Director Notes

The Link Between Brand Value and Sustainability

by Bahar Gidwani

This report presents the findings of a multiyear study that compares brand value and sustainability performance. It reveals a significant increase in the connection between sustainability performance and brand value, and shows that some aspects of sustainability are more closely related to brand than others.

Does a company that invests in sustainability increase its brand value? What parts of sustainability performance seem to drive brand? We present data combined from two sources: CSRHub, which rates the sustainability performance of more than 8,300 companies in 104 countries, and Brand Finance's Brand Strength Index (BSI), a proprietary methodology to calculate the brand value of more than 5,000 leading global companies. For details on the methodology used, see p. 12.

Several published studies purport to prove a connection between sustainability and brand. For instance, The Conference Board has published a series of *Director Notes* on the relationship between "real" ESG (environmental, social, and governance) performance and "perceived" performance as measured via a brand strength indicator.[1] These and other studies have tended to focus on a few hundred top companies and on industries that are perceived to be brand driven, such as consumer products and business services.

1 "Communicating Sustainability Leadership: The Difficulty of Achieving Differentiation," The Conference Board, Director Notes, 5, no. 8, April 2013; "The Bar Is Rising on Sustainability Leadership," The Conference Board, Director Notes, 5, no. 2, January 2013; "Charting a Path to Sustainability Leadership," The Conference Board, Director Notes, 4, no. 22, November 2012.

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For the period 2008 through 2012, we studied 1,094 companies to compare brand value and sustainability performance across 97 industries in 16 industry groups (Table 1) and 54 countries in 10 regions (Table 2). While the study has a bias toward larger companies and those that are publicly traded, some smaller companies (less than $1 billion in revenue) are included in the data set (Chart 1).

Table 1
Sample by industry group

Industry group	Number of companies
Agriculture and mining	30
Construction and engineering	12
Consumer goods	57
Distribution	14
Durable goods	78
Finance and real estate	383
Food, beverages, and tobacco	39
Health care	5
Media	39
Multi-industry	15
Retail	55
Services	21
Technology	183
Transportation	38
Travel	14
Utilities and refining	48

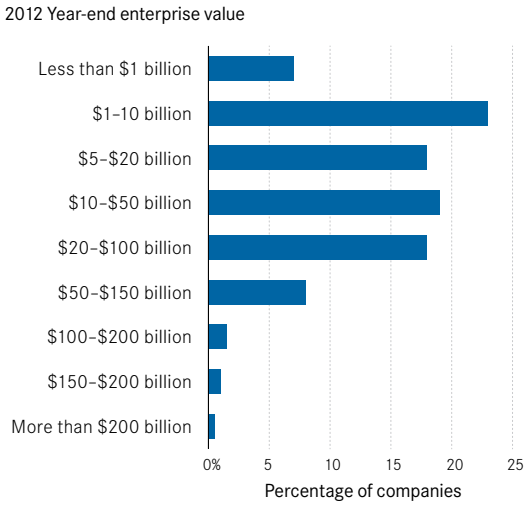
Source: CSRHub and Brand Finance databases, 2008-2012

Table 2
Sample companies by region

Region	Number of companies
Africa	17
Asia	184
Caribbean	4
Europe	288
Middle East	24
North America	400
Pacific	25
South America	18
South Asia	29
Southeast Asia	42

Source: CSRHub and Brand Finance databases, 2008-2012

Chart 1
Sample companies by revenue



Source: CSRHub and Brand Finance databases, 2008-2012

A Strong Link

There is a strong correlation between the 2013 BSI and CSRHub's overall sustainability performance rating for 2012 (using the profile of the average CSRHub user). Chart 2 shows this correlation for 1,079 companies. It appears that about 22 percent of the variation in BSI can be explained by changes in perceived CSR performance. CSRHub's rating relies on four category ratings that in turn are based on 12 subcategory ratings. Performing a multivariate regression between the 2013 BSI and the 12 CSRHub subcategories reveals an even stronger correlation of 28 percent (Chart 3).

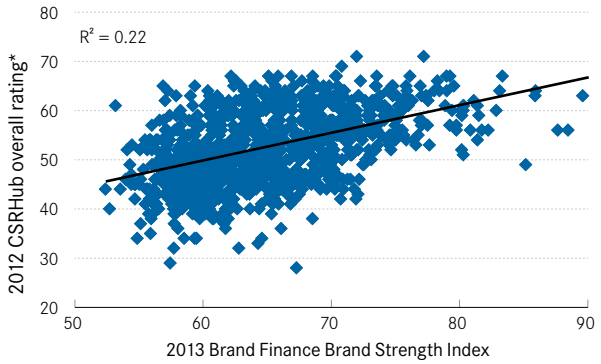
There are three potential explanations for this correlation:

- One measure does not affect the other. It just appears to due to random variation.
- Brand value and CSR performance could both be correlated with some other factor such as market capitalization. As a result, they appear to be correlated with each other, but in fact just share a common driver.
- Brand value and sustainability are related, and a company that seeks to do well in one area should consider also investing in the other. As statistician and information graphics expert Edward Tufte has put it, "Correlation is not causation but it sure is a hint."[2]

2 Edward R. Tufte, *The Cognitive Style of PowerPoint* (Cheshire, Connecticut: Graphics Press, 2003) p. 4.

Chart 2

Correlation between 2012 CSRHub rating and 2013 BSI

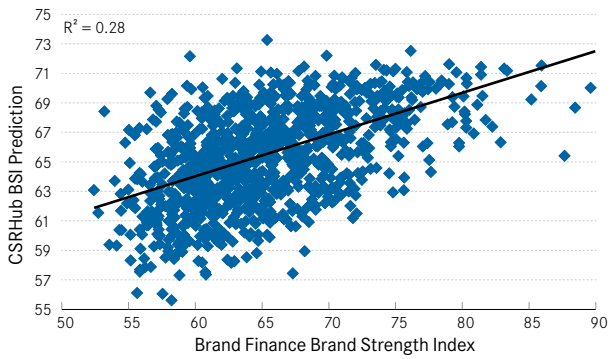


*Based on 1,079 ratings pairs and using the CSRHub average user.

Source: CSRHub and Brand Finance databases, 2008-2012

Chart 3

Correlation between CSRHub prediction and actual BSI



*Based on 982 CSRHub subcategory rating sets.

Source: CSRHub and Brand Finance databases, 2008-2012

Testing the Strength of the Correlation

There are several ways to test the strength of the correlation between two sets of data. The easiest is to estimate the probability that an observed correlation is actually zero (no correlation). This probability is expressed via an F value. An F value equal to one would indicate that the chance that the observed correlation is zero is the same as the chance that it is nonzero. Given the ~1,000 data points we have, an F value above 4 would indicate only a 5 percent chance that the observed correlation is zero. The F value for our simple brand value versus CSR correlation is 289.9 (Table 3). For our correlation of all CSR factors against brand value, the F value is still 31.8 (correlation result not shown). Both results suggest a vanishingly small chance that there is no correlation between the data sets.

Table 3 **Correlation between BSI score and overall CSRHub rating**

Summary output	
Regression statistics	
Multiple R	0.469
R square	0.220
Adjusted R square	0.219
Standard error	5.516
Observations	1031

Analysis of variance (ANOVA)

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	8822.8	8822.8	289.9	1.80115E-57
Residual	1029	31312.4	30.4		
Total	1030	40135.2			

	Coefficients	*Standard error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	44.510	1.209	36.805	0.000	42.136	46.883
CSRHub rating	0.391	0.023	17.028	0.000	0.346	0.436

Source: CSRHub and Brand Finance databases, 2008-2012

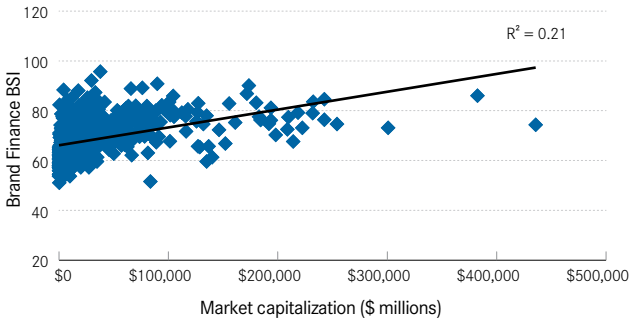
Another test is to see if splitting a data set randomly into two groups causes any change in the observed correlation. This simple test often reveals that a correlation comes from the combined effect of a few outliers or some other artifact of the data. We used a random number generator to divide our scores in half. Of course, splitting the data set reduces the total number of data elements in each sample. However, over several trials, our correlation coefficient remained between 0.21 and 0.23.

Could we be seeing only a spurious relationship between our data sets that is caused by them both being correlated with a third factor? It is impossible to rule out this type of problem—there are too many possible third factors to consider. However, we can test a couple of reasonable alternate explanations. For instance, both brand strength and sustainability could be positively correlated with enterprise value. We tested this idea and see that, while there is a fairly strong correlation between BSI and enterprise value, there is only a weak correlation for CSRHub's ratings.

Comparison of correlation with enterprise value for BSI and CSRHub rating When we include enterprise value in the regression, the correlation coefficient between enterprise value plus CSRHub score and the BSI rises to 0.39 (Table 4). The T statistics for both the CSRHub rating and enterprise value dependent variables are highly significant—well above the 3.3 needed to support a 99.9 percent confidence that these correlations are nonzero. As a result, we can conclude that enterprise value could explain a portion of the relationship between brand strength and sustainability, but not all of it.

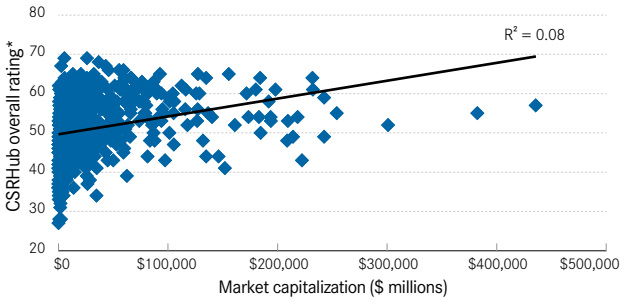
Correlation between BSI and both enterprise value and CSRHub overall rating Could the correlation we have discovered exist only for companies in "brand-focused" industries (consumer goods; durable goods; food, beverages, and tobacco; media; retail; services; technology; and travel) and not for other areas? We split our sample and examined the correlation for each type of company. As you can see, there appears to be relatively little difference in the correlation by industry type.

Chart 4
BSI versus enterprise value



Source: CSRHub and Brand Finance databases, 2008-2012

Chart 5
2012 CSRHub rating versus market capitalization



*Calculated using the CSRHub average user profile.

Source: CSRHub and Brand Finance databases, 2008-2012

Table 4 **BSI versus enterprise value**

Summary output **Regression statistics**	
Multiple R	0.625
R square	0.391
Adjusted R square	0.390
Standard error	4.879
Observations	1018

Analysis of variance (ANOVA)

	df	*SS*	*MS*	*F*	*Significance F*
Regression	2	15500.0	7750.0	325.6	5.7033E-110
Residual	1015	24159.5	23.8		
Total	1017	39659.5			

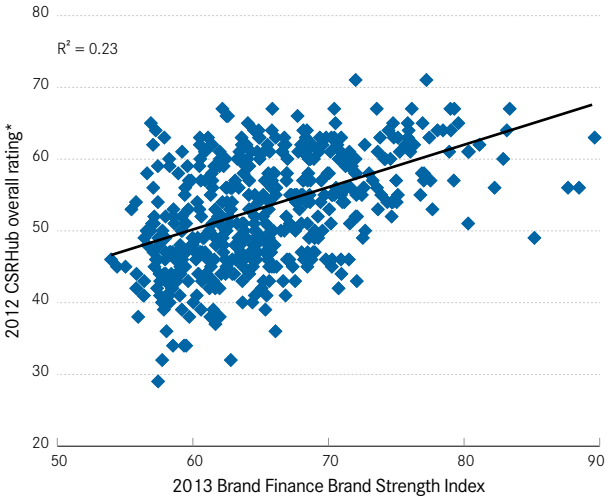
	Coefficients	*Standard error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	47.38	1.09	43.56	0.00	45.25	49.52
CSRHub rating	0.30	0.02	14.52	0.00	0.26	0.35
Enterprise value	7.3E-05	4.3E-06	1.7E+01	4.6E-57	6.4E-05	8.1E-05

Source: CSRHub and Brand Finance databases, 2008-2012

Comparison of correlation for brand-focused and non-brand-focused companies

Chart 6

BSI versus CSR rating for brand-focused companies

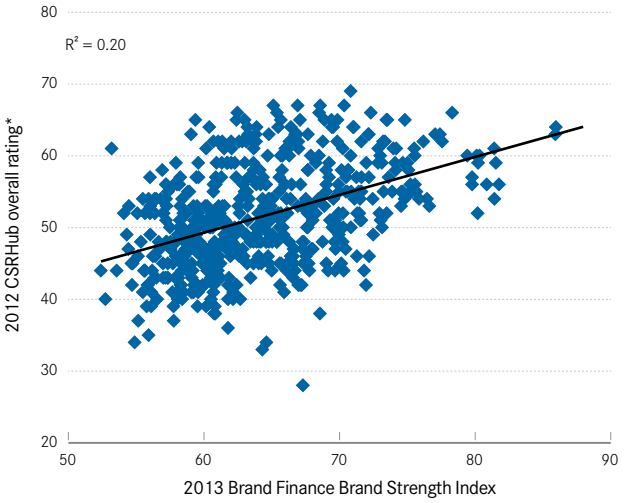


*Based on 486 ratings pairs and using the CSRHub average user profile.

Source: CSRHub and Brand Finance databases, 2008-2012

Chart 7

BSI versus CSR rating for non-brand-focused companies



*Based on 549 ratings pairs and using the CSRHub average user profile.

Source: CSRHub and Brand Finance databases, 2008-2012

Trend Over Time (2008–2012)

To further support the "hint" that there is a causal relationship between brand strength and sustainability, we investigated the changes in the relationship over time (2008 to 2012). To demonstrate how the brand-sustainability relationship changed for each year, we included all of the available company pairs for 2012 and then, for each year, only included the companies that were also present in the following year. While the number of companies studied in the earlier years is less than in the latest data set, all years include more than 350 company data set comparisons.

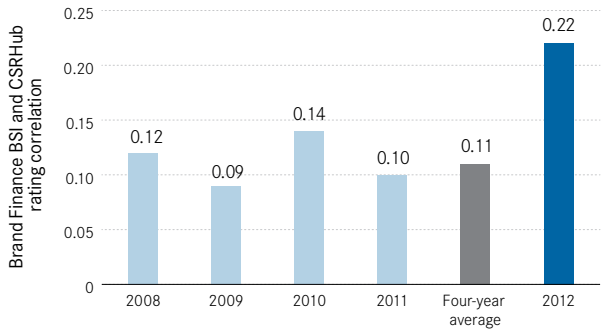
Number of companies in the sample 2008–2012

CSRHub year	Brand Finance year	Number of companies
2008	2009	373
2009	2010	511
2010	2011	650
2011	2012	998
2012	2013	1,079

For the years 2008–2011, the correlation between the BSI and CSRHub's overall rating averaged about 0.11. In 2012, the correlation rose significantly to 0.22.

Chart 8

BSI-CSR correlation doubled in 2012



Source: CSRHub and Brand Finance databases, 2008-2012

The 12-factor analysis for 2011 results in a 0.19 correlation, lower than the 0.28 correlation for 2012 (correlation result not shown). Again, this confirms a strong improvement in the relationship.

A detailed driver analysis Could one or two factors rather than sustainability performance as a whole be the source of correlation? For instance, could company performance on climate change or product sustainability be the primary driver of the correlation observed? The results of the multivariate regression discussed earlier show that some sustainability factors do matter more than others. However, 11 of the 12 CSRHub subcategories have meaningful individual correlation statistics. Only the human rights and supply chain measure seems to have no correlation with brand value.

Correlation between BSI and CSR factors We performed a similar analysis on the 2011 data set using 921 sets of data. Both the coefficients for the multivariate regression and the relative strengths of the correlations between each subcategory and brand strength were similar. The extent of correlation was less at all levels for the 2011 data.

We would expect that product sustainability, leadership ethics, and a company's environment policy and reporting would be tied to brand strength. These are areas that companies actively invest in and communicate about. The weaker ties to board performance, transparency and reporting, energy and climate change, and resource management may be due to the fact that consumers have few means to connect these areas with the products they buy. The most surprising results are the weak relationship between brand and human rights and supply chain issues, the modest effect of community development and philanthropy, and the degree to which how companies treat their employees is important to their brand strength.

We have some thoughts to offer on these three points:

1. **Human rights and supply chain** Ratings in this area are higher when a company is more transparent and discloses its behavior. Ratings also rise for a company with few "incidents" with its supply chain and when it takes steps to enforce socially positive policies (such as diversity, fair pay, and workplace safety) on its suppliers. We suspect that consumers may not understand the complexity of the issues companies face in this area. They may distrust company communications in this area or dismiss them as "window dressing." More communication and transparency may indicate that a company has problems in the area, without making it clear that the company has solved some or all of them.

2. **Community development and philanthropy** Many companies assume their investments in these areas will support their brands. However, it is hard for a company to brag about its good deeds without appearing to be "paying for love." Further, an investment in one community may not pay off with brand benefits in other/all communities.

3. **Employee treatment** Many studies have shown that consumer brand impressions are heavily influenced by the behavior of a company's employees.[3] Polite, knowledgeable service people; employees who actively serve in community organizations; and personal contact between employees and customers can directly affect how a brand is perceived.

Table 5 **Correlation between BSI and 12 CSR subcategories**

Category	CSRHub subcategory	Stand-alone correlation	Number of companies
Community	Community Development & Philanthropy	0.11	1,056
	Human Rights & Supply Chain	0.00	1,078
	Product	0.13	1,079
Employees	Compensation & Benefits	0.17	1,053
	Diversity & Labor Rights	0.15	1,072
	Training, Health & Safety	0.18	1,063
Environment	Energy & Climate Change	0.09	1,053
	Environment Policy & Reporting	0.17	1,037
	Resource Management	0.06	1,040
Governance	Board	0.10	1,060
	Leadership Ethics	0.13	1,079
	Transparency & Reporting	0.07	1,079

Strong correlation
Moderate correlation
Weak correlation

Source: CSRHub and Brand Finance databases, 2008-2012

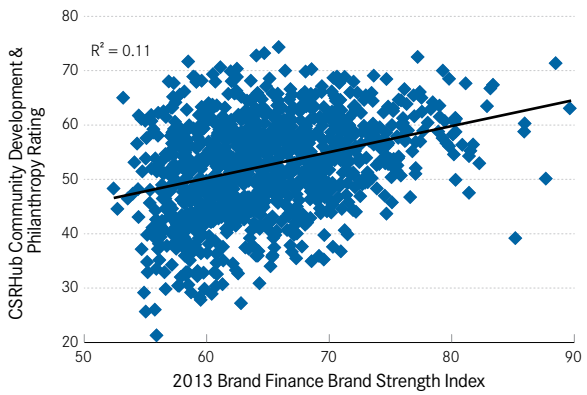
3 Sven Henkel, Torsten Tomczak, and Daniel Wentzel, "Bringing the Brand to Life: Structural Conditions of Brand-consistent Employee Behavior," *Marketing Review St. Gallen*, 24, issue 1, February 2007, pp. 13-16; Fermi Kuruvilla, "Brand Behavior" (www.brandchannel.com/papers_review.asp?sp_id=1503).

Details on the 12 Subcategory Correlations

CSRHub divides its ratings into 12 subcategories. By correlating the BSI for the studied companies against each of these factors, we determined which had the most effect on BSI.

Chart 9

BSI versus Community Development & Philanthropy rating

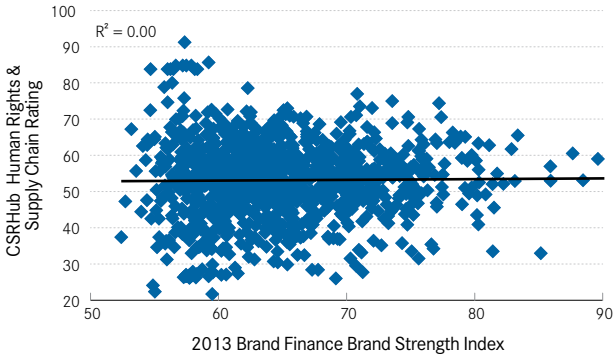


*Based on 1,056 ratings pairs.

Source: CSRHub and Brand Finance databases, 2008-2012

Chart 10

BSI versus CSRHub Human Rights & Supply Chain rating

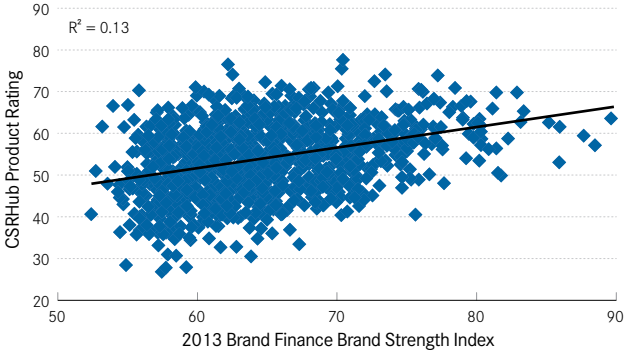


*Based on 1,078 ratings pairs.

Source: CSRHub and Brand Finance databases, 2008-2012

Chart 11

BSI versus CSRHub Product rating

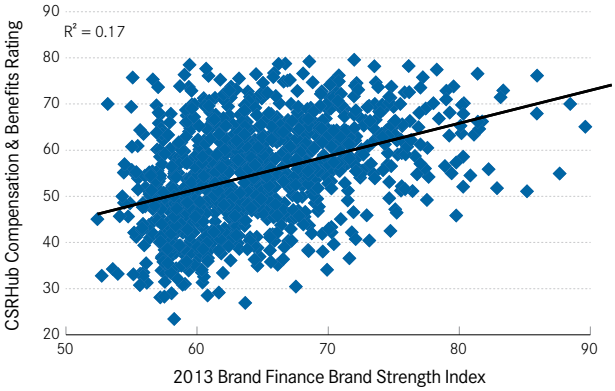


*Based on 1,079 ratings pairs.

Source: CSRHub and Brand Finance databases, 2008-2012

Chart 12

BSI versus CSRHub Compensation & Benefits rating

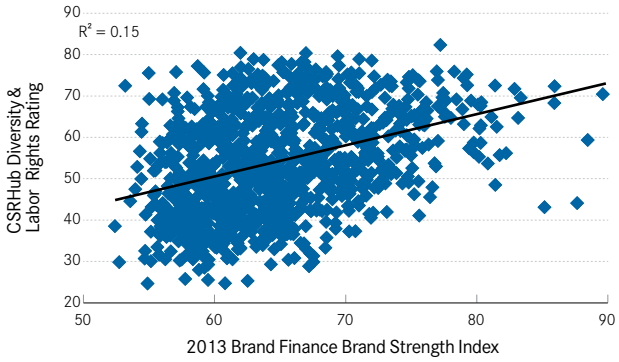


*Based on 1,053 ratings pairs.

Source: CSRHub and Brand Finance databases, 2008-2012

Chart 13

BSI versus CSRHub Diversity & Labor Rights rating

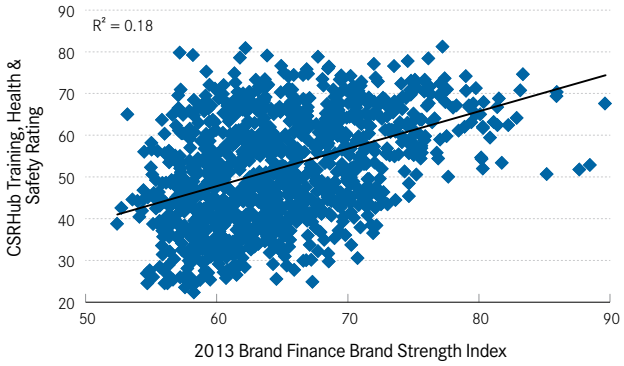


*Based on 1,072 ratings pairs.

Source: CSRHub and Brand Finance databases, 2008-2012

Chart 14

BSI versus CSRHub Training, Health, & Safety rating

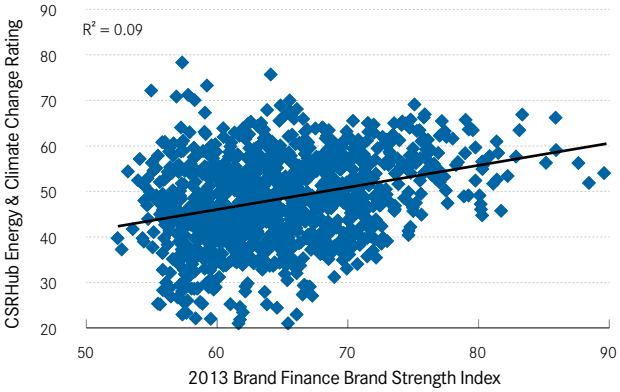


*Based on 1,063 ratings pairs.

Source: CSRHub and Brand Finance databases, 2008-2012

Chart 15

BSI versus CSRHub Energy & Climate Change rating

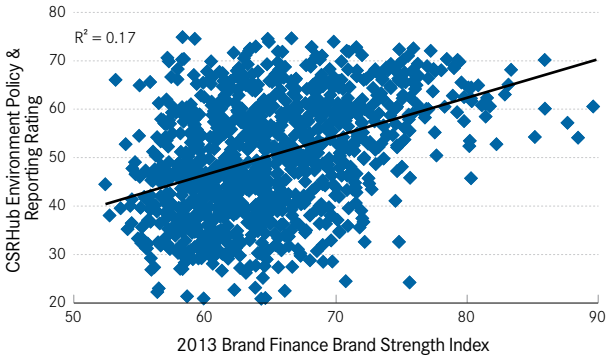


*Based on 1,053 ratings pairs.

Source: CSRHub and Brand Finance databases, 2008-2012

Chart 16

BSI versus CSRHub Environment Policy & Reporting rating

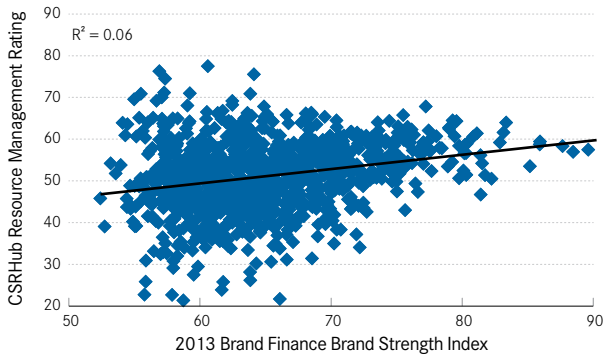


*Based on 1,037 ratings pairs.

Source: CSRHub and Brand Finance databases, 2008-2012

Chart 17

BSI versus CSRHub Resource Management rating

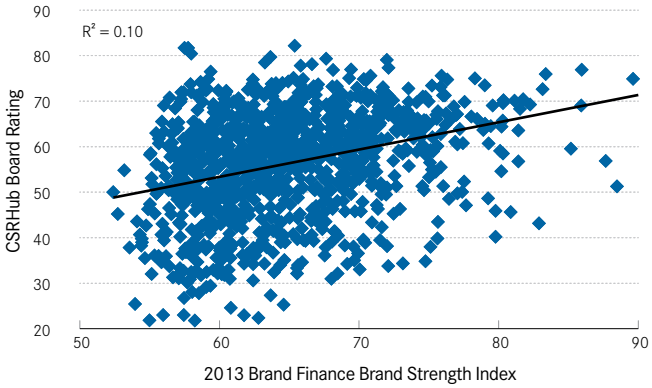


*Based on 1,040 ratings pairs.

Source: CSRHub and Brand Finance databases, 2008-2012

Chart 18

BSI versus CSRHub Board rating

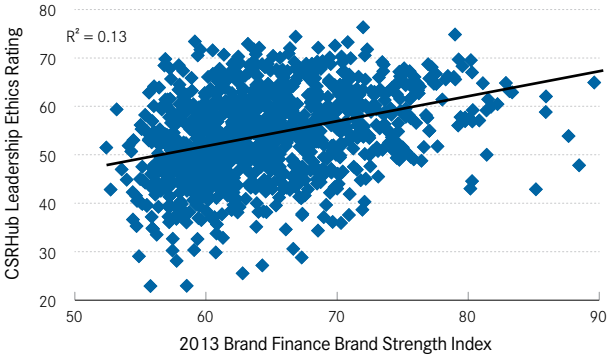


*Based on 1,060 ratings pairs.

Source: CSRHub and Brand Finance databases, 2008-2012

Chart 19

BSI versus CSRHub Leadership Ethics rating

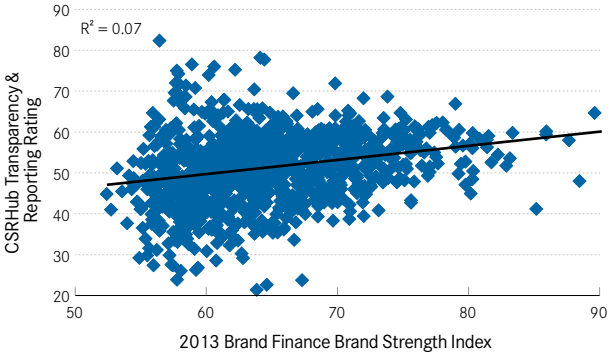


*Based on 1,079 ratings pairs.

Source: CSRHub and Brand Finance databases, 2008-2012

Chart 20

BSI versus CSRHub Transparency & Reporting rating



*Based on 1,079 ratings pairs.

Source: CSRHub and Brand Finance databases, 2008-2012

Conclusion

Our results show that there is a relatively strong correlation between a measure of brand strength and a measure of sustainability. The correlation is consistent across a wide range of companies, from various industries, regions, and enterprise values. The most important drivers of the correlation appear to be how well a company treats its employees and its environmental policies.

The observed increase in correlation suggests that consumers have become more aware of CSR and sustainability performance. This may be due to increased coverage of sustainability in the popular press, outreach and advocacy by nongovernmental organizations, increased emphasis in training programs and schools on CSR issues, and the growth of websites such as CSRHub. We would expect this correlation to continue to increase, although there should be a natural limit on how much of brand strength can be driven by social performance factors.

If CSR performance drives brand strength, companies have yet another reason to care about their social performance. We do not advocate cutting expenditures on human rights and supply chain improvements. We believe that consumer awareness in this area will grow rapidly—spurred partly by news coverage of events such as the recent collapse of a factory in Bangladesh. However, we hope that our results show companies that invest in better treatment of their employees may also increase the strength of their brands. Our results also suggest that brand managers may expect to see broad benefits for their brand strength from promoting and leveraging their company's good social responsibility performance.

Methodology

About CSRHub's ratings

CSRHub rates the sustainability performance of more than 8,300 companies in 104 countries using data from more than 270 sources to track 12 measures of corporate social responsibility (CSR) and a number of special sustainability issues. Data comes from nine socially responsible investing research firms, well-known indexes, publications, "best of" or "worst of" lists, nongovernmental organizations, crowd sources, and government agencies. By aggregating and normalizing the information from these sources, CSRHub has created a broad, consistent rating system and a searchable database that links each rating point back to its source. The CSRHub data set, which principally adheres to the Global Reporting Initiative (GRI) G3.1 guidelines, is updated monthly and extends back to December 2008.

Rating companies on CSR performance poses several methodological challenges:

Our sources track different topics in different ways For instance, one source might measure how a company treats its community by measuring how much money it contributes to local charities. Another might ask if a company has programs that allow its employees to take time off for charitable work. A third source might count the number of charity board memberships held by the company's board members. All are valid estimates of a single aspect of corporate social performance, and each might give a different reading for any given company.

Our sources each have their own rating and measurement methodology Some sources give companies a numerical score (e.g., between 0.0 and 1.0). Some use "+" or "-" signs. Many sources offer only a relative ranking (e.g., "Top 50" or "Best Performing").

Each source tracks a different universe of companies Some sources cover only specific industries. Many sources focus on one region or a single country. None of our sources offer data on more than about 60 percent of the companies we cover.

Company performance changes over time Many of our sources update their information only once per year. If a controversy arises regarding a particular company, it may take as long as two years for its effect to be reflected among all of our sources.

Some sources rate company subsidiaries or individual products Our ratings are given at the parent level of a company. It is difficult to fit together sometimes conflicting ratings on a company's subsidiaries or on its products.

CSRHub attempts to remove most of the above sources of bias and inconsistency by taking the following steps:

Map to a central schema We have divided CSR performance into 12 subcategories. These subcategories roll up into four categories. We have established an open-ended number of special issue topics to hold CSR issues that do not fit our 12 subcategory schema. We map each element of data we receive from a data source into one or more subcategories and/or one or more special issues. For instance, if a data source reports that a company is involved in Burma, we include this information in our Leadership Ethics subcategory and in our "Involved in Burma" special issue. We have mapped over 37 million data elements.

Convert to a numeric scale We take each data item from our sources and convert it into a rating on a 0 to 100 scale (100 = positive rating).

Normalize We compare the scores from different data sources for the same company. By analyzing the variations between our sources, we can determine their biases. We then adjust all of the scores from a source to remove bias and create a more consistent rating.

continued on next page

Methodology

About CSRHub's ratings (continued)

Aggregate We weight each source based on our estimate of its credibility and value. We then combine all of the available data on a company and generate base ratings at the subcategory level. We then aggregate these ratings further to the category level.

Trim We drop ratings when we do not have enough information. We currently do not rate about 90,000 companies for which we do not have enough information.

We research each rated company and attempt to determine which industries it participates in. We gather contact information, a description of the company's business, and the location of its website. This information allows us to create industry and country averages. We can also map our schema to those of other systems. For instance, we have mapped the CSRHub schema to the Global Reporting Initiative (GRI) G3.1 guideline.

Source: www.csrhub.com

About Brand Finance's Brand Strength Index

Brand Finance uses a proprietary methodology to calculate its Brand Strength Index (BSI), which measures the brand value of more than 5,000 leading global companies. The Brand Finance data set extends back to 2005. Brand Finance has been certified with ISO 10668:2010.

Brand Finance uses a Royalty Relief methodology to calculate the value of a brand. The Royalty Relief approach is based on the assumption that if a company did not own the trademarks that it exploits, it would need to license them from a third-party brand owner instead. Ownership therefore "relieves" the company from paying a license fee (the royalty) for the use of the third-party trademarks. The Royalty Relief method involves estimating likely future sales, applying an appropriate royalty rate to them, and then discounting estimated future post-tax royalties to arrive at a Net Present Value (NPV). This is held to represent the brand value. The royalty rate is supported by a profit margin analysis of comparable companies. Profit margins have been shown to be directly correlated to the royalty rates that brands are able to command.

Brand Strength is divided into three equal parts

1. Financial (33 percent)
   a. Market share (%)
   b. Market share growth (%)
   c. Revenue
   d. Margin (%)
2. Security/ Risk (33 percent)
   a. Visual identity
   b. Distribution
   c. Credit rating
3. Brand Equity (33 percent)
   a. Functional performance
   b. Emotional connection
   c. Conduct
   d. Loyalty

Source: http://brandirectory.com/

About the Authors

Bahar Gidwani has built and run large technology-based businesses for many years. CSRHub was launched in 2007 by Bahar and cofounders Cynthia Figge and Stephen Filler to improve access to sustainability metrics for corporate managers. Bahar holds a CFA and worked on Wall Street with Kidder, Peabody and with McKinsey & Co. Bahar has consulted to a number of major companies and currently serves on the board of several software and web companies. He has an MBA from Harvard Business School and an undergraduate degree in physics and astronomy. Bahar is a member of the SASB Advisory Board. He plays bridge, races sailboats, and is based in New York City.

About Director Notes

Director Notes is a series of online publications in which The Conference Board engages experts from several disciplines of business leadership, including corporate governance, risk oversight, and sustainability, in an open dialogue about topical issues of concern to member companies. The opinions expressed in this report are those of the author(s) only and do not necessarily reflect the views of The Conference Board. The Conference Board makes no representation as to the accuracy and completeness of the content. This report is not intended to provide legal advice with respect to any particular situation, and no legal or business decision should be based solely on its content.

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