

**COOPERATION BETWEEN CORPORATIONS AND ENVIRONMENTAL
GROUPS: A TRANSACTION COST PERSPECTIVE**

Accepted at the

Academy of Management Review

Special Issue on

Corporations as Social Change Agents

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Abstract: Theory suggests that when transaction costs are low, corporations and stakeholders can minimize social costs by transacting to their mutual advantage, but when transaction costs are high, reducing social costs requires the intervention of a centralized institution. Surprisingly little work has considered what happens in between – when transaction costs exist but recourse to hierarchical institution is barred. This paper uses transaction cost analysis to hypothesize how collaboration between corporations and environmental stakeholder groups will be structured.

75 words

Ronald Coase's "The Problem of Social Cost" was one of two articles mentioned by the Nobel Committee when awarding him the Nobel Prize in Economics (Royal Swedish Academy of Sciences, 1991). Yet, in his lecture at the award ceremony, Coase argued that the article had been largely misunderstood (Coase, 1991). Indeed, he even declined to claim authorship for the famous "Coase Theorem" -- the conjecture that if business and its constituents can transact without cost, social problems can be resolved through the workings of a free market. Instead, he argued, he had hoped to reveal the "imaginary" nature of both the Pigouvian view of a world of efficient government regulation and the neo-classical view of a world without transaction costs (Pigou, 1962; Coase, 1991). He maintained that in the article, he was proclaiming: "let us study a world of positive transaction costs" (Coase, 1991).

Transaction costs are usually grouped into three parts: the cost of finding parties, the cost of negotiating agreements, and the cost of monitoring and enforcing compliance with agreements (Boerner & Macher, 2005). Together, these costs are expected to influence how social exchange is organized, and how much that exchange results in social benefit (Williamson, 1985). Yet, as Coase noted with regret in his Nobel lecture, the work that followed his original analysis tended to emphasize formal theoretical models of the two extremes of the Coase Theorem (Coase, 1991; Medema, 1998; Rasmussen, 2005). Very few studies considered how transaction costs could influence the manner in which business and stakeholders organize mutually beneficial exchanges (Coase, 1991; Rasmussen, 2005). Yet, Coase believed that such constructive exchanges would prove to be critically important in preserving the natural environment or in solving other examples of problems caused by the divergence in private and social cost (Coase, 1991).

In this article, we consider this “world of positive transaction cost” to understand when and how firms act as sources of positive social change. We argue that the effort of firms and stakeholders to overcome these transaction costs should be central to the development of any theory of positive social change. We also argue that consideration of these transaction costs provide new insight on prominent examples of cooperation between firms and stakeholders. Finally, we claim that such analysis can extend stakeholder and transaction cost theory.

In this article, we emphasize the activity of stakeholders that seek to protect the natural environment. We choose to focus on environmental stakeholder groups because public and private costs of protecting the natural environment often diverge -- thereby creating Coase’s “problem of social cost”. Moreover, environmental problems contain an intriguing disconnection between theory and observed behavior. While most scholars remain in the Pigouvian tradition of emphasizing the role of government in solving environmental problems, empirical evidence reveals that corporations and environmental groups have formed a wide range of cooperative agreements (Rondinelli & London, 2003; Yaziji, 2004).

In the last twenty years, many corporations and environmental stakeholder groups have moved from a relationship of antagonism to one of “constructive engagement” (Rondinelli & London, 2003). Prominent examples of such engagement include: the joint effort by McDonalds and Environmental Defense to evaluate and redesign packaging materials and food processing methods, the pioneering effort of Greenpeace and the German company Foron in the creation and popularization of hydrocarbon refrigeration technology, and the joint effort to protect natural habitats conducted by International Paper

and Conservation Fund (Rayport & Lodge, 1990; van der Linde, 1994; Hartman & Stafford, 1997; Coccia, 2004).

Reports of constructive engagement between corporations and stakeholders have raised several questions about how firms operate. According to these reports, cooperative efforts often uncover win-win technologies that improve profits while protecting the environment (Rondinelli & London, 2003; Yaziji, 2004). If so, why hadn't firms already found these opportunities? Other reports document the transfer of some unused property rights to stakeholder groups (Coccia, 2004). Why would firms transfer such rights, and why would stakeholders be willing to buy them? Still other reports indicate that firms and stakeholders often establish ongoing relationships (Ruta, 2005). Why would stakeholders risk alienating their donors by such actions? Using transaction cost analysis, we develop potential answers to these questions.

For transaction cost theory, corporate-stakeholder cooperation provides an opportunity to better explore alternatives to private hierarchy. The non-profit nature of most stakeholder groups effectively prevents the use of hierarchy. In general, firms and stakeholders cannot merge or create a new venture in which they both hold equity positions. As a result, firms and stakeholders need to develop alternative mechanisms for addressing high transaction costs. Our analysis explores when and how these alternatives are used.

For stakeholder theory, our research considers how gains from governance might influence interactions between firms and stakeholders. We show that such analysis provides new insight on some empirical examples of firm-stakeholder interactions. We

also postulate that gains from governance could provide a way to link instrumental and normative strands of stakeholder theory.

For theories of corporations as agents of positive social change, we provide a rationale for identifying such change, and develop a mechanism for analyzing how it might come about. We conclude that the construct of interest must be the relationship between the firm and at least one stakeholder. We then use one analytical method to analyze some relatively simple dyadic relations.

SOCIAL CHANGE AND STAKEHOLDER THEORY

Identifying Positive Social Change

Understanding how firms can act as social change agents must begin with a theory of social wellbeing and change. Early economists, including Adam Smith, sought to develop just such a theory. Known originally as “moral philosophers”, these scholars sought to understand the origin of “public virtue” (Heilbrunner, 1999). In his two great works (the *Theory of Moral Sentiments* and *The Wealth of Nations*), Adam Smith attempted to understand whether, as had been previously claimed by Mandeville (1723), “private vice” could be the source of “public virtue” (Mandeville, 1723). While at first skeptical, Smith eventually concluded that the invisible hand of the market shaped self interested behavior so that it played a central role in providing human benefits. “It is not”, Smith wrote, “from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their regard to their own interest (Smith, 1776/1987).” After Smith, economists went on to enumerate a formal theory of when self-interest leads to conditions

that maximize public welfare. When these conditions do not exist, they say that markets “fail” (Mas-Colell, Whinston et al., 1995).

Many environmental problems are caused by a type of market failure known as a “missing market” (Barbier, 1989). Because markets for environmental goods and services generally do not exist, the true cost of these goods and services is not priced into many market transactions. Lacking these markets, corporations do not bear the full cost of the damage they inflict and they make choices that cause excessive (from a welfare perspective) social damage. For example, the sale and consumption of tobacco cigarettes may harm an uninvolved party without harming the profits of the tobacco company or the utility of its consumer. Such effects are also termed “externalities” in the economic literature because they cause costs that are external to the actors engaged in the exchange (Barbier, 1989).

For many years, scholars followed the Pigouvian tradition that held that the problems caused by missing markets could only be resolved through the actions of central government. Taxes or permits could return these costs to the balance sheet of the polluting firm and so restore the welfare benefits of a free market. In “The Problem of Social Cost”, Ronald Coase suggested that affected individuals (like the party harmed by second-hand smoke) could solve directly the problem of externalities (Coase, 1960). He suggested that when the cost of negotiating and enforcing agreements (i.e. transaction costs) were low, stakeholders and firms could form a mutually beneficial agreement that would balance the cost and value of pollution. Stigler (1989) argued that if transactions had zero cost, the resulting equilibrium would maximize social welfare (Stigler, 1989). Following this analysis, many papers in the economics literature investigated the theoretical implications

of this result (Medema, 1998; Chari & Jones, 2000). Yet, the implications of Coase's study for the structure of relations between corporations and stakeholders has gone relatively unconsidered (Rasmussen, 2005).

Stakeholder Theory

Although he did not use the term "stakeholder", Coase's analysis became one of the foundations for modern stakeholder theory because it suggested that firms might wish to consider a diverse group of parties as potential sources of beneficial exchange (Donaldson & Preston, 1995). Freeman (1984) provided a further quantum advance in stakeholder analysis. Like Coase, he pointed out that a corporation's impacts often go far beyond its suppliers or customers, and he argued that firms might be able to benefit from forming some relationship with these effected parties. He also greatly expanded the definition of stakeholders and demonstrated their strategic importance. Freeman's work led to an explosion of studies. Donaldson & Preston (1995) report that since Freeman's book, more than 100 articles on the stakeholder concept have appeared. Stakeholder research, they argue, can be separated into descriptive, instrumental, and normative approaches.

In the descriptive tradition of stakeholder research, scholars attempt to uncover the extent to which managers consider stakeholders and the reasons why they do so (Brenner & Molander, 1977; Posner & Schmidt, 1984). The descriptive tradition also includes studies on the role of stakeholders in the creation of new institutions. Orts (1992) documents a trend toward laws that allow managers to extend their responsibilities to stakeholders (Orts, 1992). Nash and Ehrenfeld (1996) explore the origins of voluntary codes of conduct (Nash & Ehrenfeld, 1996).

In the instrumental tradition of stakeholder research, most studies suggest that better stakeholder relations augment firm performance (Donaldson & Preston, 1995). Waddock and Graves (1997) report a positive association between corporate socially responsible behavior and financial performance. Hillman, Keim, and Luce (2001) show that the presence of stakeholders on boards of directors is associated with superior stakeholder performance.

Researchers in the normative tradition seek to develop a moral compass that could guide managers (Donaldson & Preston, 1995). These researchers assert that language, conceptual schemes, and metaphors influence how managers think and act (Wicks, Gilbert et al., 1994; Hoffman, 1997). Freeman (1994) argues that stakeholder research should seek to better understand normative cores: the normative logic of the firm and the responsibilities of managers. To date, scholars have proposed several basis for this normative core (Evan & Freeman, 1988; Wicks, Gilbert et al., 1994; Phillips, 1997).

Scholars have debated, sometimes with considerable heat, whether these three research streams should be integrated into one (Jones & Wicks, 1999). Our article also crosses the boundaries of these three traditions because it involves descriptive, instrumental, and normative elements. While its main goal is to develop a set of hypotheses that describe the organizational form of cooperative relations between corporations and environmental stakeholders, it uses a theoretical tradition that integrates instrumental and normative objectives. In this paper, we assume that stakeholders and corporations interact for private gain, and this interaction improves the welfare of both parties.

Transaction Cost Theory

We use transaction cost analysis to consider how firms and their stakeholders will work together. For our purposes, two of the main branches of transaction cost analysis are important: the governance branch often identified with Oliver Williamson, and the agency branch sometimes identified with Oliver Hart (Masten & Saussier, 2000). The former branch tends to view contracts as devices for preventing wasteful behavior and for allowing ex-post adjustments to changing circumstances (Masten & Saussier, 2000). The latter branch tends to emphasize the role of contracts in shifting risk and in aligning the incentives of the parties to the exchange (Masten & Saussier, 2000). The Williamson branch is often criticized for lacking a formal theory of hierarchy and for its relative inattention to other governance forms (Masten & Saussier, 2000). On the other hand, vastly more empirical evidence has been marshaled in support of its basic tenants than has been amassed for the more formal agency branch (Boerner & Macher, 2005).

In this paper, we will follow the Williamson school in paying particular attention to ex-post contractual transaction costs. However, since for the most part, firms and stakeholders are legally barred from creating a firm hierarchy to govern transactions, we will consider how the recognition of post-contractual problems influences how firms structure their “relations” with stakeholders. We use the term “relations” rather than “contracts” to highlight the informal nature of many of these agreements (Milne, Iyer et al., 1996). Research suggests that stakeholders and firms generally do not sign contracts (Milne, Iyer et al., 1996). At most they may both agree on a general, and nonbinding, “memorandum of understanding” (Austin & Reavis, 2002).

Our emphasis on ex-post transaction costs has several origins. First, the emergence of stakeholder groups has reduced the ex-ante costs of finding polluters and negotiating agreements. Most of these stakeholder groups include internal experts that track major trends in environmental and social issues, and they evaluate the extent to which individual corporations may be responsible (Williamson, 1985). In addition, the cost of identifying polluters has been reduced by government regulations that require disclosure of information on corporate environmental impact (Williamson, 1985). Finally, Coase himself expected that ex-post costs would have the largest effect on the structure of firm-stakeholder relations (Coase, 1991).

DEVELOPING A THEORY FOR COASIAN EXCHANGE IN A WORLD OF HIGH TRANSACTION COSTS

Solving the Hold-up Problem

Coase (1960) argues that mutually beneficial exchange between corporations and stakeholders can improve social welfare. If so, why is it that so many social problems persist? The answer, he suggests, is that transaction costs get in the way. Yet, in Coase's original specification, ex-ante transaction costs are minimal. Following Pigou, he considered a case where a railroad engine might generate sparks that could start fires and harm neighboring citizens (Pigou, 1962). He claimed that so long as the risk of fire exceeded the value of the last train, farmers could pay the railroad to reduce the number of

trains operating each day. Since no capital investment was required and monitoring of the railroad was a simple matter, ex-post transaction costs were of little concern.

As Coase himself noted, when companies must make an investment to reduce their environmental impact, ex-post transaction costs become much larger (Coase, 1960).

Returning to the case of sparks from railroad engines, suppose that reducing the threat of fires requires a capital investment in a filter to catch sparks before they leave the engine's smoke stack. In order to make this investment, the firm would need to be confident that stakeholders would provide them with an ongoing stream of payments for the use of trains that incorporated this technology. However, once the company had made this investment and installed the filter, stakeholders would have little incentive to provide any such payment. Thus, as is true in other types of exchange, investments in fixed assets that are specific to one stakeholder may make the firm subject to hold-up problems (Gibbons, 2005).

One possible solution to the problem of hold-up is for the environmental group to share in the capital investment needed to make environmental improvements (Gibbons, 2005). In essence, this allows the company to get a lump-sum payment for its future environmental improvement, and reduces or eliminates the risk that stakeholders will decide not to pay for environmental improvement at some future time. Unfortunately, now the hold-up problem can work in reverse. Once the stakeholder has made the lump sum payment, the corporation can redirect the money to other activities.

One possible solution would be for the stakeholder to invest in an asset that bundles together environmental and financial benefits. For example, the stakeholder could invest in new train engines that were less costly to operate and less likely to create fires. While it

might seem far fetched that such investments will occur, there are many examples of just such exchanges between corporations and environmental stakeholders. For example, the environmental stakeholder group Greenpeace obtained and transferred important hydrocarbon refrigeration technology to the German company Foron. Greenpeace's goal was to induce the company to create a Freon-free refrigerator and thus lesson damage to the world's ozone layer (van der Linde, 1994; Stafford & Hartman, 2001). In another case, the Alliance for Environmental Innovation helped the United Postal Service to convert to a new type of delivery box. Once the investment had been made in the development of this box, it became the most cost effective alternative for UPS (Laurent, 2003). Finally, Conservation International invested in training of farmers in techniques for growing "shade-grown" coffee. This investment helped Starbucks obtain a reliable supply of shade-grown coffee, and this helped them to offer a new product line(Austin & Reavis, 2002).

In all of these cases, investment by an outside stakeholder changed the firm's production choices so that an option that was initially financially inferior (but environmentally superior) became superior relative to both criteria. In doing so, this investment greatly reduced the ex-post monitoring and enforcement problem for environmental stakeholders. So long as the firm's optimal production choice remained the environmentally preferred choice, the environmental stakeholder could reasonably assume the firm would choose the jointly beneficial option.

Based on the above analysis, we can form our first conjecture for how corporations and environmental stakeholders will organize mutually beneficial exchanges.

Hypothesis 1: When a firm has a second-best production option that uses fewer environmental resources¹, and the cost to make this the first-best option is less than the environmental benefit that will be gained, corporate-stakeholder exchanges will involve stakeholder investment in an asset that makes the environmentally preferred option the first-best production option.

One interesting thing about this hypothesis is that it suggests an alternative explanation for reported “win-win” benefits from cooperation between stakeholders and corporations. Reportedly, several joint development projects between corporations and stakeholders have uncovered new technology that is both financially and environmentally superior (Rondinelli & London, 2003). Such reports raise the question of why the firms failed to develop these technologies themselves. Our analysis suggests that strategic responses to transaction costs may explain these reports: to prevent the possibility of stakeholder hold-up, the parties ensure that payments are provided up front in the form of technology development assistance; to prevent the possibility of corporate renegeing, the developed technology is designed to marry the dual objectives of financial and environmental benefits. Thus, our analysis suggest, cooperative corporate-stakeholder projects report the development of win-win technologies, because these are the only type of technology that signifies successful completion of a joint project.

¹ We use the term “environmental resources” to indicate the use of any environmental goods and services. For example, the capacity of the atmosphere to absorb pollution can be viewed as a resource.

Solving the Problem of Wasteful Effort

Transaction cost analysis allows us to consider another problem that firms and their stakeholders may face when attempting to collaborate for mutual financial and environmental benefits. This problem arises because firms may have an incentive to act strategically to extract further concessions from environmental stakeholders.

Consider a case in which a firm has a choice between two technologies. One (T1) provides superior financial and environmental benefits, and the other (T2) is inferior on both fronts. However, the firm recognizes that with a little investment, it can improve the financial performance of this second option so that it provides slightly higher operating profits than the first technology. Even if these additional operating profits are not sufficient to cover the investment to improve the second technology (T2), the firm may choose to go ahead and invest, because by doing so, they can improve their bargaining position with respect to the stakeholder. Their bargaining position is improved by making the dirty alternative the best production alternative, because now they can demand that the stakeholder invest in further improvements of their existing technology (T1).

This investment in an inferior technology in order to improve one's bargaining position may seem unlikely, but it has been documented in many for-profit transactions (Gibbons, 2005). In a famous case, General Motors purchased Fisher Body to prevent Fisher Body from investing in technology to improve the margin they would be able to get if they sold car bodies to Ford Motors (Klein, 1991). Fisher Body was inclined to make such investments even though they were not selling car-bodies to Ford (and Ford was a less desirable customer), because these investments improved their bargaining position with GM. By buying Fisher Body, GM could prevent such wasteful investments.

It seems unlikely that any stakeholder group could purchase a for-profit firm, as GM did with Fisher Body. Stakeholders usually do not have sufficient assets to make such purchases, and most are structured as non-profits – thereby creating legal barriers to such a merger. Stakeholders can purchase, however, particular assets that corporations may possess. Intriguingly, there is evidence that firms engage in precisely the kind of threat that our analysis would suggest, and that stakeholders attempt to prevent it by buying certain firm assets.

In a famous example, Charles Hurwitz purchased a timber company (PALCO) in California and tripled the cut rate of its old-growth forests. Although the relative value of a higher cut rate is difficult to determine precisely, several authorities argue that it was not the best operational alternative, and Hurwitz was, as he had done with two earlier companies, engaged in “greenmail” (Harris, 1995). Whatever the logic, the sudden increase led to a dramatic outcry and eventually led to a joint state and federal purchase of the forest. The sum for this purchase was almost 45% of the original price Hurwitz paid for acquiring the company (Johnson, 1998). Yet, the Headwater’s forest represented only 3% of the timberland owned by PALCO (Johnson, 1998).

A more positive example involves a land deal between International Paper and the environmental stakeholder group Conservation Fund. Fearing that International Paper would eventually sell some critical forest land to developers, Conservation Fund purchased the development use rights from International Paper (Coccia, 2004). Yet, they did not purchase the timber rights to the land, and International Paper was able to continue to harvest trees on the property. According to an executive at International Paper, the company didn’t want to develop the property and even accepted a below market price for

the land rights (Boyd, 2004). By acquiring these rights, Conservation Fund prevented the threat of strategic maneuvering in the future (Coccia, 2004). By selling them, the firm gained some financial benefit and constrained itself from making (jointly) wasteful investments to improve its bargaining position.

*Hypothesis 2: When a firm's second-best production option uses **more** environmental resources, corporate-stakeholder exchanges will transfer this second-best option to stakeholder groups.*

What is interesting about this hypothesis is that it suggests that environmental stakeholders may be able to generate welfare gains by buying unused property rights. By buying these rights, they prevent wasteful strategizing on the part of firms. They also prevent unforeseen outcomes from greenmail (e.g. the PALCO case). Yet, several land trusts (e.g. the Nature Conservancy) have been criticized for precisely this strategy. Our analysis suggests that such criticism may be misguided.

Selecting Exchange Partners to Reduce Ex-Post Transaction Costs

One of the important implications of transaction cost theory is that any governance solution usually creates another governance problem, and this is true for corporate-stakeholder exchanges as well. Even if both of the above steps are taken, some possibilities for hold-up may exist. One potential hold-up problem may arise when stakeholders and corporations jointly develop intellectual property in the process of producing a win-win asset. Unlike for-profit exchange partners which usually have an incentive to keep

intellectual property for their own private use, stakeholder groups often have an incentive to expropriate and *disseminate* intellectual property capabilities (Tomforde, 1994; van der Linde, 1994; Stafford & Hartman, 2001). Because stakeholder groups are usually interested in the spillover social effects of intellectual property (and not the private return), they have an incentive to make sure that valued intellectual property is *publicly* available.

Precisely such a conflict of interest over intellectual property occurred in the Greenpeace and Foron case. Once Foron had demonstrated the feasibility of the hydrocarbon refrigeration technology and shown that consumers would buy it, Greenpeace turned its attention to technological information to the rest of the German refrigerator industry (and indirectly to the rest of the world) (Stafford & Hartman, 2001; van der Linde, 1994). Scientists in these companies “were surprised by the amount of scientific research, technical data, and contacts Greenpeace had amassed...it would have taken a good deal of time and money to establish contacts like this.” (Stafford & Hartman, 2001). Greenpeace also may have transferred some of Foron’s other technology when they aggressively encouraged other refrigerator producers to switch to hydrocarbon-based foam blowing technologies – an area that had previously been exclusive to Foron (Stafford & Hartman, 2001; van der Linde, 1994). As a result, Foron’s advantage in both hydrocarbon blowing and refrigeration technology was quickly eliminated. *The Guardian* reported that “Foron GmbH, pioneer of the world’s first ‘green fridge,’ has run into difficulties, because major electrical producers have copied its success (Tomforde, 1994).” Unable to recoup its investment and lacking a competitive advantage, Foron eventually went out of business (Stafford & Hartman, 2001; van der Linde, 1994).

Stakeholders too may face some ex-post risks. Firms may identify additional production options that could be used to leverage more assistance. Alternatively, once the stakeholder has made an investment in an asset that the firm will use, the firm may choose to reduce its ongoing investment and effort. For example, Foron might have chosen to produce only a small number of the new refrigerators and to sell them as boutique products. If Foron could trust Greenpeace to safeguard their intellectual property, such a decision would make little sense. It might make sense, however, if Foron doubted Greenpeace's intentions and thus doubted that future sales would offset the investment to expand production.

One possible solution to these problems is to convert the ex-post transaction cost problem into an ex-ante transaction cost problem. For example, the corporation might decide only to work with stakeholder groups that have posted a large bond that would lose its value if they reneged on agreements. Such bonds exist in numerous forms (Kirmani & Rao, 2000). Most commonly, a firm or stakeholder organization's reputation can provide such a bond.

In the late 1980s, for example, the Applied Energy Services corporation spent millions of dollars to buy trees in Latin America (Trent, 1992). They were doing so, they claimed, to offset the carbon dioxide emissions from their power plants. Another explanation, however, is that they were attempting to signal local communities in the United States that they would be a responsible corporate neighbor. At the time of AES's investment, they were engaged in a race with other independent power producers to build electrical power stations (Trent, 1992). Since, by law, AES would receive a long term contract priced at the avoided cost for the existing power producer, AES wanted to build as

many power generation facilities as possible before all of the inefficient plants had been replaced (Trent, 1992).

The trust of government and local stakeholder groups is often critical to expedient approval to build a power plant. Thus, investing in a reputation of responsibility provided a direct benefit to AES, because it helped speed approval of construction of new power generation facilities. At the same time, it helped to ensure that AES behaved responsibly. If they did not do so, this reputation would lose its value. For this reason, scholars have conjectured that reputation may represent a credible signal that a firm intends to deal honestly (Kirmani & Rao, 2000).

Reputation has a stronger effect if it is tied to the issue that is vulnerable to ex-post renegeing. In our case, it is the potential for corporations to engage in environmental greenmail, and for stakeholders to appropriate corporate intellectual property.

Hypothesis 3: Corporate-stakeholder exchanges will tend to include stakeholder groups with a valuable reputation for fair dealing, and corporations for which their environmental reputation is an important asset.

Using Relational Contracts to Prevent Reneging

Reductions in ex-post transaction costs can also be accomplished through the use of a “relational contract”. Such contracts seek to use the promise of future beneficial exchange to control the threat of post contractual opportunism. As Gibbons (2005) points out, relational contracts are at the heart of modern theories of the firm. Oliver

Williamson's insight, he argues, was to recognize that firms allow repeated exchanges that can overcome opportunistic behavior (Gibbons, 2005).

Central to any relational contract is the promise of gain from future exchange relations. This "shadow of the future" encourages the parties to deal honestly in the current period (Gibbons, 2005). Rather than structuring the exchange as a one-time agreement, a sequence of ongoing relations is identified. Defection at any point will cause the termination of these future payments. As a result, parties are motivated to behave honestly.

Scholars from many disciplines have found empirical evidence that relational contracts "can be crucial between firms as well as within" (Gibbons, 2005). Axelrod's studies of tit-for-tat solutions to repeated prisoner-dilemma games represent a type of relational contract (Axelrod, 1984). Dore (1983) describes Japanese supply relationships as relational contracts, and Powell (1990) finds evidence of both vertical and horizontal relational contracts in the fashion industry and the diamond trade (Dore, 1983; Powell, 1990). As a result, Gibbons (2005) argues, "the old 'make or buy' decision should instead be viewed as 'make or cooperate', where both options involve important relational contracts."

Several corporate-stakeholder relationships seem to involve relational contracting. For example, McDonald's projects with Environmental Defense began with consideration of the packaging for hamburgers and the size of napkins used in McDonalds' restaurants (Laurent, 2003). Over time these joint projects progressed to consider more central issues like the sourcing and production of food ingredients (Laurent, 2003). According participants on the project, if either party had observed unfair transfer of technology or other forms of renegeing on agreements, the relationship would have been terminated. Since

both parties hoped to gain from future projects, this provided an incentive for good behavior on early projects (Laurent, 2003; Ruta, 2005).

Hypothesis 4: Corporate-stakeholder exchanges will tend to establish a long-term relationship that includes a sequence of joint projects.

Reducing Conflicts of Interest among Stakeholder Roles

Our final hypothesis emphasizes the unique role of stakeholder groups as representatives of stakeholder interests. Stakeholder groups rely on the goodwill and financial support of their constituents. As a result, they must be careful not to appear to become too closely aligned with corporate interests. Perhaps it is for this reason that many stakeholder groups will not take financial support from the corporations with whom they work (Austin & Reavis, 2002; Ruta, 2005). Even so, ongoing relations between corporations and stakeholder groups may raise questions of conflicts of interest – particularly if these stakeholder groups are also acting as conduits for information about corporate performance. Yet, this is one of the most critical roles played by stakeholder groups. Moreover, this role is also critical for firms because it can help resolve asymmetric information between a firm and its consumers.

Asymmetric information poses substantial problems for firms because it reduces a consumer's willingness to pay (Mas-Colell, Whinston et al., 1995). Akerlof (1970) demonstrated that when consumers cannot observe the quality of a product (e.g. a used car) and suppliers cannot credibly communicate this quality, consumers will be less willing to pay for products with (claimed) high quality. As a result, a “market for lemons” can

emerge in which only poor quality products and services are offered for sale (Akerlof, 1970). Both consumers and suppliers benefit from fixing this problem.

Environmental attributes of products and services are particularly prone to asymmetric information, because most environmental attributes cannot be observed – even after purchase by the consumer (Rice, 2001). For example, a consumer usually cannot determine if a pound of coffee beans has been produced without use of pesticides or in a manner that preserved the natural forest canopy (Rice, 2001).

Stakeholder groups can be valuable allies in solving communication problems (either to consumers or other stakeholders) because the interest of a stakeholder group is not usually aligned with the profitability goals of a corporation, and thus the stakeholder group has little incentive to make false claims (King & Baerwald, 1998). For example, Conservation International’s endorsement of Starbucks’ shade-grown coffee makes it more credible that the coffee indeed has been grown beneath a natural forest canopy (Rice, 2001).

Stakeholder groups that both assist companies and certify the environmental quality of their products are caught in a similar bind to the one faced by firms that include both consulting and accounting services (e.g. Anderson). Mutually beneficial cooperation makes it less credible that the stakeholder is a disinterested conveyer of credible information.

One solution would be for two stakeholder groups to take each of the two roles of “constructive engagement” and “auditing/reporting”. Yet, most cooperative arrangements between corporations and stakeholders have not chosen this option. One possibility is that working with an additional stakeholder increases the risk of lost intellectual property. As

discussed above, environmental stakeholders have an incentive to disperse cleaner technology. Working with two environmental groups may increase the chance that valuable intellectual property will be leaked.

Another solution is for the stakeholder groups to maintain financial independence from the corporations with which they work. Many of the bylaws of larger foundations (e.g. the Ford Foundation) or environmental groups (e.g. Environmental Defense) expressly forbid taking financial support from a corporation.

Finally, stakeholder groups can organizationally separate their “constructive engagement” and “auditing” functions. The two stakeholder groups that have worked most closely with corporations have chosen this second path. Environmental Defense formed a separate group, The Alliance for Environmental Innovation, to work with corporations on new technology. To cement its independence further, this group was partially funded in part through a grant from the Pugh Foundation and it was located far from the main offices of Environmental Defense. According to the Alliance’s director, Gwen Ruta, concern about conflicts of interest were central to the decision to give the alliance a separate organization, and financial structure (Ruta, 2005). Similarly, Conservation International chose to create a separate unit to work with companies – The Center for Leadership in Business. This unit is also partially funded by outside sources.

One might think that business would prefer to work with a stakeholder group that combined the two services into one organization. Then, as Enron did with Anderson, they might be able to exert pressure over the accounting and reporting functions. Sue Mecklenburg of Starbucks argues that actually this is not in the interest of the company, because the company needs the help of the stakeholder in communicating with the

company's customers. "They [environmental groups] need to maintain their independence as an NGO [non-governmental organization], otherwise what they say is not really the same value as it would have been had you gotten them to agree to say only what you'd like them to say. (Austin & Reavis, 2002): pg. 9"

Hypothesis 5: Stakeholder groups will separate organizationally and financially their corporate engagement and auditing activities.

Limitations to our Analysis

Our analysis only cracks open one window for viewing firm-stakeholder relations. It is limited by both our choice of focal stakeholders and our decision to emphasize a transaction cost perspective. We chose environmental stakeholders because they represent a class of stakeholders that address problems of social cost, and because they generally do not have an existing relationship with firms (unlike labor, etc.). We hope in future research to conduct a more exhaustive survey of relationships with other stakeholders of the same type (e.g. those concerned with public safety) and others that are most concerned with social benefits (e.g. those concerned with fostering spillover knowledge).

Our analysis emphasizes the U.S. context. As a result, it does not consider how public institutions might influence how and to what end, firms cooperate with stakeholders. Clearly, a better understanding of firm-stakeholder relations could be gained by considering how these relations vary across different systems of public governance.

Our research is also limited by its emphasis on relatively intensive corporate-stakeholder relations. As demonstrated by Rondenelli and London (2003), stakeholder

relations can vary from cursory co-branding to ones entailing considerable joint effort. In future research, we hope to explore less intensive forms. Firms also can form relations to solve different types of social exchange problems. For example, firms and stakeholders sometimes engage in joint efforts to create new semi-public institutions for solving asymmetric information problems. We hope that future analysis will investigate how firms cooperate with stakeholders to solve these problems.

Finally, we emphasize a transaction cost analysis of firm-stakeholder relations. We believe that this perspective provides only one way of analyzing these relationships. One could imagine using knowledge-based theories, theories of identity, or theories of ethical behavior, to analyze them as well. We hope only to have advanced one perspective in the scholarly discussion.

CONCLUSION

In this article, we respond to Coase's call to consider a world of high transaction costs, and we investigate how, in such a world, firms and stakeholders organize cooperative efforts. Using the tools of transaction cost analysis and the grounding of prominent empirical examples, we develop several hypotheses for how firms and stakeholders cooperate. Our analysis provides new perspective onto observed patterns of participation. We provide new explanations for the origin of co-developed win-win technology, the logic of partial property right transfer, the development of long-term relations between corporations and stakeholder groups, and the formation of separate "corporate engagement" groups.

For theories of corporations as positive social change agents, this article provides one mechanism for identifying positive social change and for understanding when and how corporations can act as change agents. We return to early moral philosophy to suggest that positive social change occurs when parties reduce impediments to mutually beneficial exchange. Thus, we argue that theories of social change should consider the role of firms in reducing such barriers. We further argue that any analysis of the role of corporations as change agents must consider their relations with stakeholders. Such analysis, we assert, is critical both to uncovering the impetus for change, and for ensuring that it has social benefits.

For transaction cost theories, our research highlights the importance of stakeholders that have no existing relationship with the firm. Our analysis reveals the interaction of firms and stakeholders represents a fruitful area for extending transaction cost theory. As we discussed earlier, the non-profit nature of these groups inhibits the use of hierarchy in response to high transaction costs. As a result, firms and stakeholders must create hybrid and intermediate forms of governance. Moreover, we demonstrate that the missions of these groups create new types of ex-post contract risk. For both of these reasons, we contend, further study of relations between firms and stakeholders will generate new insight on strategic responses to transaction costs.

For stakeholder theory, our analysis reveals the importance of transaction costs in understanding how firms and stakeholders structure their relations. We conjecture that the gains from governance provided by such relations may actually allow a way to link the instrumental and normative strands of stakeholder theory. We hypothesize that in solving exchange problems for their own benefit, firms and stakeholders improve general social

welfare. Thus, our analysis provides another option for developing normative heuristics for managers.

Finally, we hope that our research will provide renewed interest in Coase's conjecture that solutions to "the problem of social cost" requires better understanding of how high transaction costs shape how corporations and stakeholders interact. Some social problems, like environmental degradation, now pass beyond the authority of any central government. Thus, any solution to these problems may depend on how well firms and stakeholders can find ways to cooperate despite living in a world of high transaction costs.

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