The Organization of Non-Market Strategy*

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Abstract

We explore the determinates and structure of the organization of non-market strategy. Firms either integrate non-market strategy activities throughout the firm or create stand-alone business units that specialize in non-market strategy activities. We find that the advantage of integration over specialization is U-shaped in the importance of non-market strategy to the firm's market strategy. We also develop a typology of non-market strategy organization and qualitatively analyze some of the companies currently listed in the Dow Jones Sustainability Index.

Keywords: non-market strategy, corporate social responsibility, organizational design

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1 Introduction

> One of the most important points to be made up front is that there is no single universally accepted method for designing a CSR structure—*Business for Social Responsibility* (2002)

How a firm organizes is a fundamentally important question. There has been a plethora of work exploring how to organize a firm in terms of what belongs *in and outside* of a particular firm. Early work includes Coase (1937), Williamson (1975), and Grossman and Hart (1986). More recently, the growing field of organizational economics has focused on organizing within a firm. Primary areas of exploration have included corporate hierarchy (e.g., Garicano (2000), Harris and Raviv (2002), and Alonso, Dessein, and Matouschek (2008)), task design (e.g., Holmstrom and Milgrom (1991), Laux (2001), and Schottner (2008)), delegation (e.g., Alonso and Matouschek (2008), Prendergast (1995), and Krishna and Morgan (2008)), and incentive design (see Bolton and Dewatripont (2005) for a survey). This paper continues in this stream of literature by exploring how to organize non-market activities within a firm. As will be discussed, there is clear heterogeneity in how firms currently organize non-market operations. The purpose of this paper is to propose a typology not only to help identify different types of non-market organizational structures, but also to understand why different organizational structures arise.

Non-market strategy is a broad term that refers to a firm's activities outside of the marketplace that can help it gain competitive advantage (Baron (2009)). This includes both public politics strategies (e.g., lobbying and engaging with regulators) and private politics strategies (e.g., engaging with activists). Meanwhile, corporate social responsibility (CSR) can be a part of both of these types of political strategies. CSR can be used to increase returns to lobbying and prevent or soften future regulation (e.g., Lyon (2004), Baron (2009), Minor and Morgan (2011), Hong and Minor (2014)). CSR can also be used to appease activists and possibly avoid future adverse activist actions (e.g., see Godfrey (2005), Barnett (2007), and Baron (2009)). Typically, firms do not have a division called "non-market" strategy. Instead, firms

have divisions that carry out some of these non-market strategy functions, but these groups are often referred to as Corporate Social Responsibility, Sustainability, or some similar name. Consequently, for this paper, we will focus on CSR divisions to help illuminate how firms organize their non-market strategy functions—though we do consider the organizational consequences of adding non-CSR elements to a CSR group in Section (3.3.5). For the balance of the paper, we refer to non-market strategy organization as organizing CSR strategy. To the best of our knowledge, this is the first paper to explicitly explore the organization of these groups.

We begin in the next section by developing a typology of four types of CSR strategy organization. We then use four firms to illustrate these categorizations. This qualitative analysis motivates our next section, where we utilize organizational economics to explore when a firm should choose a particular CSR strategy organizational form. In particular, we develop a model where a firm must decide on organizing market strategy activities and non-market strategy activities in separate units versus having both units engage in both activities. There is a trade-off in this decision in that there is an opportunity cost for a single unit to engage in both activities; however, when both units engage in both activities, the firm receives outputs on both domains from two units as opposed to a single output towards each domain from a single, specialized unit. In this sense, the model is related to the extant multi-tasking literature (see Holmstrom and Milgrom (1991), Laux (2001), and Prendergast (2002)). However, there are some additional elements that distinguish it from this literature. First, it is assumed that there are some complementarities between market and non-market strategy activities. That is, engaging in one activity can help the performance of the other. Second, and more novel, is that there are externalities in our model, since we are dealing with (possible) social output. In particular, both the manager and the firm may value CSR beyond its ability to enhance financial performance. This introduces the possibility of different outcomes organizationally than if such externalities were not present.

We find that the organization of the firm is generally non-monotonic in the importance of CSR to the firm—where importance comes from the degree of financial and social performance complementarities, the firm's value of CSR, and the man-

ager's value of CSR. In particular, for low and high values of CSR importance, it is best for the firm to integrate its CSR strategy—business units should be engaged in both market and non-market activities. However, for intermediate values of CSR importance, it is best for the firm to organize CSR strategy activity into a stand-alone business unit that specializes in CSR activities. The intuition is as follows. For high-importance CSR settings, the synergy of CSR and financial performance overcomes the (potentially high) cost of multi-tasking within a business unit. In contrast, for low-value CSR firms, the return to having two units both work on market strategy activities overcomes the multi-tasking cost, which is small since business units minimally engage in CSR when it is not very important. However, for intermediate values of CSR, these forces net out in the opposite direction: CSR strategy activities are sufficiently valuable to warrant a significant level of activity, but not valuable enough to overcome the (increased) cost of distracting a unit from market strategy activities. Hence, having CSR strategy activities located in a specialized CSR unit is the best organizational design for this setting.

Related to our study is the organizational design literature using agent-based simulation. Owing to the difficulty of finding closed-form solutions in the analysis of organizational design while using multiple variables, some have used agent-based simulation to generate large-sample-size numerical examples to provide evidence of optimal organizational design. For a recent example of this technique, see Claussen, Kretschmer, and Stieglitz (2014). They study the trade-off of commitment and flexibility within an organization. Similarly Rivkin and Siggelkow (2003) explore the trade-off of organizational search and stability. Siggelkow and Rivkin (2005) extends Rivkin and Siggelkow (2003) to allow for dynamic environments. Given a particular distributions of decisions across managers or departments, these papers focus on how the primitives of the model predict which organizational form converges to a superior (i.e., locally optimal) performance level. In contrast, this current paper focuses on how to get the distribution of choices right when a particular manager might also be making choices on the *same* dimensions as another manager or business unit. In addition, these agent-based simulations generally assume mean zero performance complementarities between different decision dimensions, as payoffs are randomly

assigned assuming *iid*. That is, they do not explicitly consider the case where, for example, a non-market strategy can have a systematic bias to enhance market strategy. Finally, all choices in these models are binary, which disallows the analysis of magnitudes of choices and their relationship to organizational form. Thus, this paper complements this strand of literature by exploring aspects of organizational design that are not the focus of the extant papers. This paper also complements these organizational design papers by explicitly analyzing firm-level non-market strategy choice and implementation. Baron (2015) argues that more attention should be given to this level of non-market strategy analysis.

We now begin with our typology.

2 A Typology of Non-Market Organization

Based on personal discussions with senior executives of CSR units at several SP500 firms and data obtained from 2013 sustainability reports available on company websites, we identified two primary dimensions that differentiate CSR units. One dimension is the degree of integration of a firm's CSR unit across the rest of the organization. One measure of the degree of integration is to what extent the firm has a particular business group specialize in CSR strategy activities. Another marker of the degree of integration is how many levels of the organizational hierarchy decide on CSR strategies. Some firms concentrate almost all decisions in the C-suite, whereas others tend to push decisions all the way down to front-line employees. In an intermediate form of CSR integration, each separate business unit acts as a separate division in terms of deciding on CSR strategy; however, these decisions primarily take place at the head of the respective business unit. The degree of integration of CSR activities can then be conceptualized as the *procedure* of the firm's CSR activities.

On one end of the spectrum of integration, a company like Intel embeds its CSR activities within and across all of its business units. It also incentivizes all of its workers to engage in sustainability: "Intel links a portion of every employee's variable compensation—from front-line staff to our CEO—to environmental sustainability metrics." On the other end of the integration spectrum is a company like Starbucks.

In 1999, Starbucks formed a stand-alone CSR department. This department is led by a Senior Vice President who focuses on business practices, environmental issues, community affairs, corporate giving, and the Starbucks Foundation. The CSR unit operates similarly to any other important business unit of the firm. Thus, whereas Intel has to a large degree integrated its CSR strategy making throughout its organization, Starbucks has a separate division that specializes in CSR strategy making.

A second dimension differentiating CSR units is the degree of profit alignment in their CSR activities. Some types of CSR, such as some energy costs savings measures, simply pay for themselves financially. Another example is consumer-facing firms that engage in CSR and in response enjoy an increase in customer sales that exceed such CSR costs. These types of CSR would be appropriate in a Milton Friedman world of CSR, where a manager's sole responsibility is to maximize the profits of the firm (Friedman (1970)). However, other types of CSR are not expected to generate a full financial return of its cost. One feature of this latter type of CSR is that it is often is not well related to the market strategy activities of the firm. Another feature is that the CSR may be done in such a way that it is difficult to recoup many of the costs. Thus, this second dimension can be conceptualized as the *purpose* of the firm's CSR activities.

On one extreme towards CSR profit alignment, there is Halliburton, which although it appears in the 2013 Dow Jones Sustainability Index, lists "financial Performance" as the primary reason for its CSR efforts. In its sustainability report, Halliburton further explains that its CSR issues impact "shareholder value and are, therefore, important" to the company. On the other end of the spectrum is Patagonia, which reorganized under a Benefit Corporation charter to make legally explicit its objective of social performance and that it is not maximizing shareholder value based solely on financial outcomes.

From these two dimensions, we can now map CSR organizational forms into four types. We denote a firm that is profit centric in its CSR and has its CSR strategic activities largely carried out by a specialized business unit as Strategic. These firms are generally engaging in CSR primarily for profit and are implementing their CSR activities by means of this stand-alone CSR business unit. At the other extreme of

both dimensions is the organizational form we call Mission. Firms in this category are engaging in CSR from less of a profit motive. An additional sign of this type of organizational form is that the CSR activities are devised and engaged in at possibly all levels of the firm. Most benefit corporations would also fit in this category.

In contrast, those firms that disperse their CSR strategic activities broadly throughout the organization but are more profit driven in their CSR pursuits are categorized as Integrated. Finally, the opposite CSR organizational form of Integrated is Foundation. These firms carry out CSR activities in a more stand-alone-unit fashion and are not purely profit driven in their CSR.

In Figure 1, we plot four firms according to this CSR organization typology:

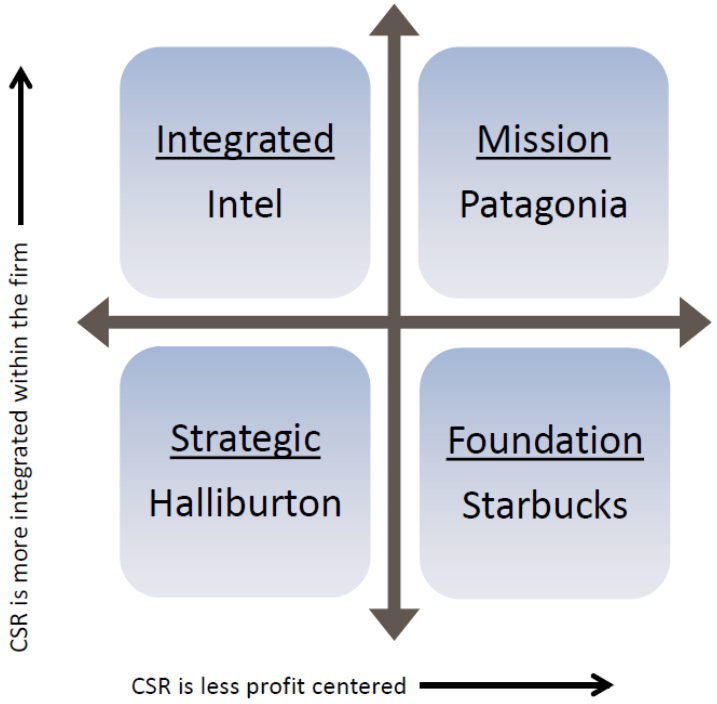

Figure 1: Organizational Form Typology

Of course, in practice, there are degrees of integration and degrees of profit

centered-ness. Thus, if we plotted a variety of firms, they would portray a distribution of outcomes. In this spirit, we randomly selected a sample of 24 companies from the Dow Jones Sustainability Index. We then hand collected data from each firm's most recent sustainability report and graded them on each dimension of our typology.[1] In addition to these DJSI companies, we added Patagonia as an example of a benefit corporation, and a far north-east reference point, creating a total sample of 25 firms. In Figure 2, we report the results of this qualitative analysis. We then divide the resultant space into quadrants to map these firms into our typology introduced with Figure 1.

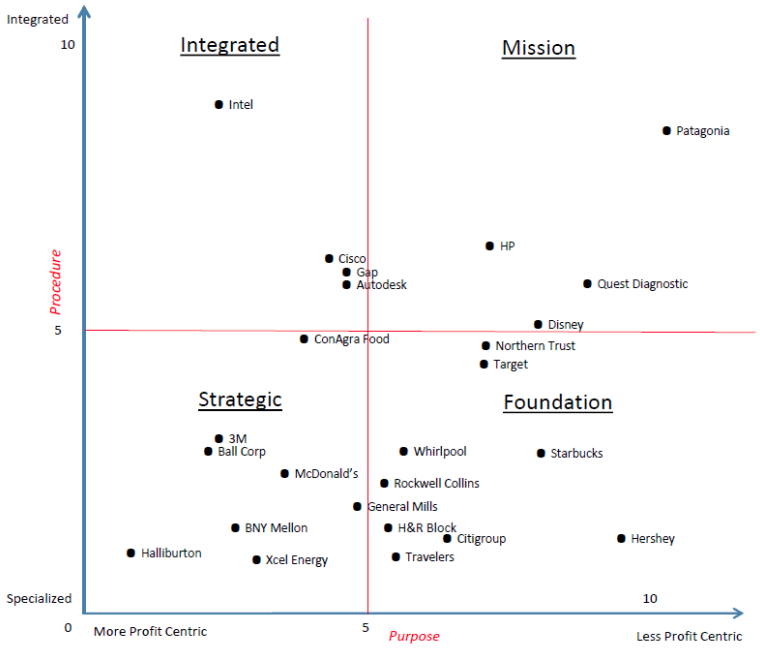

Figure 2: Sample of Organizational Forms

It should also be noted that this chart represents firms' *stated* organizational form. We are unable to test the actual organizational form of all of these firms. However,

[1]See the Appendix for information on our method of categorization.

there is some comfort in knowing that for those firms for which we interviewed top executives, we found similar proclamations from the executives as those in their sustainability reports.

Although an exact plotting is admittedly subjective, it is apparent from this chart that there is heterogeneity across firms. We next turn to identifying the environments in which a firm should operate by means of a given organizational form to illuminate the origins of this heterogeneity.

3 Model

To model the problem of organizational design, we assume that the firm chooses **integration** or **specialization** for two units, or groups.[2] Integration means that both units will perform both market and non-market activities. Specialization means that one unit handles only market activities and the other handles non-market activities. To match the reality that much of the non-market activity at firms that have a non-market-specific unit involves corporate social responsibility activities, and to simplify exposition, we refer to non-market activities in the model as CSR. For simplicity and to abstract away from a team problem, we refer to each unit interchangeably as a "manager." In particular, we consider two risk-neutral managers, 1 and 2, each managing its respective unit.

The firm uses business units 1 and 2 to collectively implement a level of CSR activity indexed by level S and a level of market activity indexed by level M.[3] Hence,

[2]Note that Figure 2 provides a qualitative example of firms with varying degrees of integration and profit-centeredness. To simplify the analysis and make sharp predictions, our theoretical analysis focuses on the decision to choose integrated or specialized organizational forms for a given pair of units. That is, we are exploring the world of Figure 1. See section (3.3.6) for a discussion of how to link the resultant theory to the sample of firms in Figure 2.

[3]Of course, rather than a scalar choice, strategy activities are often multi-dimensional and can be represented as a vector of choices. However, we could project a scalar output variable onto multiple dimensions to capture complex activities. Thus, M and S can be thought of as the output for a given multiple-dimension choice, which in sum represents a strategy. We can then order these complex tasks by their output levels, creating a one-to-one mapping between complex activities and scalar outputs. Since we do not introduce noise into our model, the scalar output choice then becomes the scalar input choice.

we explicitly consider both market and non-market choices without taking the other as given, as is often the case in the extant literature (see Baron (2015)).

Total output Y is a function of both of these factors and is written as

$$Y \equiv \mathbf{M} + \alpha \mathbf{S}, \tag{1}$$

where $\mathbf{M} = M_1 + M_2$, $\mathbf{S} = S_1 + S_2$, and $\alpha \in \mathbb{R}_+$ captures CSR output's contribution to overall output.[4] Thus, α measures how important CSR is in the firm's production process. For example, a firm that faces consumers who place a greater value on CSR, enjoys a greater α. In contrast, when $\alpha = 0$, CSR activities do not help the production process at all. We de not consider $\alpha < 0$. This would mean that a firm is engaging in CSR that hurts overall firm performance. A firm should not engage in this type of CSR. Note that overall firm performance can also mean social performance in addition to financial performance (see section (3.3.4)).

It is costly to implement activities, and this cost is a function of the level of activity. In particular, a manager's cost of production is

$$C_i \equiv \frac{M_i^2}{2} + \frac{S_i^2}{2} + \beta M_i S_i, \tag{2}$$

for manager $i \in \{1, 2\}$. The parameter $\beta \in \mathbb{R}$ captures the degree of economy of scope of a manger's production process. In particular, when $0 < \beta < 1$, as commonly assumed (see Bolton and Dewatripont (2005)), increasing one level of production increases the marginal cost of an additional unit of production on both dimensions. This case can be thought of as a negative effort spillover from one task to another; as one becomes exhausted from one activity, increasing activity on either dimension is more costly. If instead, $\beta < 0$, increasing production on one dimension, *reduces* the cost of increased production on the other dimension. For example, if engaging in more CSR enabled a manager to produce market activities more cheaply, then $\beta < 0$. This could also be thought of as a learning spillover effect: as one becomes

[4] We could add noise to the production process but since business units are risk neutral, it would not change the results and would just add additional notation. If we instead assume the business units are risk-averse, similar results to those presented obtain. However, notation and exposition are greatly complicated.

better at CSR, one can more effectively generate market output (and or vice versa). Finally, if $\beta = 0$, then there is no difference between having one worker do two tasks or two workers each do one task. In other words, any link between tasks is assumed away.

Manager i's payoffs are

$$\gamma_i Y + \delta S_i, \tag{3}$$

where γ_i is the manager's financial payment,[5] which is calculated as share of total output, and $\delta \in \mathbb{R}_+$ is a manager's valuation of personally producing CSR. With this latter term, we allow for a manager to be intrinsically motivated to produce some level of CSR. We will assume that $\gamma_i \geq \delta$. This means that managers receive no less financial benefit from market activities than utility from social activities. Recall that our analysis is focusing on profit seeking firms and their workers. However, we will later consider firms that care about CSR beyond its contribution to total output in section (3.3.4), as well as managers with high values of $\delta > \gamma_i$ in section (3.3.3). With these basic ingredients we can identify the manager's activity-level choices as a function of organizational form.

3.1 Integration

Assuming the managers are engaged in both market and CSR activities in their respective units, we obtain the following production levels:

Lemma 1 *If manager i engages in both market and CSR activities, outputs are $M_i = \frac{\gamma_i - \beta(\delta + \alpha\gamma_i)}{1-\beta^2}$ and $S_i = \frac{\delta + (\alpha - \beta)\gamma_i}{1-\beta^2}$ for $i \in \{1, 2\}$.*[6]

[5] We consider the optimal organizational form holding compensation structure fixed. This allows us to isolate organizational form effects from differential compensation effects. We leave exploring optimal pay structures to future work.

[6] Note that without additional assumptions, it is possible for M_i and S_i to take on negative values for a given set of parameters. However, given such parameters, it simply means that Specialized, the alternative organizational form, is the preferred one; this form always generates positive output, as shown in the next section.

Proof: See Appendix.

We then calculate the total market output as

$$M = M_1 + M_2$$

$$= \frac{(\gamma_1 + \gamma_2) - \beta(2\delta + \alpha(\gamma_1 + \gamma_2))}{1 - \beta^2} \tag{4}$$

and social output as

$$S = S_1 + S_2$$

$$\frac{2\delta + (\alpha - \beta)(\gamma_1 + \gamma_2)}{1 - \beta^2}. \tag{5}$$

Thus, total output is

$$Y_{\text{integrated}} = \frac{(\gamma_1 + \gamma_2) + 2\alpha\delta - \beta(2\delta + \alpha(\gamma_1 + \gamma_2)) + \alpha(\alpha - \beta)(\gamma_1 + \gamma_2)}{1 - \beta^2}. \tag{6}$$

3.2 Specialization

When managers only engage in one activity, we get the following outputs, assuming manager 1 does M and manager 2 does S:

Lemma 2 *If manager* 1 *engages in market activity and manager* 2 *engages in CSR activity, outputs are* $M_1 = \gamma_1$ *and* $S_2 = \alpha\gamma_2 + \delta$.

Proof: See Appendix.

Thus, the firm's total output is simply

$$Y_{\text{specialized}} = \gamma_1 + \alpha(\alpha\gamma_2 + \delta). \tag{7}$$

The next natural question is, when does a firm prefer specialization to integration? Fortunately, the analysis is simplified in that we do not need to worry about

comparing profitability or net output of different organizational forms but instead we can simply compare which form provides the greatest output, as given by our next Lemma.

Lemma 3 *If $Y_{integrated} > (<) Y_{specialized}$, integration (specialization) is the optimal organizational form.*

Proof: See Appendix.

We now use this Lemma to identify when one organizational form is preferred to another.

3.3 Optimal Organizational Form

The optimal organizational form then depends on the primitives of the model. We will consider each primitive in turn in order to identify when firms should choose one organizational form over another.

3.3.1 Economy of Scope β

First consider the case as economy of scope approaches zero (i.e., $\beta \to 0$). Then, we have

$$2\alpha\delta + \left(1 + \alpha^2\right)(\gamma_1 + \gamma_2) > \gamma_1 + \alpha\left(\alpha\gamma_2 + \delta\right). \tag{8}$$

This means that integrated generates greater total output than specialized. Intuitively, when there is sufficient economies of scope across both activities, having both units engage in both strategies dominates being specialized, since two rather than one units generate similar levels of output on both dimensions. Similarly, and more extreme, is when $\beta \in (-1, 0)$. Here, $Y_{\text{integrated}}$ is further increased compared to when $\beta = 0$, while $Y_{\text{specialized}}$ does not change, thus we still have $Y_{\text{integrated}} > Y_{\text{specialized}}$. That is, if a manager becomes more effective in engaging in one activity because of engaging in the other, then market and CSR activities should naturally be integrated within the organization. In contrast, as $\beta \to +\infty$, it can be shown that the

inequality becomes the opposite: specialized is the preferred organizational form. Intuitively, when it becomes costly enough to engage in both activities simultaneously, the firm is better off having specialized units; one business unit should specialize in CSR activities and the other in market activities. We label this increased cost as the *multi-tasking cost*. To explore the effects of the other model parameters, we now consider, as commonly assumed (see Bolton and Dewatripont (2005)), more moderate economy of scopes, such that $0 < \beta < 1$.

3.3.2 Importance of CSR for Output α

Recall that α measures how much CSR activities contribute to overall output. First consider the case when CSR is not very important in the production process (i.e., as $\alpha \to 0$). Then, we have $Y_{\text{integrated}} = \frac{(\gamma_1+\gamma_2)-2\beta\delta}{1-\beta^2}$ and $Y_{\text{specialized}} = \gamma_1$. Since $\gamma_i \geq \delta$ and $\beta < 1$, we have $Y_{\text{integrated}} > Y_{\text{specialized}}$, and the firm will choose to have integrated units.[7] When CSR matters little in total output, the manager is also receiving very little incentive to participate in CSR since she is paid a share of output; thus, she will choose relatively little CSR investment. This also means there will be little multi-tasking cost to offset the advantage of having both units engage in both activities, yielding greater output from units being integrated. In short, when CSR does not matter, it makes little sense to have a separate unit engaging in CSR activities.

If instead CSR activities are very important in producing output (i.e., as $\alpha \to +\infty$), it is also the case that $Y_{\text{integrated}} > Y_{\text{specialized}}$. Here, the synergy of CSR activities and market activities in generating output overcomes any multi-tasking cost of having managers engage in both activities. In practice, this means that when non-market activities are important for market performance, it is critical to have the market and non-market strategies integrated locally, which is best achieved by forcing business units to engage in both types of activities.

However, for intermediate values of α and β[8] it can be shown that the opposite

[7] The inequality $Y_{\text{integrated}} > Y_{\text{specialized}}$ is true if and only if $\left(\gamma_2 + \gamma_1\beta^2\right) > 2\beta\delta$. To see this is the case, note that $\left(\gamma_2 + \gamma_1\beta^2\right) \geq \gamma_{\min}\left(1+\beta^2\right) \geq \delta\left(1+\beta^2\right) > 2\beta\delta$, where $\gamma_{\min}$ is the minimum of γ_1 and γ_2. The final inequality follows since $\left(1+\beta^2\right) > 2\beta$ for all $\beta \neq 1$.

[8] From the previous section, regardless of α, we know that low and high values of β result

is true: $Y_{\text{integrated}} < Y_{\text{specialized}}$. Intuitively, there are two forces that determine the overall output of a firm with an integrated organizational form: the importance of CSR to overall output α and the cost of multi-tasking β. When the multi-tasking cost β of a manager engaging in both CSR and market activities is sufficiently greater relative to the benefit α it provides to overall output, increased importance of CSR (i.e., increased α) still induces the integrated firm to produce more CSR. However, this greater CSR production is done with relatively poor efficiency due to a higher β, which yields a reduction in overall output for such a firm. Eventually, however, CSR is valuable enough to production that it adequately offsets the multi-tasking cost β, which yields an increase in overall output as the increased importance of CSR (i.e., increased α) induces greater firm production of it.[9]

Meanwhile, a specialized organizational form does not face such a tradeoff, as each unit only engages in only one activity, thus avoiding a multi-tasking cost β. Hence, $Y_{\text{specialized}}$ is always increasing in α. Consequently, the *relative* advantage (or disadvantage) of the integrated organizational form compared to the specialized organizational form is then U-shaped in the importance of CSR the firm's production process.

For an example of this U-shape of relative organizational-form advantage over values $\alpha \in [0, 1]$, assume the following parameters: $\gamma_1 = .25, \gamma_2 = .25, \delta = .2$, and $\beta = .75$. This yields Figure 3, showing that intermediate values of α predict specialization

in optimal organizational forms of integration and specialization, respectively. Hence, we must consider intermediate values of β to explore the effects of α.

[9]Formally, this can be seen by noting that $Y_{\text{integrated}}$ is first decreasing and then increasing in α. In particular, we see that $\frac{\partial}{\partial \alpha} Y_{\text{integrated}} = \frac{2}{1-\beta^2} \left(\delta + (\alpha - \beta)\left(\gamma_1 + \gamma_2\right)\right)$.

Thus, $\frac{\partial}{\partial \alpha} Y_{\text{integrated}} > 0$ if and only if $\delta + (\alpha - \beta)\left(\gamma_1 + \gamma_2\right) > 0$. If we fix β sufficiently greater than 0 (note that $\frac{1}{2}\left(\gamma_1 + \gamma_2\right) > \delta$, since $\gamma_i \geq \delta$), then low values of α generate $\frac{\partial}{\partial \alpha} Y_{\text{integrated}} < 0$ and higher values of α generate $\frac{\partial}{\partial \alpha} Y_{\text{integrated}} > 0$. In other words, $Y_{\text{integrated}}$ is U-shaped in α.

(i.e., the gray region), whereas low and high values of α predict integration:

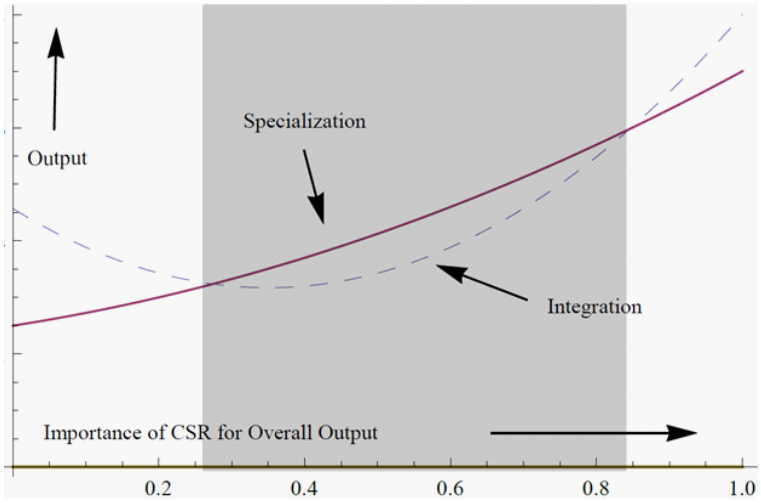

Figure 3: Integration and the Importance of CSR

The x-axis of the graph represents $\alpha \in [0, 1]$. Given a level of α, the blue, dashed line is the output from the organizational form of integrated, whereas the red, solid line is the output from the organizational form of specialized. Whichever organizational-form output is higher identifies the preferred organizational form. Thus, for the gray region, which is approximately $\alpha \in (.25, .85)$, specialized is preferred. Otherwise, integrated provides superior total output.

3.3.3 Manager Valuation of CSR δ

Now consider increasing δ. We find that as $\delta \to \infty$, $Y_{\text{integrated}} > Y_{\text{specialized}}$ if and only if $\alpha > \frac{2\beta}{1+\beta^2}$. Thus, if CSR is sufficiently important in the production process, then given the manager cares enough about CSR, integration is preferred. In this case, the firm and managers are aligned in producing higher levels of both market and CSR activities. Otherwise, if CSR is not as important, and given the manager cares enough about CSR, specialization is preferred. Intuitively, if a manager cares a lot about CSR, but CSR is not that important for production, the firm is better off having

that manager produce CSR alone rather than having both managers simultaneously engaging in CSR.

3.3.4 Firm Valuation of CSR

Now we consider the case where the firm values CSR beyond its contribution to output. In particular, assume that the firm's objective is to maximize

$$Y \equiv \mathbf{M} + \alpha \mathbf{S} + \boldsymbol{\nu} \mathbf{S},$$

where $\boldsymbol{\nu}$ is the firm's additional valuation of social output over its value to financial output. However, note that we can rewrite this as

$$Y \equiv \mathbf{M} + \widetilde{\alpha} \mathbf{S},$$

where $\widetilde{\alpha} = \alpha + \boldsymbol{\nu}$. Hence, our previous analysis of α applies here as well. That is, we witness a U-shaped relationship between the relative advantage of integrated compared with specialized as a function of the firm's valuation of CSR.

3.3.5 Non-CSR non-market functions

Those firms with substantial non-market activities divorced from CSR strategy can also be nested within our model and typology. These non-CSR non-market activities generally include actions such as influencing legislation, influencing regulations, and litigation actions (see Baron (2009)). If we assume a manager does not value their personal engagement in these activities outside of its value in increasing financial performance, we simply set manager non-market production valuation $\delta = 0$. Now consider what happens when $\delta = 0$; this yields

$$Y_{\text{integrated}} = \frac{(\gamma_1 + \gamma_2) - \beta(\alpha(\gamma_1 + \gamma_2)) + \alpha(\alpha - \beta)(\gamma_1 + \gamma_2)}{1 - \beta^2}$$

and

$$Y_{\text{specialized}} = \gamma_1 + \alpha^2 \gamma_2.$$

As can be shown, the inequality $Y_{\text{integrated}} > Y_{\text{specialized}}$ always holds with $\delta = 0$. In this world, under an integrated form, the manager provides the exact division of labor between market and CSR activities as preferred by the firm. Since the firm is receiving market activity level effort from two managers rather than only one (i.e., when specialized), this double activity more than offsets the cost of multi-tasking. Here we are again assuming moderate multi-tasking costs of $0 < \beta < 1$. Of course, as shown in section (3.3.1) , if β is too great, the specialized organizational form will again dominate, even with $\delta = 0$.

In practice, non-market strategy often entails both CSR and non-CSR non-market activities. Hence, for our model, we could redefine manager i's payoff as

$$\gamma_i Y + \widetilde{\delta} S_i,$$

where $\widetilde{\delta} = \delta\eta$, with $0 < \eta < 1$. The term η then captures the fraction of non-market activities that are represented by CSR activities, for which manager i values her personal production at rate δ. With this new notation, we can reassess all of our previous analysis in terms of $\widetilde{\delta}$, manager i's effective valuation of personal non-market activity production. For a given level of non-market activity, those firms with a relatively high share of CSR activities (i.e., high η) and managers with high valuation of CSR activities (i.e., high δ) are likely to be integrated, assuming sufficient returns to non-market strategy given the firm's economy of scope (i.e., $\alpha > \frac{2\beta}{1+\beta^2}$), as given by our previous analysis in section (3.3.3) .

3.3.6 Relating Theory to Organizational Form in Practice

In practice, as shown in Figure 2, many (large) firms have some *degree* of integrated organizational form rather than being fully integrated or fully specialized. We can conceive of firms that are partially integrated and partially specialized as follows: consider a firm that has a combination of integrated and specialized units. For example assume a firm has 10 units. Different parts of the firm could have different features (e.g., different values of α and β) that dictate some units to be specialized and some to be integrated. Perhaps, the marketing unit is fully integrated and the

finance and operation units are specialized. On average, we would expect those firms that have a greater total degree of firm-wide β, to also have a greater degree of firm-wide integration (i.e., have more integrated units), for example. Hence, with this conceptualization, we can still make predictions about the *degree* of integration as a function of firm-wide parameters.

From section (3.3.4) , we showed that the incidence of integrated organizational form is U-shaped in the degree that a firm cares about CSR beyond any financial benefit that it might yield. This suggests that the degree of integration should also be U-shaped in the degree a firm cares about CSR beyond profits.

We can then relate the pattern of the data from section (2) to our theoretical analysis. To do so, we fit a quadratic model to the 25 observations. In particular, we regress the degree of integration (i.e., integer values 1 through 10) on a quadratic equation of the degree of being less profit centric with CSR (i.e., integer values 1 through 10). In Figure 4, we show the resulting estimated polynomial:

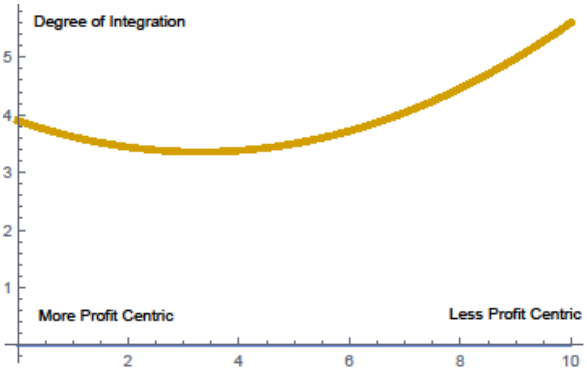

Figure 4: Quadratic fit to Sample

With so few observations and the fact that the data was qualitatively obtained, we must view this chart with care and merely consider it suggestive, albeit consistent with our theory. In the end, the hope is that this paper's theoretical predictions will spur future rigorous, quantitative exploration into the organization of non-market strategy.

Once a firm's degree of integrated form is determined, its second dimension, the importance of CSR beyond profits, identifies its placement in one of our four quadrants of our typology. From the analysis in the previous section, we expect the firms where CSR has the greatest and least value to be integrated and thus to be Mission and Integrated firms, respectively. In contrast, the firms that are slightly more moderate in their valuation of CSR are predicted to fall either into the Strategy or Foundation category, depending on how important CSR is to them. Of course, if a firm faces extremely great (or poor) economies of scope (i.e., low (high) multi-tasking costs), it will necessarily be integrated (or specialized). For these cases, it is also the firm's value of CSR that determines its ultimate location in our typology. Hence, assuming a reasonable proportion of firms with moderate economies of scope, we expect in practice the location of firms in our typology to trace through the four quadrants in a U-shaped manner, as found in the suggestive chart above. The greater the proportion of firms with moderate economies of scope, the greater the strength of the U-shape.

4 Conclusion

We created a typology for non-market organizational design. In particular, we identified two dimensions of categorization: the degree that CSR activity is integrated with market activities within a firm and the importance of CSR strategy in a firm's production process. We dubbed these resulting four organizational types as Integrated, Strategic, Mission, and Foundation.

We then used a simple model to identify when firms are likely to choose each of these organizational forms. Our primary finding is that the relative advantage of firms with integrated over specialized organizational forms is U-shaped in the importance of CSR: those firms for which CSR has either a high or low level of importance—whether its because of the importance of CSR strategy on market outcomes, a firm's value of CSR beyond its financial value, or a manager's high valuation of CSR—are most likely to choose an integrated organizational form, combining mar-

ket and CSR activities throughout the firm. In contrast, those firms where CSR is moderately important in the production process are more likely to choose to specialize their CSR operations in a stand-alone business unit.

Empirical implications of these results are severalfold. First, once proxies for the importance of CSR to the firm are identified (i.e., measures of managerial valuation of CSR, measures of the degree of CSR complementaries with financial performance, and the preferences of the board of directors and shareholders concerning CSR), the U-shaped relationship between these and the probability of CSR integration can be assessed. Second, using a proxy for the proportion of non-CSR non-market activities (e.g., political contributions and lobbying) can be used to test an increase of such a proxy being associated with reduced incidence of CSR specialization. Third, measures of the economy of scope of a firm should also predict organizational form. At the extreme, strong (poor) economies of scope predict integration (specialization).

We note that our analysis did not formally explore more than two divisions. Although we trust the intuition will carry over to n divisions, we leave this analysis to future research. Similarly, we did not simultaneously explore the joint effects of myriad forces, as is typical of the agent-based simulation literature. This paper suggests future avenues of research by means of this methodology: numerical simulations could determine organizational outcomes based on the *assumption* that certain strategic activities are correlated in terms of payoffs. This would be a departure from the standard approach of assuming *iid* draws of payoff profiles. However, it could provide rich insights into the integration of market and non-market strategy and its implications on the organization of non-market strategy.

5 Works Cited

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6 Appendix

6.1 Proofs

Lemma 1 *If manager i engages in both market and CSR activities, outputs are* $M_i = \frac{\gamma_i - \beta(\delta + \alpha\gamma_i)}{1-\beta^2}$ *and* $S_i = \frac{\delta + (\alpha - \beta)\gamma_i}{1-\beta^2}$ for $i \in \{1, 2\}$.

The managers problem is

$$\max_{M_i, S_i} \left(\gamma_i Y + \delta S_i - \left(\frac{M_i^2}{2} + \frac{S_i^2}{2} + \beta M_i S_i \right) \right).$$

Obtaining the first order conditions yields the following:

$$FOC_{M_i} : \gamma_i - M_i - \beta S_i = 0$$

$$\implies M_i = \gamma_i - \beta S_i$$

$$FOC_{S_i} : \alpha\gamma_i + \delta - S_i - \beta M_i = 0$$

$$\implies S_i = \alpha\gamma_i + \delta - \beta M_i.$$

Using the system of four resultant equations yields

$$M_1 = \frac{\gamma_1 - \beta\left(\delta + \alpha\gamma_1\right)}{1 - \beta^2}$$

$$S_1 = \frac{\delta + \left(\alpha - \beta\right)\gamma_1}{1 - \beta^2}$$

$$M_2 = \frac{\gamma_2 - \beta\left(\delta + \alpha\gamma_2\right)}{1 - \beta^2}$$

$$S_2 = \frac{\delta + (\alpha - \beta)\,\gamma_2}{1 - \beta^2}.$$

QED.

Lemma 2 *If manager* 1 *engages in market activity and manager* 2 *engages in CSR activity, outputs are* $M_1 = \gamma_1$ *and* $S_2 = \alpha\gamma_2 + \delta$.

Assume manager 1 does M and manager 2 does S.

Manager 1′s problem is

$$\max_{M_1} \left(\gamma_1 Y - \frac{M_1^2}{2} \right),$$

which yields optimal choice of level

$$M_1 = \gamma_1.$$

Manager 2′s problem is

$$\max_{S_2} \left(\gamma_2 Y + \delta S_2 - \frac{S_2^2}{2} \right).$$

and the manager's CSR choice becomes

$$S_2 = \alpha\gamma_2 + \delta.$$

QED.

Lemma 3 *If* $Y_{\text{integrated}} > (<)\, Y_{\text{specialized}}$*, integration (specialization) is the optimal organizational form.*

By optimal organizational form we mean the greatest output net of the costs of creating such output (i.e., greatest "net output"). For the purely profit driven firm (i.e., the firm that does not care about CSR output beyond its contribution to financial performance), net output is simply financial profit. The net output derived from either non-market organizational form (i.e., integrated or specialized) is simply

the share of output after paying managers for their efforts. Thus, we write the firm's net output π as a function of each organizational form as:

$$\begin{aligned}
\pi_{\text{integrated}} &= (1-\gamma_1-\gamma_2)\left[\frac{(\gamma_1+\gamma_2)+2\alpha\delta-\beta\left(2\delta+\alpha\left(\gamma_1+\gamma_2\right)\right)+\alpha\left(\alpha-\beta\right)\left(\gamma_1+\gamma_2\right)}{1-\beta^2}\right] \\
\pi_{\text{specialized}} &= (1-\gamma_1-\gamma_2)\left[\gamma_1+\alpha\left(\alpha\gamma_2+\delta\right)\right].
\end{aligned}$$

We then see that $\pi_{\text{integrated}} > \pi_{\text{specialized}}$ if and only if $Y_{\text{integrated}} > Y_{\text{specialized}}$:

$$\begin{aligned}
\pi_{\text{integrated}} &> \pi_{\text{specialized}} \\
&\iff (1-\gamma_1-\gamma_2)\left[\frac{(\gamma_1+\gamma_2)+2\alpha\delta-\beta\left(2\delta+\alpha\left(\gamma_1+\gamma_2\right)\right)+\alpha\left(\alpha-\beta\right)\left(\gamma_1+\gamma_2\right)}{1-\beta^2}\right] \\
&> (1-\gamma_1-\gamma_2)\left[\gamma_1+\alpha\left(\alpha\gamma_2+\delta\right)\right] \\
&\iff \frac{(\gamma_1+\gamma_2)+2\alpha\delta-\beta\left(2\delta+\alpha\left(\gamma_1+\gamma_2\right)\right)+\alpha\left(\alpha-\beta\right)\left(\gamma_1+\gamma_2\right)}{1-\beta^2} \\
&> \gamma_1+\alpha\left(\alpha\gamma_2+\delta\right) \\
&\iff Y_{\text{integrated}} > Y_{\text{specialized}},
\end{aligned}$$

QED.

6.2 Organizational Form Typology Coding

To categorize our sample of 25 firms, we first studied if the firm's **procedure** for engaging in CSR was more driven by an integrated or specialized organizational form approach. Specifically, using each firm's 2013 Sustainability report, we analyzed how CSR-related decisions were made and implemented. Many reports also provided schematics on the flow of decision making and implementation of CSR strategy. We further explored if strategy was generated from within a central CSR unit versus created autonomously within separate business units, and if generated from a specialized unit, how much influence outside units had on the specialized unit's activities. Based on this qualitative review, we rated firms by assigning them an integer between 1 and 10, inclusive, where 10 was having CSR fully integrated throughout the firm and 1 was fully specialized. Ranks were then compared to assess relative differences across firms and verify the appropriate rating of each of the 25 firms. To do so, two research assistants (RAs) independently created a rating for each firm, as well as a summary of their qualitative research to justify each of their ratings. We then all met to discuss the ratings and rationales to arrive at a final rating for each firm.

To score firms on the dimension of how profit centered their CSR activities were, we followed the same process by having each RA score firms and provide rationale, as well as engage in a discussion. However, for this dimension we explored the **purpose** of the firm's CSR activities. If a CEO stated that CSR was used because it increases shareholder value or makes economic sense, for example, this generated a more profit centric rating (i.e., a lower number) than if the CEO instead said CSR is engaged in because it helps make the world a better place. Overall, this purpose rating was formed primarily by reviewing statements from top management that argued for why their company engages in CSR activities. The more statements that linked profit and CSR, the more profit centric their rating, and the more statements that linked CSR and non-(direct)profit motives, the less profit centric their rating. Here, we gave the most profit centric a rating of 1 and the least profit centric a rating of 10. Other firms were assigned an integer in between these extremes.

In the end, the purpose of the qualitative coding exercise was to develop a sense

of the types of organizational approaches firms are currently taking when engaging in CSR by providing a simple, simultaneous snapshot of their efforts. From this analysis, it became clear that there is significant heterogeneity on both dimensions of CSR purpose and procedure. This finding motivated our theoretical analysis to help understand the origins of these differences.