
A PITFALL IN ETHICAL INVESTING: ESG DISCLOSURES REFLECT VULNERABILITIES, NOT VIRTUES

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It is widely believed that ESG (Environmental, Social, Governance) investing reduces regulatory and reputational risks. In a large global panel, we find that business ethics controversies and regulatory issues are more likely for firms that disclose a richer set of ESG-friendly policies. The effect is attenuated by controlling for size, industry, and country but remains economically and statistically significant. We also show that some prominent ESG indices favor companies that disclose more ESG policies and as a consequence have greater controversy exposure than an ESG-unaware benchmark.



Does Environment, Social, Governance (ESG) investing work? On the affirmative side, Edmans (2011) and Kahn *et al.* (2015) show higher returns along selected dimensions of social responsibility. On the negative side, it is well known that “sin” stocks tend to outperform (see Hong and Kacperczyk, 2009; Dimson *et al.*, 2015). The performance question is unlikely to be resolved in the near future; after all, there is still disagreement on the overall value of active management after

nearly 50 years of research (see Jensen, 1968; Ellis, 2015).

In this paper, we focus directly on ethical and social performance rather than returns. Our measure of performance is the publication of business ethics controversies or regulatory actions against the firm.¹ We choose these outcomes because they are objective, widely applicable, and as we show below are also associated with negative stock market reactions.²

Like most observers, we expected that an ESG-friendly profile would be associated with better social performance.³ We were wrong. Firms that disclose the widest range of socially responsible policies such as signing the UN Global Compact, disclosing “family friendly” employment

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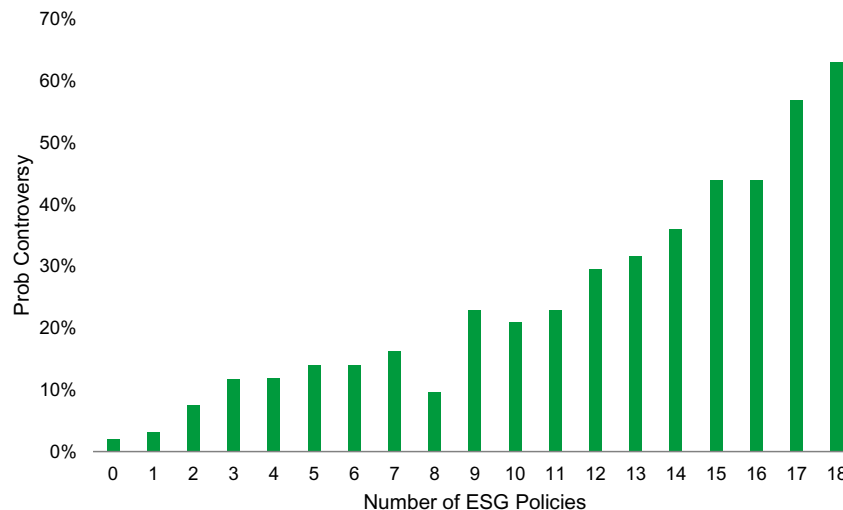


Exhibit I: Fraction of firms with controversy in subsequent year as a function of the number of ESG policies in a given year, 2003–2014.

policies, and monitoring suppliers' labor practices are *more* likely to experience ethics controversies and adverse regulatory actions in the future. Exhibit I summarizes the relationship between the number of ESG policies in a given year and the occurrence of a controversy in the following year in a sample of all MSCI World and MSCI EM firms covered by Thomson Reuters' Asset 4 database from 2003 to 2014 (17,999 firm-years).

Our results do not refute the view that all else equal, a stronger ESG profile can reduce exposure to ethical and legal issues.⁴ The key, we believe, is that all else is not equal. First and most obviously, we find that larger firms have more of both policies and controversies. Controlling for size shrinks the relationship in Exhibit I by about a third. The proportion of a firm's sales from foreign countries has a qualitatively similar effect and interpretation; a wider set of stakeholders increases the chance the firm will fall afoul of at least one. Continuing on the country theme, we know that ESG interest is highest in Western Europe, and to a somewhat lesser degree in the US and Canada. We find that Asia-Pacific companies tend to have both fewer policies and fewer controversies than European firms, but exposure

to controversies increases even more rapidly with policies in the Asia-Pacific region. We expected strong industry effects but they turn out to be quite modest drivers of controversy incidence and our result that controversies increase in policies also holds *within* industries. We find that positive association between ESG policies and future controversies in Exhibit I remains large and statistically significant after accounting for all these effects.

A clear research implication is that we should devote attention to understanding *why* firms present different ESG profiles. Academic work has tended to focus on management preferences and incentives (see Cheng *et al.*, 2013; Benabou and Tirole, 2010), but it appears that firms' social and business environment is a much stronger driver. More work is required to isolate the key facets of the environment that matter for social performance. Industry effects are likely weak because standard industry classifications are based mostly on firms' outputs rather than on their social environment. A more tailored industry scheme could be extremely helpful for assessing firms' ESG practices and risks.

Regardless of causality, our results have a clear practical implication. Screening firms based on

popular ESG features will *not* deliver the goods in terms of reduced ethical and social downside. To our knowledge no one has advocated such a crude screening, and ESG practitioners also consider the “E” and “G” components. However, our last section presents evidence that prominent ESG index providers favor firms with more policies, and as a consequence show more rather than less exposure to subsequent controversies.

The outline of this paper is as follows. The next section summarizes the controversy and policies data. We then document the relationship between policies and controversies. Finally, we analyze the holdings of some prominent global ESG indices. While each index has its own methodology, we find each one loads on disclosed policies. As a consequence, we argue, they tend to be more and not less exposed to controversy than an ESG-unaware benchmark. We conclude with some directions for future research.

1 Descriptive statistics on ESG policies and ethics controversies

1.1 Policies

Thomson Reuters’ Asset 4 database collects and classifies companies’ ESG disclosures into 18 distinct “Socially Aware” policies and practices. It covers over 4,000 listed firms from 2002 to 2014 (see QSG Research Team, 2009; Utz and Wimmer, 2014). Some of the policies reflect adherence or signing on to centralized standards including the UN Global Compact and the Ethical Trading Initiative. Others are less standardized but intuitively summarized by Asset 4 into categories such as “Monitors Human Rights on its or its Suppliers Facilities”. In the Appendix we present a full list and summary of the policies.

We focus on the MSCI World plus MSCI EM universes to give a broad range of countries and firms but also focus on what popular ESG indices cover.

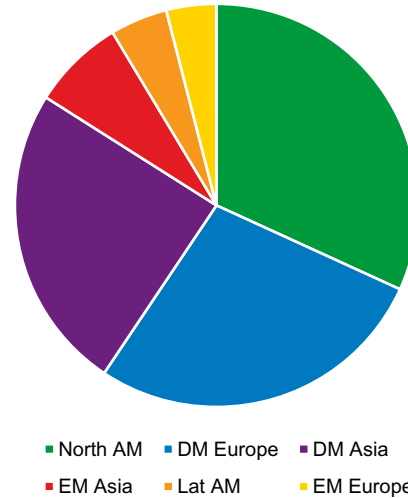


Exhibit II: Distribution of sample by region.

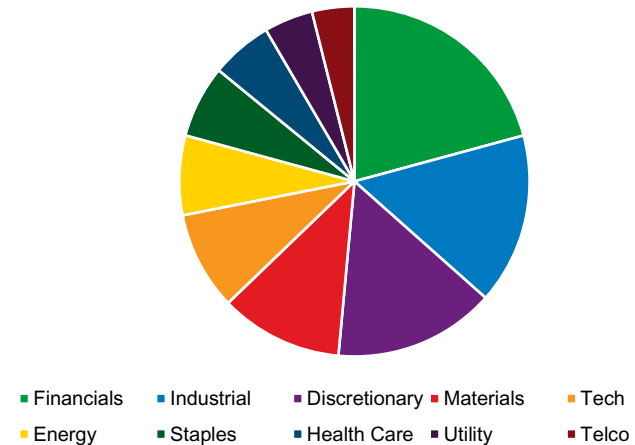


Exhibit III: Distribution of sample firms by GICS 2-digit sector.

Exhibits II and III show our coverage by geography and sector. We distinguish four broad regions (North America, Europe, Latin America, and Asia-Pacific) and within regions we also adopt MSCI’s Emerging/Developed classification.

North America (Canada plus US) is the largest category but we have strong representation in developed Asia and Europe. Emerging market firms represent just over 15% of our sample by count. Exhibit III shows our coverage by sector.

Consistent with the shape of global equity markets, financials are the largest category with

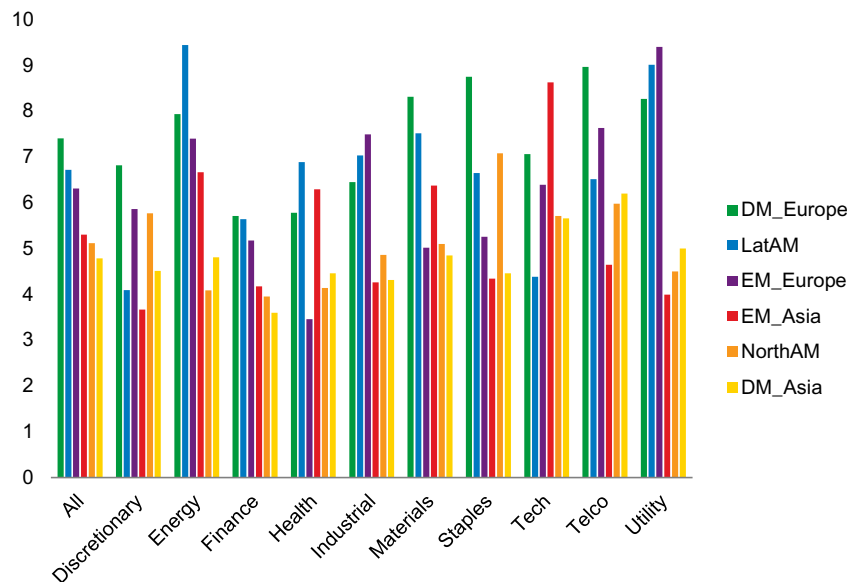


Exhibit IV: Average number of Social Policies per firm, by sector and region.

Industrials and Consumer Discretionary also having a large number of listed firms.

How does the adoption of ESG policies vary across these dimensions? Exhibit IV summarizes the average number of policies by region and by industry for our sample.

Regional effects are present but not dramatic; only the difference between DM Europe and DM Asia in the full sample is statistically significant. Recall however that even in the less-developed countries, the firms in our sample are large and prominent, so national patterns could be muted. There are also no statistically significant industry patterns.

1.2 Controversies

We study the performance of ESG firms on the social dimension. We focus on a set of outcomes that are applicable to any firm and are clearly related to social performance; controversies reported in the press and in government publications. The most frequent controversies are classified by Asset 4 as “business ethics”.

These represent lawsuits and regulatory actions covering a wide range of issues such as mistreatment of franchisees, inflating prices charged to government health care systems, and gender discrimination in hiring and promotion. The next most important are anticompetitive actions related to excessive charges, price fixing, or exploitation of suppliers. The remaining categories are tax fraud, dealings with sensitive or problematic countries, and controversies relating to treatment of indigenous peoples. Exhibit V summarizes the relative incidence of these different categories for an average firm-year in our sample period.

We will henceforth treat all five categories as simply instances of controversies, as there are no statistically meaningful differences in their industry or country incidence, or the return associated with the events. Put another way, Asset 4’s sub-categories for controversies do not appear to distinguish materially different events. In the next section we separately analyze the controversies associated with negative versus positive stock returns, but it would be interesting in future

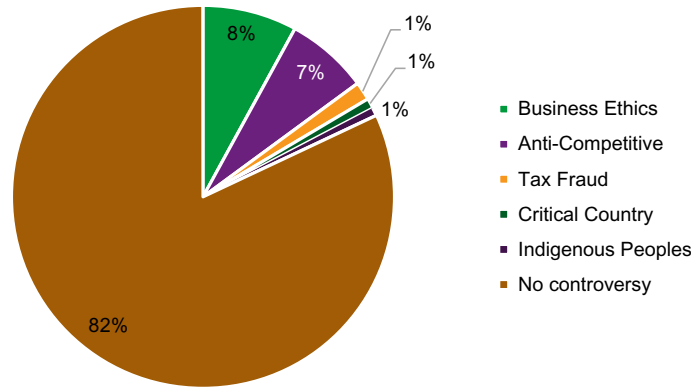


Exhibit V: Proportion of firms by type of controversies, 2002–2014.

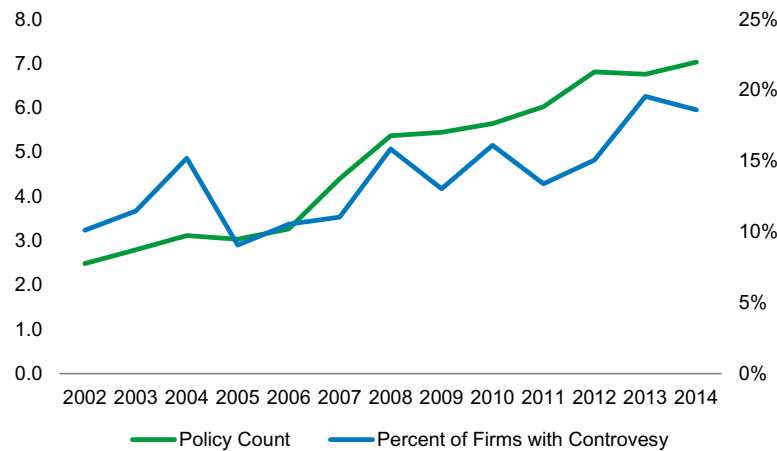


Exhibit VI: Average policy count and likelihood of controversy per firm by year.

research to textually or otherwise distinguish more and less severe issues.

Exhibit VI shows that the incidence of controversies and policies shares a positive time trend, likely due to increased attention to ESG issues. Neither trend is related to stock market performance, which makes sense since we are focusing on the social rather than the financial dimension. However, we clearly need to control for time trends to isolate the relationship between policies and controversies.

Exhibit VII summarizes the incidence of controversy across industry and region. DM Europe firms have the most controversies, while Asian firms tend to have the least. Sector patterns are

somewhat stronger but as we see later this is mostly due to the large size of firms in Energy or Telecommunications in Latin America and Emerging Europe.

Controversies and legal issues are unpleasant, but do they matter to shareholders? The explicit fines or penalties are frequently small so the value effect would have to be cumulative or reputational.⁵ Exhibit VIII shows that controversies do negatively affect returns. The controversy data is only available annually so we use a full year window to gauge returns.

The raw return difference is just under 3%, and is significantly different from zero at the 5% level.⁶ The return differences are more than double and

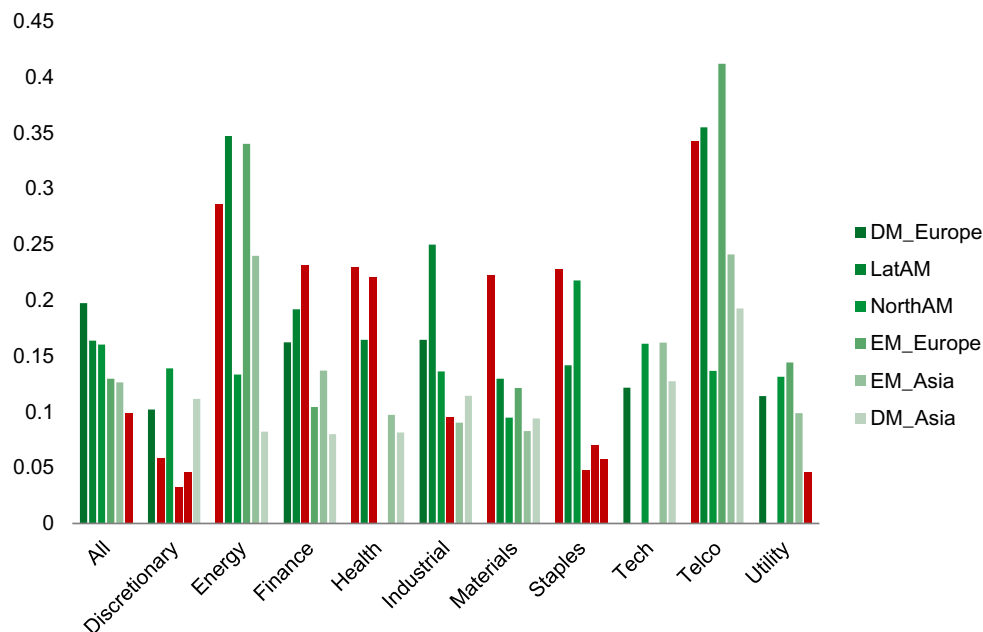


Exhibit VII: Likelihood of controversy per firm-year, by sector and region.

Exhibit VIII: Average annual raw and adjusted returns for firms that have and do not have a controversy in a given calendar year, MSCI All Cap Universe.

	No controversy ($n = 15,489$)	Controversy ($n = 2,510$)
Raw returns	3.2%	0.3%
Size, industry and country- adjusted returns	0.6%	-6.4%

become significant at the 1% level if we control for size (large firms have more controversies and tended to outperform in our sample period), industry, and country. On a nonparametric basis, size and country-adjusted returns are negative in 57% of the controversies (1,431 instances). We therefore conclude that the controversies we identify are a valid instrument for many of the reputational and regulatory risks that a responsible investor would like to avoid.⁷

2 What explains controversies?

2.1 Univariate analysis

Exhibit IX presents some key financial and related metrics for firms that do and do not experience a controversy in a given year.

There is very little difference in traditional financial ratios (leverage, valuation, profitability, liquidity, or risk) for firms that do experience a controversy compared with those that do not. Controversy firms tend to be larger and to have a greater number of ESG policies (p value for differences $<1\%$), and also tend to have more of their sales in foreign countries (p value for difference = 4.6%).

2.2 Regression analyses

Exhibit X presents a univariate and a multivariate logit model where the dependent variable is a dummy indicating the presence of a controversy in the next year and the explanatory variables are

Exhibit IX: Descriptive statistics conditional on a controversy in the next financial year. Financial data from Worldscope, Market Data from BARRA.

Variable	No controversy ($n = 15,489$)			Controversy ($n = 2,510$)		
	Mean	Median	SD	Mean	Median	SD
Debt/assets	0.182	0.159	0.149	0.177	0.158	0.129
Market/book	3.13	2.16	3.19	3.04	1.97	2.78
ROA	0.099	0.087	0.0571	0.098	0.089	0.057
Cash/assets	0.135	0.093	0.071	0.125	0.091	0.079
Market Cap	9978	4030	22140	20201	9061	14956
Beta	1.02	1	0.253	1.056	1.03	0.273
Volatility	0.268	0.252	0.096	0.256	0.232	0.104
ESG policies	5.01	3	4.08	8.63	8	5.07
Foreign Sales Ratio	0.347	0.388	0.351	0.47	0.467	0.311

Exhibit X: Logit estimate of the probability of a controversy in the following year Country and Industry fixed effects included in Multivariate Specification. Standard errors allow for clustering by year, country, and industry.

Variable	Univariate coefficient (p value)	Multivariate coefficient (p value)	Standardized coefficient
Number of ESG policies	0.128 (0.00)	0.078 (0.00)	0.337
Current controversy		1.778 (0.00)	0.640
Year (time trend)		0.060 (0.00)	0.194
Ln (Market Cap)		0.480 (0.00)	0.696
Foreign Sales Ratio		0.00078 (0.072)	0.098
Pseudo- R^2	8.8%	23%	
N	17,999	17,999	

the current number of ESG policies, the presence of a controversy this year (lag_controversy), size, time trend, Foreign Sales Ratio, and country plus the 23 GICS 4-digit Industries represented in our sample. We omit traditional financial ratios because Exhibit IX indicates that these have little effect.

The first column shows that policies alone explain almost 9% of the likelihood of future controversy. The second column introduces all controls and consistent with the view that policies reflect the firms' inherent exposure to controversy, they attenuate but do not remove the effect of the policy variable.

The explanatory variables in Exhibit X are generally on different scales. The last column presents standardized coefficients so that the magnitude of the estimated effects can be directly compared. The largest effects are size and past controversies, but the next most important is policy count. In more intuitive terms, a firm with 15 policies has slightly more than twice the chance of controversy than a comparable (in size, foreign sales, industry, and year) firm with only five policies.

The analysis thus far has treated all controversies as equally problematic. None of our results vary substantially across the Asset 4 sub-categories

Exhibit XI: Negative versus non-negative return controversies. Logit estimate of the probability of a signed controversy in the following year. Country and industry fixed effects included in multivariate specification. Standard errors allow for clustering by year, country, and industry.

Variable	Univariate, negative return (<i>p</i> value)	Univariate, positive return (<i>p</i> value)	Multivariate, negative return (<i>p</i> value)	Multivariate, positive return (<i>p</i> value)
Number of ESG policies	0.148 (0.00)	0.109 (0.00)	0.0832 (0.00)	0.0641 (0.00)
Current controversy			1.180 (0.00)	1.045 (0.00)
Year (time trend)			0.280 (0.01)	0.471 (0.00)
Ln (Market Cap)			0.780 (0.00)	0.602 (0.00)
Foreign Sales Ratio			0.00067 (0.10)	0.00082 (0.81)
Pseudo- <i>R</i> ²	7.8%	3.5%	21%	15%
<i>N</i>	10,259	7,740	10,259	7,740

(e.g., business ethics versus anticompetitive issues). But stock market performance surrounding the controversy is a potentially useful indicator of severity. We therefore repeat the estimates in Exhibit X for the controversies which are associated with negative versus non-negative size and country-adjusted returns as in Exhibit VIII. Exhibit XI repeats the logit estimates from Exhibit X, sub-setting by the sign of the abnormal return in the year of the controversy.

It appears that ESG-friendly firms not only have more controversies, but also they are more likely to be associated with a negative market reaction. This could be because the controversies are genuinely more material, or because the market was as surprised as we were to find controversies in these firms. As the two sample sizes are both reasonably large, most key are significantly different from zero at the 1% level.

2.3 Additional results

All else equal, a firm that discloses more ESG policies is more likely to be involved in subsequent controversy. We strongly suspect this result is not causal but rather reflects aspects of the firms' environment that are not captured by size and our other controls. In this section we present two

attempts to capture the underlying drivers. We first look more deeply at the industry issue. While there are only mild industry patterns in either policy or controversy incidence, it is quite possible that the *relationship* between policies and controversies is driven by some key industries which are subject to greater scrutiny by third parties. Exhibit XII summarizes the results of adding a set of industry interaction terms to our logistic regression from Exhibit X. We present the point estimate of the effect of the ESG policy count for each industry, equal to the base effect (0.078) plus the estimated industry dummy interaction effect.⁸

The positive association between policies and controversies is present in all but four industries and none of the negative coefficients are statistically different from zero. The industries with the strongest relationships do appear to be ones with more inherent exposure to controversy. Household products and transport can involve injuries and liabilities, while energy, diversified financials, and pharmaceuticals are common targets for negative publicity. It might also be interesting to stratify some of these industries by size but statistics are unreliable due to resulting small sample sizes.

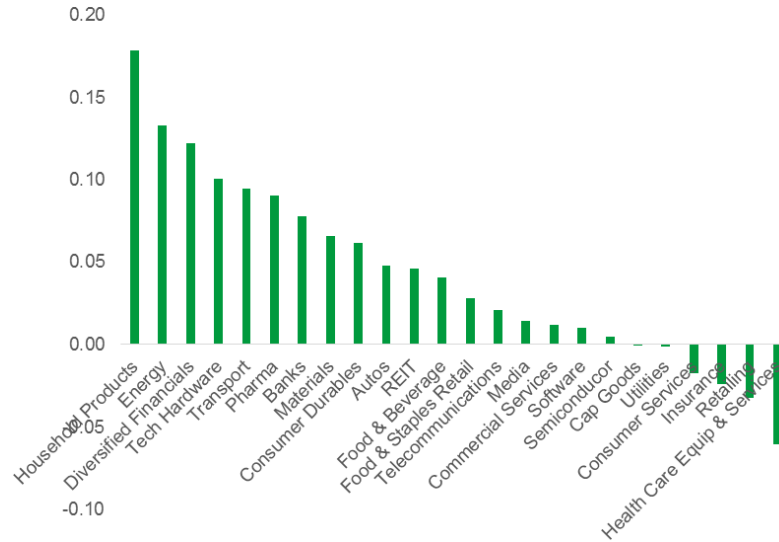


Exhibit XII: Effect of ESG policies on likelihood of controversy by GICS 4-digit industry.

Exhibit XIII: Which leads which? First two columns are OLS estimates of change in policies next year on current change in controversy, and change in controversy next year on current change in policies. Standard errors allow for clustering by year, country, and industry. Last two columns are logit estimates for dummy variables indicating increases in policies or a new controversy.

Variable	Next year change in policies	Next year change in controversy	Dummy for policy increase next year	Dummy for controversy next year
Change in controversy	0.0492 (0.128)			
Change in policy count		0.0047 (0.002)		
Dummy for controversy this year			0.238 (0.000)	
Dummy for policy increase this year				0.362 (0.000)
R^2	1.71%	3.41%	5.93%	8.57%
N	17999	17999	17999	17999

Exhibit XIII takes a time-based approach to causality inspired by Granger (1969). Experiencing a controversy is a late but clear indicator that the firm is in a sensitive environment and introducing additional ESG policies could be part of the response. Exhibit XIII first asks whether a change in the firm’s controversies this year predicts an increase in the number of policies. We then reverse the experiment, asking if a change

in the number of policies this year predicts a change in controversies next year. We begin with OLS regressions using the simple changes in policies and controversies. However, in both cases, the negative values are hard to interpret. For example, a -1 for “change in controversy” indicates the firm had a controversy last year and no controversy this year. If firms do not systematically reduce policies in the next year, it will

weaken our result. We therefore repeat the experiment using dummy variables to indicate whether or not the firm experienced a controversy this year and not last year, and whether or not the firm increased its policy count.

The results suggest two-way causation. The OLS estimates say that new policies lead to controversy, but new controversies do not systematically lead to new policies. The logit estimates imply that both forces are at work, which makes sense in our framework. A new controversy leads to the adoption of additional policies, as the controversy was a signal to the firm of its exposures. Since firms learn about their environments in many ways beyond public controversies and regulatory actions, it is also intuitive that new policies forecast subsequent controversies.

3 ESG indices are prone to controversy because of reliance on policies

To document the practical aspects of the ESG policy–controversy relationship, we examine three global indices that all use MSCI World as their base universe. As the ESG movement is quite new, many of the key indices do not have a long history. For comparability, we restrict attention to a restricted cross-section of holdings. The indices are all formed on a simple exclusion basis, so in each case we take the list of stocks that are included as of December 31 of the year and compare the incidence of controversies in the subsequent year relative to the stocks that have been excluded. The indices are:

MSCI World (approximately 1,600 stocks), which serves as our benchmark.

MSCI World ESG (approximately 800 stocks), which roughly takes the top half of ESG scorers in each major sector. We focus on this broad-based index although we obtain stronger (i.e., even greater exposure to controversies) with MSCI’s

more focused “Sustainability” and “Development” indices. We have data for this index for the years 2012–2014.

The United Nations Global Compact 100 Index, for 2013.

The Dow Jones Sustainability Index World Diversified (approximately 800 stocks), also for 2013.

Each of the ESG index providers’ websites and documents broadly describes the criteria used to include or exclude stocks, but none present an explicit formula or set of rules. MSCI has a full time ESG research team, and the Dow Jones Sustainability Index is formed with the assistance of a specialized ESG firm that uses their own questionnaire which has substantial overlap with the topics covered by Asset 4 (RobecoSAM, 2014). We can however determine whether the final output of their processes (the stocks they choose to include and exclude) results in more or less policies and controversies.

The first row of numbers in the cells of Exhibit XIV show that each of the indices’ holdings loads on the Asset 4 Social policies. The

Exhibit XIV: Average number of policies and controversies for firms in ESG indices versus remainder of MSCI World Index Universe.

	MSCI ESG	Dow Jones	UN
Ave. Policies and subsequent controversies of included firms	8.78 0.19	9.68 0.22	10.13 0.27
Ave. policies and subsequent controversies of excluded firms	6.01 0.15	3.70 0.12	2.71 0.09
<i>p</i> Value for difference	0.003 0.047	0.001 0.013	0.000 0.004

Exhibit XV: Logit estimate of the effect of index inclusion on the likelihood of a controversy next year. MSCI ESG estimates are 2012–2014 with year fixed effects, while the Dow Jones and UN are for 2013 only.

	MSCI ESG only	MSCI ESG and policies	Dow Jones only	Dow Jones and policies	UN only	UN and policies
Index inclusion dummy	0.145 (0.051)	−0.128 (0.096)	1.238 (0.000)	0.505 (0.010)	0.017 (0.003)	−0.213 (0.512)
Policy count		0.151 (0.000)		0.157 (0.000)		0.182 (0.000)
Pseudo- R^2	0.5%	9.3%	2.2%	11.1%	1.32%	9.2%

second cell shows that their included firms tend to have more controversies in the next year than the firms excluded. The firms included in the ESG indices exhibit between two and seven more policies than the firms excluded, and in each case the difference is significantly different from zero. Size and other controls have no effect, which is expected as the indices all endeavor to match the benchmark along these dimensions.

All the indices show a significant statistical reliance on the policies in our study, and along with that a higher rather than lower incidence of controversy. The strong results for the UN index could reflect the fact that we focus on policies in the Social dimension and omit policies aimed at either the Environment or Governance. The UN index is focused on Human Rights, Labour, Environment, and Anti-corruption and like our policy and controversy issues, does not claim to account for Governance.

Exhibit XV presents a logit regression predicting controversy incidence. The univariate regressions show that firms included in the indices are more and not less prone to controversy in the subsequent year. For the MSCI ESG Index (2014) the difference is 16% for included versus 11% for excluded. For the Dow Jones and UN indices the incidence of controversy in the next year is 34% and 29%, respectively versus 10% for the excluded firms. The bivariate regressions show that excess exposure is largely due to reliance

on policies. Once we control for policies the MSCI ESG and UN indices become somewhat less prone to controversy and the excess controversies of the Dow Jones index are cut by more than 50%.

It seems that the criteria used by the ESG indices *other* than company-disclosed policies are useful in avoiding controversy. The fact remains that indices which claim to consider social criteria fail to outperform a passive Market Cap-weighted benchmark on this dimension. At least based on the statistics, this appears largely due to their reliance on firms' disclosed policies and procedures. We have shown these to be a perverse indicator of their social performance.

4 Limitations and directions for future research

Our study is distinguished by focusing on social outcomes rather than returns. It is only a first step; controversies and regulatory actions are clear and relatively easy to classify, but focus exclusively on the negative. A recent report by Reynolds *et al.* (2016) presents a rich set of examples of other social and environmental aspects including job creation, opportunities for vulnerable workers, and land and resource footprint. Broader measurement of social outcomes and their association with firms' characteristics and policies represent an important research area for both academics and practitioners.

Appendix: List of policies from Asset 4 database.

Policy name	Description
Diversity and Opportunity Policy Elements/Diversity and Opportunity	Does the company have a diversity and equal opportunity policy?
Employee Health & Safety Training/Supply Chain Health & Safety Training	Does the company train its executives or key employees on employee health & safety in the supply chain?
Ethical Trading Initiative ETI	Is the company a member of the Ethical Trading Initiative (ETI)?
Flexible Working Schemes	Does the company provide flexible working schemes?
Fundamental Human Rights ILO or UN	Does the company claim to comply with the fundamental human rights convention of the ILO or support the UN declaration of human rights?
Global Compact	Has the company signed the UN Global Compact?
Health & Safety Management Systems	Does the company have health and safety management systems in place like the OHSAS 18001 (Occupational Health & Safety Management System)?
Human Rights Monitoring	Does the company monitor human rights in its or its suppliers' facilities?
Human Rights Policy Elements/Child Labor	Does the company have a policy to avoid child labor?
Human Rights Suppliers	Does the company report or show to use human rights criteria in the selection or monitoring process of its suppliers or sourcing partners?
Human Rights/Monitoring	Does the company monitor human rights in its or its suppliers' facilities?
Human Rights/Suppliers Social Impact	Does the company report or show to use human rights criteria in the selection or monitoring process of its suppliers or sourcing partners?
Maternity Leave	Does the company claim to provide generous maternity leave benefits?
OECD Guidelines for Multinational Enterprises	Does the company claim to follow the OECD Guidelines for Multinational Enterprises?
Product Access Low Price	Does the company distribute any low-priced products or services specifically designed for lower income categories?
Supplier Diversity	Does the company describe a supplier diversity program or initiative?

Appendix: (Continued)

Policy name	Description
Technology Know-How Sharing	Does the company voluntarily share licenses, patents, intellectual property or useful technology with developing countries, or allow generics under specific conditions?
Training and Development/Supplier ESG Training	Does the company provide training on environmental, social or governance factors for its suppliers?

Notes

- ¹ See, for example, W. M. Mercer (2014), “An Investment Framework for Sustainable Growth”.
- ² Environmental issues such as oil spills or greenhouse gas concerns are highly concentrated in energy production and distribution.
- ³ For example, Lee *et al.* (2015, p. 4) assert that “. . . ESG scores are linked to future stock performance; companies that integrate ESG considerations into their operations are able to avoid some financial losses related to ESG issues, such as environmental fines or labor disputes”. See also W. M. Mercer (2014) or Graver (2003) report.
- ⁴ Hong and Liskovitch (2016) find that an appealing ESG profile tends to mitigate the fines and losses for US firms that fall afoul of the Foreign Corrupt Practices Act. This result is conditional on actually being prosecuted; we simply step back and generalize to the observation that firms that anticipate more issues are more willing to invest in ESG.
- ⁵ Karpoff and Lott (1993) “The Reputational Penalty Firms Bear from Committing Criminal Fraud,” *Journal of Law and Economics* **36**, 757–803 finds value losses more than an order of magnitude greater than the explicit damages.
- ⁶ Our standard errors allow for clustering by year as well as by firm; see Guld *et al.* (2010).
- ⁷ While the controversies do have significant return effects, they are not sufficiently widespread to generate material performance differences. As Exhibit I indicates, only about 10% of the population has a controversy in an average year. So even a perfect ability to avoid these firms would only generate the order of 25 basis points of alpha (raw return spread of 2.6% affecting 1/10 of the firms).
- ⁸ An intuitively equivalent but less statistically efficient approach would be to estimate a separate model for each industry.

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