those indexes are used to back investment decisions. The ratings and indexes are tools to provide evidence and corroborate ESG investment choices. Such ratings and metrics have facilitated the further development of innovative financial products. Sequentially, the process of financial product development has also raised concerns about the robustness of ESG investment and financial products from the perspective of investors' protection.

The demand for ESG financial products increased exponentially between 2016 and 2020 to \$35 trillion, tantamount to 36% of total professionally managed assets, according to 2021 estimates from the Global Sustainable Investment Alliance [GSIA] (2021).

Concerns relate also to dynamics pertaining to the valuation procedures for ESG-compliant companies. The quest for a good ESG ranking may also generate incentives to misbehave by less experienced and scrupulous investors, intermediaries or companies that may tinker with the information disclosed, at times using different techniques of disclosing low quality or excess quantity of data and information. Those mechanisms led to coining terms like "green washing" and "blue washing" (International Monetary Fund [IMF], 2021)².

The similarities between the current hype towards ESG finance leads the authors to establish similitudes with financial bubbles that in the past were triggered by inaccurate valuations, lax regulatory supervision and oversight combined with euphoric investors and intermediaries, such as the Internet bubble of the 1990s, the Great Financial Crisis triggered by excessive securitization and current speculative trends behind financial innovations such as cryptocurrencies and Special Purpose Acquisition Company (SPAC).

Against this background, there appears to be a rush to ESG compliance to ride the wave of ESG finance that may be generating unjustified asymmetries or defining new features of financial risks. While certainly worthy, this transformation in the financial sector and evolution of new products, the concern is that the more sustainable and greener investments may be based on investment metrics the go beyond financial robustness and business viability.

Finance is upgrading its role of intermediary to support this ESG transition, by developing innovative products (ESG investing) and processes (ESG rating). In addition, the financial sector is proving instrumental to implement the green transition, providing capital and investments for new technologies and adoption of greener and more sustainable products and services.

Nonetheless, questions remain concerning the greener and increased sustainability of those investments. As ESG ratings apply to business processes and not on

products, there is the potential for a paradox of ESG-virtuous companies that adopt sustainable processes to deliver goods and services that may not be necessarily environmentally or socially desirable. This paradox materializes in companies that have good ESG ratings while producing socially questionable products, such as harmful products (alcohol, tobacco, weapons) or environmentally impactful ones (oil, fossil fuels, etc.).

1. ESG disclosure literature, main findings

The risk implicit in the above mentioned "disclosure techniques" or strategies, with any consequent doubt about the transparency of ESG-compliance indicators, and the asymmetries backing bad practices, invite to a brief survey of main findings in the specific field, looking at the latest literature on ESG disclosure, especially its relationship with the sustainability performance, and with the enterprise value.

The first one is in that the best disclosure is related to Governance, whereas the lowest – predictably – is on the Environmental impact of companies' behaviour (Tamimi & Sebastianelli, 2021). To improve G-compliance (e.g. by increasing gender parity, or widening the board of directors to minorities) is much easier in fact than reducing emissions.

On the other hand, most of volatility in ESG disclosure depends on firm-specific characters (see Yu & Van Luu, 2021), more than on country factors, which is confirmed to some extent by the results of our analysis below, if one focus on the difference between sectors. And a good example of how non-financial peculiar factors may impact disclosure is the relationship found between an increased tenure of management and a reduced variability of disclosure itself (Mc-Brayer, 2018). The lack of transparency ensuing from the freedom degrees that the companies still have because of low, or absent regulation, make strident the comparison between traditional financial reporting, heavily regulated and imperatively "relevant, reliable, comparable", and ESG reporting (De Silva Lokuwaduge & De Silva, 2022), still in a grey area.

From a different perspective, while a better quality of ESG reporting provides investors with a more accurate image of the company compliance and its sustainability degree, ESG scores seems to be positively correlated with market value and prices (see Eng et al., 2022). This also increases the EES (Economic, Environmental and Social) sustainability performance, boosted by an effective governance (Alsayegh et al., 2020).

All the above considerations could be probably synthesized in one sentence, by saying that a higher (voluntary !?) disclosure level, as far as non-financial information, is beneficial for i) sustainability performance, ii) shareholders, in terms of the enterprise value and cost of capital, iii) responsible investors, providing them with further discriminant elements, and iv) the company, in terms of reputation (Rezaee & Tuo, 2017).³

² Greenwashing is becoming a common definition, now fully adopted also by regulators and financial authorities. The IMF also makes direct reference to the term in the domain of ESG finance, where a concluding remark about ESG finance reports that "Further improvements in data, disclosure, and sustainable finance classifications remain the key policy objectives in this area to facilitate the assessment of transition-related risks and prevent greenwashing."

³ What suggests that something should be done, on the way to the strict regulation of ESG reporting.

2. Research questions and methodology

2.1. Defining the scope

Against the above background, it is suggested to provide a more operational interpretation of ESG indicators, ratings and rankings, taking the perspective of a potential retail investor trying to gauge information to make informed ESG investment decisions. The approach is to develop a methodology to better understand the data underpinning ESG information disclosed by companies and possibly discern the various ESG rankings and ratings.

According to the above-mentioned scope, the purpose of this contribution is to cross-reference and complement available data about emissions declared by companies with their level of disclosure. Among the three variables of Environment, Social and Governance, the focus is on the Environment: this is due to the wider availability of data for this pillar of the ESG architecture and also because emissions are more directly related to the environmental sustainability aspects of ESG.

Benchmarking and assessing the emission data against the level of disclosure allows to build a new model to face, and possibly reduce asymmetric information and promote more informed decision making for responsible investment. Hence the development of the "GHG Scope-1 Disclosure Adjusted Index" (GHG1_{adi}).

As the basis for data analysis, the Bloomberg[®] ESG solutions was selected as the source of data and information, considering its wide coverage of indicators, fields and companies⁴.

A total of 20 companies from five different sectors are considered to perform the analysis (Table 1): Automotive, Finance & Banking, Consumer Goods, Technology and Energy. The sectors were selected to represent both services and products of different levels of technological sophistication. Moreover, the sectors also provide diversity in the sample, allowing to bundle sectors that encompass manufacturing, research and development, innovation and distribution. All sectors are regulated, although to different extents.

Table 1. List of selected companies

Auto-	Finance &	Consumer	Tech-	Energy
motive	Banking	Goods	nology	
- BMW - Ford - Toyota - Volks- wagen	– J. P.	 Colgate Pal- molive Kraft Heinz Nestle' Procter & Gamble 	- Ama- zon - Google - Intel - Micro- soft	Exxon MobilPetroChinaRenewable Energy Group Inc.SunPower

⁴ Reportedly, Bloomberg's ESG solutions give investors access to transparent, consistent, comparable data on more than 2000 ESG fields and scores for over 11 800 global companies.

The companies were selected to provide for geographical coverage, as all companies are multinational corporations; geographical diversity to include representation of North American, European and Asian companies. Moreover, in the case of the automotive and energy sectors, the sample was built so as to include industry incumbents that are gradually transitioning towards more efficient and environmentally friendly processes and products. Namely, the automotive sample includes well established companies like Ford and Volkswagen but also Toyota that has been a leader in adopting new technologies like hybrid (towards which the incumbents are moving).

Similarly, the energy compartment includes fossilfuel and extractive industry representatives (Exxon Mobil and PetroChina) as well as companies established in pursue of alternative energy solutions (towards which the incumbents are also transiting, diversifying their operations).

The finance and banking sample includes traditional actors that are also embracing innovation in financial products and processes, as well as companies that are at the forefront of FinTech with particular focus on intermediation and payment systems.

The sample for consumer goods is the one that is more evenly grouping companies that are similar by structure, markets, technology and tradition.

The sample of technology companies includes chip manufacturing, software and technology services.⁵

Before methodology is explained, key terms are listed below in the box below. It provides a detailed description of the key terms and building blocks of the methodology behind the modelling of the elements GHG-Disclosure Adjusted Index. The taxonomy describes the variables of the model and their inter-relation.

Key Terms

ESC

Acronym for Environmental, Social, and Governance, is a set of non financial goals inspiring a new approach to economic development based on sustainability, also used to evaluate the ESG performances of companies (ESG sustainability), and the sensibility of investors to the environmental issue (see below).

Sustainable Investment:

Responsible or Sustainable Investment is a way of investing which is sensitive to ESG factors, that is to the Environmental, Social, and Governance profile of the borrowing company

Greenwashing:

Both a marketing practice and a communication strategy aimed to let an organisation to appear environmental more friendly and responsible than it really is.

⁵ Full availability of data over the last five years played also a role in our choice (see below).

GHG-1:

Direct Greenhouse Gas (GHG) Emissions of a company are defined as "those gases which contribute to the trapping of heat in the Earth's atmosphere, including Carbon Dioxide (CO₂), Methane, Nitrous Oxide, and others. Scope 1 Emissions are those emitted from sources that are owned or controlled by the reporting entity" (definition provided by the data provider Bloomberg[@]).

Environmental Disclosure Score:

"Proprietary Bloomberg score based on the extent of a company's environmental disclosure as part of Environmental, Social and Governance (ESG) data [...]. The score ranges from 0.1 for companies that disclose a minimum amount of ESG data to 100 for those that disclose every data point collected by Bloomberg." (definition provided by the data provider Bloomberg@).

GHG-Disclosure Adjusted Index:

 ${\rm GHG1_{adj}}$ index is an inductive indicator of true emissions, built *ad hoc* according to the methodology described in the \S 3.2. by combining disclosure scores and GHG scope 1 emissions.

Carbon-Backed Green Products:

Neologism based on this research, aimed to emphasize the true nature of some "green products", still based on polluting processes and carbon emission, in spite of their declared ESG friendly strategies.

2.2. Building the GHG Scope-1 Disclosure Adjusted Index (GHG1_{adj})

In building our model we extrapolated data and information concerning the environmental element of the ESG family, giving preference to the "green" aspects of sustainability. Within the environmental segment, we took into consideration the indicators for Scope 1 GHG emissions, considered as the emissions directly related to sources controlled and/or owned by the reporting entity⁶.

For the purposes of this paper, we relied upon the definitions of the Environmental Protection Agency of the US Government www.epa. gov Scope 1 emissions are direct greenhouse (GHG) emissions that occur from sources that are controlled or owned by an organization (e.g., emissions associated with fuel combustion in boilers, furnaces, vehicles).

Scope 2 emissions are indirect GHG emissions associated with the purchase of electricity, steam, heat, or cooling. Although scope 2 emissions physically occur at the facility where they are generated, they are accounted for in an organization's GHG inventory because they are a result of the organization's energy use.

Scope 3 emissions are the result of activities from assets not owned or controlled by the reporting organization, but that the organization indirectly impacts in its value chain. Scope 3 emissions include all sources not within an organization's scope 1 and 2 boundary. The scope 3 emissions for one organization are the scope 1 and 2 emissions of another organization. Scope 3 emissions, also referred to as value chain emissions, often represent the majority of an organization's total GHG emissions.

Bloomberg definition is the following: "Scope 1/Direct Greenhouse Gas (GHG) Emissions of the company, in thousands of metric tonnes of carbon dioxide equivalent (CO2e). Greenhouse Gases are defined as those gases which contribute to the trapping of heat in the Earth's atmosphere, including Carbon Dioxide (CO2), Methane, Nitrous Oxide, and others. Scope 1 Emissions are those emitted from sources

The choice to focus on Scope 1 GHG was also driven by greater availability of data for this indicator compared to other indicators within the environmental building block of ESG data.

For each of the companies in the sample, we extrapolated data for the last five years, from 2017 to 2021. Such a timeline was considered due to data availability for the selected companies in the sample.

Then we considered, among the indicators available in the Bloomberg's ESG solutions, the Environmental Disclosure Score, that measures the amount of data that a company reports publicly. The Environmental Disclosure Score does not take into account financial performance of the company.

Our model gives emphasis to the *Environmental Disclosure Score*, insofar that the disclosure score becomes to some extent the key to interpret the environmental score of companies. Hence, the definition of GHG1_{adi}.

Starting from five years average values (2017–2021) of GHG1 and Disclosure scores, the GHG1_{adj} index was built by standardising pollution (GHG1 emissions) values by company, and combining them with disclosure scores of companies themselves, having transformed Bloomberg scores in their complement to unity. This is to have an indicator of the lack of transparency instead.

After that, both std GHG1 emissions and lack of transparency scores were weighted, giving back for each of the companies involved what we treat as an *inductive indicator of true emissions*. We assume therefore that lack of transparency should suggest true emissions are (most probably) higher than declared. After a series of trials, we opted for a weighting of the index such that 60% of the scoring would depend on the amounts of GHG emissions declared and 40% hinges on the disclosure score.

3. Results

3.1. The GHG1adj scores

The following figures present the outcome of the application of the adjusted index and related analysis. The table under the Figure 1, particularly, shows how the rank is changing by comparing the case of zero weight to disclosure with the opted one (weight = 0.4), plotted on the right.

The graph exhibits the companies of the sample distributed according to their GHG1_{adj} index, as mentioned. In spite of being the companies mixed in the same picture, this clearly provides a differential between sectors, with clear distance between Technology and Energy.

The caveat is to consider that the emission levels have been standardized by sector. While a comparison between sectors can be made, this graph does not

that are owned or controlled by the reporting entity."

Namely, according to the data provider: "Proprietary Bloomberg score based on the extent of a company's environmental disclosure as part of Environmental, Social and Governance (ESG) data."

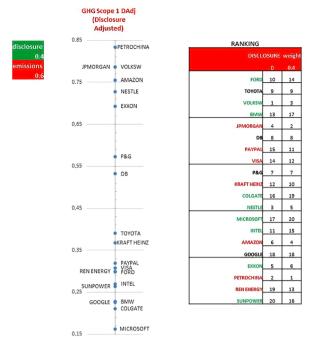


Figure 1. Companies ranking according to the adjusted index

represent the difference among the companies' emission levels, rather the relative effectiveness of the control over their emissions.

Adjusting the emission levels by the disclosure generates distance between companies and even between sectors. Those that might have been considered virtuous by taking into account only level of emissions are by virtue of this adjustment somehow penalized. Giving the disclosure rate a considerable weigh triggers interesting dynamics, lowering the position in environmental impact of a series of companies (e.g. FORD, BMW, INTEL), and adjusting to inductive higher positions in the rank some others (PAYPAL, REN ENERGY, SUNPOWER as first).

3.2. From virtuous to unaware companies, looking the best performer

In the second part of the empirical analysis, we changed the perspective, by focussing on the relationship between GHG1 and disclosure (emissions, std by sector, *versus* five years average disclosure), the actual values, now. We did this for individual sectors separately, and for the whole sample.

This allowed us to distinguish, having defined abscissa and ordinates mean values as thresholds, four separate windows in the graph (top, left and right; bottom, left and right); see the Figure 2.

In other words, all the graphs we are going to present pivot around a reference point (the one shaded), that allows to build a quadrant with four areas corresponding to categories that the authors named as follows:

 Virtuous: those are the companies with low GHG emissions and high disclosure rates, suggesting lower pollution with a higher degree of reliability of information. In principle, this category should

- include companies that are environmentally friendly and transparent, ideally serving as example to their industry peers;
- ii) Honest: this category groups those companies that have high GHG emission and high disclosure rates, indicating that the companies pollute but also are open and transparent, potentially indicating their concerns about environmental compliance but with high pollution that they are maybe trying to address through processes of green transition that will yield results in the future;
- iii) Unaware is the group of companies featuring high emissions accompanied by low disclosure rates, making one wonder what the pollution levels could be with higher disclosure or whether the company is disclosing only those information and data that show their pollution; and finally
- iv) Maybe Deceitful represented by companies displaying low emissions coupled with low disclosure, a situation that might lead a skeptical observer to question whether the lower emissions are a function of lower disclosure levels.



Figure 2. Categories and their position against the "core" of the index

Individual pictures below here, in the Figure 3.

The whole framework, on the other hand, where all companies are plotted, provides an interesting map.

The standardization of the data allows for comparison between companies only within the reference sector: there is a physiological level of pollution that is different by sector (as mentioned in the methodology section, Energy is by default a more polluting sector than Technology). Nonetheless, the "grouping" effect of this graph illustrates how companies from different sectors with different emission levels may be grouped in the same position of the graph.

The map in the Figure 4 also shows, as an example, the distance between Deutsche Bank and the "benchmark"/ the best performer. And Euclidean distances are calculated as follows (Table 2):

Bottom-left window in the graph (Figure 5) presents a set of companies whose declared low emissions we may hardly "validate", because of lack of transparency, in some instances a considerable one.

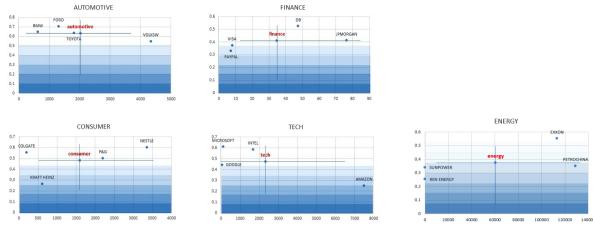


Figure 3. Map of companies by sector

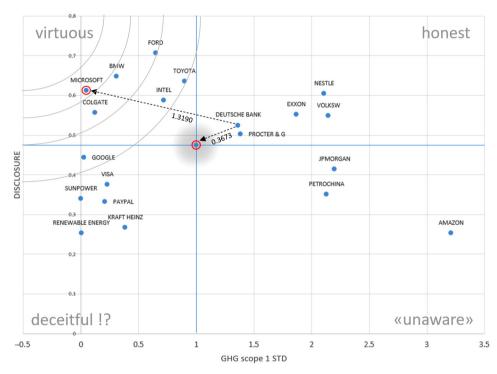


Figure 4. Emission levels by sector (standardised) Vs five-year mean disclosure

Table 2. Emissions (standardized) Vs. Disclosure, 5-year means, Euclidean distance

Benchmark	Best
0.4226	0.6061
0.1907	0.8491
1.1491	2.0998
0.7112	0.2647
1.2016	2.1613
0.3673	1.3190
0.8054	0.3229
0.7779	0.2982
0.3844	1.3402
0.6500	0.4825
	0.4226 0.1907 1.1491 0.7112 1.2016 0.3673 0.8054 0.7779 0.3844

End of Table 2

Distance from	Benchmark	Best
Colgate	0.8808	0.0936
Nestle	1.1167	2.0614
Microsoft	0.9620	0.0000
Intel	0.3034	0.6708
Amazon	2.2217	3.1830
Google	0.9770	0.1707
Exxon	0.8711	1.8208
PetroChina	1.1370	2.0986
Renewable Energy	1.0223	0.3626
SunPower	1.0092	0.2770

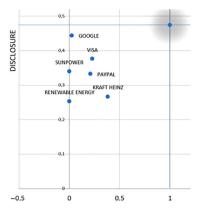


Figure 5. Companies with considerable low level of transparency and GHG1

At the end of the analysis, we present two more graphs, where a series of ellipsoids are drawn, incorporating: i) all companies for each sector (Figure 6), and ii) closer companies, by excluding outliers (Figure 7).

What is worthy to note, is that discounting for the outliers, there appears to be a concentration of companies by sector that can lead to suggest that the automotive sector would offer convincing ESG investment rationale with sound level of credibility. The technology sector is also well positioned with credibility and emission levels that would imply a degree of reliability higher than those of consumer goods. The financial sector appears to be affected by low disclosure instead.

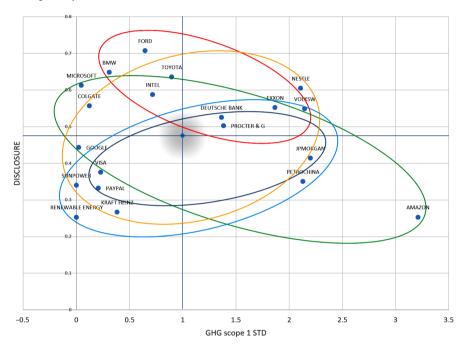


Figure 6. Emission levels by sector (standardised) vs five-year mean disclosure, grouping by sector

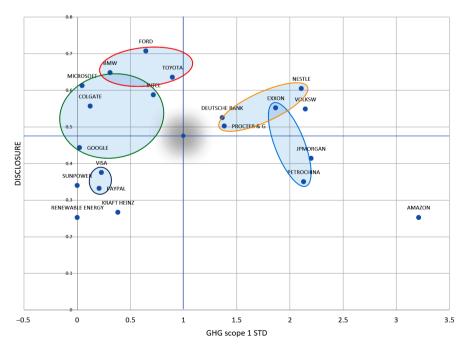


Figure 7. Emission levels by sector (standardised) Vs five-year mean disclosure, grouping by sector performance

Conclusions

Sustainable finance is a worthy development that should be supported and encouraged. The growing attention towards ESG finance is a promising signal that corporations, investors and intermediaries as well as consumers are all aiming towards a greener and more sustainable planet. The emergence of ESG ratings and rankings is also a welcome feature of this process of societal and economic transformation, as those tools and mechanisms will guide investors in the years to come and steer investment decisions, ideally rewording the virtuous actors involved.

The purpose of this paper was to reveal a few short-comings that may still affect the viability and reliability of some indicators and ratings, hence making those ESG rankings a second-best solution that should soon be addressed.

Weighing the relevance of the disclosure index reveals what could be considered a self-serving mechanism of ESG reporting, in which part of the information and data relating to ESG originates from the companies that want to be ranked. This makes the mechanism vulnerable to inefficiencies and exposed to possible negligence.

Sustainable finance should hinge on trust and confidence established through built-in mechanisms of transparency and reliability. Pivotal to establish such trust is the degree and depth of disclosure of information in a standardized fashion. The data analysed thus far in the building of the Disclosure Adjusted Index, appear to suggest the self-serving nature of ESG disclosure, with disclosure rates at levels not adequate to develop trust and confidence.

The pitfall may reside in the effort to accelerate the mainstreaming of ESG finance by shortening the physiologic timing of adoption of and adherence to ESG standards from companies, i.e. gradually facilitate the compliance of companies with ESG requirements and guidelines as well as increasing their disclosure levels.

Such rush to ESG may generate room for speculative attitudes that may undermine the robustness of the financial system and trigger attempts of "bad finance", in which the temptation to take advantage of asymmetries of information may lead to the development of ESG related financial products to lure conscious investors even though those products are not necessarily grounded in ESG compliance nor corroborated by robust evidence and information.

This may also raise red-flags for a renovated role of regulatory and supervisory bodies to monitor more carefully the development and adoption of ESG metrics, ratings and rankings that are driving investment decisions that could be potentially flawed by low disclosure rates.

ESG ratings may not be a substitute for robust financial and operational information about companies for informed financial decisions. Moreover, the shortcomings deriving from low disclosure rates should call for more careful consideration of the ESG ratings that may

not be reliable as a sole source of information for investment decisions, especially for those retail investors that may be more vulnerable to tinkering with ESG-related indicators.

In other words, there could be a significant risk for retail investors to embrace the ESG philosophy, and maybe to renounce to the possibility to direct their interest towards more profitable, traditional investments, while investing in what we ought call *Carbon-Backed Green Products*, to point to ESG financial products that are in reality still engrained in not so sustainable assets and investments.

Having emphasized how the lack of disclosure, at least for the moment, risks to void of value and meaning the ESG statistics currently provided, and having attempted to adjust available data to obtain a better picture of the situation, the unthinkable events of the conflict in Ukraine (February 2022) give us the opportunity to complement the outcome of the empirical analysis, and the above considerations, with a few thoughts from the latest news events we provide in the box below.

The flames of war are revealing uncomfortable features of some ESG financial products. The sanctions imposed on Russia highlight how the ESG financial sector may be adversely affected by a (potential) sovereign and corporate financial default of the Russian Federation. Reportedly, ESG funds held more than 8 USD billion in Russian assets as of late February 2022. Holdings encompass not only government bonds, but also stakes in large corporations with strong ties with the Russian government and / or the Kremlin, like Gazprom and Rosneft in the energy sector and Sberbank in banking & finance.

Such assets would not sound unusual for traditional investment funds seeking to diversify, also geographically, their holdings. Yet, such investments from western ESG funds (i.e. EU or US) may raise questions about the due diligence on the three dimensions of ESG investment:

- 1) Environmentally, those energy companies may sound relatively traditionally based on fossil fuels rather than innovative in alternative energy and technologies.
- 2) Socially, a skeptical reader may question the appropriateness of investing in treasury and corporate bonds of companies associated with a government often referred to as unreliable if not outright hostile by the West, in consideration of aggressive stances in Georgia (2008), annexation of Crimea (2014), support to separatist movements in Donetsk and Luhansk (2014), continued alleged violations of human rights and civil liberties in Russia, interference and tampering with third countries' elections and many other wrongdoings at home and abroad culminating with the invasion of Ukraine in 2022.
- 3) Governance-wide, investing in the country with the lowest rating in the 2021 Corruption Perceptions Index of Transparency International² coupled with a blurred human-rights record may raise a few eyebrows even in the less scrupulous investors.

The above may lead to think that ESG could in some instances be a label under which traditional financial product development and investment continue in conventional fashion. In some instances, the ESG label may be used to entice investors lured by the prospects of adequate returns coupled with social and environmental fulfilment. Little did the retail investors know that their socially responsible and governance conscious investment were instead financing

military operations (that not only may be socially questionable, but also have a considerable carbon footprint). No donation to refugee assisting NGOs nor victim relief funds may alleviate such a strain for socially conscious investors.

- ¹ "ESG Funds Get 'Brutal Wake-Up Call' on \$800 Million Russia Bonds", available at https://www.bloomberg.com/news/articles/2022-03-15/esg-funds-get-brutal-wake-up-call-on-800-million-russia-bonds, last visited March 15 2022.
- 2 Reportedly, Russia is the lowest rated European country, ranking 136th out of 180 countries

https://www.transparency.org/en/cpi/2021 last visited March 12, 2022.

Disclosure statement

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APPENDIX

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