

A Pitfall in Ethical Investing: ESG Disclosures Reflect Vulnerabilities, not Virtues

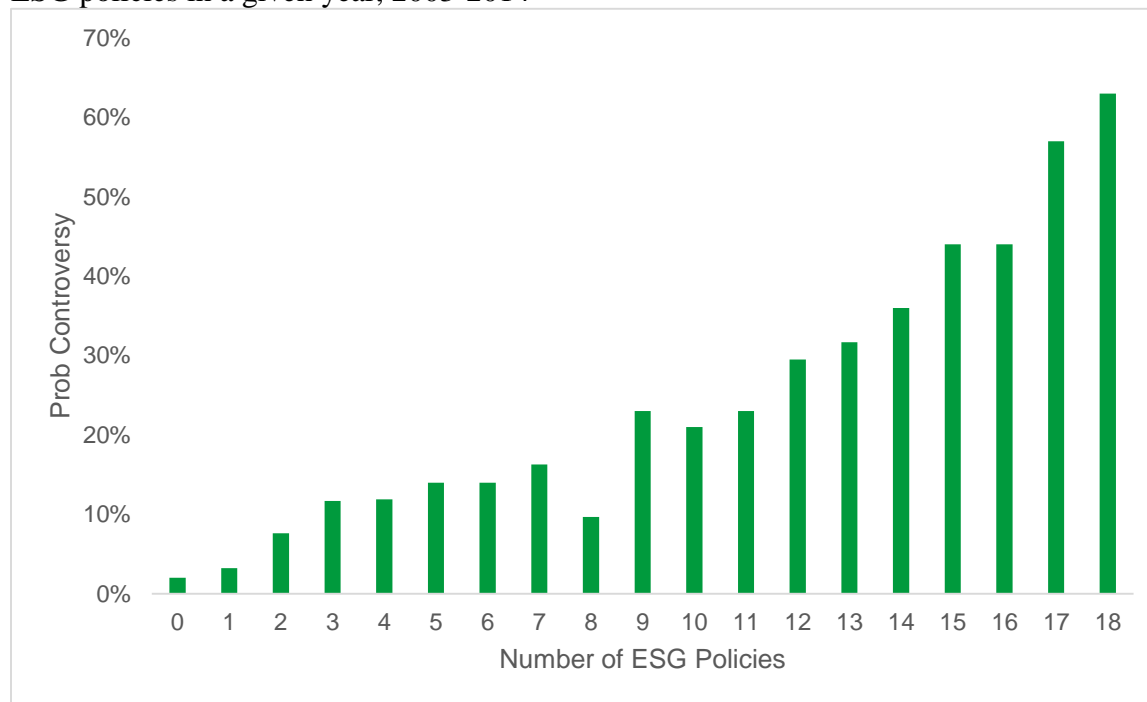
Abstract

It is widely believed that ESG (Environmental, Social, Governance) principles mitigate regulatory and reputational risks. We test this view with a global panel of ethics-related controversies and regulatory actions. These negative experiences are more and not less likely for firms that adopt popular ESG policies, and this continues to be true after controlling for size, industry, and country. We then show that some prominent ESG indexes favor companies that disclose more ESG policies and as a consequence generally 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 (2016) show some evidence of higher returns along selected dimensions of social responsibility. On the negative side, it is well-established that “sin” stocks frequently outperform (see Hong and Kacpercyk, 2009 or Dimson et al, 2015). The debate is unlikely to be resolved in the near future; after all, there is still disagreement on the value of active management in general after nearly 50 years of research (see Jensen, 1968 and Ellis, 2015)

Financial performance is clearly important, but the most fundamental motivation for ESG is ethical and social performance. We focus on the “S” (social) dimension and specifically the occurrence of regulatory actions, legal challenges, and other forms of reputational damage. Like most observers we expected common ESG practices to be associated with better social performance.¹ We were wrong. Firms that disclose the widest range of socially responsible policies such as signing the UN Global Compact, disclosing “family friendly” employment policies, and monitoring suppliers’ labour practices, are much *more* likely to experience ethics controversies and adverse regulatory actions in the future. Figure 1 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 2003-2014 (17,999 firm-years).

Figure 1: Fraction of firms with controversy in subsequent year as a function of the number of ESG policies in a given year, 2003-2014



In the next section we show that the effect is statistically significant and robust to a wide set of controls.

¹ For example, Lee, Kassam and Nagy (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 report, (2003).

How could this be? All else equal, a stronger ESG profile should reduce exposure to ethical and legal issues². But all else is not equal. Home security measures such as barred windows may be a useful analogy. All else equal, such precautions indicate a more security-conscious homeowner. But if we take two homes at random, extensive security is more likely to signal a bad neighborhood and attractive target home. For starters, larger homes are more vulnerable and larger firms are more likely to be targets of controversy. We find that larger firms have both more policies and controversies, and controlling for size shrinks the relationship in Figure 1 by about a third. The proportion of a firm's sales from foreign countries has a similar effect and interpretation; contact with overseas stakeholders increases both visibility and the likelihood of misunderstanding. 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 in policies in the Asia-Pacific region. We expected substantial industry effects but these turn out to be second-order. But positive association between ESG policies and future controversies remains large and statistically significant after accounting for all these effects.

The portfolio choice implication is straightforward. Screening firms based on ESG profiles is not a reliable way to avoid controversy and related left-tail outcomes. To our knowledge no one has advocated such a crude screening, and ESG funds and indices also consider the “E” and “G” components. However, our last section presents evidence that some prominent ESG index providers favor firms with more policies, and their exposure to subsequent controversies is thereby elevated.

The research implication of our findings is more long-term. We should devote more attention to understanding *why* firms differ in their adoption of various ESG practices. Academic work has tended to focus on management preferences and incentives (see Cheng, Hong and Shue, 2014; Tirole and Benabou, 2010), but it appears that firms' social and business environment is a much stronger driver. Industry effects are surprisingly weak; here we report results by GICS sectors but the same is true for with more granular GICS or with SIC/NAICS industries. This might simply reflect the fact that standard industry classifications are based mostly on firms' output rather than to their social environment. Existing industry schemes could be analogous to the material with which a home is constructed. Such information is vital for fire insurance, but tells us little about security. A more tailored industry scheme could be extremely helpful for assessing firms' ESG practices and risks.

In the next section we summarize the controversy and policies data, and document the relationship between policies and controversies. We conclude by analyzing 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.

² 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.

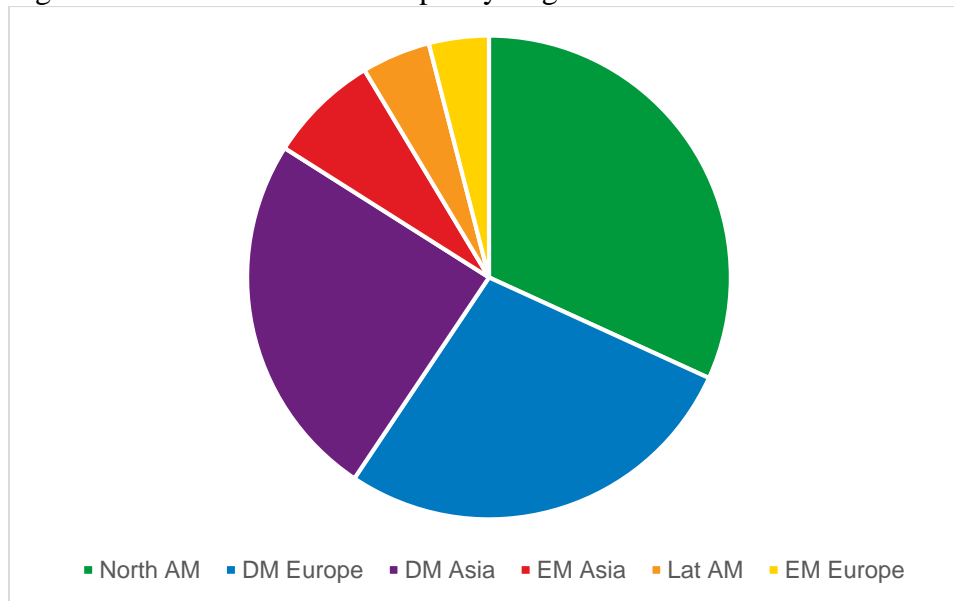
ESG Policies and Ethics Controversies

Policies

Thomson Reuters' Asset 4 database collects and classifies companies' ESG disclosures into 18 distinct "Socially Aware" policies and practices. It covers over 4000 listed firms from 2002-2014 (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. As figures 2.1 and 2.2 illustrate, this gives quite broad and representative coverage by geography and sector. We distinguish four broad regions (North America, Europe, Latin America, and Asia-Pacific) and within regions also adopt MSCI's Emerging/Developed classification.

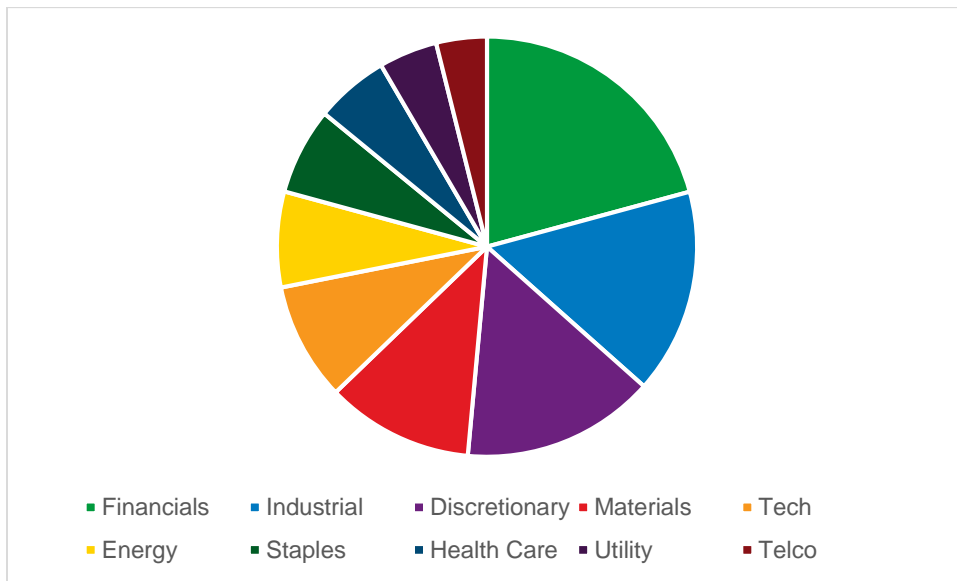
Figure 2.1: Distribution of Sample by Region



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. Figure 2.2 shows our coverage by sector. Consistent with the shape of global equity markets, Financials are the largest category with Industrials and Consumer Discretionary also having a large number of listed firms. Telecommunications and Utilities have a relatively small

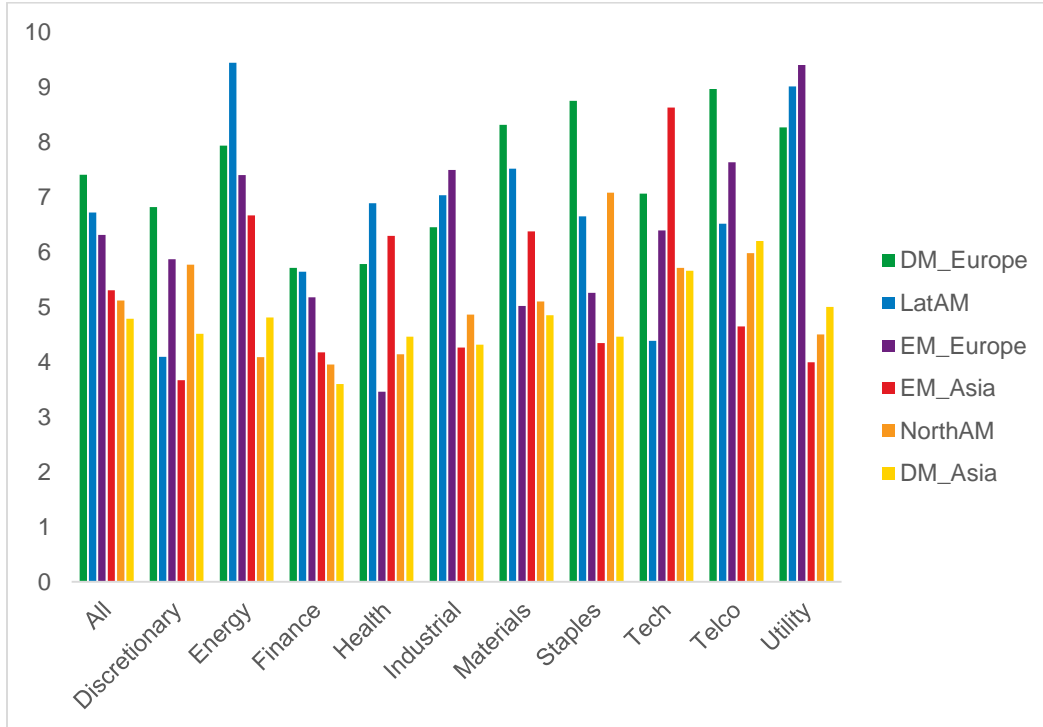
number of larger firms.

Figure 2.2: Distribution of Sample Firms by GICS 2-digit Sector



How do policies vary across these dimensions? Figure 3 summarizes the average number of policies by region and by industry for our sample.

Figure 3: Average number of Social Policies per firm, by GICS sector and Region



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.

Controversies and Policies

The motivation of our study is to identify the effect of ESG policies and practices on some outcomes beyond stock returns. We focus on a set of outcomes that are clearly both negative and related to the firm’s 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 from mistreatment of franchisees, to inflating prices charged to government health care systems, to gender discrimination in hiring and promotion. The next most important are anticompetitive actions related to excessive charges, price fixing, or maltreatment of suppliers. The remaining categories are tax fraud, dealings with sensitive or problematic countries, and controversies relating to treatment of indigenous peoples. Figure 4 summarizes the relative incidence of these different categories for an average firm-year in our sample period.

Figure 4: Proportion of Firms experiencing different types of controversies, 2002-14.

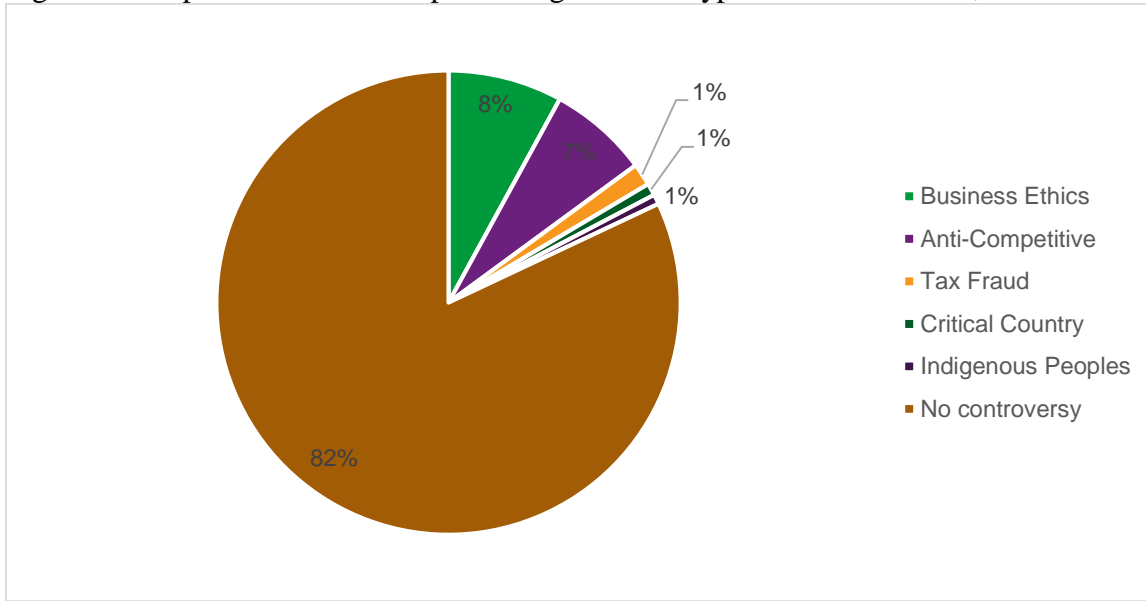


Figure 4 shows averages over our full sample period. Figure 5 shows that the incidence of controversies and policies share a positive time trend, due likely to increased attention to ESG issues. Neither trend is not driven degree by stock market performance, which makes sense since we are focusing on the social rather than the financial dimension. However, we clearly need to control for time trends to isolate the relationship between policies and controversies.

Figure 5: Average policy count and likelihood of controversy per firm by year

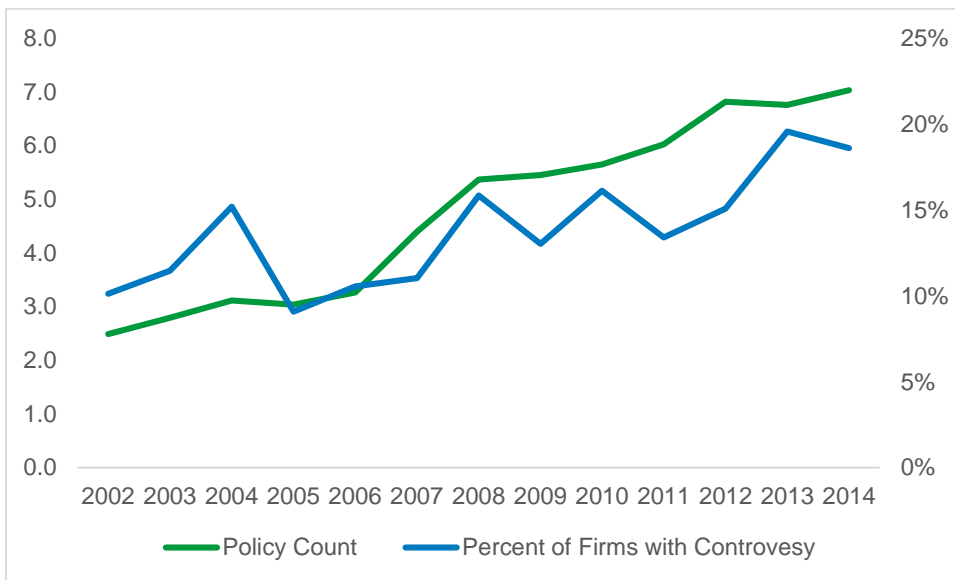
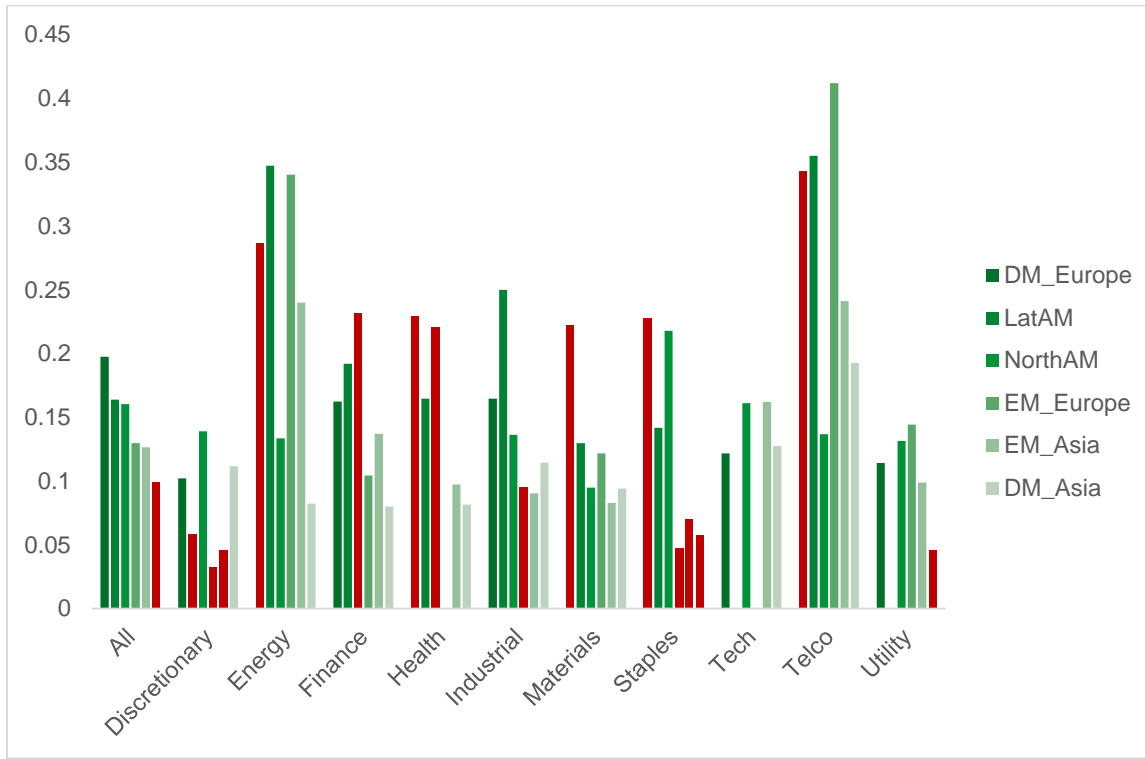


Figure 6 summarizes the incidence of controversy across industry and region.

Figure 6: Average Likelihood of Controversy per firm, by GICS sector and Region



There are modest regional differences in the incidence of controversy, and consistent with our overall story they line up with the policy frequency. DM Europe firms has the most policies and controversies, while Asian firms tend to have less of both. The sector patterns are somewhat stronger but tend to occur in sectors where there are relatively few, albeit large, firms such as Energy or Telecommunications in Latin America and Emerging Europe. Sector effects are present but not statistically significant.

Table 1 turns to financial metrics, distinguishing firms that do and do not experience a controversy in a given year.

Table 1: Descriptive Statistics Conditional on a Controversy in the subsequent financial year. Financial Data from Worldscope, Stock Market Data from BARRA

Variable	NO CONTROVERSY (n=15489)			CONTROVERSY (n=2510)		
	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

There is very little difference in traditional financial ratios (leverage, valuation, profitability, liquidity, or risk). Controversy firms tend to be larger and to have a greater number of ESG policies (p values for differences <1%), and also tend to have more of their sales in foreign countries (p value for difference =4.6%).

Table 2 formally tests the significance of ESG policies as a marker for future controversy. We run 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 the current number of ESG policies, the presence of a controversy this year (lag_controversy), size, time trend, Foreign Sales Ratio, and country plus industry.

Table 2: Logit Estimate of the probability of a controversy in the following year. Year, Industry, 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 Multivariate 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	17999	17999	

The first column shows that policies alone explain almost 9% of the likelihood of future controversy. The second 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 Table 2 are generally on different scales. The last column therefore 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, and year) firm with only 5 policies.

All else equal, a firm that discloses more ESG policies is more likely to be involved in future controversy. We believe the result reflects aspects of the firms’ environment that are not fully captured by size and our other controls. In fact, the causality could be reversed; experiencing a controversy would be a stark signal that the firm is in a sensitive environment and introducing additional ESG policies could be part of the response. Table 3 addresses this idea more formally. We first ask 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.

Table 3: 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

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.

ESG Indices are prone to Controversy because of 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:

1. MSCI World (approximately 1600 stocks), which serves as our benchmark.

2. 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 (ie, 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.
3. The United Nations Global Compact 100 Index, for 2013.
4. The Dow Jones Sustainability Index World Diversified (approximately 800 stocks), also for 2013.

Each of the ESG index providers' websites and documents provide a wealth of information on the criteria used to include or exclude stocks, but all emphasize that it cannot be reduced to an objective formula. MSCI has a full time specialist ESG research team, and the Dow Jones Sustainability index is formed with the assistance of a specialised ESG firm that uses their own questionnaire which has substantial overlap with the topics covered by Asset4 (Robeco SAM, 2014). We do not evaluate the research or objectives of these providers in detail. We simply ask whether their final output (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 Table 4 show that each of the indices places some reliance, implicit or explicit, on the ESG policies we use. The 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.

Table 4: Average number of Policies and Controversies for Firms in ESG Indices vs 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
p-value for difference	0.003 0.047	0.001 0.013	0.000 0.004

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.

Table 5 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 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%.

Table 5: Logit estimate of the effect of index inclusion on the likelihood of a controversy next year. MSCI ESG estimates are 2012-14 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 R2	0.5%	9.3%	2.2%	11.1%	1.32%	9.2%

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.

Limitations and Directions for Future Research

Our study is mainly 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. Returning again to our housing metaphor, avoiding home invasions is important but certainly not sufficient for a happy and productive household. A recent report by Reynolds, Simonek, Guez, and Dufour (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 polices seems a vital research area for both academics and practitioners.

References

Allison, Kevin (2016) “Calpers rethinking policy banning investment in tobacco stocks”, *the New York Times*, April 5.

Asset 4 Database <http://financial.thomsonreuters.com/en/products/data-analytics/company-data/esg-research-data.html>

Benabou, Roland and Jean Tirole (2010) “Individual and Corporate Social Responsibility”, *Economica* 77, 1-19.

Cheng, Ing-Haw, Harrison Hong, and Kelly Shue (2013) “Do Managers do Good with Other Peoples’ Money?” *working paper*, Princeton University

Daines, Robert, Ian D Gow, and David F Larcker (2010) “Rating the Ratings: How Good Are Commercial Governance Ratings?” *Journal of Financial Economics* 98, 439-61

Davidson, Russell and James G. MacKinnon (1993) *Estimation and Inference in Econometrics* New York, Oxford University Press.

Diermeir, Daniel (2008) “Measuring and Managing Reputational Risk” *Risk Management* 12, 20-24.

Dimson, Elroy, Paul Marsh and Mike Staunton (2015) “Responsible Investing: Does it pay to be bad?” *Credit Suisse Global Investment Returns Yearbook*, 17-28.

Down Jones Sustainability Index <http://www.sustainability-indices.com/index-family-overview/djsi-diversified-family-overview/index.jsp>

Edmans, Alex (2011) “Does the Stock Market Fully Value Intangibles? Employee Satisfaction and Equity Prices”, *Journal of Financial Economics* 101, 231-57.

Ellis, Charles (2015) “In Defense of Active Investing” *Financial Analysts Journal* 71,

Friedman, Milton (1970) “The Social Responsibility of Business is to Increase its Profits”, *New York Times Magazine*, September 13, 32-33.

Global Reporting Initiative (2015) “G4 Inside Out: Tell It like it is” <https://www.globalreporting.org/>, June

Guld, William W., James S. Pitblado, and B. P.Poi (2010) *Maximum Likelihood Estimation with Stata* 4th ed, College Station, TX: Stata Press.

Hong, Harrison and Marcin Kacperczyk (2009) “The Price of Sin: The Effects of Social Norms on Markets”, *Journal of Financial Economics* 93, 15-36.

Hong, Harrison and Inessa Liskovich (2016) “Crime, Punishment, and the Halo Effect of Corporate Social Responsibility”, *working paper*, Princeton University

Jensen, Michael C. (1968) “The performance of mutual funds in the period 1945-1964”, *Journal of Finance* 23, 389-416.

Kahn, Mozaffar, George Serafeim, and Aaron Yoon (2015) “Corporate Sustainability” First Evidence on Materiality”, Harvard Business School Working Paper, No 15-073

Karpoff, Jonathan and John R. Lott, Jr. (1993) “The Reputational Penalty Firms Bear from Committing Criminal Fraud”, *Journal of Law and Economics* 36

Kovacic, William E. and Carl Shapiro (2000) “Antitrust Policy: A Century of Economic and Legal Thinking”, *Journal of Economic Perspectives* 14, pp 43-60.

Lee, Linda-Elig, Altaf Kassam, and Zoltan Nagy (2015) “Can ESG add Alpha?”. MSCI ESG Research, June.

MSCI ESG Index (2014) <http://www.msci.com/products/indexes/esg/>

OfficialNorwegianReports.2003:22.ReportfromtheGraverCommittee.Part ofthereportisavailableathttp://www.regjeringen.no/nb/dep/fin/tema/statens_pensjonsfond/etiske-retningslinjer/graverutvalget/Report-on-ethical-guidelines.html?id=420232.

QSG Research Team (2009) “The Asset4 Framework: Adding Value with Environmental, Social, and Corporate Governance Information”, *QSG Investment Insights*, Quantitative Services Group

Reynolds, Jake, Clarisse Simonek, Herve Guez, and Mathilde Dufour (2016) “In Search of Impact: Measuring the full value of capital”, *University of Cambridge Institute for Sustainability Leadership*

Robeco SAM (2014) <http://eu.spindices.com/indices/equity/dow-jones-sustainability-world-developed-diversified-index>

W.M. Mercer (2014), “An Investment Framework for Sustainable Growth”.

UN Sustainability Index <https://www.unglobalcompact.org/take-action/action/global-compact-100>

Utz, Sebastian and Maximilian Wimmer (2014) “Are they any good at all? A financial and Ethical Analysis of Socially Responsible Mutual Funds”, *Journal of Asset Management* 1, 72-82

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?
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?