

The Impact of Corporate Social Responsibility on Brand Value: An Empirical Study of Top 100 Global Brands

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Abstract

As is previously discussed in CSR research, one important benefit from CSR activities is to build up strong brand reputation and favorable brand image and increase the brand value of the company. However, there is little empirical evidence to support this claimed benefit. In this paper, we empirically test whether and which type of CSR activities influence the brand value of multinational corporations (MNCs) by collecting data from Inter brand, Bloomberg, and Advertising Age. We find partial evidence that CSR activities help create brand value for the MNCs. However, not all CSR activities are effective. For example, all CSR activities in the governance domain show a significant effect while any activities in the environmental domain do not have a significant impact. On the other hand, substantive CSR activities effectively increase the brand value of the firm while perfunctory actions do not have significant impact.

Keywords: Corporate Social Responsibility (CSR), Brand Value, CSR Domain, Multinational Company, Inter brand

1. Introduction

Along with the omni directional spread across overall business fields, Corporate Social Responsibility (CSR) has been a primary topic of study during the last several decades (Freeman 1984; Clarkson 1988; Sen and Bhattacharya 2001). CSR activity is considered as not an optional strategy anymore; but an integral part of core strategies of the firm. Now, for a manager, the key issue is how to construct CSR programs effectively to benefit the firms rather than whether or not to implement them (Balmer and Wilson, 1998; Hatch and Schultz, 2003; Balmer, 2011; Parguel et. al., 2011; Vallaster et al., 2012).

In marketing perspective, CSR activities are considered as an effective tool to raise firms' reputation from consumers and their brand image; so, it eventually increases the evaluation of the firm's brand value (Brown and Dacin 1997; Sen and Bhattacharya, 2001; Trudel and Cotte, 2009) In particular, CSR is relevant matter to the multinational companies who spend humongous amount of money and efforts to manage the strong brand over the countries. For example, Coca-cola whose brand value is more than \$81.5Bil.¹

¹Interbrand, "Best Global Brands"

And who has been always ranked in top three among other global companies for the last two decades continuously implements various CSR programs across more than 200 countries.² Also, CSR is effective to penetrate to other countries. When Starbucks entered the Chinese market, they confronted strong hostility among Chinese consumers who are proud of their traditional tea culture and against the Western, especially the American, culture. Starbucks actively implemented the CSR programs (e.g. charity projects to areas with poor education, improve benefits for the local employees, various activities for local communities, development of the first China-source coffee) and successfully builds up their brand image to be more favorable to local consumers and becomes the dominant market leader in the Chinese market (Ferrell and Hartline, 2011). The CSR becomes the core branding strategy for Starbucks worldwide and it is the key driver that makes Starbucks the most recognizable and respected global brand.³

In the CSR literature, it is well known that firms' CSR activities can raise company's reputation and improve its brand image; thus, it leads to more purchases from consumers (Brown and Dacin 1997; Murray and Vogel, 1997; Sen and Bhattacharya 2001; Tian et al., 2011). However, while these behaviors and conceptual studies successfully model the role of CSR on the consumers' brand awareness, company reputation, and brand evaluation, there are few empirical evidences provided. Many empirical studies lopsidedly examine the impact of CSR activities on firms' financial performances (Anderson and Frankle, 1980; Nehrt, 1996; Waddock and Graves, 1997; Porter and Kramer, 2006; Godfrey, 2005). Even if these studies can provide some evidence of the profitability of CSR activities (but still debating), it is not clear whether CSR activities can influence the brand evaluation of the firm. Also, there is little known whether CSR activities are helpful for the multinational companies' branding strategy.

Therefore, there are important empirical research questions raised. First, we need to verify whether CSR activities influence the brand value by increasing brand awareness and brand image. The following empirical question should be what types of CSR activity play significant roles to improve the brand value of the firm within different domains (e.g. environmental, social, governance domain). In this paper, we investigate these two major research questions to fill the gap in the CSR literature. For the analysis, we collect the secondary data from the most eminent research sources: we collect the brand value data for the top 100 multinational companies from Interbrand and collect data of those firms' characteristics including all CSR activities they conducted each year from Bloomberg. In addition, we collect the advertising data of these companies from Advertising Age to separate the CSR effect from the advertising effect. By employing this firm panel data, we address our research questions aforementioned.

We find partial evidence that CSR activities play important roles to increase the brand value of the firms. However, not all of the CSR activities are effective: For example, all CSR activities in the governance domain show a significant effect on the creation of the brand value while any activities in the environmental domain do not show a significant effect. This indicates that having accountability and transparency would be the key driver to successfully create brand value through CSR activities.

On the other hand, our findings suggest that substantive CSR activities (e.g. Link executive's compensation with CSR performance, CSR training programs for employees) effectively increase the brand value of the firm while perfunctory actions (e.g. implementing environmental policies or policy of employment) do not have significant impact. Thus, we find that simple and passive adoption of CSR activities (e.g. implementing policy or disclosing more numbers of CSR programs) would not be good enough to raise the brand value; rather, firms need trust from their stakeholders (e.g. consumer, employees, etc.) by showing their strong commitments or performances. Our study expands the understanding in the CSR literature by examining how different type of CSR activities influences a firm's brand by using three distinctive datasets. Particularly, our findings provide important implications for managers of multinational companies to make more effective CSR programs.

² Coca-Cola developed the women empowerment program by hiring 865,000 women since 2010, balanced the equivalent of an estimated 94 percent of the water used in our finished beverages in 2014, supported more than 330 active, healthy living programs across 112 markets. (Source: Coca-Cola 2014/2015 Sustainability Report)

³ Starbucks donate about 4% of their revenue for charitable contributions, spend more than \$200 million for women- and minority-owned business, huge financial and training supports for their local business partners, and execute several dozens of CSR programs to various domains every year (Source: Starbucks Corporation Corporate Social Responsibility Fiscal 2006 annual report)

2. Literature Review

2.1 CSR on brand value

In the last two decades, issues related to CSR and ethical business practices have attracted a lot of academic attention and researches on the CSR initiatives and effectiveness/benefits of practicing CSR in terms of business value. The overwhelming majority of literatures focus on the firm financial performance such as the efficiency of business operation (Porter and Kramer, 2002; Brammer and Millington, 2005), the employee productivity (Tuzzolino and Armandi, 1981; Valentine and Fleischman, 2008), the capital market benefits (Godfrey, 2005, Dhaliwal et al., 2012), and the risk management benefits (Richardson and Welker, 2001; Husted, 2005).

One of the important benefits of implementing CSR activities is its effect on the creation of brand value via increasing brand awareness or brand reputation. Existing studies mainly investigate the CSR differentiation effect in two aspects - consumer behaviors such as changed purchasing pattern and the brand management such as product differentiation and brand reputation (Murray and Vogel, 1997; Singh et al., 2008; Trudel and Cotte 2009; Melo and Galan, 2011; Tian et al., 2011; Hsu, 2012; Torres et al., 2012).

Melo and Galan (2011) identify positive effect in terms of improved intangible competitive advantage due to the enhanced brand value through practicing CSR. Trudel and Cotte (2009)'s research on the customers show that they prefer to buy products with a premium from the firm they deem to be more ethical and request a lower price for similar products from a firm without significant CSR initiatives. In fact, Hur et al. (2014) suggest that CSR has a direct positive effect on the corporate brand credibility and the corporate reputation. This type of findings seems quite consistent across different countries and different industry. For example, using a cross-cultural context, Hsu (2012) investigated firm CSR initiatives and find them to improve the brand reputation which may in turn help differentiate the company's products or services thus create corporation level differentiation strategy.

Tian et al. (2011) find that consumers generate positive perception of a firm or a product with good CSR record and also have higher purchase intention; however, the effect may vary across different product categories, the effect seems to be more pronounced for experience products. Similar to the product market, Trong Tuan (2012)'s study of the healthcare service companies also reveal positive relationship among the transformational leadership, ethical CSR, and the brand equity. It is obvious that behavioral changes are only realized when the customers are aware of the CSR activities of the company (Sen and Bhattacharya, 2001; Yoon et al., 2006). Other variables seem much more complex. Lee et al. (2009) argue that CSR activities only have positive impact if they are perceived as being altruistically motivated. The findings of Ellen et al. (2006) and Lee et al. (2009) show that CSR involvement that is perceived as profit-oriented will lead to negative effects on the consumers' attitudes toward a brand and decrease their willingness to purchase. The effects of CSR are also very much contingent on the personality of consumers. Within certain consumer groups, it can even be perceived as negative impact (Kolodinsky et al., 2010). As for the information source, according to Yoon et al. (2006), information source is determinant to the positive or negative impact of CSR on the customer perception and the brand evaluation. If the company is viewed as the source of CSR information, there exists a negative impact on the attitude towards the company while if CSR is communicated by a neutral source, even profit-oriented CSR does not necessarily result in negative effects (Yoon et al., 2006).

2.2 Effect of different CSR initiatives

However, while there are many behavioral and conceptual models proposed to capture the CSR impact on brand value of the firms, there are little CSR research provided in the empirical literature. In addition, another important empirical research question is to understand which types of CSR activities are more effective to create brand value of the firms. This is critical questions for a manager who need to optimally allocate his/her budgets and researches to different types of CSR activities.

According to previous literatures, not all of the CSR initiatives are working equally effective on companies' brand value addition. Bronn and Vrioni (2001) review research done on cause-related marketing from the 1980s to the 2001 and confirm the positive impact of pro-social company agenda in building stronger brand image and brand equity. In the more recent literature, Hoeffler and Keller (2002) and Nan and Heo (2007) identify evidence for a social welfare/causes related CSR to be effective in raising the brand reputation and brand equity. Singh et al. (2008) study the factors that will influence the consumer purchasing behavior and their perception of the companies.

Their results suggest that social issues such as related to CSR practices are significant in creating an image and enhancing customer purchasing preferences. Torres et al. (2012) find that CSR to various stakeholders (customers, shareholders, employees, suppliers, and community) is positively associated with improved global brand equity.

In addition, CSR initiatives with environmental strategies are found to lead to competitive advantages for the firms in terms of better reputation, improvements in investors' trust in the firm, more efficient use of resources, and new market opportunities (Porter and van der Linde, 1995; Hart and Ahuja, 1996; Russo and Fouts, 1997; Sharma and Vredenburg, 1998; Delmas and Toffel, 2004). However, there are also some studies indicating no significant association between the environmental CSR initiatives and the company reputation and brand value enhancement. For example, Ingram and Frazier (1980) identify a weak positive relationship between the environmental performance and the contents of environmental disclosures. First and Khatriwal (2008) find no conclusive evidence for whether consumers give priority choice to the environmentally friendly firms and punish other firms with less environmental concerns when they perceive the competitive market brands and make purchasing decisions.

Finally, a firm's CSR consciousness can be perceived or indicated through a firm's corporate governance activities. One of the simplest indicators of a firm's dedication to CSR initiatives is the disclosure of their CSR information. The investigation on the effect of CSR disclosure renders mixed findings: the investors' responses vary across countries and the actual effects depend on the content of the CSR (Alexander and Buchholz, 1978; Chan and Milne, 1999; Van Dijken, 2007; Van der Laan Smith et al., 2010). Customers can also perceive a firm's CSR activities through their adopted firm policies such as employee benefits in terms of job training, professional safety, equal opportunity, and so on. Researchers have documented that CSR initiatives such as meeting labor union demands, providing better health care and retirement benefits, and paying wages above the market level, help to improve the employee morale and increase the employee productivity, which in turn assist firms in building a reputation as a good employer, which attracts better talent and motivates personnel (Roberts and Dowling, 2002; Valentine and Fleischman, 2008; Edmans, 2012).

To induce the top management to practice CSR, one way is to work on the executives' compensations. The issues of CSR performance and executive compensation have been addressed by some studies with inconsistent results (e.g., McGuire et al., 2003; Mahoney and Thorne, 2005; Cai et al. 2011). For instance, McGuire et al. (2003) claim no association between the CSR activities and CEO incentives, while Mahoney and Thorne (2005) document a positive relationship between the CSR performance and the CEO pay when investigating Canadian executives' long-term compensation. However, Cai et al. (2011) document a negative association. Overall, whether the top management level buy into the idea of CSR and engage the initiatives in the normal management process can also eventually determine the effect of CSR activities. Du et al. (2007) find that not all CSR initiatives are equally effective: a brand that positions itself on CSR, integrating its CSR strategy with its core business strategy, is more likely to gain advantages in brand value enhancement than brands that only superficially practicing CSR.

2.3 Research questions

Following aforementioned discussions, practicing CSR could associate with a firm's overall performance. It is evident that one of the most important benefits for firms by implementing CSR activities is the improvement of their brand reputation and the creation of brand value. However, prior literatures do not provide clear evidence of this benefit of CSR on brand value creation while they provide mixed evidence on its impact on the financial performances. Thus, it is urgent issue that we need to verify whether CSR activities influence the brand value by increasing the brand awareness and the brand image. In addition, the impact could vary across domains of CSR activities. Thus another important question is that, if we are able to identify significant role of CSR activities on brand value creation, what type of CSR activity is more effective to improve the brand value of the firm among different domains (e.g. environmental, social, and governance domain). However, the problem that the brand value is difficult to measure and lack of comprehensive and consistent measurement for various firms' CSR activities make it difficult for the previous researchers to conduct rigorous empirical studies. Therefore, in this paper, we investigate these two major research questions by collecting comprehensive dataset from various eminent and reliable data sources.

3. Data and Model

3.1 Data

In this paper, we collect data from various eminent research companies: Inter brand Group (www.interbrand.com), Compustat, Bloomberg, and Advertising age (www.adage.com). For brand value measure, we employ the brand value of the global companies that appear in “Top 100 Best Global Brands Ranking” in Inter brand’s Annual Best Global Report from 2004 to 2013. The “Top 100 Best Global Brands ranking” is a highly influential annual ranking published by the Inter brand Group, the world’s leading brand consultancy with a network of 33 offices in 27 countries. According to Fehle et al. (2008), Inter brand’s publication rates as the best known source of brand value with a methodology that is universally accepted by both the academia and the business community.

For CSR related measures, we rely on the Bloomberg ESG database. For the Bloomberg ESG database, it is a database that includes a broad cross section of environmental, social, and corporate governance measures, such as resource efficiency, emissions management, community relations, workforce development, and board/ committee structures⁴. There are several shining points for this data. The first one is the accountability. Bloomberg ESG data is collected from company-sourced filings such as Corporate Social Responsibility reports, annual reports, company websites, and a proprietary Bloomberg survey that requests corporate data directly. Bloomberg ESG data is highly accountable since none of this data is estimated or derived and every data field has transparency backed by a company document. The second one is the broad coverage. Bloomberg ESG database has a broad coverage, which enables comparability between companies. Bloomberg has researched 20,000 companies worldwide across more than 50 countries, covering virtually the entire investable universe that discloses ESG data. The third one is the inclusion of abundant CSR related data points. Bloomberg ESG database is a platform that offers the full integration of over 700 ESG indicators. As this study aims at figuring out the impact of different kinds of CSR practices on the brand value, this ESG data highly fit our needs.

We derive the advertisement data from Advertisement Age (www.adage.com). “Advertising Age is recognized as the leading global source of news, analysis, and inspiration for the marketing and media community. Advertising Age includes ongoing coverage of strategic topics for marketers from mid to large companies complemented by breaking news and a database of the world’s best creative publisher. This 84-year-old publisher produces more than 15 original rankings each year, including the Global Marketer, the 100 Leading National Advertisers and 100 Leading Media Companies lists, the Digital A-List, and the annual Agency Report.”⁵ Our advertisement data is derived from the Global Marketer Ranking. Brands in our dataset include multinational brands that receive substantial focus from the internal and external stakeholders they are generally famous corporate brands, such as Apple, Microsoft, Google, Toyota, and Samsung. After examining the most recently 10-year best global brand reports published by the Inter brand Group, we have got 65 brands appeared in the best global brand ranking for at least five year. Collating brand value estimates and CSR data, we have 50 brands with an average length of 8 years in our dataset.

3.2 Model

3.2.1 Dependent Variables

For the measure of brand value (BV), we use brand value estimates developed by the Inter brand Group. Inter brand Group brand value estimates are based on formulas that incorporate three key components of our valuation: the financial performance of the branded products and services, of the role the brand plays in the purchase decision, and of the competitive strength of the brand (Inter brand Group, 2012). Brand value estimates developed by the Inter brand Group have served as major data sources for a number of studies. Brand value estimated by the Inter brand Group is “generally believed to be valid and reliable” even though have been criticized by some people (Peterson and Jeong, 2010).

⁴ Introduction of ESG data available in Bloomberg terminals and Bloomberg ESG Brochure

⁵ Introduction of Advertisement Age, available on <http://adage.com/help/about-us>, accessed on May 6, 2015

3.2.2 Independent Variables

In order to have a comprehensive and authentic measure for CSR activities of the company, we follow the “Environmental, Social, and Corporate Governance KPI framework” proposed by United Nations Environment Program Finance Initiative (UNEP FI) and World Business Council for Sustainable Development (WBCSD) and create nine individual variables for the measurement of CSR activities of each firm. It is worth noticing that in this study, CSR is treated as a multi-dimensional construct that contains three subcategories (environmental domain, social domain, and corporate governance domain) with nine measurements. Further, in order to have a comprehensive picture of CSR practices of the company to the most extent, each CSR dimension includes two sub-dimensions, namely, policy and performance.

1) *Environmental domain*

For the environmental domain, we focus on environmental policies and the efficient use of energy. Especially, for environmental policies (EPL), eight policies including Biodiversity Policy, Climate Change Policy, Emission Reduction Policy, Energy Efficiency Policy, Environmental Quality Management Policy, Green Building Policy, Pollution Abatement Policy, Water Policy are under investigation.⁶Therefore, EPL varies between 0 and 8, where 0 means the company is not engaging at all with environmental policies, and 8, where the company is committed to all 8 environmental policies under investigation. For the energy efficiency (EEF), we proxy it by the energy intensity of the company, which calculates as megawatt hours of energy consumed per million of sales revenue. It is widely believed that the lower the energy intensity, the more efficient use of the company.

2) *Social domain*

For the social domain, two groups of stakeholders are considered. One is the internal stakeholder such as employees. Internal CSR efforts such as CSR training programs for employees (CTR) and the number of CSR policies related to employees (CPE) are in our examination. Especially, for employee related policies, six policies including Equal Opportunity Policy, Fair Remuneration Policy, Health and Safety Policy, Human Rights Policy, Training Policy and Policy against Child Labor are under investigation. Similar to the environmental policy, Employee Policy is varies between 0 and 6, where 0 means the company is not engaging at all in employee policies, and 6, where the company is committed to all 6 employee policies under investigation. The second important stakeholder connected to the social responsibility of the firm, is the local community. Two indicators are included: one is whether the adoption of business ethical policy (BEP), shedding light on a firm’s efforts in ensuring an ethical and fair market environment, with its connection with upper stream suppliers and downstream consumers. The other is the amount of community spending (CMS), capturing a firm’s willingness as well as capability in community affairs.

3) *Governance domain*

For the corporate governance domain, three dimensions of the company are under investigation. The first is company’s compliance to the number of sustainability initiatives (COM) where the company is an active signatory or member, including whether the company has used the Global Reporting Initiative framework for the guidance in its public reporting; signature to United Nations Global Compact; whether the company’s application level for “Materially Matters” was checked by the Global Reporting Initiative. It is a measurement indicating the accountability and normalization of company’s information disclosure. Second, this study also focuses on the CSR information disclosure (CDC) of the company. CSR disclosure of a company can be measured by a proprietary aggregate environmental, social and governance disclosures score calculated by Bloomberg for public companies. The third measure for the corporate government domain aims at measuring whether the company’s top level (ie, the board of directors) takes into account the issue of CSR engagement (SEC). A company that implements various programs and activities at the board level, such as linking the senior executives’ compensation with the CSR performance, is demonstrating to society that it has an active strategic posture with regard to CSR activities (Ullmann, 1985). This is measured by a dummy variable that equals to 1, if the company has the mechanism that links senior executives’ compensation with CSR performance, otherwise it is 0.

In addition to the key variables related to CSR activities, we include two additional variables as control variables in our model: advertising expenditure (ADS) and research and development expenditure (RDE).

⁶ Detailed information is available upon request.

Basing on the extant literature, “brand value is generally believed to reflect in part the joint outcome of advertising and research and development activities” (Peterson and Jeong, 2010). In addition, we include year dummies (YEAR) to capture the potential seasonality issue. Table 1 reports the descriptive statistics of key variables in our model.

Table 1: Descriptive Statistics

| | Mean | S.D. | Min | 25% Quantile | Median | 75% Quantile | Max |
|-----|-----------|-----------|-------|--------------|--------|--------------|----------|
| BV | 19,189.95 | 19,582.54 | 3,110 | 4,062 | 11,378 | 59,926 | 118,863 |
| EPL | 4.19 | 2.35 | 0 | 0 | 5 | 6 | 8 |
| EEF | 3.94 | 1.17 | 1.57 | 2.34 | 3.84 | 4.91 | 6.94 |
| CPE | 3.51 | 1.59 | 0 | 0 | 4 | 5 | 6 |
| CTR | 0.21 | 0.41 | 0 | 0 | 0 | 1 | 1 |
| CMS | 110.56 | 161.34 | 7.06 | 16 | 65 | 297 | 1,068 |
| BEP | 0.93 | 0.26 | 0 | 0 | 1 | 1 | 1 |
| COM | 1.21 | 0.84 | 0 | 0 | 1 | 2 | 3 |
| SEC | 0.07 | 0.26 | 0 | 0 | 0 | 0 | 1 |
| CDC | 40.83 | 13.29 | 10.74 | 19.01 | 40.91 | 61.40 | 94.79 |
| ADS | 1,068.55 | 940.44 | 75.8 | 143 | 810 | 1,854 | 5,934 |
| RDE | 2,028.38 | 2,621.88 | 0 | 0 | 610 | 4,759.1 | 10,890.5 |

3.2.3 Empirical Model Specification

$$BV_{it} = \beta_0 + \beta_1 \times EPL_{it} + \beta_2 \times EEF_{it} + \beta_3 \times CTR_{it} + \beta_4 \times CPE_{it} + \beta_5 \times BEP_{it} + \beta_6 \times CMS_{it} + \beta_7 \times COM_{it} + \beta_8 \times CDC_{it} + \beta_9 \times SEC_{it} + \beta_{10} \times ADS_{it} + \beta_{11} \times RDE_{it} + YEAR' \theta + \varepsilon_{it}$$

Where $\varepsilon_{it} = \alpha_i + \epsilon_{it}$

As aforementioned, in our proposed model, we include nine CSR variables from three different domains. Also, we include all the control variables as well as specific dummy vectors across sector, country, and time. In addition, we consider our error terms as the combination of two parts: the unobserved individual specific effect, α_i and the random error, ϵ_{it} . Due to the nature of our panel data, it is reasonable to consider firm-individual characteristics which are unobserved to researchers. For example, individual firm’s preference or strategic focus on branding or its capacity or expertise would be different across firms. We conduct the correlation analysis between key variables (Table 2) and can’t find any serious multicollinearity problem in our model.

Table 2: Correlation Analysis

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) |
|----------|--------|-------|--------|-------|--------|--------|-------|-------|--------|-------|-------|------|
| (1) BV | 1 | | | | | | | | | | | |
| (2) EPL | 0.174 | 1 | | | | | | | | | | |
| (3) EEF | 0.071 | 0.139 | 1 | | | | | | | | | |
| (4) CPE | 0.025 | 0.544 | 0.154 | 1 | | | | | | | | |
| (5) CTR | 0.386 | 0.149 | -0.086 | 0.229 | 1 | | | | | | | |
| (6) CMS | 0.417 | 0.186 | -0.067 | 0.151 | 0.199 | 1 | | | | | | |
| (7) BEP | 0.130 | 0.318 | 0.106 | 0.342 | 0.022 | 0.103 | 1 | | | | | |
| (8) COM | 0.175 | 0.402 | -0.089 | 0.529 | 0.326 | -0.065 | 0.119 | 1 | | | | |
| (9) SEC | 0.245 | 0.087 | 0.033 | 0.104 | 0.372 | -0.001 | 0.085 | 0.144 | 1 | | | |
| (10) CDC | -0.095 | 0.146 | 0.072 | 0.199 | -0.092 | 0.045 | 0.048 | 0.138 | -0.247 | 1 | | |
| (11) ADS | 0.180 | 0.327 | 0.263 | 0.255 | 0.010 | 0.175 | 0.180 | 0.112 | 0.171 | 0.103 | 1 | |
| (12) RDE | 0.434 | 0.369 | 0.059 | 0.194 | 0.204 | 0.523 | 0.160 | 0.139 | -0.009 | 0.138 | 0.076 | 1 |

4. Estimation Results

For estimation, we conducted both the fixed effect model and the random effect model (Baltagi, 2002). Following the houseman test results (Chi-squared = 29.03, p-value <0.05), we choose fixed effect model to test our hypotheses. In Table 3, estimation results of both models are reported.

The results are quite interesting because we find strong evidence that CSR activities have an impact on the creation of brand value of the firms. However, not all activities play significant role to create the brand value. For example, all CSR activities related to the governance domain (COM, CDC, SEC) plays as key brand driver to influence the brand value while any of the activities in environmental domain (EPL and EEF) do not show significant effect on brand value creation. Activities in social domain show mixed results: adopting employee training programs and business ethical policies is helpful in creation of the brand value while community spending and policies related to employees do not have significant effect to increase the brand value of the firm.

This finding provides important managerial implications to the multinational companies' CSR strategy. Under the circumstance where many companies are competitively rushing to equip themselves with colorable CSR activities, it is critical to have the public trust and differentiate themselves from the other competitors. Instead of the announcement of perfunctory CSR policies, firms should effectively build up public trust and accountability to their consumers. Substantive efforts such as linking the executives' remuneration to the CSR activities or actively participating into well-known sustainability organization can give a strong signal of the strong commitment of the company to the authentic responsibility to the society. Similarly, providing substantive CSR training programs for their employees plays significant role in creation of the brand value while implementing employee policies for minority or women do not have a significant impact on the brand value creation. In addition, managers should carefully design and implement environmental activities. Our findings suggest that implementing environmental policies or environmental related programs might not be effective to increase brand value of the company. This might be the nature of nature of the environmental activities. First and Khetriwal (2010) argue that it is difficult for a company to persuade consumers about their devotions to the environment via their environmental policies and activities. Also, Ramus and Montiel (2005) argue that environmental policies are frequently utilized as a form of green washing; so, it is not very effective to increase their brand reputation through the conventional environmental activities.

Table 3: Estimation Results of Key Variables

| variables | | FE | | RE | |
|---------------------------------|----------|--------------|----------|--------------|----------|
| | | estimates | s.e. | estimates | s.e. |
| <i>CSR activities</i> | | | | | |
| Environmental Domain | EPL | 269.47 | 168.05 | 289.80* | 168.75 |
| | EEF | -0.502 | 4.856 | -2.855 | 4.268 |
| Social Domain | CTR | 2,607.91*** | 665.12 | 2,729.93*** | 672.15 |
| | CPE | -50.03 | 227.61 | -91.65 | 230.46 |
| | BEP | 2,247.20*** | 904.48 | 2,315.80*** | 918.73 |
| | CMS | 4.123 | 3.516 | 4.698 | 3.384 |
| Governance Domain | COM | 908.35** | 407.60 | 931.53** | 409.57 |
| | CDC | -103.55*** | 36.34 | -108.02*** | 36.18 |
| | SEC | 2,976.75*** | 884.77 | 2,931.95*** | 901.09 |
| Control Variables | ADS | 3.120*** | 0.636 | 2.959*** | 0.595 |
| | RDE | 0.5983*** | 0.229 | 0.827*** | 0.218 |
| | Year 2 | -2,375.34 | 2,142.86 | -2,111.71 | 2,190.11 |
| | Year 3 | -2,412.89 | 2,161.84 | -2,2218.43 | 2,207.56 |
| | Year 4 | -3,245.01 | 2,169.64 | -3,090.33 | 2,213.23 |
| | Year 5 | -3,830.26* | 2,194.76 | -3,696.39* | 2,236.72 |
| | Year 6 | -2,977.51 | 2,244.93 | -2,854.27 | 2,284.09 |
| | Year 7 | -3,053.09 | 2,290.61 | -2,943.47 | 2,326.53 |
| | Year 8 | -3,105.22 | 2,318.15 | -3,035.96 | 2,352.65 |
| | Year 9 | -4,000.74* | 2,371.29 | -3,914.80* | 2,404.92 |
| | Year 10 | -4,108.74* | 2,435.97 | -4,019.55* | 2,470.51 |
| | Constant | 14,900.63*** | 2,396.76 | 13,865.16*** | 2,700.20 |
| N | | 378 | | 378 | |
| Number of Brands | | 50 | | 50 | |
| Observation per group (average) | | 7.9 | | 7.9 | |
| R-sq within | | 0.3427 | | 0.3397 | |
| R-sq between | | 0.2660 | | 0.3134 | |
| R-sq overall | | 0.2515 | | 0.2913 | |
| F-statistics/Chi-statistics | | 8.29*** | | 179.12*** | |
| (p-value) | | (0.000) | | (0.000) | |
| Hausman Test | | | | | |
| : Chi-statistics (p-value) | | 29.03** | (0.015) | | |

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Another interesting finding is that we found negatively significant impact of CSR disclosures numbers on brand value. This is somewhat counterintuitive finding because disclosures of CSR related information can be a conversation between the company and stakeholders and it helps them understand the company's activities and change their perceptions and expectations (Adams and McNicholas, 2007). However, negative effect of CSR disclosure implies that simply large numbers of disclosure does not guarantee higher evaluation of the company reputations and brand value. This might be a matter of sincerity. Due to the voluntary nature of the disclosure, more disclosures would not be good signal to people. Indeed, we find negative correlation between the disclosure (CDC) and the linkage of executives' compensation (SEC) or employee training programs (CTR) in Table 2.

This indicates that firms who focus more on external frills with their CSR programs lack strong internal programs. On the other hand, the companies who lack strong internal commitments of CSR activities and expertise are likely to focus on disclosing more. Another possible explanation would be that more disclosure of the company can raise people's expectation of the company and disappoint them when the company's CSR performance would not meet their expectation even if they get involved in CSR activities as much as other competing firms. It is interesting research question to see how disclosures influence people's expectations and understand key drivers of firms' disclosure behaviors. However, this is out of the scope of our study and we leave this possibility for future research.

5. General Discussion

In this study, we empirically test the impact of CSR activities on the brand value of the company by collecting multinational company data from multifaceted sources. We find partial evidence that CSR activities significantly influence the creation of brand value for the company. However, not all CSR programs are effective. We find strong support for CSR activities related to the governance domain while no significant evidence for those activities related to environmental domain which is consistent with some of the previous research. Our study expands the understanding of CSR effect on the brand value creation of the multinational company in the CSR literature by providing empirical evidences with distinctive database. Also, we call for further theoretical and conceptual study related to people's reaction towards company's CSR activities in each domain.

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