

Research Paper No. 1916

**Corporate Social Responsibility
And Social Entrepreneurship**

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Abstract

Milton Friedman argued that the social responsibility of firms is to maximize profits. This paper examines this argument for the economic environment envisioned by Friedman in which citizens can personally give to social causes and can invest in profit-maximizing firms and firms that give a portion of their profits to social causes. Citizens obtain social satisfaction from corporate social giving, but that giving may not be a perfect substitute for personal giving. The paper presents a theory of corporate social responsibility (CSR) and shows that CSR is costly when it is an imperfect substitute, but entrepreneurs and not shareholders bear that cost. A social entrepreneur forms a CSR firm at a financial loss because either doing so expands the opportunity sets of citizens in consumption-social giving space or there is an entrepreneurial social glow from forming the firm. The creation of CSR firms increases aggregate social giving. Firms can also undertake strategic CSR activities that increase profits, and a social entrepreneur carries strategic CSR beyond profit maximization and market value maximization. The paper also examines the implications of taxes and the effect of the market for control for the sustainability of CSR.

Corporate Social Responsibility and Social Entrepreneurship

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Stanford University

I. Introduction

In his classic and provocative essay Milton Friedman (1970) argued that the responsibility of corporations is “to conduct the business in accord with [shareholders’] desires, which generally will be to make as much money as possible while conforming to the basic rules of the society, both those embodied in law and those embodied in ethical custom.”¹ This paper evaluates this argument by developing a positive theory for the economic environment Friedman envisions and extends that environment to explain whether firms that engage in corporate social responsibility (CSR) would be created and would survive in the capital markets. This extension completes Friedman’s argument but also qualifies it. The theory identifies conditions under which social entrepreneurs would create CSR firms at a financial loss and why those firms can coexist with profit-maximizing firms. In doing so, the theory identifies a social contract between firms and their managers and the citizens who invest in them. The paper does not explore all the possible explanations for CSR, although certain explanations associated with Friedman’s argument are considered.

Friedman provides two kinds of justification—one economic and the other philosophical—for his position. The latter embraces liberty, individualism, and avoiding coercion and is not considered here.² The economic justification for his position is built on an environment in which citizens can both invest their funds in the capital markets and make personal gifts to social causes. Social good can also be provided by firms in the form of CSR, and citizens can obtain satisfaction from corporate giving as well as from their personal giving.

In Friedman’s framework firms are owned by shareholders who are principals, and managers are agents with the duty to serve the interests of their principals. If shareholders as principals wish to support social goals, they can do so with the returns from their shareholdings rather than through CSR. This perspective is based on a separation theorem in which citizens prefer to

¹ Friedman concludes the essay by quoting from *Capitalism and Freedom* (1962, p. 133): “there is one and only one social responsibility of business—to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game, which is to say, engages in open and free competition without deception or fraud.”

² Friedman (1970) identifies “the great virtue of private competitive enterprise—it forces people to be responsible for their own actions and makes it difficult for them to ‘exploit’ other people for either selfish or unselfish purposes. They can do good—but only at their own expense.”

maximize their financial returns and then allocate those returns between consumption and social giving. Social good is a non-traded good, however, so the separation theorem is not valid for this environment. Although social good is non-traded, the financial and social returns from a CSR firm are spanned by investment in a profit-maximizing firm and personal giving. An implicit price for CSR thus can be identified.

Although corporate social giving is valued by citizens, firms that practice CSR have a lower market value than profit-maximizing firms, so there is a cost to CSR. Why then would investors buy shares in a CSR firm? The answer must be that the price is sufficiently low to induce them to do so, and the model shows that in equilibrium this is the case. Shareholders thus do not bear the cost of CSR when they fully anticipate that the firm will allocate a portion of corporate profits to social causes. The citizens who purchase shares of CSR firms are those who receive substantial satisfaction from corporate spending on social good, although that satisfaction may be less than that associated with personal giving to social causes. Citizens who have low satisfaction from corporate social giving purchase shares of profit-maximizing firms and from their financial returns make personal gifts to social causes.

Since shareholders do not bear the cost of CSR, that cost must be borne by the entrepreneurs who create the firms. This perspective was articulated by John Mackey (2005), CEO of Whole Foods, who wrote,

I believe the entrepreneurs, not the current investors in a company's stock, have the right and responsibility to define the purpose of the company. It is the entrepreneurs who create a company, . . . and who negotiate the terms of trade with all of the voluntarily cooperating stakeholders—including the investors. At Whole Foods we “hired” our original investors. They didn't hire us.

We first announced that we would donate 5 percent of the company's net profit to philanthropy when we drafted our mission statement. . . . Our policy . . . predates our IPO by seven years. All seven of the private investors at the time we created the policy voted for it when they served on our board of directors. . . . How can Whole Foods' philanthropy be “theft” from the current investors if the original owners of the company unanimously approved the policy and all subsequent investors made their investments after the policy was in effect and well publicized?

Vogel (2005) considers the nature of CSR and evaluates the evidence on its effects as well as its potential. He (p. 2) defines CSR, or business virtue, as “practices that improve the workplace and benefit society in ways that go above and beyond what companies are legally required to do.” He (pp. 3-4) concludes that the market for virtue is limited, but CSR “enables citizens to both express their values and possibly influence corporate practices, by ‘voting’ their preferences through what they purchase, whom they are willing to work for, and where they invest.”

The CSR considered here includes both Vogel's focus on "practices" and Friedman's and Mackey's view of CSR as redistribution of corporate profits to social causes. Shareholders may obtain satisfaction from the share of corporate social giving attributable to their shareholdings as well as from their personal giving. They may also receive satisfaction from the practices or operational activities of firms.

Friedman notes that some managers refer to corporate practices or operational activities that increase profits as CSR, but he labels such statements "hypocritical windowdressing." That is, some managers extol the social good generated in the pursuit of profit maximization. Baron (2001)(2006, Ch. 18) refers to this as strategic CSR; i.e., activities undertaken by a firm in the name of CSR that increase its market value. Referring to days on which each store donates 5 percent of its sales of local charities, Mackey wrote, "While our stores select worthwhile organizations to support, they also tend to focus on groups that have large membership lists, which are contacted and encouraged to shop our store that day to support the organization. This usually brings hundreds of new or lapsed customers into our stores, many of whom then become regular shoppers. So a 5% Day not only allows us to support worthwhile causes, but is an excellent marketing strategy that has benefited Whole Foods investors immensely." If shareholders value such activities, the theory presented here indicates that managers who serve the interests of shareholders or of the entrepreneurs who create CSR firms carry strategic CSR beyond the level that maximizes profits or market value.

Friedman (1970) also calls attention to the discipline of the market for control, "Will not the stockholders fire [the manager]? (Either the present ones or those who take over when his actions in the name of social responsibility have reduced the corporation's profit and the price of its stock.)"³ Even if shareholders supported CSR, the market for control could result in new shareholders taking over the firm, eliminating the CSR, and capturing the gain in market value. To persist, CSR firms thus need insulation from the market for control.

Since the market value of a CSR firm is lower than that of a profit-maximizing firm, would an entrepreneur ever form a CSR firm? Entrepreneurs are citizens who have an opportunity not available to all citizens. They can establish profit-maximizing firms or firms that practice CSR by redistributing a portion of their profits to social causes. The term private entrepreneur is used

³ T.J. Rodgers (2005), CEO of Cypress Semiconductors, wrote, "Mackey spouts nonsense about how his company hired his original investors, not vice versa. If Whole Foods ever falls on persistent hard times—perhaps when the Luddites are no longer able to hold back the genetic food revolution using junk science and fear—he will quickly find out who has hired whom, as his investors fire him."

to refer to one who creates a firm if and only if its market value exceeds the capital required to create it. The term social entrepreneur is used to refer to one who is willing to create a CSR firm at a financial loss. The latter sacrifices financial return but gains satisfaction. The questions to be answered are (1) whether entrepreneurs are willing to absorb a financial loss to form a CSR firm and (2) whether an entrepreneur prefers to form a CSR firm rather than a profit-maximizing firm.

Although this paper is not intended to explore all the possible explanations for CSR, two are considered.⁴ One is taxes and the other is an efficiency advantage a firm may have in social giving; i.e., the firm may be more efficient in doing social good than are the organizations to which citizens direct their personal giving. Shareholders then could prefer corporate social giving to personal giving for social causes.

This paper thus addresses the following questions. What is Friedman's environment and is anything missing? Is there a cost of CSR, and if so, who bears that cost, and why do they bear it? Would an entrepreneur form a CSR firm? How are the answers affected by taxes, the market for control, and efficiency aspects of providing social good? If investors obtain social satisfaction from the operational activities of firms, how far do firms carry those activities? Will they also redistribute a portion of their profits to social causes? Finally, what should be the objective of a firm?

II. A Formalization of Friedman's Environment

A. The Model

The analysis proceeds in a series of steps. In this section profit-maximizing and CSR firms are assumed to exist, and Section III introduces the entrepreneurs who establish these firms. The subsequent sections consider elaborations of the model. The basic model of the capital markets and social giving is due to Graff Zivin and Small (2005).

The model includes as players entrepreneurs who create firms and citizens who invest in the firms. At time 0 entrepreneurs establish firms, and at time 1 citizens purchase shares in them. At time 2 the returns on those shares are received by citizens, and they allocate their returns between consumption and social giving. All players are rational. To simplify the analysis, the model assumes certainty and complete information, and discounting is ignored.

The profit π of a firm is assumed to be fixed, and a profit-maximizing firm distributes all its operating profits as a financial return. A CSR firm generates social good by allocating a portion

⁴ The paper also does not consider the role of government or not-for-profit organizations in providing social good.

h of its operating profits to social causes. The financial and social returns on a CSR firm thus are $(1 - h)\pi$ and $h\pi$, respectively. The entrepreneur chooses whether the firm is a profit maximizer or practices CSR, and in Section VIII the model is extended to allow the entrepreneur to choose strategic CSR activities that affect profits.

Citizens are identical except for their preferences regarding the CSR activities of firms. Each citizen has an initial endowment w of wealth at time 0 and at time 1 can purchase shares $(\eta_m, \eta_s) \in [0, 1] \times [0, 1]$ of profit-maximizing and CSR firms with market values p_m and p_s , respectively. A citizen's budget constraint is

$$\eta_m p_m + \eta_s p_s \leq w, \quad (1)$$

and her financial return r at time 2 is

$$r = (w - \eta_m p_m - \eta_s p_s) + \eta_m \pi + \eta_s (1 - h)\pi,$$

where the first term in parentheses is savings (at a 0 interest rate).

A citizen can allocate the return r between consumption c and personal giving g that yields one unit of satisfaction per dollar given.⁵ It is the giving of g for social good that yields satisfaction for the citizen, and the citizen treats the giving by others as exogenous. The citizen may also value the portion of the social good $h\pi$ provided by the CSR firm that is attributable to her share ownership. The social good generated by the CSR firm is indirect for the citizen, however, since he does not make the gift personally. This suggests that giving through a firm could provide less satisfaction to the citizen than personal giving. Let $\theta \in [0, 1]$ denote the social satisfaction from a unit of social good provided by corporate giving relative to a unit of personal giving.⁶ A citizen is thus indexed by θ .

The social satisfaction or social return s for a citizen is thus

$$s = \eta_s \theta h\pi + g, \quad (2)$$

and consumption c is

$$c = w - \eta_m p_m - \eta_s p_s + \eta_m \pi + \eta_s (1 - h)\pi - g. \quad (3)$$

All citizens with $\theta > 0$ value corporate giving, but they also have the opportunity to give personally.

⁵ This is consistent with Friedman's view that shareholders can give to social causes out of their returns.

⁶ In Section IV additional interpretations are given for θ . For example, $\theta < 1$ could reflect corporate giving to causes to which the citizen objects.

In Friedman's environment corporate giving is a perfect substitute for personal giving, so $\theta = 1$ for all citizens. When some citizens have $\theta < 1$, corporate giving is an inferior substitute for personal giving, and the environment represented by the model favors Friedman's argument.

B. The Capital Market

The CSR firm supplies both a traded good—a financial return—and a non-traded good—corporate social giving. Although there is a non-traded good, the financial and social returns on the CSR firm are spanned by investment in the profit-maximizing firm and personal giving. More formally, in (c, s) -space for any citizen of type θ the return from the CSR firm is $((1-h)\pi, \theta h\pi)$, and this return is a linear combination of the returns $(\pi, 0)$ and $(0, 1)$ from investing in the profit-maximizing firm and personal giving, respectively; i.e., $((1-h)\pi, \theta h\pi) = \delta_c(\pi, 0) + \delta_s(0, 1)$, where $\delta_c = (1-h)\pi$ and $\delta_s = \theta h\pi$. This means there is an implicit price of CSR.

Citizens are assumed to have preferences for both consumption and satisfaction from social good. Those preferences are represented by a utility function $u(c, s)$ that is strictly increasing and strictly concave. A citizen chooses share purchases and personal giving according to

$$(g^*(\theta), \eta_m^*(\theta), \eta_s^*(\theta)) \in \arg \max_{(g, \eta_m, \eta_s)} u(c, s)$$

subject to (1). Citizen preferences for CSR differ, and let the citizen who is indifferent between personal giving and corporate giving be denoted by θ^* . The first-order conditions for θ^* are

$$-\frac{\partial u}{\partial c} + \frac{\partial u}{\partial s} = 0 \tag{4}$$

$$\frac{\partial u}{\partial c} - \lambda p_m^* = 0 \tag{5}$$

$$(1-h)\frac{\partial u}{\partial c} + \theta^* h \frac{\partial u}{\partial s} - \lambda p_s^* = 0, \tag{6}$$

where $\lambda \geq 0$ is the multiplier on the constraint in (1). The equilibrium market value of the profit-maximizing firm is $p_m^* = \pi$, so the market value equals profits. Substituting (4) and (5) into (6) yields an expression for the equilibrium market value p_s^* of the CSR firm in terms of the citizen of type θ^* :

$$p_s^* = (1-h)\pi + \theta^* h\pi. \tag{7}$$

The last term is the market value of corporate giving to social causes, so θ^* is the implicit value or price of a dollar of CSR. The market value of the CSR firm thus exceeds its financial return.

The expression in (7) identifies the cost of CSR, which is the difference $p_m^* - p_s^* = (1 - \theta^*)h\pi$ in the market values of the two firms. This cost is decreasing in θ^* and will be referred to as the CSR discount.

The environment Friedman considers is one in which corporate giving is a perfect substitute for personal giving. That is, citizens have preferences for social good and the social satisfaction they receive from corporate giving in the same as from personal giving. In this case $\theta = 1$ for all citizens, so $\theta^* = 1$, and $p_s^* = p_m^*$. CSR then has no effect. That is, when personal giving and corporate giving are perfect substitutes for all citizens, CSR is neither costly nor beneficial, since any increase in corporate giving would be exactly offset by a decrease in personal giving. Graff Zivin and Small refer to this result as a Modigliani-Miller theorem. When $\theta^* < 1$, the CSR firm sells at a discount in the capital market; i.e., $p_s^* < p_m^*$. This is the economic foundation for Friedman's conclusion that shareholders can contribute at least as efficiently to social causes from their investment returns as they can through corporate giving. These results are summarized in the following proposition.

Proposition 0: (Graff Zivin and Small) If all citizens have $\theta = 1$, then $\theta^* = 1$ and $p_s^* = p_m^* = \pi$. CSR is thus inconsequential. If some citizens have $\theta < 1$, then $\theta^* < 1$ and $p_s^* < p_m^*$.⁷

When corporate giving is a perfect substitute for personal giving, there is no justification for managers redistributing corporate profits to social causes. If $\theta < 1$ for some citizens, corporate giving is inferior to personal giving, which provides stronger support for Friedman's argument. Friedman concludes that shareholders of CSR firms are worse off because of corporate giving; i.e., they bear a tax. What is missing from Friedman's argument, however, is that investors anticipate the CSR. The market value of the CSR firm thus must be low enough to induce shareholders to hold those shares. That is, the cost of CSR is anticipated and fully reflected in the price citizens pay for their shares.⁸ Shareholders thus do not bear a tax. Instead, the entrepreneurs that form the firms bear the tax corresponding to the CSR discount. The remainder of this section completes the characterization of the equilibrium, and Section III considers entrepreneurs and the formation of firms.

In the equilibrium citizens self-select based on their preferences for corporate giving. Citizens

⁷ Graff Zivin and Small also argue that if the support of θ is $[0, \hat{\theta}]$ and $\hat{\theta}$ is sufficiently greater than 1, then θ^* can be greater than 1 and $p_s^* > p_m^*$. A similar feature is considered here in Section IV.

⁸ Friedman implicitly assumes that the CSR is a surprise rather than being anticipated as assumed here. Surprise is considered in Section VI.

with a weaker preference for corporate giving ($\theta < \theta^*$) prefer to do social good through personal giving, so (6) is an inequality and $\eta_s^*(\theta) = 0$. Then, the equilibrium has $\eta_m^*(\theta) = w$, and $g(\theta)^* = g^*$ satisfies

$$-\frac{\partial u(w - g^*, g^*)}{\partial c} + \frac{\partial u(w - g^*, g^*)}{\partial s} = 0.$$

Those citizens who do not invest in CSR firms still “value” the CSR activities, but personal giving is preferred. Their utility is $u(w - g^*, g^*)$ which is constant in θ .

Citizens with a stronger preference ($\theta > \theta^*$) for corporate giving prefer to do social good through CSR firms, so (4) is an inequality and $g^*(\theta) = 0$. That is, the presence of CSR firms expands the opportunity set for citizens, and those citizens with $\theta > \theta^*$ take advantage of the expanded opportunities. Their share demands are then given by (5), (6), and (1). Their optimal utility using (7) and (1) is $u(w - \theta^* h \pi \eta_s^*(\theta), \theta h \pi \eta_s^*(\theta))$, which is strictly increasing in θ .

In contrast to Friedman’s position, in equilibrium shareholders with $\theta > \theta^*$ choose corporate giving over personal giving. This results despite the social return θ on corporate giving for CSR being less than the social return on personal giving. The CSR discount is the reason for this preference. The financial return per dollar invested in a CSR firm is $\frac{(1-h)\pi}{p_s^*}$, and the social return is $\frac{\theta h \pi}{p_s^*}$. For the purpose of illustration suppose that the financial and social returns are additive. The total return is greater than that from the profit-maximizing firm; i.e.,

$$\frac{(1 - h + \theta h)\pi}{p_s^*} = 1 + \frac{(\theta - \theta^*)h\pi}{p_s^*}. \quad (8)$$

The total return is greater than 1 for all citizens with $\theta > \theta^*$ and less than 1 for all citizens with $\theta < \theta^*$. Consequently, citizens ($\theta > \theta^*$) who purchase shares in the CSR firms receive a higher total return than with a profit-maximizing firm, and they make no personal gifts. Those citizens ($\theta < \theta^*$) with a lower total return on a CSR firm purchase shares in the profit-maximizing firms and rely on personal giving rather than CSR.

Since citizens with $\theta > \theta^*$ hold shares in the CSR firm, such firms, once created, are viable, but sell at a discount in the capital market. Friedman argues that shareholders of the CSR firm would be harmed if a firm switched from profit-maximization to CSR. In the model here, everything is anticipated, so it is the entrepreneur and not shareholders who bears the cost of CSR.

Proposition 1: Shareholders do not bear the cost of CSR.

In this model all citizens contribute to the social good either through personal giving or through investment in CSR firms. No citizens do both, which leaves the question of whether those who

invest in CSR firms do more social good than those who give personally. The following proposition indicates that the answer is yes.

Proposition 2: Social giving $\eta_s^*(\theta)h\pi$ through CSR firms is greater for a $\theta > \theta^*$ citizen than for a $\theta < \theta^*$ citizen.

Proof: For $\theta > \theta^*$ consumption $c^*(\theta)$ in (3) is, using (7), $c^*(\theta) = w - \eta_s^*(\theta)\theta^*h\pi$, and social satisfaction $s^*(\theta)$ is $s^*(\theta) = \eta_s(\theta)\theta h\pi$. Utility is then

$$u(c^*(\theta), s^*(\theta)) = u(w - \eta_s^*(\theta)\theta^*h\pi, \eta_s^*(\theta)\theta h\pi). \quad (9)$$

Citizen $\theta = \theta^*$ is indifferent between purchasing shares of a CSR firm and using personal giving g^* , and utility is $u(w - g^*, g^*)$. Indifference then implies

$$\eta_s^*(\theta^*)\theta^*h\pi = g^*. \quad (10)$$

Since the utility in (9) is increasing in θ and θ^* is unique, strict concavity of u implies

$$\eta_s^*(\theta)\theta h\pi > g^*.$$

Then, $\theta < \theta^*$ implies $\eta_s^*(\theta)h\pi > g^*$. Q.E.D.

Those who give personally thus give less than those who invest in CSR firms. Note also from (10) that those who give personally all give the same amount g^* , whereas those who invest in CSR firms give different amounts depending on their type θ . Those who invest in CSR firms would be expected to hold more shares the greater is θ ; i.e., $\eta_s^*(\theta)$ is nonincreasing in θ . The following proposition establishes this for a special case.

Proposition 3: For separable preferences $u(c, s) = u_c(c) + u_s(s)$ with $u_s(s) = s^\alpha$ and $\theta \geq \theta^*$ the optimal shareholdings $\eta_s^*(\theta)$ are strictly increasing in θ .

Proof: Total differentiation of the first-order condition

$$-\theta^* u'_c(w - \eta_s^*(\theta)\theta^*h\pi) + \theta u'_s(\eta_s^*(\theta)\theta h\pi) = 0.$$

yields

$$\frac{d\eta_s^*(\theta)}{d\theta} = -\frac{u'_s(\eta_s^*(\theta)\theta h\pi) + \theta h\pi \eta_s^*(\theta) u''_s(\eta_s^*(\theta)\theta h\pi)}{\frac{d^2 u}{d\eta_s^2}},$$

where $\frac{d^2 u}{d\eta_s^2} = \frac{d^2 u(w - \eta_s\theta h\pi, \eta_s\theta h\pi)}{d\eta_s^2} < 0$ is the second-order condition. For the assumed utility function this is

$$\frac{d\eta_s^*(\theta)}{d\theta} = -\frac{\alpha^2 s^{*\alpha-1}}{\frac{d^2 u}{d\eta_s^2}} > 0.$$

Q.E.D.

To close the model, the indifferent citizen θ^* is identified from the market clearing condition for shareholdings in the CSR firm. The market clearing condition is

$$\int_{\theta^*}^1 \eta_s^*(\theta) dF(\theta) = 1, \quad (11)$$

where $F(\theta)$ is the distribution function of citizen types and 1 is the total shares of a CSR firm. The distribution function is assumed to be differentiable except possibly at $\theta = 0$ or $\theta = 1$; i.e., a mass point at 0 or 1.

C. A Closed-Form Characterization

To characterize the equilibrium in closed form and make more specific predictions, for the rest of the paper the preferences of citizens are specified as

$$u(c, s) = \gamma c^\alpha + s^\alpha, \quad \alpha \in (0, 1).$$

The shareholdings are then

$$\eta_s^*(\theta) = \frac{w}{\theta^* h \pi} \left(1 + \gamma^{\frac{1}{1-\alpha}} \left(\frac{\theta^*}{\theta} \right)^{\frac{\alpha}{1-\alpha}} \right)^{-1}, \quad (12)$$

which is increasing in θ and decreasing in h , π , and γ . Substituting (12) into (11) and totally differentiating with respect to h and θ^* yields⁹

$$\frac{d\theta^*}{dh} < 0. \quad (13)$$

Then, differentiating (7) yields

$$\frac{dp_s^*}{dh} = \left(-1 + \theta^* + h \frac{d\theta^*}{dh} \right) \pi < (-1 + \theta^*) \pi < 0. \quad (14)$$

Consequently, the CSR discount is increasing in the social giving of the CSR firm. The properties of the securities market equilibrium are summarized in the following proposition.

Proposition 4: The greater the corporate giving h the broader is the set of shareholders in CSR firms. Shareholding broadens because the CSR discount is increasing in corporate giving.

The equilibrium personal giving g^* for a citizen $\theta < \theta^*$ is

$$g^* = w \left(1 + \gamma^{\frac{1}{1-\alpha}} \right)^{-1},$$

⁹ The properties of $\eta_s^*(\theta)$ and θ^* are interrelated, so that if, for example, $\eta_s^*(\theta)$ decreases then θ^* must decrease; i.e., a greater number of citizens must hold shares in the CSR firm.

which is increasing in w and decreasing in γ .

The utility u^m of the shareholders of the profit-maximizing firm is

$$u^m = w^\alpha \left(1 + \gamma^{\frac{1}{1-\alpha}}\right)^{1-\alpha}, \quad \forall \theta \in [0, \theta^*].$$

This is independent of π , since an anticipated change in profits is incorporated in the share price. Shareholders of profit-maximizing firms are thus unaffected by anticipated changes in profits, but they would fully bear the effects of any unanticipated change.

The utility $u^s(\theta)$ of the shareholders of the CSR firm is

$$u^s(\theta) = w^\alpha \left(\left(\frac{\theta}{\theta^*}\right)^{\frac{\alpha}{1-\alpha}} + \gamma^{\frac{1}{1-\alpha}} \right)^{1-\alpha},$$

which is strictly increasing in θ and $u^s(\theta^*) = u^m$. The utility $u^s(\theta)$ is strictly increasing in h , so citizens ($\theta > \theta^*$) who purchase shares in CSR firms are better off with greater corporate giving even though they value that giving less than personal giving. This results because the cost of corporate giving is reflected in the market value p_s^* of the CSR firms. Shareholders thus bear no cost of anticipated corporate giving, so, as considered in the next section, it must be entrepreneurs who bear the cost of CSR. This means that Friedman's opposition to CSR pertains to unanticipated CSR, and the cost of anticipated CSR is borne by those, such as Mackey, who form CSR firms.

D. Aggregate Social Giving

Corporate giving $g^c(\theta)$ by citizen $\theta > \theta^*$ is $g^c(\theta) = \eta_s^*(\theta)h\pi$, which by Proposition 3 is greater than the personal giving g^* by citizens with $\theta < \theta^*$. Aggregate corporate giving G^c is $G^c = \int_{\theta^*}^1 \eta_s^*(\theta)h\pi dF(\theta) = h\pi$. Aggregate social giving G^* then is $G^* = g^*F(\theta^*) + G^c = g^*F(\theta^*) + h\pi$. Aggregate social giving is strictly increasing in h , π , and w and strictly decreasing in γ .

The presence of CSR firms expands the opportunity sets of citizens, and in the absence of those firms aggregate social giving is g^* . The impact of CSR firms is thus to increase aggregate social giving, i.e.,

$$G^* - g^* = (h\pi - g^*)(1 - F(\theta^*)) + h\pi F(\theta^*) > 0,$$

since Proposition 3 establishes that $\eta_s^*(\theta)h\pi > g^*$ for $\theta > \theta^*$, so $\int_{\theta^*}^1 \eta_s^*(\theta)h\pi dF(\theta) = h\pi > g^*$.

If $\theta = 1$ for all citizens, aggregate social giving is g^* . Somewhat paradoxically, if citizens value corporate giving less highly; i.e., $\theta < 1$ for some citizens, aggregate social giving increases. This results because CSR firms sell at a discount, which leads citizens to buy their shares. Again, this result is to be interpreted as entrepreneurs bearing the cost of CSR. These results are summarized as:

Proposition 5: The presence of CSR firms increases aggregate social giving. Aggregate social giving is lower when corporate giving is a perfect substitute for personal giving than when it is an imperfect substitute.

E. Citizen-Investor Welfare

Aggregate welfare W of citizen-investors is

$$W = \int_0^{\theta^*} u(w - g^*, g^*) dF(\theta) + \int_{\theta^*}^1 u(w - \eta_s^*(\theta)\theta^*h\pi, \eta_s^*(\theta)\theta h\pi) dF(\theta).$$

Differentiating with respect to h and using (10) and the first-order condition for $\eta_s^*(\theta)$ yields

$$\frac{dW}{dh} = -\frac{d\theta^*}{dh} \int_{\theta^*}^1 u_c(w - \eta_s^*(\theta)\theta^*h\pi, \eta_s^*(\theta)\theta h\pi) \eta_s^*(\theta) h \pi dF(\theta).$$

Citizen-investors welfare is increasing in h , since from (13) $\frac{d\theta^*}{dh} < 0$. Welfare is thus increasing in corporate giving. This results because entrepreneurs rather than citizen-investors bear the cost of CSR, as considered in Section III.

Proposition 6: Aggregate welfare of citizen-investors is strictly increasing in the share h of profits allocated to corporate giving.

III. Private and Social Entrepreneurship

A. Entrepreneurs

The section extends Friedman's environment by adding the formation of firms by entrepreneurs. Entrepreneurs are citizens who have an opportunity to establish a firm at time 0. The number of entrepreneurs and the number of entrepreneurial opportunities to establish a firm are assumed to be limited, so not all citizens can form firms. Entrepreneurs are classified as private or social entrepreneurs. A private entrepreneur is one who forms a firm only if he gains financially from doing so, whereas a social entrepreneur is one who is willing to incur a financial loss.

Entrepreneurs at time 0 can establish a firm at a cost k , and they then take the firm public at time 1 by selling its shares to investors. A profit-maximizing firm that returns a profit π at time 2 can be sold in the capital market for $p_m^* = \pi$. A CSR firm returns a profit $(1 - h)\pi$ and a social return $h\pi$ at time 2 and can be sold in the capital market for p_s^* . Entrepreneurs are also investors, so at time 1 they also purchase shares. As citizens, entrepreneurs also allocate their financial returns between consumption and personal giving. The number of entrepreneurs and entrepreneurial opportunities is assumed to be small, so the capital gains or losses from establishing a firm have little effect on the equilibrium in the financial markets.

Forming a CSR firm expands the opportunity set for citizens, and those citizens for whom corporate giving is a close substitute for personal giving use investment in CSR firms in lieu of personal giving. A social entrepreneur also would hold shares in a firm he creates and thus receives the same benefit as an investor. A social entrepreneur who is willing to form a CSR at a financial loss, however, may prefer forming a profit-maximizing firm if he has an opportunity to do so. Under a variety of conditions, however, social entrepreneurship can occur even when the entrepreneur has the alternative of creating a profit-maximizing firm. For example, the social entrepreneur could receive satisfaction or an entrepreneurial social glow from creating the CSR firm itself.

B. Private Entrepreneurship

If an entrepreneur formed a profit-maximizing firm, her utility u_E^m would be

$$u_E^m = (w + (p_m^* - k)I)^\alpha \left(1 + \gamma^{\frac{1}{1-\alpha}}\right)^{1-\alpha}, \quad (15)$$

where I is an indicator variable with $I = 1$ indicating that a firm was established and $I = 0$ indicating that no firm was established. A private entrepreneur thus establishes a profit-maximizing firm if and only if $k \leq p_m^*$. She acts as Friedman would advocate.

C. Social Entrepreneurship

An entrepreneur with $\theta \geq \theta^*$ purchases shares of a CSR firm and has a share demand $\eta_s^*(\theta)$ given by

$$\eta_s^*(\theta) = \frac{w + (p_s^* - k)I}{h\theta^*\pi} \left(1 + \gamma^{\frac{1}{1-\alpha}} \left(\frac{\theta^*}{\theta}\right)^{\frac{\alpha}{1-\alpha}}\right)^{-1}, \quad (16)$$

which is strictly increasing in θ . The market clearing condition yielding θ^* is

$$\int_{\theta^*}^1 \frac{(w + (p_s^* - k)I(\theta))}{h\theta^*\pi} \left(1 + \gamma^{\frac{1}{1-\alpha}} \left(\frac{\theta^*}{\theta}\right)^{\frac{\alpha}{1-\alpha}}\right)^{-1} dF(\theta) = 1, \quad (17)$$

where $I(\theta)$ depends on θ , i.e., on who is an entrepreneur. This condition and (7) determine the market value p_s^* and θ^* . The utility $u_E^s(\theta)$ of the entrepreneur forming a CSR firm is¹⁰

$$u_E^s(\theta) = (w + (p_s^* - k)I(\theta))^\alpha \left(\left(\frac{\theta}{\theta^*}\right)^{\frac{\alpha}{1-\alpha}} + \gamma^{\frac{1}{1-\alpha}} \right)^{1-\alpha}. \quad (18)$$

First, consider an entrepreneur who only has the opportunity to form a CSR firm. For example, the entrepreneur may have personal characteristics important for founding a CSR firm that are not useful for a profit-maximizing firm. An entrepreneur with $\theta = \theta^*$ has utility

$$u_E^s(\theta^*) = (w + (p_s^* - k)I(\theta^*))^\alpha \left(1 + \gamma^{\frac{1}{1-\alpha}}\right)^{1-\alpha},$$

¹⁰ Note that the utility in (15) and (18) of an entrepreneur and an investor ($I = 0$) is separable in financial return and the investor's preference characteristics for consumption and social giving.

which for $I(\theta^*) = 0$ is the utility of a citizen who buys shares only of profit-maximizing firms and is also the utility of all citizens when there are no CSR firms. A private entrepreneur with $\theta = \theta^*$ would form a CSR firm if and only if $p_s^* \geq k$. The utility in (18) of an entrepreneur is increasing in θ , since forming a CSR firm provides the opportunity to substitute corporate giving for personal giving. Consequently, compared to forming no firm, an entrepreneur with $\theta > \theta^*$ is willing to form a CSR firm at a loss; i.e., for some $k > p_s^*$.

To characterize the social entrepreneur's choice, let $\hat{\theta}(k)$ denote the entrepreneur who is indifferent between forming a CSR firm at a cost k and having only profit-maximizing firms in the market; i.e.,

$$u_E^s(\hat{\theta}(k)) - u_E^s(\theta^*)|_{I(\theta^*)=0} \equiv 0$$

or

$$\left(\frac{w + p_s^* - k}{w}\right)^\alpha \left(\frac{\left(\frac{\hat{\theta}(k)}{\theta^*}\right)^{\frac{\alpha}{1-\alpha}} + \gamma^{\frac{1}{1-\alpha}}}{1 + \gamma^{\frac{1}{1-\alpha}}}\right)^{1-\alpha} \equiv 1,$$

where this is defined only for k such that $\hat{\theta}(k) \leq 1$. Entrepreneurs with $\theta \in [\hat{\theta}(k), 1]$ are thus willing to form a CSR firm at a financial loss, and the maximum loss any social entrepreneur would be willing to bear is $p_s^* - \hat{\theta}^{-1}(1)$, where $\hat{\theta}^{-1}(\hat{\theta})$ is the inverse of $\hat{\theta}(k)$. They bear a loss because having CSR firms available expands their investment–social giving opportunity set. Social entrepreneurship thus can explain the presence of CSR firms.

A social entrepreneur may also have an opportunity to choose the scale h of corporate social giving, and

$$\begin{aligned} \frac{du_E^s(\theta)}{dh} = & \alpha(w + (p_s^* - k)I)^{\alpha-1} \left(\left(\frac{\theta}{\theta^*}\right)^{\frac{\alpha}{1-\alpha}} + \gamma^{\frac{1}{1-\alpha}}\right)^{-\alpha} \left[\left(\left(\frac{\theta}{\theta^*}\right)^{\frac{\alpha}{1-\alpha}} + \gamma^{\frac{1}{1-\alpha}}\right) \frac{dp_s^*}{dh} \right. \\ & \left. - \alpha(w + (p_s^* - k)I)(\theta^*)^{\frac{-1}{1-\alpha}} \theta^{\frac{\alpha}{1-\alpha}} \frac{d\theta^*}{dh} \right]. \end{aligned} \quad (19)$$

The term on the first line of (19) is negative, since $\frac{dp_s^*}{dh} < 0$ from (14), whereas the term on the second line is positive, since $\frac{d\theta^*}{dh} < 0$ from (13). The derivative cannot be signed at this level of generality and is reexamined in Section VIII.

Next, consider an entrepreneur with the opportunity to create either a profit-maximizing firm or a CSR firm. Since entrepreneurs with $\theta < \theta^*$ do not purchase shares of CSR firms and rely on personal giving, they would create a CSR firm rather than a profit-maximizing firm only if $p_s^* \geq \pi$. It is only citizens with $\theta > \theta^*$ who might form a CSR firm in lieu of a profit-maximizing firm. If the

market is thick with CSR firms, all entrepreneurs prefer to form a profit-maximizing firm rather than a CSR firm. This then requires an explanation for why the market is thick with CSR firms.

If there are no CSR firms in the market, an entrepreneur with $\theta > \theta^*$ forms a CSR firm rather than a profit-maximizing firm if and only if, using (15) and (18),

$$(w + p_m^* - k)^\alpha \left(1 + \gamma^{\frac{1}{1-\alpha}}\right)^{1-\alpha} \leq (w + p_s^* - k)^\alpha \left(\left(\frac{\theta}{\theta^*}\right)^{\frac{\alpha}{1-\alpha}} + \gamma^{\frac{1}{1-\alpha}} \right)^{1-\alpha}.$$

If $k = \pi$, this reduces to

$$\left(1 - \frac{\left(\frac{\theta}{\theta^*}\right)^{\frac{\alpha}{1-\alpha}} - 1}{\left(\frac{\theta}{\theta^*}\right)^{\frac{\alpha}{1-\alpha}} + \gamma^{\frac{1}{1-\alpha}}}\right)^{\frac{1-\alpha}{\alpha}} \leq 1 - \frac{hw(1 - \theta^*)}{w}. \quad (20)$$

This is not satisfied for $\theta = \theta^*$, but the left side is decreasing in θ with a minimum at $\theta = 1$. If the condition in (20) is satisfied for $\theta = 1$, some entrepreneur prefers to form a CSR firm. Social entrepreneurship thus results when either $p_s^* \geq k$ and the entrepreneur cannot form a profit-maximizing firm or if she can and $p_s^* < \pi$ and $\theta \geq \hat{\theta}(\pi)$.

The results of this section are summarized in the following proposition.

Proposition 7: If social entrepreneurs ($\theta > \theta^*$) can only form a CSR firm, some are willing to do so at a financial loss. If a social entrepreneur can form both types of firms, she forms a CSR firm if and only if (20) is satisfied.

D. Social Entrepreneurship with an Entrepreneurial Social Glow

The satisfaction from social entrepreneurship has been assumed to result only from the holding of shares of the CSR firm. The entrepreneur could also receive an entrepreneurial social glow from creating a firm that engages in CSR. The glow could come from providing citizens with $\theta > \theta^*$ the opportunity to increase their social giving through a CSR firm. An entrepreneurial glow could also take the form of a lump-sum independent of the entrepreneur's shareholdings in the CSR firm.

In the former case in which an entrepreneurial glow comes from the shareholdings ($1 - \eta_s$) of other citizens, the aggregate social satisfaction for the entrepreneur is

$$s = I(1 - \eta_s)\theta h\pi + \eta_s\theta h\pi + g.$$

The entrepreneur holds no shares in the CSR firm, since the satisfaction with $I = 1$ is a constant independent of her share purchases. The entrepreneur then gives personally as a function of θ . This entrepreneurial glow means that an entrepreneur is willing to form a CSR firm at a financial

loss ($p_s^* < k$) and, depending on how warm the glow is, may form a CSR firm rather than a profit-maximizing firm.

The utility $u_E^e(\theta)$ of the entrepreneur is

$$u_E^e(\theta) = \left((w + (p_s^* - k)I) \frac{(1-h)\pi}{p_s^*} + \theta h \pi \gamma^{\frac{1}{1-\alpha}} I \right)^\alpha \left(1 + \gamma^{\frac{1}{1-\alpha}} \right)^{1-\alpha}.$$

The entrepreneur with $\theta > \theta^*$ forms a CSR firm if $u_E^e(\theta)$ is at least as great as the utility in (18) with $I(\theta) = 0$ or¹¹

$$(p_s^* - k) \frac{(1-h)\pi}{p_s^*} + \theta h \pi \gamma^{\frac{1}{1-\alpha}} + w \frac{\theta^* h \pi}{p_s^*} \geq w \left[\left(\frac{\left(\frac{\theta}{\theta^*} \right)^{\frac{\alpha}{1-\alpha}} + \gamma^{\frac{1}{1-\alpha}}}{1 + \gamma^{\frac{1}{1-\alpha}}} \right)^{\frac{1-\alpha}{\alpha}} - 1 \right]. \quad (21)$$

Note that the right side of (21) is increasing in θ and at $\theta = \theta^*$ equals 0. The entrepreneur $\theta = \theta^*$ forms a CSR firm if $p_s^* - k + \theta^* \frac{h}{1-h} (w + p_s^* \gamma^{\frac{1}{1-\alpha}}) \geq 0$. Consequently, some social entrepreneurs with $\theta > \theta^*$ are willing to form a CSR firm at a financial loss ($p_s^* < k$) when an entrepreneurial glow comes from providing an opportunity for others to use corporate giving.

If the entrepreneurial glow is a lump-sum, the entrepreneur purchases shares in the firm he creates. Let ϕ denote the lump-sum glow, so the total social satisfaction of the entrepreneur is

$$s = \phi I + \eta_s \theta h \pi + g.$$

The entrepreneurial glow decreases the shareholdings, since u is strictly concave, and the utility $u_E^\phi(\theta)$ of the social entrepreneur of type $\theta > \theta^*$ is

$$u_E^\phi(\theta) = \left(w + (p_s^* - k)I + \phi I \frac{\theta^*}{\theta} \right)^\alpha \left(\left(\frac{\theta}{\theta^*} \right)^{\frac{\alpha}{1-\alpha}} + \gamma^{\frac{1}{1-\alpha}} \right)^{1-\alpha}.$$

The entrepreneur forms a CSR firm if and only if $u_E^\phi(\theta)$ is at least as great as $u_E^s(\theta)$ in (18) with $I(\theta) = 0$ or¹²

$$p_s^* - k + \phi \frac{\theta^*}{\theta} \geq 0, \quad (22)$$

so low θ entrepreneurs are willing to form CSR firms at a greater loss than are social entrepreneurs with a higher θ . The effect of a lump-sum entrepreneurial glow is to increase the willingness of an entrepreneur to form a CSR firm, and the entrepreneur prefers to form a CSR firm rather than a profit-maximizing firm if the condition in (22) is satisfied for $k = \pi$. Social entrepreneurship thus can result from an entrepreneurial glow.

¹¹ If this is the only CSR firm, the comparison is to (15) with $I = 0$.

¹² If this is the only CSR firm, the comparison is to (15) with $I = 0$.

IV. Social Efficiency, Inefficiency, and Opposition

Personal giving to social causes typically goes through a charitable organization that may have inefficiencies in its delivery of social good. For example, many organizations spend large shares of the contributions they receive on fundraising. Social giving through CSR firms thus could be more efficient than personal giving. Conversely, in response to Mackey, Friedman (2005) stated, “what reason is there to suppose that the stream of profit distributed in this way would do more good for society than investing the stream of profit in the enterprise itself or paying it out as dividends and letting stockholders dispose of it? ... Whole Foods has no special competence in deciding how charity should be distributed.” Moreover, the CSR firm may give to social causes to which a shareholder objects. This social cause selection effect would make corporate giving less desirable than personal giving. The modification of the model considered in this section incorporates the cases of objectionable social cause selection and greater efficiency on the part of the CSR firm.

To represent a corporate advantage or disadvantage in the provision of social good relative to personal giving, introduce a parameter μ in the expression in (2) for social good; i.e.,

$$s = \eta_s \theta h \mu \pi + g,$$

where $\mu > 1$ represents an advantage and $\mu < 1$ a disadvantage of corporate giving.¹³ Proceeding as above, the market value corresponding to (7) is¹⁴

$$p_s^* = (1 - h)\pi + \theta_\mu^* h \mu \pi,$$

where θ_μ^* is given by a market-clearing condition analogous to (11). If the objectionable social cause selection effect is dominant and $\mu < 1$, the market value p_s^* of the CSR firm is less than π , and the social entrepreneur’s choice between forming a profit-maximizing firm rather than a CSR firm is analogous to that considered in Section III. If the efficiency advantage is dominant and $\mu > 1$, the market value p_s^* is greater than π if

$$\theta_\mu^* \mu > 1.$$

¹³ If a portion of corporate giving goes to causes shareholders oppose, then $\mu < 1$. If the causes are viewed as harmful by citizens, then $\mu < 0$ is possible. For example, Berkshire Hathaway allowed shareholders to allocate a portion of their dividends among a set of social causes. A salesperson for a Berkshire Hathaway subsidiary organized on the Internet a campaign against the company because a portion of the profit she generated could be allocated by shareholders to a cause, Planned Parenthood which operates abortion clinics, to which she objected. Berkshire Hathaway discontinued the program because of the effect on sales and salespersons.

¹⁴ This provides another interpretation of θ ; i.e., reinterpreted as $\theta\mu$.

In this case both private and social entrepreneurs would form CSR firms. They do so because citizens who invest in CSR firms are willing to pay more for the shares due to the greater social return relative to personal giving.

V. The Market for Control

Social entrepreneurship and the management of CSR firms take place in the shadow of the market for control. That market has imperfections and transactions costs associated with takeovers, mergers, and restructurings. The imperfections include both those associated with asymmetric information, such as about the earnings potential of firms, and policies, such as takeover defenses, erected by management. Rather than incorporate such imperfections in the model, this section considers the incentives at play in the market for control and the responses of entrepreneurs.

Consider a situation in which both profit-maximizing firms and CSR firms have been formed. Also, assume that there are many CSR firms. Citizens with $\theta < \theta^*$ have an incentive to takeover a CSR firm. They could pay p_s^* for the firm and convert it to a profit-maximizing firm, and their utility u^m would be from (15)

$$u^m = (w + p_m^* - p_s^*)^\alpha \left(1 + \gamma^{\frac{1}{1-\alpha}}\right)^{1-\alpha}.$$

Consequently, as long as 1) the capital market is thick with CSR firms and 2) the market value of a CSR firm is less than its earnings potential π , it would be taken over through the purchase of shares in the capital markets.

Suppose instead that the market is not thick with CSR firms and that a takeover requires buying out the shareholders of the CSR firm, as in the case of a tender offer followed by a merger. If the firm is taken over and a premium p is paid, the utility of the shareholder with $\theta > \theta^*$, who now must invest in profit-maximizing firms, is

$$u^m = (w + p)^\alpha \left(1 + \gamma^{\frac{1}{1-\alpha}}\right)^{1-\alpha}.$$

For shareholder θ to sell her shares, a premium $p(\theta)$ is required, where that premium is defined by¹⁵

$$(w + p(\theta))^\alpha \left(1 + \gamma^{\frac{1}{1-\alpha}}\right)^{1-\alpha} \equiv w^\alpha \left(\left(\frac{\theta}{\theta^*}\right)^{\frac{\alpha}{1-\alpha}} + \gamma^{\frac{1}{1-\alpha}} \right)^{1-\alpha},$$

where the right side is from (18) with $I(\theta) = 0$. For example, if $\alpha = \frac{1}{2}$, the premium is

$$p(\theta) = \frac{w(\theta - \theta^*)}{\theta^*(1 + \gamma^2)}.$$

¹⁵ If takeovers could occur, they would be anticipated, and the market value for the CSR firm would be affected. This effect is not considered here. Hence, θ^* is that characterized in Section II.

The premium is a strictly increasing function of θ . The aggregate premium required to purchase all shares in a tender offer is $\int_{\theta^*}^1 p(1)dF(\theta) = p(1)(1 - F(\theta^*))$, and this could be greater than the takeover gain $p_m^* - p_s^*$ less any transactions cost κ .

Takeovers do not require the purchase of all shares, however, so suppose that only a fraction ω of the shares is required. The premium $\hat{p}(\omega)$ required for a takeover is then given by

$$\frac{F(\theta(\omega)) - F(\theta^*)}{1 - F(\theta^*)} \equiv \omega,$$

where $\theta(\omega) = \hat{p}^{-1}(\hat{p}(\omega))$. A takeover then occurs if and only if

$$\hat{p}(\omega) \leq p_m^* - p_s^* - \kappa.$$

The results of this section are summarized in the following proposition.

Proposition 8: CSR firms are subject to takeover and conversion to profit-maximizing firms if the premium required is less than the difference in market values less any transactions costs.

In a takeover those shareholders with $\theta > \theta(\omega)$ lose. This identifies a role for so-called socially-responsible mutual funds. They provide a means by which a CSR firm or social entrepreneur can protect shareholders from the market for control. This also suggests that in practice socially-responsible mutual funds should under perform the market.

Protection from the market for control can also be provided by the entrepreneur by adopting anti-takeover provisions, such as a poison pill, at the time the firm is formed. For example, Whole Foods has a number of anti-takeover provisions including delay measures such as a classified board, a poison pill, and golden parachutes (IRRC (2004)).¹⁶

Is there an incentive for citizens with $\theta > \theta^*$ to take over a profit-maximizing firm and convert it to a CSR firm? The answer was given in Section III. If a social entrepreneur would form a CSR firm when $k = p_m^* = \pi$, a takeover would occur. To protect the taken-over firm, the social entrepreneur would then have to sell the firm to a socially-responsible investment fund or adopt anti-takeover provisions.

VI. Managerial Discretion and Surprise

Managers who have protection from the market for control may be able to convert a profit-maximizing firm to a CSR firm. An unanticipated conversion would be opposed by all current shareholders, however, since their utility would then be given in (18) with $\theta < \theta^*$. This is also

¹⁶ Many other corporations have such provisions.

apparent from the illustration in (8). Such an unanticipated conversion, or surprise, is what Friedman refers to as a tax on shareholders.

In the model the shareholders of a profit-maximizing firm would unanimously oppose a conversion, so it is only protection from the market for control that would allow managers to impose such a tax. Similarly, managers of a CSR firm may be able to convert it to a profit maximizer. Shareholders would oppose the conversion, unless they had close substitutes for the CSR firm. Friedman argues against both types of conversion, since they would not be in the interests of shareholders. Baron (2006, pp. 658-659) refers to this as a component of managerial capitalism, since managers rather than markets allocate resources.

VII. Taxes

Friedman (1970) noted that “it may be that, given the laws about the deductibility of corporate charitable contributions, the stockholders can contribute more to charities they favor by having the corporation make the gift than by doing it themselves, since they can in that way contribute an amount that would otherwise have been paid as corporate taxes.” This tax advantage of corporate giving affects shareholdings and the market values of firms and provides an explanation for CSR. More specifically, corporate giving is tax advantaged relative to personal giving because returns distributed to investors are taxed.

To investigate the implications of taxes, three tax rates are considered. Let τ denote the corporate profits tax rate and t denote the tax on dividends. The returns to investors are assumed to be paid in the form of dividends, which in the model equal the after-tax return $\pi(1 - \tau)$. Let the personal income tax rate be denoted by T , and assume that the capital gains or losses of entrepreneurs are also taxed at T . Consumption c then is¹⁷

$$c = w - \eta_m p_m - \eta_s p_s + (\eta_m \pi + \eta_s (1 - h) \pi) (1 - \tau) (1 - t) - (1 - T) g,$$

where the last term reflects the tax deduction for personal giving.¹⁸ Social satisfaction s is as in (2) and is unaffected by taxes, since giving is tax deductible.

The equilibrium market values are

$$p_m^* = (1 - \tau)(1 - t)\pi$$

¹⁷ The cost of purchasing shares is not deducted, since in a one-period model the taxes τ and t would then be irrelevant. Capital gains and losses are taxed at the level of the entrepreneur.

¹⁸ Note that corporate social giving is also tax deductible. Friedman argues that corporate giving should not be deductible.

and

$$p_s^* = (1 - \tau)(1 - t)(1 - h)\pi + (1 - T)\theta_T^* h\pi,$$

where θ_T^* denotes the citizen indifferent between corporate and personal giving and the last term in the expression for p_s^* reflects the tax savings on the alternative of personal giving. If all citizens have $\theta = 1$, an after-tax Modigliani-Miller theorem does not obtain. If, however, corporate giving is not tax-deductible, as Friedman argues it should not be, the market value \hat{p}_s^* is

$$\hat{p}_s^* = p_m^* + (1 - \hat{\theta}_T^*)(1 - T)h\pi.$$

Consequently, if $\theta = 1$ for all citizens, an after-tax Modigliani-Miller theorem obtains.

The share demand $\eta_s^T(\theta)$ when corporate giving is tax-deductible is

$$\eta_s^T(\theta) = \frac{w}{(1 - T)\theta_T^* h\pi} \left(1 + ((1 - T)\gamma)^{\frac{1}{1-\alpha}} \left(\frac{\theta_T^*}{\theta} \right)^{\frac{\alpha}{1-\alpha}} \right)^{-1},$$

and the market clearing condition is analogous to (11). The shareholdings $\eta_s^T(\theta)$ and θ_T^* are corporate tax neutral but depend on the personal tax rate T . The shareholdings $\eta_s^T(\theta)$ are increasing in T and hence so is θ_T^* . An increase in the personal tax rate thus results in more investors relying on personal rather than corporate giving. Personal giving g_T^* by citizens with $\theta < \theta_T^*$ is

$$g_T^* = w \left(1 + ((1 - T)\gamma)^{\frac{1}{1-\alpha}} \right)^{-1}.$$

Personal giving is increasing in the personal tax rate as expected.

The market values of both firms are strictly decreasing in the corporate profits and dividend tax rates, and the value of the profit-maximizing firm is independent of the personal tax rate. The personal tax rate affects the value of the CSR firm directly and also indirectly through θ_T^* . If the elasticity of θ_T^* is low, the market value of the CSR firm is decreasing in the personal tax rate.

The tax advantage of corporate giving can result in a market value for the CSR firm that is higher than that of the profit-maximizing firm. The necessary and sufficient condition is that

$$\theta_T^* > \frac{(1 - \tau)(1 - t)}{(1 - T)}.$$

The corporate profits tax rate and the marginal personal tax rate are currently equal, so this condition reduces to $\theta_T^* > 1 - t$. The dividend tax rate currently is 15 percent, although in prior years it equaled the marginal personal tax rate. A decrease in the dividend tax rate increases the market values of both firms and makes it less likely that the market value of the CSR firm exceeds that of the profit-maximizing firm.

The utility $u_E^s(\theta)$ of the entrepreneur with $\theta > \theta_T^*$ is

$$u_E^s(\theta) = (w + (p_s^* - k)(1 - T)I)^\alpha \left(\left(\frac{\theta}{\theta_T^*(1 - T)} \right)^{\frac{\alpha}{1-\alpha}} + \gamma^{\frac{1}{1-\alpha}} (1 - T)^{\frac{\alpha}{1-\alpha}} \right)^{1-\alpha}.$$

An entrepreneur thus forms a CSR firm rather than a profit-maximizing firm if and only if $p_s^* \geq p_m^*$. If there are no other CSR firms, the analysis is analogous to that in Section III.C. Taxes thus affect the market values of firms and the choice of some citizens between social and corporate giving, but the characterization of entrepreneurship is based on the same logic as in the absence of taxes.

If the social entrepreneur receives an entrepreneurial glow from forming a CSR firm or from providing an opportunity for others to invest in a CSR firm, the incentives to form a CSR firm are strengthened. That is, the condition in (22) becomes

$$(p_s^* - k)(1 - T) + \phi \frac{\theta_T^*}{\theta} \geq 0.$$

This condition reflects the tax deductibility of the capital loss on forming a firm with $p_s^* < k$. The condition in (21) with taxes is

$$(p_s^* - k)(1 - T) \frac{(1 - h)\pi}{p_s^*} + \theta h \gamma^{\frac{1}{1-\alpha}} + w \frac{\theta_T^* h \pi}{p_s^*} > w \left[\left(\frac{\left(\frac{\theta}{\theta_T^*} \right)^{\frac{\alpha}{1-\alpha}} + \gamma^{\frac{1}{1-\alpha}}}{1 + \gamma^{\frac{1}{1-\alpha}}} \right)^{\frac{1-\alpha}{\alpha}} - 1 \right].$$

The entrepreneurial social glow itself, however, could be affected by taxes.

Proposition 9: Corporate giving is tax-advantaged and can result in a higher market value for a CSR firm than for a profit-maximizing firm. Entrepreneurial incentives are analogous to those summarized in Proposition 7.

VIII. Strategic Corporate Social Responsibility

Some activities undertaken to increase profits may be viewed by citizens as providing social good. Suppose that the operating profit $\pi_s(a_s)$ is strictly concave and is maximized at $a_s = a^* > 0$, with $\pi(a^*) = \pi$, where a_s denotes the operational activities or policies valued by citizens. An example could be Whole Foods' practice of 5% Days. Citizens who value the activities can reward the firm in the marketplace by purchasing its products or services, and this market effect is assumed to be incorporated in $\pi(a_s)$.¹⁹ Such activities have been referred to by Baron (2001)(2006, Ch.

¹⁹ Corporate giving could also affect profits; e.g., as a form of public relations or advertising. Navarro (1988) provides a model of corporate giving that increases profits and provides empirical evidence that the giving was like advertising and that the profit motive drove giving.

18) as strategic CSR, since they are undertaken to increase profits or market value.²⁰ In addition, citizens may obtain social satisfaction from $a_s > 0$.

To examine the effects of strategic CSR, the firm that redistributes a portion of its profits as corporate giving is also assumed to have operational activities valued by citizens. Letting $\rho > 0$ reflect a citizen's social satisfaction from strategic CSR relative to corporate giving, the total social satisfaction s is

$$s = \eta_s(h\pi(a_s) + \rho a_s)\theta + g,$$

and consumption c is

$$c = w - \eta_m p_m - \eta_s p_s + \eta_m \pi + \eta_s(1 - h)\pi(a_s) - g.$$

The first-order conditions for the citizen θ_s^* who is indifferent between personal giving and investment in the CSR firm imply that the market value \hat{p}_s is²¹

$$\hat{p}_s = \pi(a_s)(1 - h) + (h\pi(a_s) + \rho a_s)\theta_s^*. \quad (23)$$

A firm that makes no social contribution ($h = 0$) but has operational activities valued by citizens has a market value that exceeds its financial return.

As in Section II a citizen with $\theta < \theta_s^*$ holds no shares in the CSR firm and relies on personal giving. Citizens with $\theta > \theta_s^*$ hold shares in the CSR firm, and their optimal shareholdings $\hat{\eta}_s(\theta)$ are

$$\hat{\eta}_s(\theta) = \frac{w}{\theta_s^*(h\pi(a_s) + \rho a_s)} \left(1 + \gamma^{\frac{1}{1-\alpha}} \left(\frac{\theta_s^*}{\theta} \right)^{\frac{\alpha}{1-\alpha}} \right)^{-1}. \quad (24)$$

The shareholdings in (24) are increasing in θ , decreasing in h and ρ , and decreasing in a_s , since in any equilibrium the marginal social return $\rho + h\pi'(a_s)$ is positive. (If $\rho + h\pi'(a_s)$ were not positive, an increase in strategic CSR would decrease both profits $\pi(a_s)$ and the return from corporate social giving. Since no citizen prefers both less consumption and less social giving, at the equilibrium $\rho + h\pi'(a_s)$ is positive.) The market clearing condition is

$$\int_{\theta_s^*}^1 \hat{\eta}_s(\theta) dF(\theta) = 1. \quad (25)$$

²⁰ Baron (2001) focuses on the motive for CSR activities and considers CSR activities induced by private politics in the form of an activist-led boycott.

²¹ Fisman, Heal, and Nair (2005) assume that managers maximize a utility function with a similar form. They focus on "visible CSR" directed to interest groups, such as consumers, that can affect the firm. They provide empirical evidence supporting their theory.

Totally differentiating (25) for $\rho > 0$ yields $\frac{d\theta_s^*}{da_s} < 0$,²² so in equilibrium an increase in strategic CSR increases the number of citizens who use corporate giving rather than personal giving.²³

The utility $u_E^s(\theta)$ of an entrepreneur θ is

$$u_E^s(\theta) = (w + (\hat{p}_s - k)I)^\alpha \left(\left(\frac{\theta}{\theta_s^*} \right)^{\frac{\alpha}{1-\alpha}} + \gamma^{\frac{1}{1-\alpha}} \right)^{1-\alpha}. \quad (26)$$

The entrepreneur's utility does not depend directly on ρ . Instead, the preference for strategic CSR is reflected through θ_s^* and the market value \hat{p}_s .

If the strategic CSR is chosen by the entrepreneur, the optimal a_s^* maximizes (26) and satisfies

$$\begin{aligned} \frac{du_E^s(\theta)}{da_s} \Big|_{a_s=a_s^*} &= \alpha(w + (\hat{p}_s - k)I)^{\alpha-1} \left(\left(\frac{\theta}{\theta_s^*} \right)^{\frac{\alpha}{1-\alpha}} + \gamma^{\frac{1}{1-\alpha}} \right)^{-\alpha} \left[\left(\left(\frac{\theta}{\theta_s^*} \right)^{\frac{\alpha}{1-\alpha}} + \gamma^{\frac{1}{1-\alpha}} \right) \frac{d\hat{p}_s}{da_s} \right. \\ &\quad \left. - (w + (\hat{p}_s - k)I)(\theta_s^*)^{-\frac{1}{1-\alpha}} \theta^{\frac{\alpha}{1-\alpha}} \frac{d\theta_s^*}{da_s} \right] = 0, \end{aligned} \quad (27)$$

provided that $u_E^s(\theta)$ is concave.

The CSR firm will first be shown to choose its strategic CSR to maximize its profits when citizens only reward the firm in the marketplace; i.e. $\rho = 0$. If $\rho = 0$, the optimal $a_s^* = a^*$. To show this, note that $\pi'(a_s^*) = 0$ at $a_s^* = a^*$, so for $\rho = 0$, $\frac{d\theta_s^*}{da_s} \Big|_{a_s=a_s^*} = 0$ from (24) and (25). Then, differentiating (23) and evaluating it at $\rho = 0$ and $a_s^* = a^*$ implies that $\frac{d\hat{p}_s}{da_s} \Big|_{a_s=a_s^*} = 0$. These two conditions satisfy (27), so $a_s^* = a^*$ is optimal. This implies that $\theta_s^* = \theta^*$, and hence the market values in (7) and (23) are the same. This demonstrates that when $\rho = 0$ the firm chooses strategic CSR to maximize its profit and market value. For $\rho = 0$ strategic CSR thus responds only to the market effects reflected in $\pi(a_s)$.

²² The derivative is

$$\frac{d\theta_s^*}{da_s} = - \frac{\frac{\rho + h\pi'(a_s)}{\rho a_s + h\pi(a_s)}}{\hat{\eta}_s(\theta_s^*)f(\theta_s^*) - \int_{\theta_s^*}^1 \frac{\partial \hat{\eta}_s(\theta)}{\partial \theta_s^*} dF(\theta)},$$

and from (24) $\frac{\partial \hat{\eta}_s(\theta)}{\partial \theta_s^*} < 0$.

²³ The other comparative statics of θ_s^* are:

$$\frac{d\theta_s^*}{d\gamma} < 0; \quad \frac{d\theta_s^*}{dw} > 0; \quad \frac{d\theta_s^*}{d\rho} < 0; \quad \frac{d\theta_s^*}{dh} < 0.$$

The interpretations of these results are straightforward. An increase in the marginal utility γ of financial returns leads some citizens to shift to holding shares in the CSR firm. An increase in wealth w of citizens leads shareholders of the CSR firm to increase their holdings, which reduces the set of citizens who hold shares. An increase in the satisfaction ρ from strategic CSR or the share h of profits allocated to corporate social giving broadens the set of citizens holding shares of the CSR firm.

When citizens obtain social satisfaction ($\rho > 0$) from the firm's operational activities, the CSR firm does not maximize its market value. Since $\frac{d\theta_s^*}{da_s} < 0$, (27) implies that an entrepreneur chooses strategic CSR such that $\frac{d\hat{p}_s}{da_s} < 0$. Entrepreneurs thus do not maximize the market values of the firms they create but instead carry strategic CSR beyond the value-maximizing level. This results because the entrepreneur with $\theta > \theta^*$ obtains social satisfaction from the strategic CSR that is not fully captured in the market value.

The optimal strategic CSR depends on the type θ of the entrepreneur, and an entrepreneur with higher θ engages in greater strategic CSR. To show this, totally differentiate (27) to obtain

$$\frac{da_s^*}{d\theta} = -\frac{1}{\frac{\partial^2 u_E^s(\theta)}{\partial a_s^2}} \frac{\alpha}{1-\alpha} \theta^{-1} \left[\left(\frac{\theta}{\theta_s^*} \right)^{\frac{\alpha}{1-\alpha}} \frac{d\hat{p}_s}{da_s} - (w + (\hat{p}_s - k)I_s)(\theta_s^*)^{-\frac{1}{1-\alpha}} \theta^{\frac{\alpha}{1-\alpha}} \frac{d\theta_s^*}{da_s} \right],$$

where $\frac{\partial^2 u_E^s(\theta)}{\partial a_s^2}$ is assumed negative. Substituting from (27) yields

$$\frac{da_s^*}{d\theta} = \frac{1}{\frac{\partial^2 u_E^s(\theta)}{\partial a_s^2}} \frac{\alpha}{1-\alpha} \theta^{-1} \gamma^{\frac{1}{1-\alpha}} \frac{d\hat{p}_s}{da_s} > 0. \quad (28)$$

Social entrepreneurs with a stronger preference for corporate social good choose greater strategic CSR.

If the social entrepreneur chose to delegate the choice of strategic CSR activities to a manager and if the manager faithfully served the interests of shareholders, the manager would choose a_s to maximize aggregate shareholder utility U given by

$$U = \int_{\theta_s^*}^a u_E^s(\theta)|_{I=0} dF(\theta).$$

It is straight forward to show that the manager chooses a_s such that $\frac{d\hat{p}_s}{da_s} < 0$. Managers who serve the shareholders' interests thus do not maximize the market value of the firm.

To determine if the entrepreneur maximizes profit, differentiate (23) to obtain

$$\begin{aligned} \frac{d\hat{p}_s}{da_s} &= \pi'(a_s^*)(1-h) + (h\pi'(a_s^*) + \rho)\theta_s^* + (\rho a_s^* + h\pi(a_s^*)) \frac{d\theta_s^*}{da_s} \\ &= \pi'(a_s^*)(1-h) + (h\pi'(a_s^*) + \rho)\theta_s^* \left(1 - \frac{(\rho a_s^* + h\pi(a_s^*))}{a_s^*(h\pi'(a_s^*) + \rho)} \epsilon_s^* \right) < 0, \end{aligned} \quad (29)$$

where $\epsilon_s^* = -\frac{a_s^*}{\theta_s^*} \frac{d\theta_s^*}{da_s}$ is the elasticity of ownership with respect to strategic CSR.²⁴ Differentiating (25) yields

$$\frac{(h\pi(a_s^*) + \rho a_s^*)}{a_s^*(h\pi'(a_s^*) + \rho)} \epsilon_s^* = \left(\theta_s^* \hat{\eta}_s(\theta_s^*) f(\theta_s^*) + 1 + \frac{\alpha}{1-\alpha} \gamma^{\frac{1}{1-\alpha}} \int_{\theta_s^*}^1 \left(\frac{\hat{\eta}_s(\theta)}{1 + \gamma^{\frac{1}{1-\alpha}} \left(\frac{\theta}{\theta_s^*} \right)^{\frac{\alpha}{1-\alpha}}} \right) \left(\frac{\theta_s^*}{\theta} \right)^{\frac{\alpha}{1-\alpha}} dF(\theta) \right)^{-1} \in (0, 1). \quad (30)$$

²⁴ Note that if $\rho = 0$ and $a_s^* = a^*$, the derivative $\frac{d\hat{p}_s}{da_s} = 0$.

Then, (29) and (30) imply that $\pi'(a_s^*) < 0$. Consequently, the social entrepreneur carries strategic CSR beyond the level that maximizes profit, so neither profit nor market value is maximized by the social entrepreneur.²⁵

An entrepreneur establishes a firm to maximize his utility in (26), and his choice between the two types of firms depends on the same considerations as in Section III. With strategic CSR, however, the value \hat{p}_s of the firm in (23) could be greater than $\pi(a^*) = \pi$, in which case any entrepreneur would form a CSR firm. If the market value is less than π , an entrepreneur would form a CSR firm at a loss if either the entrepreneurial glow is sufficiently great or the utility in (26) is at least as great as the alternative of having only profit-maximizing firms available in which to invest.

It is straightforward to show that $\theta_s^* < \theta^*$, so the CSR firm is attractive to more investors when they obtain satisfaction $\rho > 0$ from its activities a_s .²⁶ The utility of the entrepreneur that forms a CSR firm with strategic CSR activities is greater than the utility of the social entrepreneur when investors do not obtain social satisfaction from strategic CSR activities. Whether the market value in (23) is increasing in ρ , however, cannot be determined in general.

²⁵ Fisman, Heal, and Nair explain a negative relation between strategic CSR and profitability as the result of poor corporate governance that allows managers to deviate from the interests of shareholders. The result presented here obtains with good governance.

²⁶ To show that $\theta_s^* < \theta^*$, note that

$$(h\pi(a_s) + \rho a_s)|_{a_s=a_s^*} = h\pi(a_s^*) + \rho a_s^*.$$

Since $h\pi'(a_s) + \rho > 0$ for $a_s \leq a_s^*$, $h\pi(a_s^*) + \rho a_s^* > h\pi(a^*) + \rho a^*$. This implies in (24) that

$$\hat{\eta}_s(\theta) < \frac{w}{\theta_s^*(h\pi(a_s^*) + \rho a_s^*)} \left(1 + \gamma^{\frac{1}{1-\alpha}} \left(\frac{\theta_s^*}{\theta}\right)^{\frac{\alpha}{1-\alpha}}\right)^{-1}.$$

Suppose that $\theta^* \leq \theta_s^*$. This implies using (16) that

$$\hat{\eta}_s(\theta) < \frac{h\pi(a_s^*)}{h\pi(a^*) + \rho a^*} \eta_s^*(\theta),$$

which implies that

$$\hat{\eta}_s(\theta) < \eta_s^*(\theta).$$

Then, integrating both sides over $[\theta_s^*, 1]$ implies that

$$\int_{\theta_s^*}^1 \eta_s^*(\theta) dF(\theta) > 1,$$

which is a contradiction. Hence, $\theta_s^* < \theta^*$.

Intuition suggests that for $\rho > 0$ investors value the firm more highly so the market value must increase above that in (7). To verify this locally, differentiate (23) to obtain

$$\frac{d\hat{p}_s}{d\rho} = \pi'(a_s^*)(1 - h(1 - \theta_s^*)) + a_s^*\theta_s^* + (h\pi(a_s^*) + \rho a_s^*) \left(\frac{\partial \theta_s^*}{\partial a_s} \frac{da_s^*}{d\rho} + \frac{\partial \theta_s^*}{\partial \rho} \right).$$

Evaluating this at $\rho = 0$ (and hence $a_s^* = a^*$) yields

$$\begin{aligned} \frac{d\hat{p}_s}{d\rho} \Big|_{\rho=0} &= a^*\theta_s^* + h\pi(a^*) \frac{\partial \theta_s^*}{\partial \rho} \\ &= a^*\theta_s^*(1 - D) > 0, \end{aligned}$$

where $D < 1$ is the right side of (30) evaluated at $a_s^* = a^*$.²⁷ An increase in the satisfaction ρ from strategic CSR thus increases the market value of the CSR firm at least near $\rho = 0$.

The social entrepreneur can also choose the extent h of corporate giving in addition to the strategic CSR. Differentiating (26) yields

$$\begin{aligned} \frac{\partial u_E^s(\theta)}{\partial h} \Big|_{a_s=a_s^*} &= \alpha(w + (\hat{p}_s - k)I)^{\alpha-1} \left(\left(\frac{\theta}{\theta_s^*} \right)^{\frac{\alpha}{1-\alpha}} + \gamma^{\frac{1}{1-\alpha}} \right)^{-\alpha} \left[\left(\left(\frac{\theta}{\theta_s^*} \right)^{\frac{\alpha}{1-\alpha}} + \gamma^{\frac{1}{1-\alpha}} \right) \frac{\partial \hat{p}_s}{\partial h} \right. \\ &\quad \left. - (w + (\hat{p}_s - k)I)(\theta_s^*)^{-\frac{1}{1-\alpha}} \theta^{\frac{\alpha}{1-\alpha}} \frac{\partial \theta_s^*}{\partial h} \right]. \end{aligned} \quad (31)$$

Differentiating the market clearing condition in (25) with respect to h and then a_s implies

$$\frac{\partial \theta_s^*}{\partial h} = \left(\frac{\pi(a_s)}{h\pi'(a_s) + \rho} \right) \frac{\partial \theta_s^*}{\partial a_s}. \quad (32)$$

Differentiating (23) with respect to h and then a_s implies

$$\frac{\partial \hat{p}_s}{\partial h} - \left(\frac{\pi(a_s)}{h\pi'(a_s) + \rho} \right) \frac{\partial \hat{p}_s}{\partial a_s} = - \frac{\pi(a_s)}{h\pi'(a_s) + \rho} [\pi'(a_s) + \rho]. \quad (33)$$

Substituting (27), (32), and (33) into (31) yields

$$\begin{aligned} \frac{\partial u_E^s(\theta)}{\partial h} \Big|_{a_s=a_s^*} &= -\alpha(w + (\hat{p}_s - k)I)^\alpha \left(\left(\frac{\theta}{\theta_s^*} \right)^{\frac{\alpha}{1-\alpha}} + \gamma^{\frac{1}{1-\alpha}} \right)^{-\alpha} (\theta_s^*)^{-\frac{1}{1-\alpha}} \theta^{\frac{\alpha}{1-\alpha}} \left(\frac{\partial \theta_s^*}{\partial a_s} \right) \left(\frac{\partial \hat{p}_s}{\partial a_s} \right) \\ &\quad \cdot \left(\frac{\pi(a_s^*)}{h\pi'(a_s^*) + \rho} \right) [\pi'(a_s^*) + \rho]. \end{aligned} \quad (34)$$

The sign of the derivative in (34) is the opposite of the sign of $\pi'(a_s^*) + \rho$. Since $\pi'(a_s^*) < 0$, for low ρ the utility of the entrepreneur is increasing in h , but for high ρ it is decreasing in h . This is also true for managers who maximize the aggregate utility of shareholders.

²⁷ The derivative $\frac{\partial \theta_s^*}{\partial \rho}$ is $\frac{\partial \theta_s^*}{\partial \rho} = -\frac{\theta_s^* a^*}{h\pi(a^*)} D$.

This implies that when ρ is low some corporate giving is optimal for the social entrepreneur as a complement to strategic CSR, but when ρ is high, strategic CSR is a close substitute for corporate giving, and corporate giving is zero. Consequently, if strategic CSR is highly valued by citizens, firms conduct those activities beyond the points that maximize profits or market value and refrain from corporate redistribution. If the social entrepreneur delegated operating policies to faithful managers, they would do the same, although they would take into account the preferences of all shareholders. This may be what firms and their executives mean when they argue for CSR that makes “business sense”; i.e., ρ is sufficiently high that the redistribution of profits is not attractive.

The principal results of this section are summarized in the following proposition.

Proposition 10: If citizens reward firms for their operational activities only through the marketplace ($\rho = 0$), a CSR firm chooses its strategic CSR to maximize profits. If citizens receive social satisfaction from the operational activities, social entrepreneurs and managers carry strategic CSR beyond profit or market value maximization. Strategic CSR is increasing in the social satisfaction θ from corporate good. If social satisfaction is low, the social entrepreneur also engages in corporate giving, but if that social satisfaction is sufficiently high, corporate giving is eliminated.

IX. Conclusions

The environment Friedman considers includes the opportunities to hold shares in firms and to make personal gifts from the financial returns on those shares. This means that the financial and social returns from a CSR firm can be replicated by a linear combination of personal giving and shareholdings in profit-maximizing firms. If corporate giving is a perfect substitute for personal giving for all citizens, CSR has no consequence despite the fact that social good is non-traded. That is, any corporate giving reduces personal giving by an equal amount, and the market value of a firm that practices redistributive corporate giving is the same as that of a profit-maximizing firm.

If corporate giving is an inferior substitute for personal giving, the CSR firm sells at a discount relative to a profit-maximizing firm. In an environment in which the future is fully anticipated, the entrepreneur bears the cost of corporate social responsibility rather than shareholders. In the capital market investors sort based on their preferences for corporate giving relative to personal giving and on the market values of the firms in which they can invest. Those for whom corporate giving is a close substitute for personal giving hold shares in CSR firms, and they make no personal gifts. Those for whom corporate giving is a poor substitute hold shares in profit-maximizing firms and make personal gifts. Those firms thus do as Friedman advocates. Citizens who hold shares in

CSR firms supply more social giving than do citizens who give personally.

What is missing from Friedman's environment is the creation of the firms in which the citizens invest. An entrepreneur who has only the opportunity to form a CSR firm is willing to do so at a financial loss, since the existence of the CSR firm expands citizens' opportunity sets by providing an alternative to personal giving. The closer a substitute personal giving is to corporate giving the larger the financial loss the social entrepreneur is willing to bear. If the entrepreneur can create either a CSR or a profit-maximizing firm, she creates a CSR firm if she gains more from an expanded opportunity set than she loses in the market values of the firm. If the social entrepreneur receives an entrepreneurial social glow from forming a CSR firm, she may also prefer to form a CSR firm rather than a profit-maximizing firm. The theory presented here thus provides explanations for social entrepreneurship.

Corporate social responsibility can be justified on other grounds. First, corporate giving is tax-advantaged relative to personal giving because the dividend tax can be avoided. Second, firms may be more efficient in the provision of social good than are the organizations to which personal gifts are made. Corporate giving, however, may go to causes opposed by shareholders, in which case personal giving, which can be targeted to selected social causes, may be preferred.

The general question raised by the CSR issue pertains to the objective of a firm. In the model there are no agency problems, so managers are closely monitored by shareholders and thus serve their interests. Managers of firms that do not redistribute profits to social causes would maximize profits. Managers of CSR firms who serve the interests of shareholders would conduct CSR activities rather than convert the firm to profit maximization. Indeed, the entrepreneur forming the firm would hire a manager with instructions to conduct CSR activities. Friedman's environment includes the market for control, however, which in the absence of transactions costs could prevent firms from engaging in corporate giving. Social entrepreneurs thus must protect their firms from the market for control through anti-takeover provisions, or socially-responsible mutual funds have to hold the shares of CSR firms.

If investors value the operational activities or policies of firms, a firm has an opportunity to engage in strategic CSR. In an environment in which citizens reward these activities only in the marketplace, a CSR firm chooses strategic CSR to maximize its profits. If citizens also obtain social satisfaction from those activities, social entrepreneurs, or the managers they hire, carry strategic CSR beyond the point that maximizes profits or market value. This results because the social entrepreneur receives social satisfaction from the strategic CSR activities, and the more she values

those activities the farther she carries them. This form of CSR would not be opposed by Friedman because it serves the interests of owners, but he would view attaching the corporate responsibility label to it as window dressing.

This paper suggests that the social contract between business and society involves firms and managers that serve the interests of their shareholders. In equilibrium some firms maximize profits and attract shareholder clienteles for which corporate giving is a poor substitute for personal giving. Social entrepreneurs can prefer to create CSR firms, and for them and their shareholders corporate giving is a good substitute for personal giving. Shareholders may also value the operational activities or policies of a firm. If citizens only respond to those activities in the marketplace, strategic CSR is chosen to maximize profits. If citizens also receive social satisfaction from those activities, the activities are carried beyond profit maximization and value maximization. Firms that have activities for which shareholders obtain modest social satisfaction (ρ low) also engage in corporate social giving. Firms with activities for which ρ is high do not redistribute profits to social causes because strategic CSR is a close substitute for corporate giving. The social contract thus includes firms that maximize profits, firms that engage in strategic CSR, and firms that redistribute profits to social causes. All serve the interests of their shareholders or the entrepreneurs who create them. Those shareholders and entrepreneurs are the citizens with whom the social contract is written.

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