VIEWPOINT
Russell Research

Russell Investments

Are ESG tilts consistent with value creation?

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Our thesis is that positive ESG tilting among active managers will indicate an implicit endorsement of the consistency between ESG factors and value creation. Ultimately, we find that positive ESG tilts exist in active equity portfolios.

1. **Investors seeking a positive tilt** toward ESG factors in their portfolios may find that their active products already have one. We suggest that investors be inquisitive, and that they actively monitor those tilts.
2. **Investors who are concerned** that ESG tilting might be value-eroding may find it useful to know that the professional active managers in Russell's universes, who are seeking to add value over a benchmark, seem to have had positive tilts during this sample period.
3. **Purveyors of active funds** may find that they have positive ESG tilts in their portfolios! Moreover, there may be information in ESG scores that might assist active managers in the security selection process – information that they are not yet explicitly considering.

"Value-based' investing

With some $13.6 trillion of the invested assets evaluated by the Global Sustainable Investment Alliance (GSIA) now incorporating environmental, social and corporate governance (ESG) analysis,[1] the integration of ESG considerations into active portfolios seems to be gaining steam. In this paper we explore the relationship between ESG tilts and adding value through active security selection. We are not seeking to link ESG tilts with excess return or value creation directly within a portfolio. Our thesis is that positive ESG tilting among active managers will indicate an implicit endorsement of the consistency between ESG

factors and value creation. Russell's experience in evaluating security selection among active equity managers is that these tilts are not engineered, but rather are byproducts of ESG-agnostic processes; i.e., they are not intentional. Having examined these unintentional ESG tilts in active portfolios, Russell is able to comment on the relevance of economic **value-based** integration of ESG and portfolio management.[2] Ultimately, we find that ESG tilting may indeed be consistent with adding value, as active equity managers typically exhibit positive ESG tilts in their portfolios.

We encourage investors to gain awareness of the ESG tilts in their own portfolios, and we believe they will find our research helpful.[3] As well, active equity managers may find the presence of positive ESG tilts in their portfolios interesting; we encourage them to understand better the potential role of ESG factors in security selection.

Data and methodology

In order to provide a fair and reasonable quantitative evaluation of a company's ESG factor exposure, Russell receives Environmental (E), Social (S), Governance (G) and total ESG scores from an independent third party, Sustainalytics.[4] Sustainalytics analyzes and evaluates companies on ESG criteria using targeted, sector-specific ESG indicators. The sample period for Sustainalytics data starts in 2009Q3. For recent data, Sustainalytics covers roughly 4,400 companies globally.

Sustainalytics offers multiple scores for each specific E, S and G category; however, our main focus is the composite scores computed for E, S and G, as well as a total (aggregated) ESG score. Each indicator is assigned a score between 0 and 100, where 100 is a perfect score. Security-level scores for E, S, G and total ESG are calculated based on a weighted average of the underlying indicator scores.[5] To generate portfolio-level (index-level) ESG scores, we calculate a weighted average composite Sustainalytics score. Profile characteristics data for manager universes comes from Russell calculations. We generate portfolio- and index-level ESG scores from calculations of companies covered by Sustainalytics. Where the coverage is less than 100%, we gross them up. They are weighted according to the allocation in the portfolio or index, and subsequently normalized to the portfolio level.

Security-level ESG score distribution – boxes and whiskers

We examine the distribution of security-level ESG scores for these indexes with a box and whiskers representation, where the bottom of the "under" whisker starts at the 10th percentile, the box bottom is at the 25th percentile, the box top is at the 75th percentile and the "upper" whisker ends at the 90th percentile. All percentiles are cap weighted. In our box and whiskers charts we also highlight the capitalization-weighted median, the equal-weighted average and the capitalization-weighted average.

Indexes – United States and global ex-U.S.

United States and the Russell 1000

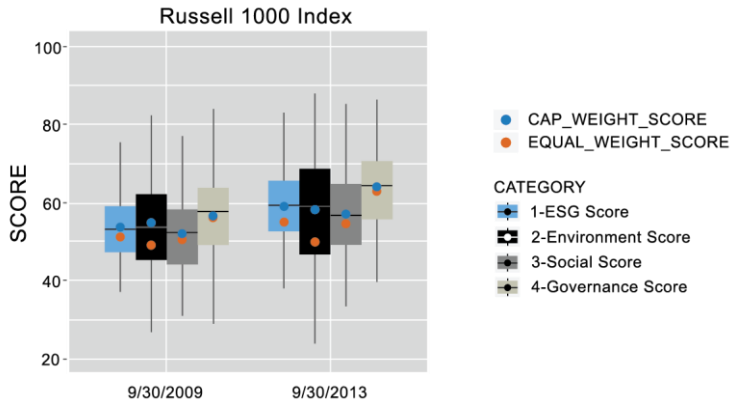
Coverage

We measure coverage as the percent of the total market cap of the index with an ESG score. ESG coverage rates are much higher for the Russell 1000® Index (median quarterly coverage of 94%) than for the Russell 2000® Index (median quarterly coverage of 5%). Because we observe that the security-level ESG data provided by Sustainalytics only has good coverage for large cap companies, our analysis is restricted to the Russell 1000®.

Analysis

We generate a security-level ESG score box and whiskers distribution for two periods, 2009Q3 and 2013Q3.[6] Exhibit 1 illustrates security-level ESG score distribution for securities in the Russell 1000® Index.

Exhibit 1: Security-level ESG score distribution for Russell 1000 Index[7]



Source: Box plots describe distribution of ESG scores for underlying securities of Russell 1000 Index. Each bar corresponding to a specific ESG score category (TOTAL ESG, E, S, G). Blue dots indicate the magnitude of cap-weighted ESG score for Russell 1000 Index, while yellow dots indicate arithmetic mean value of ESG scores for Russell 1000 Index. This box plot only contains data of 2 quarters, 2009 Q3 and 2013Q3.

From these benchmark plots we make several observations:

1. The range of Governance scores is higher than Environmental and Social scores, possibly indicating the importance to corporations of high governance standards. Therefore we observe that **Governance is particularly important to U.S.-based publicly listed companies**, relative to Environmental and Social.
2. The cap-weighted ESG score and the individual Environmental, Social and Governance scores are universally higher than the equal-weighted scores. Therefore, we observe that **large cap companies exhibit higher ESG scores than mid caps do**.
3. All cap-weighted average scores, for ESG, Environmental, Social and Governance, exhibit increasing trends over the sample period. Medians increased steadily during this time period for the Governance, Social and total ESG scores, but remained at a constant level for Environmental. Therefore, we observe that **ESG scores and the sub-scores have increased over the time studied**.
4. The "typical" range of U.S. large cap ESG scores is approximately 53 to 65.
5. The cap weighted E score has increased meaningfully but the equal weighted E score has been relatively stable.[8]

Observation 1 is not surprising. The importance of Governance to publicly listed companies is well known and has been a material factor in security selection for some time. Observation 2 is new information. We observe similar cap biases across the globe, and we consider this to be a robust result. What we do not know is if ESG awareness within firms leads to higher cap weights (that is, if good environmental, social and governance practices contribute to a firm's growth); if larger firms simply have more resources to invest in good practices; or if larger firms have just been increasing their efforts toward achieving higher ESG scores in recent years.[9] Finally, Observation 3 is a mystery. Why are these scores increasing over time? Similarly to Observation 2, this result is largely consistent globally. Is it that ESG practices are improving globally or is it that reporting is getting better? Let's explore this just a bit.

If ESG scores have increased over the sample period across the globe, it may indicate a shift in investor preferences. While we are not equipped to evaluate this point in detail, we pause for just a moment to offer some speculation based on our knowledge of macro trends that may relate to ESG:

1. Russell's observation is that shareholder activism is on the rise. It is possible that pressures exerted in recent years by stakeholders have started to have an impact.
2. Global initiatives such as United Nations Principles for Responsible Investing (UN PRI) and the UK Stewardship Code may be playing a leading role in either encouraging or even requiring transparency on ESG issues. Bringing transparency to

ESG practices, combined with the rise of shareholder activism, is potentially strong enough to influence behavior and internal practices.

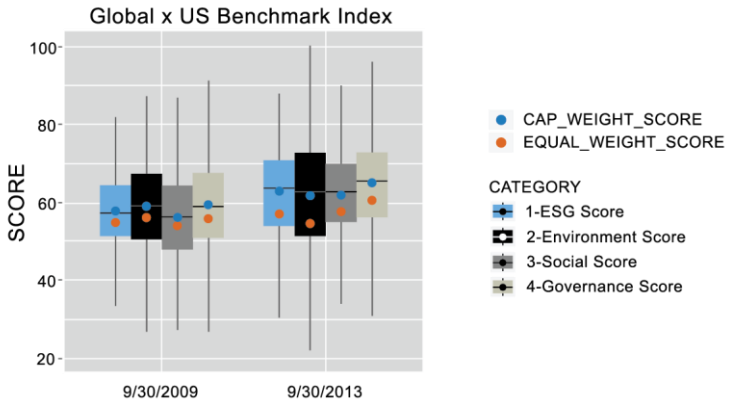
3. Customers may also be playing an important part by voting with their dollars for sustainable goods and services. Thus, companies may seek to avoid reputational risk. Such attention to reputational risk may reflect recognition that ESG issues are financially material. Indeed, initiatives are underway across the globe to adapt accounting practices for ESG issues.[10]

At this point we simply note these three trends as possible explanations for the rise in ESG scores over time.

Global ex-U.S

Now we turn our attention to global indexes. For the Russell Global ex-U.S. Large Cap Index ("Global ex-U.S."), the Sustainalytics coverage is 86% as of 2013Q3.

Exhibit 2: Security-level ESG score distribution for Russell Global ex-U.S. Index



Source: The only difference between this plot and Exhibit 1 is that this box plot is describing data for global x US index (Russell Global ex-U.S. Large Cap Composite Index).

As in the case of Russell 1000, we generate a security-level ESG score distribution for two periods, 2009Q3 and 2013Q3.

From the Exhibit 2 benchmark plots we have several observations about ESG scores outside the U.S.:

1. Governance scores are higher than Environmental and Social scores in 2013, but the median and 75th percentile Environmental scores are higher than Governance for the earlier period. Therefore we observe that **Governance is becoming more important to non-U.S. publicly listed companies** relative to Environmental and Social.
2. The cap-weighted ESG, E, S and G scores are universally higher than the equal-weighted scores, and this difference has increased. Therefore, we observe that **large cap companies exhibit higher ESG scores than mid caps across the globe**.
3. ESG, Environmental, Social and Governance exhibit increasing trends over the sample period as measured by cap-weighted average. Medians increased steadily during this time period for the Governance, Social and total ESG scores, but dropped for Environmental. Therefore, we observe that **S and G scores have increased over time, but that E is less clear**.
4. The "typical" range of Global ex-U.S. large cap ESG scores is approximately 53 to 71.

Observation 1 is more interesting in the case of Global ex-U.S. than U.S. Certainly governance has improved across the globe. But what is more interesting is that the range of the Environmental scores is increasing. Observation 2 reinforces what we observed in U.S. large cap – namely that larger companies across the globe exhibit higher ESG scores than

smaller companies do. Finally, while Observation 3 is a mystery, this result is largely consistent globally.

While Observations 1, 2 and 3 are telling us something about indexes, Observation 4 is truly just information, but we also now know that the upper range of ESG scores is, indeed, higher *outside* the U.S.

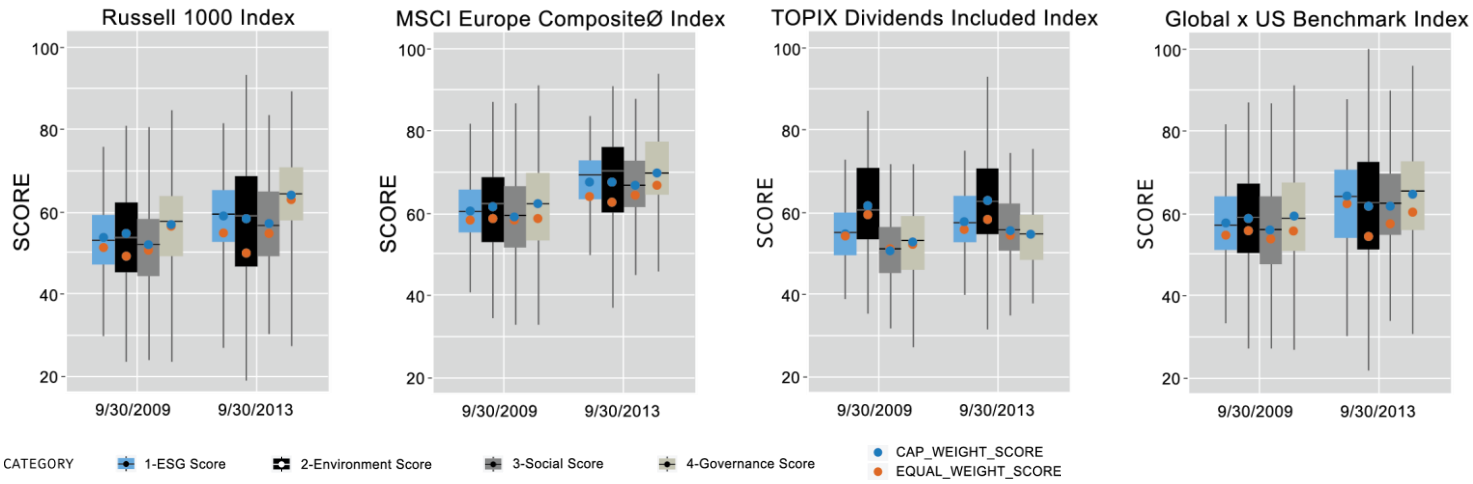
A quick look around the globe

While a full discussion of ESG around the globe is beyond the scope of this paper, a very quick tour will help give us some grounding. In looking across the globe, we observe some regional differences. While U.S. and Global ex-U.S. have some very similar properties, we find that Japan and Pan-Europe (UK and Continental Europe) look a bit different. To assist in reviewing regional differences, we add Japan and Pan-Europe to our boxes and whiskers in Exhibit 3, with a reference line dropped in at 50.[11]

Japan

Japan exhibits two main differences from U.S. and Global ex-U.S. indexes. First, Japan ESG scores are dominated by E, or Environmental. In a densely populated island nation, such attention to Environmental is not surprising. Second, Japan Governance scores are markedly different from other economies' scores. Japan's long history of cross-ownership among large corporations and the insularity of corporate board memberships have long been noted as very different from other developed economies. And indeed, Prime Minister Shinzo Abe recently announced measures to reform corporate boards in Japan.[12]

Exhibit 3: ESG around the globe



Source: 4 set of box plots were included in exhibit 3, where figure for Russell 1000 and global US index are exactly same figures, only difference is size of scale.

Pan-Europe

Pan-Europe is another unique region in that all ESG, E, S and G scores are higher than other regions' scores. Europe's focus on social welfare (often called a cradle-to-grave system), early development of public transportation systems, high population density, and centuries-long development of business practices are likely explanations for the high ESG scores among businesses.

Indexes – Summary

From our analysis of U.S. and Global ex-U.S. indexes, we have four main observations:

1. A strong and rising range of Governance scores across the globe
2. A consistent cap bias, in that the larger companies exhibit higher ESG scores than smaller companies in the Sustainalytics universes
3. A rise in Social scores over time, while the range of Environmental scores increases; and, finally, a better understanding of typical scores across the globe
4. As well as, looking across the globe we discover regional biases

These findings are interesting, but largely descriptive. What we still don't know is how the active management community looks when viewed through the ESG lens. What biases are lurking in our active portfolios? In the next section we answer just this question.

We also know from our long history of evaluating active equity portfolios that most of these active products have a negative cap bias.

Active manager universes – United States and Global ex-U.S.

We now shift our attention to active manager universes. Again, remember that we are not intending to demonstrate any direct link between value creation and ESG scores. Our thesis is that active equity managers themselves are seeking to add value. Therefore, *if* active equity managers exhibit positive ESG tilts in their portfolios, such tilts are consistent with value creation. We are inferring a link (and not a causal link) between value creation and ESG, rather than directly demonstrating it.

For this note, we focus on large-capitalization, market-oriented managers relative to the cap-weighted index. In particular, we want to know if managers in the active universes exhibit ESG bias as they seek to add value over benchmarks. If the naysayers are right and ESG is a money-losing strategy, we should find that managers are biased against ESG. If the proponents of the value-based[13] investing hypothesis are right, we should find evidence that active managers are positively biased. Indeed, we find some evidence of positive biases. Let's have a look.

Tilts

Our examination of indexes revealed some important points for us to consider – ubiquitously high Governance scores, both in U.S. and Global ex-U.S.; a clear capitalization bias; and increasing scores over time. From the broad representations of large cap indexes, what securities are active managers selecting? And what biases will we find there?

Recall that our main interest is in evaluating the ESG tilts in active equity portfolios.

We know from our analysis above that ESG scores have a large cap bias. A typical way of evaluating tilts is to look at medians or averages across a universe. However, because of the influential role of capitalization in ESG space, we want to evaluate those averages while taking the cap tilt into account. We separate out the ESG tilt from the cap tilt, using a very simple regression model:

Equation (1) $\widehat{ESG}_i = T + CE * \widehat{CAP}_i$,

where

$\widehat{ESG}_i$ = the ESG score of active manager *i* less the ESG score of the index (or E, S, G),

T = the "Modified Average Tilt" or the average active tilt which takes into account the cap effect (a regression intercept),

CE = the average "Cap Effect" on the benchmark-relative ESG score (a regression coefficient), and

$\widehat{CAP}_i$ = the CAP weight of the active manager *i* less the CAP weight of the index.

We show the results of this regression in Exhibit 4a for the U.S. Large Cap Market Oriented universe and Exhibit 4b for our Global ex-U.S. universe. For each date in our sample period, we show the cross-sectional Modified Average Tilt and the Cap Effect for the universe. When a Modified Average Tilt is positive, then the average manager has a positive ESG tilt. When a

Cap Effect is positive, then the active manager's ESG score is positively affected by capitalization. When Modified Average Tilt or Cap Effect is statistically significant, we display the regression coefficient in **bold**.[14] We restrict this analysis to 2011Q3 through 2013Q3.[15]

Exhibits 4a and 4b illustrate very clearly the robust capitalization bias in our ESG tilts. For all periods, Cap Effect has a positive and significant impact on ESG, E, S and G tilts. We expected this result, based on our observation of indexes. What we could not have anticipated from our index review is the large number of positive and significant ESG, E and S Modified Average Tilts after taking cap into consideration.

The U.S. universe is shown in Exhibit 4a. For the composite ESG tilt, we find that all modified average scores are positive; as well all are positive and significant after 2012Q3. For E we find similar results. For S we observe negative (but insignificantly different from zero) tilts in the first two periods of our sample but, again, positive and significant ESG tilts from 2012Q3. These results clearly establish that in more recent periods, active managers have positive and significant Modified Average Tilts in their portfolios that are largely driven by E and S.

Moreover, from Russell's decades of researching and performing due diligence on active equity managers, it is our assessment that these tilts are not engineered. In other words, these tilts are most likely an outcome of an ESG-agnostic process, rather than of any portfolio-construction effort to incorporate ESG factors.

Governance is a different story. While the positive and significant Cap Effect is still evident, a statistically significant Modified Average Tilt is not. This contrast is interesting for two reasons. First, we know from examining the indexes that Governance scores are universally higher than other scores. In the face of very strong governance practices in the U.S., active managers do not seem to be tilting on even stronger Governance to add value over time. Second, it is our observation at Russell that governance practices are closely scrutinized by active managers. We really don't know for sure why Governance is different, but this is clearly something Russell seeks to understand. Given the shortness of our sample period, we hesitate to draw strong conclusions from our data, and largely take this information as interesting and informative.

Exhibit 4a: Modified Average ESG scores for active managers in U.S. Large Cap Market Oriented Universe[16]

DATE		ESG	E	S	G
9/30/2011	Modified Average Tilt	0.17	**0.43**	-0.08	0.19
	Cap Effect	**2.87**	**5.04**	**2.06**	**1.28**
12/31/2011	Modified Average Tilt	0.12	0.27	-0.03	0.12
	Cap Effect	**2.21**	**4.04**	**1.56**	**0.87**
3/31/2012	Modified Average Tilt	0.17	0.26	0.11	0.09
	Cap Effect	**2.46**	**4.51**	**1.77**	**0.89**
6/30/2012	Modified Average Tilt	0.19	0.19	0.19	0.15
	Cap Effect	**2.42**	**4.39**	**1.88**	**0.73**
9/30/2012	Modified Average Tilt	**0.34**	**0.47**	**0.36**	0.11
	Cap Effect	**2.64**	**4.99**	**1.88**	**0.87**
12/31/2012	Modified Average Tilt	**0.23**	0.29	**0.25**	0.14
	Cap Effect	**2.71**	**5.16**	**2.04**	**0.67**
3/31/2013	Modified Average Tilt	**0.29**	**0.42**	**0.28**	0.11
	Cap Effect	**2.99**	**5.83**	**2.12**	**0.77**
6/30/2013	Modified Average Tilt	**0.35**	**0.57**	**0.34**	0.03
	Cap Effect	**2.95**	**5.59**	**2.26**	**0.69**
9/30/2013	Modified Average Tilt	**0.47**	**0.74**	**0.41**	0.11
	Cap Effect	**2.73**	**4.97**	**2.27**	**0.57**

Ultimately, as active equity managers in the Large Cap Market Oriented universe seek to add long-term value, their resulting portfolios have tilted toward higher-scoring E and S companies.

Exhibit 4b: Modified Average ESG scores for active managers in Global ex-U.S. Universe

DATE		ESG	E	S	G
9/30/2011	Modified Average Tilt	1.05	1.60	0.64	0.80
	Cap Effect	2.39	2.56	2.29	2.03
12/31/2011	Modified Average Tilt	1.20	1.78	0.83	0.83
	Cap Effect	2.61	2.75	2.81	1.84
3/31/2012	Modified Average Tilt	1.22	1.89	0.88	0.71
	Cap Effect	2.49	2.79	2.63	1.64
6/30/2012	Modified Average Tilt	1.15	2.02	0.71	0.58
	Cap Effect	2.65	3.05	2.59	2.02
9/30/2012	Modified Average Tilt	1.28	2.20	0.84	0.69
	Cap Effect	2.94	3.71	2.73	2.07
12/31/2012	Modified Average Tilt	1.22	2.16	0.72	0.67
	Cap Effect	2.58	3.32	2.33	1.85
3/31/2013	Modified Average Tilt	1.08	2.05	0.56	0.55
	Cap Effect	2.46	3.40	1.99	1.86
6/30/2013	Modified Average Tilt	0.94	1.93	0.41	0.38
	Cap Effect	2.25	3.26	1.96	1.30
9/30/2013	Modified Average Tilt	1.03	2.07	0.44	0.47
	Cap Effect	2.24	3.44	1.84	1.23

In the case of Global ex-U.S., shown in Exhibit 4b, we find that Cap Effects are also pervasive. As well, we observe that all ESG, E, S, and G Modified Average Tilts are positive and statistically significant. While the ESG tilts are more of a recent phenomenon in U.S. managers, it seems that they are more important outside the U.S. Given the range of regulatory environments across the globe, it is possible that considering ESG explicitly is more common in non-U.S. portfolios. In particular, governance practices may be carefully monitored in active portfolios outside the U.S.

Active managers – Summary

From evaluating the distribution of active manager ESG exposures, we find that these portfolios do have ESG tilts and have been positively biased toward higher ESG scoring companies, or biased against lower ESG scoring companies. We do not suggest that this is a monotonic bias (e.g., that the higher a security's ESG score, the more likely the manager is to hold or overweight). Our assertion is simply that in examining average tilts (while controlling for capitalization biases), we find that the active managers have tilts that were previously neither measured nor noted.

While we do not directly tie ESG tilts to value-add in active portfolios, we suggest that using such information in active portfolios may be consistent with prudent active security selection. Our strongest assertion is that Russell's focus on value-based analysis of ESG factors in portfolios is validated by this work.

Summary of results

This research represents Russell's (and possibly the investment industry's) first attempt to describe market indexes and active manager universes in terms of ESG scores. At the index level, we have several noteworthy results that are largely consistent in the U.S. and outside the U.S.:

1. Governance is particularly important both in the U.S. and across the globe, and this importance has risen over time.
2. E, S, G, and ESG scores are typically higher for cap-weighted indexes than for equal weight indexes suggesting large cap dominance.
3. S, G and ESG scores are increasing over time, both for indexes and for active manager universes.
4. The typical U.S. ESG scores are between 53 and 66, while Global ex-U.S. scores range from 53 to 71.
5. ESG scores differ by region and may be tied to differences in corporate culture and history.

These observations indicate that ESG is a moving target and something that may be useful to monitor and evaluate. From our analysis of active manager universes, we have additional observations:

1. Active managers have shown a positive tilt to ESG, E and S.
2. Global ex-U.S. managers have shown a positive tilt to ESG, E, S and G.

From these two active manager observations, we posit that ESG factors may be consistent with the intent of adding long-term value through security selection.

Recommendations to investors and active managers

We would be remiss if we did not close this note with some suggestions to the investment community:

1. **Investors seeking a positive tilt** toward ESG factors in their portfolios may find that their active products already have one. We suggest that investors be inquisitive, and that they actively monitor those tilts.
2. **Investors who are concerned** that ESG tilting might be value-eroding may find it useful to know that the professional active managers in Russell's universes, who are seeking to add value over a benchmark, seem to have had positive tilts during this sample period.
3. **Purveyors of active funds** may find that they have positive ESG tilts in their portfolios! Moreover, there may be information in ESG scores that might assist active managers in the security selection process – information that they are not yet explicitly considering.

As an investment community, let's explore the data, learn more, and develop preferences and expectations as regards ESG tilts. They are in there, and we should know more about them.

REFERENCES AND RELATED READINGS

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Appendix of Sustainalytics ESG Scores

G.1.1	Policy on Bribery and Corruption
G.1.1.1	Programs to Combat Bribery and Corruption
G.1.2	Whistleblower Programs
G.1.3	Signatory to UN Global Compact
G.1.3.1	Signatory to UN Principles for Responsible Investment
G.1.3.2	Policy on Responsible Investment
G.1.3.3	Member of UNEP Finance Initiative
G.1.3.4	Membership in Initiatives Promoting Sustainable Buildings
G.1.3.5	Equator Principles and Related Reporting
G.1.4	Tax Transparency
G.1.4.1	Policy on Money Laundering
G.1.4.3	Policy on Animal Testing
G.1.4.4	Policy on Animal Welfare
G.1.4.5	Policy on Genetic Engineering
G.1.4.6	Clinical Trial Protocols
G.1.5	Business Ethics Related Controversies or Incidents
G.2.1	CSR Reporting Quality
G.2.2	External Verification of CSR Reporting
G.2.3	Disclosure of Directors' Remuneration
G.2.4	Disclosure of Directors' Biographies
G.2.5	Oversight of ESG Issues
G.2.5.1	In-house Team Dedicated to Responsible Investment/Finance
G.2.6	Executive Compensation Tied to ESG Performance
G.2.7	Board Diversity
G.2.8	Separation of Board Chair and CEO Roles
G.2.9	Board Independence
G.2.10	Audit Committee Independence
G.2.11	Non-Audit Fees Relative to Audit Fees
G.2.12	Compensation Committee Independence
G.2.13	Governance Related Controversies or Incidents
G.3.1	Policy on Political Involvement and Contributions
G.3.2	Total Value of Political Contributions or Political Spending
G.3.3.1	Transparency on Payments to Host Governments
G.3.4	Public Policy Related Controversies or Incidents
S.1.1	Policy on Freedom of Association
S.1.1.1	Formal Policy on Working Conditions
S.1.2	Formal Policy on the Elimination of Discrimination
S.1.3	Programs to Increase Workforce Diversity
S.1.4	Percentage of Employees Covered by Collective Bargaining Agreements
S.1.5	Employee Turnover Rate
S.1.5.1	Percentage of Temporary Workers
S.1.6	Top Employer Recognition

S.1.6.1	Employee Training
S.1.6.2	Programs and Targets to Reduce Health and Safety Incidents
S.1.6.3	Programs to Address HIV/AIDS Among Workforce
S.1.6.4	Health and Safety Certifications
S.1.6.5	Trend in Lost-Time Incident Rate
S.1.6.6	Number of Fatalities
S.1.7	Employee Related Controversies or Incidents
S.2.1	Scope of Social Supply Chain Standards
S.2.1.1	Quality of Social Supply Chain Standards
S.2.1.2	Membership in the Electronic Industry Citizenship Coalition (EICC)
S.2.1.3	Policy on the Sourcing of Coltan
S.2.2	Supply Chain Monitoring System
S.2.2.1	Supply Chain Audits
S.2.2.2	Reporting on Supply Chain Monitoring and Enforcement
S.2.2.3	External Social Certification of Suppliers
S.2.2.4	Fair Trade Products
S.2.3	Contractors & Supply Chain Related Controversies or Incidents
S.3.1.1	Public Position Statement on Responsible Marketing
S.3.1.2	Public Policy Statement on Advertising Ethics
S.3.1.3	Policy Statement on Data Privacy
S.3.1.4	Programs to Minimize Health Impact of Electronic and Magnetic Fields
S.3.1.5	Outsourcing of Core Editorial Tasks
S.3.1.6	Corporate Wide Editorial Guidelines
S.3.1.7	Policy on Conflicts of Interest
S.3.1.8	Percentage of Flights Delayed More Than 15 Minutes
S.3.1.9	Public Position Statement on Health Consequences of Products
S.3.1.10	Periodic Occupier Satisfaction Surveys
S.3.1.11	Programs and Targets to Reduce Energy/Water Use by Customers
S.3.1.12	Adherence to WHO Ethical Criteria for Medicinal Drug Promotion
S.3.2.1	External QMS Certifications
S.3.3	Customer Related Controversies or Incidents
S.4.1	Activities in Sensitive Countries
S.4.2.1	Policy on Human Rights
S.4.2.2	Community Engagement Programs
S.4.2.3	Programs and Targets to Promote Access to Financial Services for Disadvantaged People
S.4.2.4	Policies and Management Systems on Access to Medicines
S.4.2.5	Programs and Initiatives to Develop Medicines for Neglected Diseases
S.4.2.6	Equitable Pricing Programs for Medicines
S.4.2.7	Policies on Access to Health Care
S.4.2.8	Programs to Support Independent Media
S.4.2.9	Policy on Indigenous People and Land Rights
S.4.2.10	Policies and Programs to Promote Access to Basic Services
S.4.2.11	Local Community Development Programs
S.4.2.12	Programs to Address Digital Divide

S.4.2.13	Policy on Drug Donations
S.4.2.14	Value of Drug Donations Relative to EBIT
S.4.3	Society & Community Related Controversies or Incidents
S.5.1	Guidelines for Philanthropic Activities and Primary Areas of Support
S.5.2	Corporate Foundation
S.5.3	Percent Cash Donations of NEBT
E.1.1	Formal Environmental Policy
E.1.1.1	Reporting Quality Environmental Data
E.1.2	Environmental Management System
E.1.2.1	Programs and Targets to Protect Biodiversity
E.1.2.2	Guidelines and Reporting on Closure and Rehabilitation of Sites
E.1.2.3	Environmental and Social Impact Assessments
E.1.2.4	Oil Spill Reporting and Performance
E.1.2.6	Waste Intensity
E.1.2.7	Water Intensity
E.1.2.8	Percentage of Certified Forests Under Own Management
E.1.3	External Certification of EMS
E.1.3.2	Programs & Targets to Reduce Hazardous Waste Generation
E.1.3.3	Programs & Targets to Reduce Air Emissions
E.1.3.4	Programs & Targets to Reduce Water Use
E.1.3.5	Other Programs to Reduce Key Environmental Impacts
E.1.4	Environmental Fines and Non-monetary Sanctions
E.1.5	Participation in Carbon Disclosure Project (Investor CDP)
E.1.6	Scope of Corporate Reporting on GHG Emissions
E.1.7	Programs and Targets to Reduce Direct GHG Emissions
E.1.7.1	Programs and Targets to Improve the Environmental Performance of Own Logistics and Vehicle Fleets
E.1.7.2	Programs and Targets to Phase out CFCs and HCFCs in Refrigeration Equipment
E.1.8	Programs and Targets to Increase Renewable Energy Use
E.1.9	Carbon Intensity
E.1.10	Carbon Intensity Trend
E.1.11	% Primary Energy Use from Renewables
E.1.12	Operations Related Controversies or Incidents
E.2.1	Formal Policy or Program on Green Procurement
E.2.1.1	Programs and Targets for Environmental Improvement of Suppliers
E.2.1.2	External Environmental Certification Suppliers
E.2.1.3	Programs and Targets to Stimulate Sustainable Agriculture
E.2.1.4	Programs and Targets to Stimulate Sustainable Aquaculture/Fisheries
E.2.1.5	Food Beverage & Tobacco Industry Initiatives
E.2.1.6	Programs and Targets to Reduce GHG Emissions from Outsourced Logistics Services
E.2.1.7	Data on Percentage of Recycled/Re-used Raw Material Used
E.2.1.8	Data on Percentage of FSC Certified Wood/Pulp as Raw Material
E.2.1.9	Programs and Targets to Promote Sustainable Food Products
E.2.1.10	Food Retail Initiatives
E.2.2	Contractors & Supply Chain Related Controversies or Incidents

E.3.1.1	Sustainability Related Products & Services
E.3.1.2	Revenue from Clean Technology or Climate Friendly Products
E.3.1.3	Automobile Fleet Average CO2 Emissions
E.3.1.4	Trend Automobile Fleet Average Fleet Efficiency
E.3.1.5	Products to Improve Sustainability of Transport Vehicles
E.3.1.6	Systematic Integration of Environmental Considerations at R&D Stage (Eco-design)
E.3.1.7	Programs and Targets for End-of-Life Product Management
E.3.1.8	Organic Products
E.3.1.9	Policy on Use of Genetically Modified Organisms (GMO) in Products
E.3.1.10	Environmental & Social Standards in Credit and Loan Business
E.3.1.11	Responsible Asset Management
E.3.1.12	Use of Life-Cycle Analysis (LCA) for New Real Estate Projects
E.3.1.13	Programs and Targets to Increase Investments in Sustainable Buildings
E.3.1.14	Share of Property Portfolio Invested in Sustainable Buildings
E.3.1.15	Sustainability Related Financial Services
E.3.1.16	Products with Important Environmental/Human Health Concerns
E.3.1.17	Carbon Intensity of Energy Mix
E.3.2	Products & Services Related Controversies or Incidents

Source: Sustainalytics

[1] This represents roughly 22% of the funds under management in the regions surveyed by the GSIA, as reported in the 2012 Global Sustainable Investment Review (page 35). Note that this is 22% of assets evaluated by GSIA, but not necessarily 22% of Russell universes. Our current understanding is that ESG analysis is rarely an explicit input into portfolio construction for the universes considered in this analysis.

[2] See Pearce and Clark (2011). We contrast value-based investing with the values-based Socially Responsible Investing (SRI) movement. These SRI portfolios typically restrict investment in securities that are inconsistent with the values of an investor – e.g., a religious organization disassociating itself from so-called "sin stocks." Other investor types imposing such restrictions have been environmental groups, non-profits and university endowments.

[3] Note that Russell's universe of institutional quality managers is not exhaustive. Therefore, the manager universe does not equal the market.

[4] www.sustainalytics.com The Sustainalytics data incorporates a number of selected indicators, weighted according to the sector in which they are operating. These include a broad range of core and sector-specific indicators that address sustainability policies, management systems and performance outcomes. Appendix 1 has a full list of indicators for ESG factors.

[5] Sustainalytics has a standard weighting scheme for each sector that is meant to reflect which criteria are most pertinent within each sector.

[6] All ESG scores provided by Sustainalytics are updated monthly. However, because our universe data is collected quarterly, the sample period for this research starts from third quarter 2009 and goes through third quarter 2013.

[7] Note that for this chart and the other "box and whiskers" charts, we use 2009Q3 as our starting date, while we use 2011Q3 as a starting date for other analyses. We have used both dates for this analysis and have found similar results.

[8] In other words, it may be that more market cap has shifted to stocks with high E scores, but there aren't more stocks with high E scores. If this is the case, it may be inferred that investor preferences shifted toward high E scores, but company managements did not. Note that the equal weight score increased in S and G.

[9] We suspect that the latter is more likely the case. Larger companies are quite possibly more scrutinized than smaller companies and more subject to headline risk. The desire to remain "in good standing" on a variety of social and environmental fronts may induce larger firms to put programs in place to assure positive ESG practices and perceptions.

[10] Even stock exchanges are adopting sustainability agendas. See "London Stock Exchange partners with United Nations Sustainable Stock Exchanges Initiative" UNPRI press release, June 2, 2014, at http://www.unpri.org

[11] There is nothing magical about an ESG score of 50. It is simply halfway between 0 and 100.

[12] "Shinzo Abe's Bid to Shake Up Corporate Japan," Hiroko Tabuchi. New York Times, June 24, 2014.

[13] Again: value-based, in contrast to values-based.

[14] We assign statistical significance at the 95% level.

[15] We use data starting in third quarter 2011 because Sustainalytics greatly expanded its coverage at that time and updated its methodology. The trends viewed in previous charts are similar when using 2011Q3 as the earlier period.

[16] This result is highly consistent in the U.S. Large Cap Value Universe, but not for the U.S. Large Cap Growth Universe. In the growth universe we typically find negative ESG scores, even when correcting for the capitalization bias.

ACKNOWLEDGEMENTS

The authors thank Mike Clark, Manisha Kathuria, Steve Murray, Lisa Schneider, Vivek Sondhi and Tom Warburton for their helpful comments and suggestions.

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First used: July 2014 (Disclosure revision: December 2014)

USI-20051-07-17