

**The effect of the mix of moral sentiment and behavioral biases
on the choice to invest in CSR.**

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Abstract

We describe how the mix of an actor's moral sentiment, and other rational factors and non-rational behavioral biases impact the decision making process as to whether to invest in corporate social responsibility (CSR) or not. We take into account three aspects of CSR investment that the decision maker weighs up rationally: (i) moral sentiment; (ii) exposure to risk and risk management; (iii) changes that would be required in corporate structure or production processes; and (iv) long term versus short term considerations. These aspects are moderated by four non-rational behavioral biases that different actors may hold to differing extents, namely: attitude to risk, status-quo bias, subjective discounting, and myopic loss aversion. This study is descriptive and theoretical in nature and draws together knowledge from various fields, such as ethics, strategy, behavioral investing, and investing in CSR.

Introduction

Given that known behavioral biases may explain the decision making process for many real life problems, they may well influence the decision making processes of corporate executives with respect to the allocation of scarce

resources, as well. Indeed, studies of executives' decision making processes indicate that some of the choices they make are non-rational and may be explained by the effect of the executives' behavioral biases. Consequently, in economics and finance research, the study of non-rational behavioral biases and their effect on corporate executive's decision-making processes has recently become important. In this context, it follows that the decision-making process surrounding investment in corporate social responsibility (CSR) is also likely to be affected by behavioral biases.

In this article we discuss a mix of four relevant non-rational behavioral biases that affect a decision maker tasked with deciding whether (or not) to invest in CSR, namely: attitude to risk, status-quo bias, subjective discounting, and myopic loss aversion. We conceptualize these biases as acting on three rational considerations that the decision maker examines when deciding whether to invest (or not) in CSR, namely: risk exposure; consequential changes to corporate structure and/or production processes; and long term versus short term profit and loss.

The rational aspects of a choice to invest in CSR are connected with the organizational decision makers' policy regarding ethics and strategy, which are two central aspects of corporate social responsibility. The ethical component deals with the organizational decision makers' choice of its set of norms, which are themselves selected to match the organizational values. The decision maker's moral sentiment is depicted in the identification of the values and their corresponding norms. Thus, the strategic evaluation made by the decision makers of the organization may be captured in its choice of a set of values necessary for organizational survival, well being and prosperity. By contrast, the non-rational aspects are behavioral in nature. They are unique to each decision maker, who may lack awareness of them, and are not documented by (or necessarily known to) the firm.

To the best of our knowledge, this article represents the first theoretical description of the rational and non-rational considerations that are embedded in an executive's choice regarding the allocation of scarce resources towards

CSR. It also represents a first step towards achieving our larger research goal of determining how values and norms can guide executives in fulfilling the firm's vision with respect to the choice to invest in CSR, while being consistent with the executives' moral sentiments and taking account of their inherent behavioral biases.

The first section of this paper addresses the issue of how investment in CSR is considered from the decision maker's moral sentiment point of view as well as considering the factors of the corporate exposure to risk and risk management, structural and product changes, as well as long and short term profits. In the second section, we describe the role of non-rational effects, i.e. behavioral biases, on the choices associated with investment in CSR. In the third section, we provide a descriptive model in which these rational and non-rational aspects of CSR investment are combined within the decision making process. The fourth section discusses the implications of the model, its strengths and weaknesses.

Investment in CSR

The design of a corporate ethical program may be linked to the process of corporate strategy development, in which the needs, wants and aspirations of members are evaluated where the assumption made is that other humans needs are not endangered.] The organizational values connected with the corporate ability to survive by meeting its basic **needs**, to do well by securing its **wants**, and to prosper by attaining its aspirations may be depicted in its vision (Bunge). The ethics of the organization consists of the norms which correspond to the organizational values. Therefore, the corporate executives' moral sentiment is applied in their decision making process when they are guided by organizational norms in making their choices. While the values and the norms may guide organizational members in their decision making process, the values chosen also enable relationships to be constructed with firm stakeholders.

In the course of deciding whether to invest firm resources in CSR (or not), the decision makers must rationally consider a number of parameters. Major considerations include CSR which is contingent on the decision makers' moral sentiment, in itself CSR is a source of risk exposure and as a means of limiting and managing risk, the implications of CSR investment in terms of consequential changes to corporate structure and/or production processes, and short term investment require to implement CSR programs, versus the long term CSR-derived profit. The rational conduct of corporate executives in this context includes their employing the right means towards ends, i.e., taking the proper steps towards fulfilling the organizational vision. Yet these rational considerations are affected by the non-rational behavioral biases of each executive, which determine executives' attitudes towards risk, the extent of any bias towards preserving the status quo, their tendency to subjectively discount some considerations and a possibly myopic aversion to loss. These rational and non-rational aspects of the decision-making process regarding CSR investment are described in more detail in the following sub-sections.

Rational Aspects of the Decision-Making Process **surrounding whether to Invest in CSR**

Moral sentiment of an actor: the term "moral sentiment" reflects values (i.e. what one evaluates as either good or bad). In accordance with this evaluation, the moral sentiment is expressed in the judgment consequently made: to do the right thing or to refrain from doing the wrong thing. norms are expressed as a judgment of the *right* thing to do or the *wrong* thing to refrain from doing, and they correspond to the set of values. The choice made in the decision making process and the action taken could be judged as right or wrong in terms of the set of corporate values. The moral sentiment of a person involves evaluation and the judgment of the social situation (Bunge, 1989). Thus, the commitment one makes towards the environment, to a fellow being, to human rights etc., all of which promote a sustainable world and thereby contribute indirectly to firm survival, well-being and prosperity, may be expressed in the choice of corporate values.

“Risk” is the average rate of change in firm profit and is reflected in a decrease or increase in firm value (Adam and Shavit, 2007). Investment in CSR may be viewed as a shrewd method for minimizing a firm’s exposure to risk and as a risk management method. Viewed rationally, firms that fail to invest sufficiently in CSR may face consequential costs from several stakeholders. For example:

- (a) **Consumers** may decide not to do business with a firm whose activities demonstrate that it pays less regard to CSR considerations than do its competitors. The negative image of a company may be an outcome of its disregard for customer sensitivities to CSR (e.g. Starbucks and the case of coffee fairtrade, and McDonalds’ case of non healthy diet, the film of “Super size me” . . . Efforts aimed at overcoming the negative image may increase costs by requiring additional advertising, re-positioning and re-branding of a product, product reformulation, and crisis management.
- (b) **Suppliers** may decide not to continue their business relationship with a firm that disregards CSR issues in its activity, causing it possible financial loss.
- (c) Where low investment in CSR manifests in poor working conditions or employee social conditions, **employees** may opt to strike in order to improve them, and talented researchers and employees may avoid working in the firm.
- (d) The **regulator** may decide to replace self-regulation, including optional CSR activities, with stricter mandatory requirements in case of violations of CSR. The regulatory changes may cause an increase in penalties, and otherwise increase firm costs. Such consequential regulation may also affect suppliers’ ability to conduct business with firms which do not comply with an expected set of CSR requirements.

The second aspect of investment in CSR is the **changes** it is likely to require in the firm’s structure and its production process. The implementation of a CSR Program in the business requires rethinking of the design of working and production processes, and as such, involves great uncertainty. The relative

power of different employees or department may change. If, in the traditional setting, power resided in one department, it may shift to another. The changes may impact the formal and informal culture of the organization (e.g. EPR). In this situation, the executives explore unknown land. The design of the production process or working process in light of investment in CSR needs to take into consideration the relationship with customers, suppliers, the general community and the environment. Changes in the firm's structure and production process may yield positive effects. For example, if a company begins to invest funds in fair-trade, this requires it to change the ways it has traditionally bought and sold products and services; however it may improve customer satisfaction. Investing in CSR may also positively impact the firms' positioning and thereby improve its brand. Improving both customer satisfaction and brand positioning may result in better customer loyalty.

A firm's decision to invest in CSR will necessarily lead to a reconsideration of its relationships with suppliers, in that the suppliers of a firm taking CSR seriously will be required to commit to CSR themselves. If the supplier refrains from adopting CSR practices; it will be excluded from the new supplier pull.

The firm's treatment of employees needs to be designed to accommodate fair treatment of employees, as well as expecting them to participate in the firm's contribution to, and involvement in, the community. However, if the employees' autonomy is to be respected, it seems, they need have the privilege to opt in or out of either passive or active participation in the firm's activity in the community.

The third aspect of adopting CSR is the investment required to do so. The costs involved in implementing a CSR program may include the redesign of production, acquisition and logistics processes and the up-grading of safety and environmental conditions. Achieving these outcomes requires greater investment of funds in the short term. Stems from our assumption is that CSR has a positive effect on long-term profit. Baumol (1991) suggests that social investment improves the firm's productivity and leads to higher profit. Husted and Salazar (2006) suggest that social investment obtains additional benefits

for the firm, such as a good reputation and differentiated products that, according to McWilliams and Siegel (2001) and Reinhardt (1999), allow the firm to charge a price premium, and hire more highly qualified personnel. According to Kanter (1999) and Russo and Fouts (1997), this increases the firm's productivity. The additional benefit is mostly in the long run. Husted and Salazar cite, by way of example, the case of a business that decides to support the community by giving scholarships for technical training programmes. They suggest that the firm's reputation in society improves, and, in the long run, it will enjoy additional benefits, such as the greater availability of a qualified labour pool with higher levels of productivity. Other studies, such as those by Hart and Milstein (1999), Marcus and Geffen (1998) and McDonough and Braungart (1998), suggest that social investment by firms can serve as a driver for technological and managerial innovation, which may influence the firm's profit in the long run.

Non-Rational Aspects of the Decision-Making Process surrounding whether to Invest in CSR

The rational aspects of the decision making process around CSR investment (see previous sub-section) are affected by executives' non-rational behavioral biases. We consider four such biases: attitude towards risk, status quo bias, subjective discounting and myopic loss aversion. Our model enables each of these biases to have a different value, and so takes into account the fact that different decision makers may be affected by different mixes of these biases.

(a) Attitude towards Risk

Attitude towards risk is understood here as the inclination of an actor to refrain from, or to take, risk. As such, it is considered as one of the most important characteristics of the decision maker in investing. The general assumption in the economics literature is that actors are risk averse. However, some actors may be less risk averse than others, and some may even be risk seekers.

There are many theoretical and experimental studies that discuss the affect of

risk attitude on decision making (e.g; Brockhaus 1980, Weber and Camerer 1987, Pablo et al 1996, Riley and Chow, 1992, Rabin 2000)

(b) Status-quo bias

Status-quo bias is the attitude of an actor who is a change avoider. Ample studies indicate that people are reluctant to make changes to their current state (Samuelson, and Zeckhauser, 1988, Kahneman, et al., 1990, 1991; Thaler et al., 1992, and Hartman, et al., 1991). In addition, Research by Shogren et al., indicates that sustaining status- quo bias effects exist in risky choices (1994).

(c) Subjective time discounting.

Subjective time discounting is the attitude of an actor who considers the marginal rate of substitution between current and future consumption. Studies of actors with a subjective time discounting bias indicate that their decisions show a high preference for the present at the expense of the future (Thaler 1981, Ben-Zion et al, 1989, Read 2001, Rubinstein, 2003).

(d) Myopic loss aversion

Myopic loss aversion may manifest as the inability to deal with losses, or as myopia, where the actor seeks to avoid losses in the short run, although the investment might create profit in the long run. Thaler (1990), who focuses on the boundaries between long-term saving, investment and consumption, and short-term decisions, offers real life examples of instances where people's preferences for short-term saving and investment decisions are inconsistent with their long-term preferences. (see also; Thaler et al (1997)

The model

The proposed model explores the relationship between the four aspects of investment to CSR discussed above, namely: (i) moral sentiment; (ii) exposure to risk, and risk management, (iii) changes in corporate structure or production process, and (iv) long term vs short term considerations with respect to the decision to invest in CSR and the biases of an actor. The latter

is based on a mix of four behavioral biases, attitude to risk, status-quo bias, subjective discounting, and myopic loss aversion.

Investment in CSR might reduce long term exposure to risk, and so risk averse actors would prefer investment in CSR. However, investment in CSR might create a process of changes in the firm. Thus, a status-quo biased actor may be inclined to avoid investment in CSR in order to avoid change. The decision to invest in CSR in many cases involves making a choice between spending income in the present which may benefit the actor in creating higher income in the future. Actors with a strong tendency towards subjective discounting may choose not to invest in CSR, since such actors prefer income in the present over possible future gains

In this model we refer to the decision maker (or “actor” or “subject”) utility $U(\cdot)$. This utility is affected by the following rational factors:

- (I) R – Which represents the change in risk.
- (II) S – Which represents the magnitude of change in the firm.
- (III) SI – Which represents the short-term investment in implementing CSR.
- (IV) LP – Which represents the long-term profit assumed to derive from investment in CSR.
- (V) M – Which represents the moral sentiments of the decision maker.

We present the decision maker’s utility as follows:

$$(1) U(\cdot) = U(R, S, SI, LP, M).$$

Using a linear structure, we present the utility as follows:

$$(2) U(R, S, SI, LP, M) = -\alpha R - \beta S + \gamma SI + \delta LP + \eta M$$

Where, the Greek letters represent non-rational factors. Thus, α represents the degree to which the decision maker is risk averse. As the absolute value of α increases, the decision maker becomes increasingly risk averse.

β represents the degree to which the decision maker is biased in favor of the status quo. As the absolute value of β increases, the status quo bias of the decision maker strengthens.

γ and δ represent the degree of myopic loss aversion experienced by the decision maker. A decision maker with a strong aversion to loss will prefer not to lose in the short term, even if the investment will increase long-term profit. For such decision makers, $\gamma > \delta$, since losing \$1 in the short term affects the utility more strongly than gaining \$1 in the long term.

δ also represents the time discounting. As δ decreases, the decision maker suffers from greater subjective time discounting, since \$1 spent in the future increases the utility at a lower rate than does \$1 spent in the present.

η represents the rate of sensitivity as is regarded in decision makers' moral sentiment through the decision-making process.

The decision maker will choose to invest in CSR if the following condition exists:

$$(2) U(R, S, SI, LP, M) > U(0, 0, 0, 0, 0)$$

Meaning that the decision maker's utility after investing in CSR must be higher than the utility in the case of no investment in CSR, in order to support a pro-CSR investment decision.

Specifically:

$$(3) -\alpha R - \beta S + \gamma SI + \delta LP + \eta M > 0$$

A decision maker who is inclined to a high status quo bias (high β), a low aversion to risk (low α), a high degree of myopic loss aversion (high γ) and a high subjective time discount (low δ , which is lower than the high γ) and low moral sentiment (low η) most likely will not invest in CSR.

Discussion and Conclusion

In recent years, the effects of an actor's behavioral biases have come to play a major role in the study of both financial and economic decision making

processes. The concurrent growth in the study of ethical and strategic investing in CSR indicates that its importance to decision makers in the fields of finance and economics is increasing. This article combines these hitherto separate fields of knowledge, namely, behavioral investing and ethical/strategic investing. In this lies both its strength and its weakness. The strength of this article lies in the first sketch it offers of the complicated relationship between ethics, strategy, the effect of behavioral biases on investing, and investment in CSR. Its weakness is its necessarily exploratory nature, in that it suggests an initial conceptualization of the decision making metrics. Thus, the proposed model describes how an actor who has a mix of (non-rational) behavioral biases that affect his or her (rational) ethical/strategic considerations comes to a decision regarding whether (or not) to invest in CSR.] In the model, the actor considers four rational aspects of investment in CSR: (i) decision maker's moral sentiment; (ii) exposure to risk, and risk management, (iii) changes in corporate structure or production process, and (iv) long term versus short term considerations. The actor's assessment of these aspects is moderated by four non-rational behavioral biases: attitude to risk, status-quo bias, subjective discounting, myopic loss aversion. Possibly, there are other rational aspects of investment in CSR and additional non-rational behavioral biases. This article does not pretend to be exhaustive but rather seeks to offer a first map of this unknown terrain. Mix of rational and non rational factors in executives' decision making process lead towards an interesting research venues: if the decision making process of executives is not psychological bias free, then the assessment standards used by accountants and analysts are not sufficient for investor's informed choice in corporate stocks. We discuss this possible logical outcome in our future paper. In addition to that a future theoretical research as well as empirical work is needed to assess our proposed model.

References

- Adam, A.M; and Shavit, T. 2007. "Formalizing Corporate Governance Choice Structure: Shareholder Management versus Stakeholder Management". Working paper.
- Baumol, W. J. 1991. (Almost) perfect competition (contestability) and business ethics. In Baumol W.J. & Blackman, S.A.B. (Eds), **Perfect Market and Easy Virtue: Ethics and the Invisible Hand**. Cambridge, MA: Blackwell Publishers: 1-23.
- Benzion, U., Rapport, A., Yagil, J., 1989. Discount rates inferred from decisions: An experimental study. *Management Science*, 35, 270-284.
- Bunge, M. (1989). *Treatise on Basic Philosophy Vol 8. Ethics: The Good and the Right*. Dordrecht: D. Reidel Publishing Company.
- Brokhaus, R.H, 1980. Risk-taking propensity of entrepreneurs, *Academy of Management Journal* 23, 509-520.
- Hartman, R., Doane, M. and C.K. Woo, 1991, Consumer Rationality and the Status Quo, *Quarterly Journal of Economics* 106, 141–162.
- Harte, G., Lewis, L., & Owen, D. 1991. **Ethical investment and the corporate reporting function**. *Critical Perspectives on the Practice of Theory*, Oxford University Press, Oxford, 27-41.
- Husted, B.W., & Salazar, J.D.J. 2006. **Taking Friedman Seriously: Maximizing Profits and Social Performance**. *Journal of Management Studies*, 43: 75-91.
- Kahneman, D., Knetsch, J. L., and Thaler, R. H. (1990). Experimental tests of the endowment effect and the coase theorem, *Journal of Political Economy*, 98, 1325–1348.

Kahneman, D., Knetsch, J. L., and Thaler, R. H. (1991). Anomalies: The endowment effect, loss aversion and status quo bias, *Journal of Economic Perspectives*, 5, 193-206.

Kanter, R.M. 1999. **From spare change to real change**. Harvard Business Review, 77(3): 122-132.

Marcus, A., & Geffen, D. 1998. **The dialectics of competency acquisition: pollution prevention in electric generation**. Strategic Management Journal, 19: 1145-1168.

McDonough, W., & Braungart, M. 1998. **The next industrial revolution**. Atlantic Monthly, October, 82-92.

McWilliams, A., & Siegel, D. 2001. **Corporate social responsibility: a theory of the firm perspective**. Academy of Management Review, 26(1): 117-127.

Pablo, A.L, Sitkin, S.B. and Jemison, D.B. 1996. Acquisition decision-making processes: The central role of risk. *Journal of Management* 22, 723-746.

Rabin, M. 2000. Risk aversion and expected utility theory: A calibration theorem. *Econometrica* 68, 1281-1292.

Reinhardt, F. 1999. **Market failure and the environmental policies of firms: economic rationales for “beyond compliance” behaviour**. *Journal of Industrial Ecology*, 3(1): 9-21.

Read, D. (2001). Is time-discounting hyperbolic or subadditive?. *Journal of Risk and Uncertainty*, 23, (1), 5-32.

Riley, W.B. and Chow, K.V. 1992. Asset allocation and individual risk aversion. *Financial Analysis Journal* 48, 32-37.

Rubinstein, A. (2003). Is It Economics and Psychology?: The case of Hyperbolic Discounting. *International Economic Review*, 44, 1207-1216.

Russo, M.V., & Fouts, P.A. 1997. **A resource-based perspective on corporate environmental performance and profitability**. *Academy of Management Journal*, 40(3): 534-559.

Samuelson, W. and R. Zeckhauser, 1988, Status Quo Bias in Decision Making, *Journal of Risk and Uncertainty* 1, 7-59.

Shogren, J. F., Shin, S. Y., Hayes, D. J. and J. B. Kliebenstein, 1994, Resolving Differences in Willingness To Pay and Willingness To Accept, *American Economic Review* 84, 255-270.

Thaler, R. (1981). Some Empirical Evidence on Dynamic Inconsistency. *Economic letters*, 8, 201-207.

Thaler, R., Kahneman, D. and J. L. Knetsch, 1992, The endowment effect, loss aversion and status quo bias, in: R. Thaler, *The Winner's Curse*. Princeton University Press (Princeton, New Jersey) 63-78.

Thaler, Richard H. (1990), Anomalies: Saving, Fungibility, and Mental Accounts, *The Journal of Economic Perspectives*, 4, 193-205.

Thaler, Richard H., Amos Tversky, Daniel Kahneman, and Alan Schwartz , "The Effect of Myopia and Loss Aversion on Risk Taking: An Experimental Test," *The Quarterly Journal of Economics*, 112, 647-661, 1997.

Weber, M. and Canerer, C. 1987. Recent development in modelling preferences under risk, *OR Spektrum* 9, 129-151.