Linking CSR and Financial Performance through Branding

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Abstract

We argue that explanations in the extant literature for the profit-effects of Corporate Social Responsibility (CSR) require further investigation, and we offer an alternative explanation. In particular, we demonstrate that CSR can work as a powerful signaling tool for leading firms when they communicate brand values to consumers. Our results outline a relationship between CSR and profitability, explain strategic CSR by highlighting motivations for this form of firm-level altruism, and hint at managerial guidelines regarding when and how much to spend on CSR. Since these results follow the direct application of standard results in signaling theory, the primary contribution of our paper is simply the novel perspective on CSR that it offers. This can help to highlight avenues of future empirical research which can help resolve the conflict among the findings in the extant literature.

1. Introduction

"He says (boastfully): "I have wasted wealth in abundance!"" –The Holy Qur'an, XC:6

Is Corporate Social Responsibility (CSR) linked to a firm's profits? And if not, why would firms exercise CSR in the first place?

These questions have become quite unfashionable in many circles. In fact, it is increasingly becoming taboo to question motives for CSR, the supposedly right thing to do. So much so that CSR has become an operational norm for firms, or at least the benchmark of firm-level ethical behavior. And managers are accepting CSR expenses much the same way that they accept other operational expenses such as utility bills.

But that is exactly the reason that the links between CSR and profits need to be unearthed. Effective management, even of operational expenses, requires an understanding of profit-effects. If managers are to engage their firms in CSR, they need normative guidelines regarding such managerial tasks as budgeting for CSR.

Prior theoretical research (c.f. Baron 2001) has attempted to link CSR to product differentiation. Firms such as Ben and Jerry's and the Body Shop clearly communicate their high ethical standards and devotion to CSR. Thereby, perhaps, their product offerings can appeal to market segments having high levels of social conscience. But strictly speaking that is not CSR, as much as it is sales. To see why, one can contrast a high-quality hospital and a low-quality free clinic.

Even if the former goes the extra mile to ensure patient well-being, it may very well be attributed to a marketing motive instead of CSR. A free clinic, on the other hand, may be closer in concept to true CSR, even if its services are not that great. Similarly, when firms sponsor minor league or soccer championships it is hard to argue whether their sponsorships constitute CSR for marketing, or simply marketing.

Clearly, highlighting a working definition of CSR is helpful. According to Siegel and Vitaliano (2007), CSR occurs when firms engage in activity that appears to advance a social agenda beyond that which is required by law. Put another way, CSR occurs when firms spend money for a social cause, *sacrificing profits*.

But given that definition, there seems to be little room left for linking CSR to profits, as the two appear tautologically antithetical. If CSR is a pure sacrifice of profits, how can it lead to profits?

This apparent conflict between CSR and firm objectives was noticed quite early by the Nobel laureate Milton Friedman, who had declared that any effort to use corporate resources for purely altruistic purposes would constitute socialism. In fact, Friedman recommended that corporation law should be modified to discourage CSR (Manne, 2006).

And yet more than thirty years after Friedman made his declaration, CSR has become the norm. Surprisingly enough, empirical research has indicated positive, neutral and even negative impacts of CSR on financial performance. While CSR skeptics can explain away the practice of CSR as a result of pressure from society, an explanation for the profit motives behind CSR

becomes even more necessary to explain the source of the social pressure. Indeed, it would be far more reasonable for society to place the burden of social work on specialized non-profits and NGOs that have the requisite comparative advantage.

2. Literature

Theoretical studies linking CSR and financial performance are few. Siegel and Vitaliano (2007) provide an excellent review, and here we highlight some of their observations. In the seminal pieces (c.f. Baron 2001, McWilliams and Siegel 2001), CSR was linked to profit-maximization by modeling firms' products to contain "social" attributes competing for socially responsible customers. In other words, firms are responding to a demand for CSR. Other studies highlight the role of asymmetric information. In particular, in exercising CSR, firms can signal to consumers that in being 'good,' perhaps even reliable and honest, they will produce better products. Thus, "CSR is a form of product differentiation, a form of advertising to establish or sustain brand loyalty" (p. 776, Siegel and Vitaliano, 2007).

The reason we choose to further study the brand-signaling role of CSR is to understand its actual mechanism. We strongly feel that prior studies, in assuming that consumers believe 'good' firms can make better products, are failing to put all the pieces of the puzzle together. In particular, *why* should consumers assume 'good' firms can make better products? In fact, this assumption is likely flawed because of two reasons. First, it may be more reasonable to assume that consumers believe efficient firms will produce better products, and that consumers should place the burden of social work on firms specialized for that purpose. Second, it may be unreasonable to assume that firms possess human characters such as 'goodness.'

The general signaling role of CSR was also studied by Goyal (2006). That study however is considerably different from ours as it did not consider the brand-value of firms. Rather, Goyal (2006) investigated the signaling role of CSR when firms considering FDI are interested in favorable terms. Our study is similar to Goyal (2006) in that we also use the well-established signaling theory (c.f. Spence 1974, Riley 2001, Vega-Redondo 2003, Gibbons 1992) to perform our analysis.

Prior empirical research has reported mixed results. McWilliams and Siegel (2000) provide an excellent review and we report their main observation. One stream has used event-study methods to assess the short-run impact of CSR (c.f. Clinebell and Clinebell, 1994; Hannon and Milkovich, 1996; Posnikoff, 1997; Teoh, Welch and Wazzan, 1999; Worrell, Davidson, and Sharma, 1991; Wright and Ferris, 1997). Another stream highlighted the long-term effects of CSR (c.f. Aupperle, Carroll and Hatfield, 1985; McGuire, Sundgren and Schneewies, 1988). McWilliams and Siegel (1997, 2000) have indicated how methodological issues can affect the findings and may be used to resolve some of the differences.

3. Motivation

Thus far we have argued that (i) true CSR involving the sacrifice of profits for a social cause needs to be explained to help generate normative guidelines and that (ii) it is not reasonable to assume that consumers are simply pressuring firms to perform CSR without explaining why.

So what explanation can there be for the deliberate introduction of inefficiencies through CSR? In other words, how do firms and consumers benefit from firms burning money on CSR? The answer may be that the benefits are actually derived from the burning, and not from the CSR.

In burning money, we may transmit two possible signals:

S1 We possess poor money-management skills.

S2 We possess enough money to burn.

So even if we accuse Paris Hilton of wasteful extravagance after hearing reports about her shopping spree, we do get clues about how rich she really is.

Firms, too, can attempt to benefit from this signaling role of burning money. In particular, when firms burn money, they may be able to signal their *past* financial performance. And since firms, unlike many rich celebrity offspring, have likely earned this money, they do not necessarily signal S1, the poor money-management skills.

And if firms are to burn money for signaling, what better way than on CSR?

Consumers benefit from these signals as learning about the true profitability of a firm helps them to learn the brand values. Standard brand-valuation techniques use profitability as the key measure. Indeed, this makes good sense. If a firm has been profitable in the past, then others have likely selected their products and derived value from them. This knowledge helps consumers to confirm their own preference for brands.

One may ask why consumers do not directly look up the profitability of firms. The response may be that they simply find it too costly to do so. This cost may stem from the difficulty of looking up profit information from financial statements, or the opportunity costs. Typically the firms have addressed this problem by engaging in branding activities such as celebrity endorsements or advertisements. So in short, consumers demand the ‘waste’ in CSR for the same reasons that they appreciate wastefully expensive branding tasks: the information value.

4. Model & Analysis

Let Π represent economic profit of a firm. Suppose there are two types of firms. Firms of type *A* are making positive profits so that in their case $\Pi = \pi > 0$. Firms of type *B* are making zero profits so that in their case $\Pi = 0$.

Initially, the consumers face uncertainty about the true type of a firm. But they are aware of the true distribution of firm types. In particular, the probability that a firm is of type *A* is θ, while the probability that a firm is of type *B* is $1-\theta$.

As consumers learn about the profitability of a firm, they assess the brand value. Unfortunately, consumers will not actively seek information about the profitability of a firm, or they find it too costly (difficulty) to do so.

But knowing the true brand value of a firm’s offering will help to sustain or increase sales. This may be due to the consumers’ attempt to make the right choices amidst imperfect information.

Indeed, knowing about the profitability of a firm sends strong signals to consumers about others' purchase decisions, which in turn can help them confirm their own selections.

A firm then needs to convey the value of its brand to consumers in order to insure *future* profits. Consequently, it needs to engage in branding activities (such as advertising, celebrity endorsements, sponsoring events, etc.). When it chooses a level $\beta \geq 0$ in branding activities, the perceived brand value is $f(\beta, E[\Pi])$, where *f* is a function that is continuously increasing in β and concave, while $E[\Pi]$ is the consumers' belief about the profit made by the firm. In general, as $E[\Pi]$ increases, *f* increases at a given level of branding while $f(\beta, 0) = 0$ for any β. Type *A* firms find branding tasks to be relatively less costly than type *B* firms. In particular, the marginal cost of branding is always less for type *A* firms,

$$c_A^{'}(\beta) < c_A^{'}(\beta) \quad \forall \beta > 0 .$$

We assume there is no discounting, and that the future return to a firm of type *i* is

$$f(\beta, E[\Pi]) - c_i(\beta) . \qquad (1)$$

In other words, the payoff to the firm depends on its selection of the level of branding, in addition to the consumers' belief about their profit level.

Insert figure 1 here

4.1 Dilemma faced by type *A* firms: Type *B* firms pose as type *A* firms.

Suppose all firms and consumers behave rationally. When type *A* firms engage in branding activities, unfortunately, type *B* firms will have a tendency to copy. This is because type *B* firms can benefit from the consumers' (erroneous) belief that their brands are worth more than those of

type A firms. Since much of the analysis will depend on the consumers' beliefs, we need to place some restrictions those beliefs so that consumers behave rationally.

Information Assumption 1 (IA1):

All beliefs on and off the equilibrium paths are consistent with Bayes' rule, if it applies.

Information Assumption 2 (IA2):

The Intuitive Criterion (Cho and Kreps, 1987) will apply.

IA1 imposes the simple restriction that consumers' beliefs should not ignore their prior knowledge of the true distribution of firms. In particular, their posterior beliefs about the types of firms should reflect the equilibrium strategies of the firms themselves. IA2 imposes the restriction that all beliefs should be reasonable. In particular, the consumers should not expect firms to ever play strategies whose highest payoffs are less than their equilibrium payoffs.

We need to introduce a few more notations to begin our analysis shortly. In the absence of type B firms, the level of branding that type A firms would choose is β_A^* such that it maximizes (1) when $E[\Pi] = \pi > 0$. By (IA1), since $\theta = 1$, the consumers expect all firms to be making the positive amount π in profit. In the absence of type A firms, the level of branding that type B firms would choose is $\beta_B^* = 0$.

Result 1: *Type A firms will select* $\beta_A^S \geq \beta_A^*$, *type B firms will select* $\beta_B^* = 0$. $E[\Pi] = \pi > 0$ if $\beta \geq \beta_S^*$, and 0 otherwise.

We can omit a proof for result 1 as it follows the direct application of results in the signaling literature. In descriptive terms, result 1 demonstrates the standard outcome expected in signaling games where the better (type *A*) firms will overwork, if necessary, to appear distinct from the worse (type *B*) firms who no longer find the brand image worth the extra cost.

Suppose the benefit that type *B* firms can expect from posing as type *A* firms is given by

$$\rho = f(\beta_A^*, \pi) - c_B(\beta_A^*)$$

Now let us we note that $\beta_A^S > \beta_A^*$ iff

$$\rho > f(\beta_B^*, 0) - c_B(\beta_B^*) = 0\,, \qquad (2)$$

in which case β_A^S is such that

$$f(\beta_A^S, \pi) - c_B(\beta_A^S) = f(\beta_B^*, 0) - c_B(\beta_B^*) = 0\,. \qquad (3)$$

But when $\beta_A^S > \beta_A^*$, type *A* firms are hurt from the signaling activities, as by definition β_A^* is most optimal and any other value will only reduce profits. In particular, β_A^S leads to a reduction in profits by the amount of

$$\lambda = f(\beta_A^*, \pi) - c_A(\beta_A^*) - \left(f(\beta_A^S, \pi) - c_A(\beta_A^S) \right).$$

One motive type *A* firms may have for CSR then is to eliminate the need for overworking, or at least reduce λ .

4.2 CSR and Branding

A second option available for firms is to signal their profitability using CSR. This CSR is a pure cost, and can only be truly afforded by type *A* firms who enjoy positive profits. If CSR is to be an effective signaling tool, then a separating equilibrium must exist such that upon seeing an

amount of CSR, consumers can infer that a firm is of type *A*. In that case the payoff to type *A* firms will be

$$f(\beta,\pi) - CSR - c_A(\beta), \qquad (4)$$

where $CSR > 0$ is the amount spent. The first-order-condition of (4) in terms of β is again β_A^*.

But knowing that consumers will view CSR as a signal for profitability, type *B* firms may also engage in CSR activities, and get the following payoff

$$f(\beta_A^*,\pi) - dCSR^2 - c_B(\beta_A^*). \qquad (5)$$

So type *A* firms have to choose a an optimal level CSR^* such that

$$f(\beta_A^*,\pi) - d(CSR^*)^2 - c_B(\beta_A^*) = f(\beta_B^*,0) - c_B(\beta_B^*) = 0$$

to make it unattractive for type *B* firms to engage in CSR. This line of reasoning helps us to state the following result.

Proposition 1:

Type A firms will prefer to engage in CSR to signal their type if only if

(i) $\beta_A^S > \beta_A^*$, and

(ii) $d > \frac{\rho}{\lambda^2}$.

The optimal amount that type A firms will need to spend on CSR is

$$CSR^* = \sqrt{\frac{\rho}{d}}.$$

Type B firms should abstain from practicing CSR.

Proof: In appendix.

Though simple, proposition 1 offers five important insights which we highlight below:

1. CSR is an effective branding strategy only for type *A* firms. Type *B* firms should abstain from engaging in CSR as it will only serve to reduce overall profits.

2. CSR is appropriate only when brand values are high enough for type *A* firms. This is because the high perceived brand value of type *A* firms will encourage type *B* firms to engage in a lot of branding activities in an attempt to earn positive profits of ρ. In those situations CSR can be an effective tool to discourage type *B* firms from doing so.

3. CSR is appropriate only when the opportunity cost of wasting money on CSR faced by type *B* firms is high enough. Otherwise, the type *A* firms are better off simply in choosing high levels of branding activities to separate themselves from type *B* firms.

4. The optimal level of CSR decreases as the opportunity cost of wasting money faced by type *B* firms increases. In mathematical terms, $\frac{\partial CSR^*}{\partial d} < 0$.

5. Using CSR arbitrarily can result in lower financial performance. In particular, if type *B* firms engage in CSR, their payoffs from it will be negative. Or if type *A* firms spend too much, or even unnecessarily on CSR, then their payoffs from it will be negative. Neutral results are also possible, when CSR and branding are perfect substitute strategies for type *A* firms.

Insert figure 2 here

5. Discussion and Conclusion

Our analysis helps to highlight one possible link between CSR and financial profits. CSR can help consumers learn about the profitability of firms and thence infer brand value. Thus, under appropriate conditions, CSR can be an effective tool to complement traditional branding activities such as advertising.

Our analysis is novel and particularly effective for two reasons. First, it indicates how true CSR activities that should entail pure ‘waste’ from a firm’s perspective can still pay off. This is in contrast to earlier studies that demonstrated the advertising role of CSR, and/or the packaging of CSR features with products in response to consumer demands. We have argued that those earlier studies do not capture the full essence of true CSR. Rather, they merely highlight the role of CSR in marketing, in which case it is difficult to argue whether firms are engaging in CSR or, simply, in marketing endeavors instead.

Second, it helps to complete the picture by explaining the paradoxical preference that consumers may have for CSR. Why do consumers expect CSR from firms, instead of delegating it to other entities that possess a comparative advantage? Our analysis indicates that a firm’s practice of CSR can help consumers realize that the firm enjoys a reasonably good financial position. Indeed, it is difficult to envision firms taking out huge loans to sponsor CSR activities.

Our study is not without limitations. First, it assumes that branding and CSR are the only (or at least preferred) ways in which consumers can infer profits. What prevents consumers from looking up profits directly from published sources? One answer may be that consumers are simply too busy these days and face high opportunity costs. And given the high levels of competition, firms may willingly accept the burden of proof to relieve consumers of their marketing research activities.

A second limitation is that our analysis does not explicitly incorporate CSR, but rather the role of 'waste' or 'money-burning.' We justify our analysis nonetheless using two arguments. First, the analysis is still correct as purest forms of CSR will involve sacrificing profits for some social cause. And second, if a firm is to waste money, it may be best to do waste it on CSR.

As simple as it is, our analysis yields several findings that are strongly of managerial relevance. In particular, CSR may make sense only in the context of stiff competition. It is likely appropriate only for communicating the value of leading brands. Finally, CSR will make sense only if competing firms face high opportunity costs of 'wasting' money on CSR.

Our analysis is a first step for resolving the difference in findings among the extant literature. In our analysis, we have already indicated conditions under which CSR will have positive, neutral and negative impacts on profits. Thus, an area of future research is to test our findings in empirical studies.

Our analysis makes a marginal but significant contribution to the growing body of literature on the strategic use of CSR. Earlier studies such as McWilliams and Siegel (2001) highlighted the role of CSR in product differentiation when information asymmetry exists and consumers demand CSR. We further their premise by explaining how CSR can achieve that, and why consumers demand CSR. Consequently their hypotheses are still valid, and are derivatives of our own analysis. For example, McWilliams and Siegel (2001) proposed that CSR would be used more often by firms selling experience goods instead of search goods, and Siegel and Vitaliano (2007) found empirical support for this.

Finally, let us go back to Friedman's argument that any use of corporate resources for purely social purposes would constitute abuse. Many hold views today that are in sharp contrast, emphasizing the role of firms in doing good. Earlier studies in strategic CSR attempted to build the case for 'doing well by doing good.' But in those studies, it was difficult to argue whether CSR was used *purely* for social purposes, as the case was made that firms provided CSR in response to demand, or to advertise.

Our study presents an interesting argument for the Friedmanian view: CSR can involve the use of firm resources *purely* for social purposes, and yet *purely* to meet profit-maximization objectives.

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Appendix

Proof of Proposition 1:

Suppose $\beta_A^S = \beta_A^*$. In that case, for any $CSR > 0$, the payoffs to type *A* firms decrease, proving "only if" of (i). Now suppose instead that $\beta_A^S > \beta_A^*$. Then $\lambda > 0$, since β_A^* is optimal by definition. We need to demonstrate that in equilibrium, firms of type *A* will engage in CSR. In such an equilibrium, consumers must believe, upon seeing a positive value, $CSR > 0$, that the firm is of type *A*. Then the payoff to firm *A* in playing $CSR > 0$ is given by (4). Firms of type *A* however will have to select a minimum level, CSR^*, such that

$$f(\beta_A^*, \pi) - d(CSR^*)^2 - c_B(\beta_A^*) = 0,$$

to prevent type *B* firms from posing as type *A* firms. (Playing any larger value $CSR > CSR^*$ will result in lower payoffs for *A*). In that case, simple algebra can show that

$$CSR^* = \sqrt{\frac{f(\beta_A^*, \pi) - c_B(\beta_A^*)}{d}} = \sqrt{\frac{\rho}{d}}.$$

Type *A* firms will strictly prefer playing CSR^* iff

$$CSR^* < \lambda.$$

Once again, simple algebraic manipulations demonstrate that the above condition can be expressed as

$$d > \frac{f(\beta_A^*, \pi) - c_B(\beta_A^*)}{\lambda^2} = \frac{\rho}{\lambda^2}.$$

It is easy to show that the following is a Bayesian Nash equilibrium as it maximizes expected profits for all players given others' strategies and beliefs:

- Type *A* firms play (β_A^*, CSR^*)
- Type *B* firms play (0,0)
- Consumers believe that $\Pr[type = B \mid CSR < CSR^*] = 1$ and $\Pr[type = A \mid CSR \geq CSR^*] = 1$
- Consumers reward firms with $f(\beta_A^*, \pi)$ iff they infer the firms to be of type *A* and they see β_A^* in branding activities.

And since consumers do not place positive probabilities on any off-equilibrium path for equilibrium-dominated strategies, the Intuitive Criterion is also fulfilled.

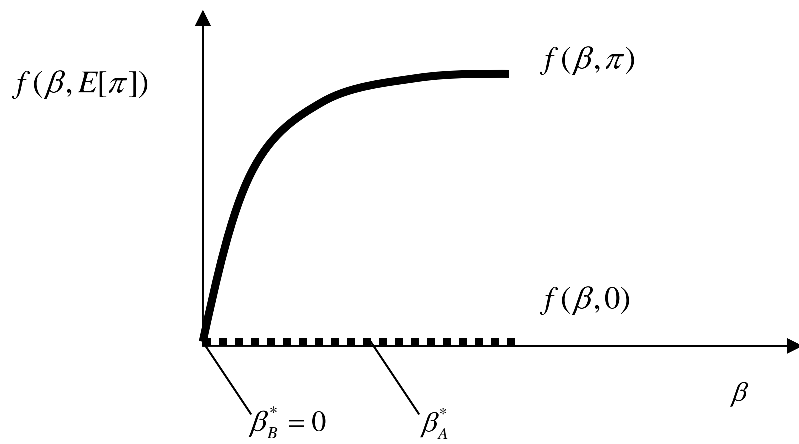

Figure 1: The effect of increasing branding activities on perceived brand values

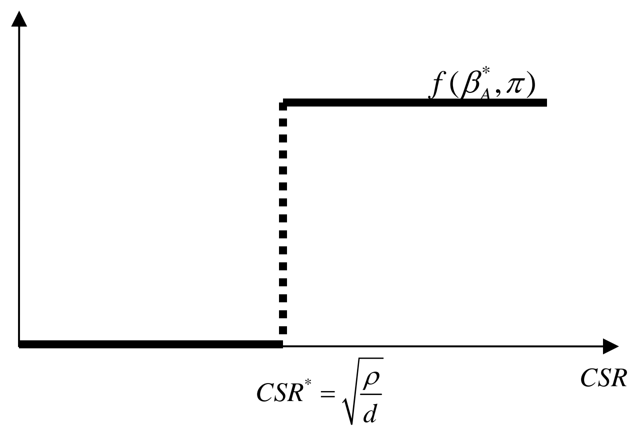

Figure 2: The consumers' response function in equilibrium