

AGENCY THEORY AND BOUNDED SELF-INTEREST

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Agency theory draws attention to certain behaviors of CEOs and boards that, in aggregate, create losses for society. The empirical literature, however, characterized by contentious findings, suggests that the current form of agency theory is not supporting a clear understanding of these behaviors and their costs. We propose a change to one assumption, with potentially profound implications. Expanding on the assumption of narrow self-interest underlying agency theory, we apply an empirically well-established refinement that self-interest is bounded by norms of reciprocity and fairness. The resulting logic is that perceptions of fairness mediate the relationships derived from standard agency theory through positively and negatively reciprocal behaviors. This mediating variable provides a parsimonious new way to help explain extreme results found in prior studies. Rather than aiming to limit CEOs' self-serving behaviors, boards that apply these arguments improve social welfare by initiating positive reciprocity and avoiding unnecessary, welfare-reducing "revenge" behaviors.

Agency theory is undeniably among the dominant theories of economic organization and management. As such, agency theorists are routinely challenged to more fully explain the ubiquitous agency problem and how to address it (e.g., Dalton, Hitt, Certo, & Dalton, 2007; Ghoshal, 2005; Hill & Jones, 1992). The problem arises whenever one party (a principal) employs another (an agent) to create value. The essential features of the agency problem are that the interests of the principal and agent diverge and the principal has imperfect information about the agent's contribution. These features define the problem, and the problem results in costs and inefficiencies ultimately borne by society, one principal at a time. While the costs to society are difficult to measure precisely, they are significant. Estimates at large manufacturing firms and small firms place the costs at 0.2 and 5.0 percent of revenue, respectively (Ang, Cole, & Lin, 2000; Dobson, 1992).

Agency theory states that principals seek to influence agents in order to economize on these costs. The theory, building from assumptions that (1) all actors are narrowly self-interested, (2) all actors are boundedly rational, and (3) agents are more risk averse than principals, has earned a place of prominence (Eisenhardt, 1989). Still, mixed empirical findings challenge us to refine the theory in search of more nuanced explanations. For example, standard agency theory logic suggests that paying CEOs with stock options will align their behaviors with the interests of the firm and result in higher firm performance, but some empirical results show that this practice leads to more big losses than big gains (Sanders & Hambrick, 2007).

We agree with Jensen (1998) that the deductive logic of standard agency theory is sound, given its assumptions. As such, future refinements in logic are likely to arise through reexamining these assumptions. The insight that drives our contributions is that, even in competitive market situations, economic actors are not *narrowly* self-interested but *boundedly* self-interested. The volume of research showing that actors' self-interest is bounded by norms of fairness is blossoming (even exploding) in fields as diverse as strategy (Ariño & Ring, 2010; Fong, Misangyi, & Tosi, 2010; Fong & Tosi, 2007), organizational behavior (Conlon, Porter, & Parks, 2004; Greenberg, 1990; Li & Cropanzano, 2009), economics (Akerlof, 1982; Fehr & Gächter, 2000),

The contributions to this manuscript by special issue editor Thomas Jones cannot be overstated. We presented prior versions of this work at the Mid-Atlantic Strategy Colloquium, the George Washington University Institute for Corporate Responsibility, and the Global Business and Society Seminar at American University. We specifically thank Shawn Berman, Steve Brammer, Parthiban David, Rebecca Dewinter-Schmitt, Heather Elms, Virginia Gerde, Kathleen Getz, Jeff Harrison, Michael Johnson, Jeff Pollack, Kathy Rehbein, Steve Tallman, and Michelle Westermann-Behaylo for helpful comments and discussions.

political science (Ostrom, Walker, & Gardner, 1992), philosophy (Becker, 1986; Rawls, 1999/1971), biology (Nowak, 2011), sociology (Cropanzano & Mitchell, 2005), psychology (Rabin, 1998), and social psychology (Cialdini, 1984). Boundedly self-interested actors *do* seek to maximize their own self-interest, but only so long as perceived norms of fairness are not violated. When actors perceive fair treatment in competitive situations, they reward it through positively reciprocal behaviors; when they perceive unfair treatment, they punish it—often at a cost to themselves—through negatively reciprocal behaviors (Bosse, Phillips, & Harrison, 2009; Hahn, 2015; Uhl-Bien & Maslyn, 2003).

In this article we examine the implications of applying bounded self-interest as an assumption of agency theory. Our resulting propositions argue that perceptions of fairness mediate the relationships derived from standard agency theory through positively and negatively reciprocal behaviors. We are unaware of any prior attempts to examine perceptions of fairness specifically and exclusively as an agency theory construct. At least three novel contributions that address well-documented limitations in the theory stem from this tractable and parsimonious extension.

First, CEOs who perceive that treatment from boards exceeds their expectations can generate what we term *agency benefits* that are unrecognizable using standard agency theory assumptions. Our analysis—consistent with empirical findings from corporate governance (Fong et al., 2010), organization studies (Coyle-Shapiro, Kessler, & Purcell, 2004), labor economics (e.g., Shapiro & Stiglitz, 1984; Weiss, 1991), and organizational justice (e.g., Li & Cropanzano, 2009) showing that people exert exceptional effort when they perceive fair treatment that exceeds their expectations—explains how boards can initiate positive reciprocity with a CEO that generates agency benefits. Our contribution clearly accounts for extraordinary behavior that we observe but cannot explain with existing agency theory.

Second, agents' perceptions of unfair treatment can generate greater agency costs than anticipated by existing theory. The costs created by ignoring fairness and reciprocity can actually be greater because, unlike narrowly self-interested executives, boundedly self-interested executives are *willing to incur*

additional costs in order to enforce the value of justice (Fehr & Gächter, 2000; Henrich et al., 2010; Hoff, 2010). The logic we develop provides one bridge for the gap in agency theory articulated by Dalton et al. that "some agency-driven interventions have actually exacerbated the fundamental agency problem" (2007: 39; see also Sanders, 2001a).

Finally, a contribution that goes beyond a deeper understanding of the agency costs borne by society when firms and CEOs are misaligned comes from acknowledging the social welfare improvements that accompany an appreciation of bounded self-interest. In addition to being facts of human psychology, fairness and reciprocity are social values that have been systematically undermined by the assumption of narrow self-interest in our most influential management theories. Our analysis not only stems this undermining but also goes on to explain that when CEOs interact with their boards in ways that reinforce their expectations for justice, they affect social norms of justice. CEOs are socially influential around the world. To the extent that expectations of fairness and justice are acknowledged and legitimated by influential parties, that pattern has ripple effects through society. Thus, in addition to the social welfare created through improved managerial practice, welfare is enhanced when one of our most powerful theories of economic action begins to show an appreciation of social and moral norms.

We proceed by providing a brief overview of agency theory, including its assumptions, the costs it seeks to economize, and the mechanisms that power its propositions. Then we explain bounded self-interest and apply it to agency theory to deduce new explanations for how agents respond to principals. The testable propositions we develop suggest that our understanding of how principals use incentive alignment and monitoring mechanisms can be altered to improve the social welfare produced by firm performance and the enforcement of justice norms. We discuss the implications of this new logic on future research that promises to account for both exacerbated agency costs and heretofore unrecognized agency benefits. The conclusion suggests that applications of standard agency theory can lead to reductions in social value and that our modification based on a less pessimistic assumption about human

behavior helps develop theory better able to advance social welfare.

AGENCY THEORY: OVERVIEW AND REACTIONS

Theory Overview

One party (a principal) employs another (an agent) when the first party thinks this will result in value creation. It is not possible for the principal to know, *ex ante*, how much value will result from such an agreement because of uncertainty regarding the agent's level of effort and exogenous factors. Nevertheless, the basis for the agreement is that the principal expects it to result in the creation of a certain amount of value in the future. We call this expected amount $E(V)$.

Assuming the agent and principal are self-interested utility maximizers, a problem arises for the principal when (1) the two parties have divergent interests and (2) the agent has better information than the principal. This problem, the fundamental agency problem, is that these conditions create the possibility, even likelihood, that the agent will not act in the best interests of the principal; consequently, the principal will not get the full expected amount of value ($E(V)$) from the agreement but, rather, something less: $E(V - C)$.

Jensen and Meckling (1976) argued that the agency problem characterizes the corporate governance choices of firms (principals) and the resulting behavior of CEOs (agents). This is because CEOs seek to increase their utility at the expense of firms by withholding effort or increasing their own compensation through self-dealing (or perhaps honest incompetence; see Hendry, 2002). When owners do not have perfect information about CEO behavior, self-interested CEOs conceal selfish actions, and firms bear the cost.

Agency theory explains how principals efficiently organize exchanges with agents by employing mechanisms—incentive alignment and monitoring—in appropriate combinations (Eisenhardt, 1989; Jensen & Meckling, 1976). The principals' challenge is to realize the benefits of cooperation with agents while minimizing the sum of productivity losses due to shirking plus the costs of mechanisms employed to mitigate such behavior.

One point of explanation is vital here. Jensen and Meckling's work and the majority of prior

positive agency theoretic research consistently conflate the board, the firm, and shareholders, including referring to shareholder as "owners." This has, technically, been mistaken from the beginning (Clark, 1985; Stout, 2012).¹ Neither the board nor shareholders are coextensive with the firm, but the board speaks and acts on behalf of the firm in interactions with the CEO. And none of them "own" the firm in any meaningful sense. Eschewing references to shareholders or owners as principals, the convention we adopt here is referring to the board when discussing actions taken by the principal and referring to the firm when discussing the party affected by CEO behaviors.

An exhaustive review of the vast body of agency theory literature is beyond the scope of this article (as of this writing, Jensen and Meckling's seminal 1976 paper has been cited over 24,000 times). However, the following brief and partial overview provides the critical cornerstones for our purposes (several excellent reviews of the agency theory literature are available, including Bradley, Schipani, Sundaram, & Walsh, 1999; Dalton et al., 2007; Eisenhardt, 1989; Finkelstein & Hambrick, 1996; Jensen, 1998; Kim & Mahoney, 2005; Walsh & Seward, 1990). We have simplified the theory to its essential core and therefore focus on the primary mechanisms for counteracting two prominent facets of the agency problem: divergent interests and information asymmetry (Cohen, Holder-Webb, Sharp, & Pant, 2007).

To counteract a portion of the agency costs that arise from the diverging interests of the principal and agent, the principal can structure the agreement in a way that more closely aligns both parties' interests (Fama & Jensen, 1983; Jensen & Meckling, 1976). To understand how this works it is important to specify that agents' and principals' interests conflict in at least two ways. First, they

¹ Clark writes, "To an experienced corporate lawyer who has studied primary legal materials, the assertion that corporate managers are agents of investors, whether debtholders or stockholders, will seem odd or loose. The lawyer would make the following points: (1) corporate officers like the president and treasurer are agents of the corporation itself; (2) the board of directors is the ultimate decision-making body of the corporation (and in a sense is the group most appropriately identified with 'the corporation'); (3) directors are not agents of the corporation but are *sui generis*; (4) neither officers nor directors are agents of the stockholders; but (5) both officers and directors are 'fiduciaries' with respect to the corporation and its stockholders" (1985: 56).

have conflicting interests regarding how much effort the agent will supply. Principals want agents to supply high effort, because their outcome value (V) depends on agent effort (more on this below); the assumption is that agents have a disutility of effort. Second, they have conflicting interests regarding how much risk the agent will bear. Principals want agents to assume some of the risk for the outcome value; agents do not want this risk.

Rewarding the agent based on his or her outcomes rather than behavior is a common incentive alignment mechanism (Eisenhardt, 1989). However, this ties risk-averse agents' compensation to outcomes they do not fully control. Consequently, CEOs are assumed to prefer behavior-based compensation schemes (e.g., salary) over outcome-based compensation (e.g., equity shares). Boards that wish to mitigate the risk a CEO will shirk by aligning their incentives with an outcome-based contract, then, must increase the size of the CEO's potential payment in order to compensate the CEO for sharing some of the outcome risk. Agency theory suggests an astute principal can spend $X_{i\alpha}$ on incentive alignment mechanisms to save $X_{i\alpha} + Y_{i\alpha}$ in potential losses due to selfish agent behavior (Hill & Jones, 1992).

To counteract the agency costs that arise from information asymmetry, the principal can employ a monitoring mechanism (Fama, 1980; Fama & Jensen, 1983; Jensen & Meckling, 1976). Without a monitor, the self-interested agent who prefers leisure over work can be expected to shirk because his or her true effort is concealed from the principal (Alchian & Demsetz, 1972). Using a monitoring device makes the CEO's behavior more visible. Agency theory explains that principals can spend X_m on monitoring mechanisms to save $X_m + Y_m$ in potential losses due to otherwise unobserved agent behavior (Hill & Jones, 1992).

The costs a principal can expect according to agency theory range from the full costs of the unmitigated agency problem to the combined costs of employing multiple mitigation mechanisms plus the residual agency costs. Principals do not get the full value they could expect absent the agency problem (i.e., $E(V)$). Figure 1 illustrates this standard agency theory logic. We hold separate the two mechanisms—without emphasizing the extent to which incentive alignment and monitoring mechanisms can be substitutes or complements (Rediker & Seth, 1995)—in order to

maintain the simplest focus on the core logic of agency theory.

Empirical Evidence

One of the most common applications of agency theory is examining corporate governance phenomena in which the board of directors acts on behalf of the firm and CEOs are the agents hired to run the firm (Jensen & Meckling, 1976). The body of empirical studies testing agency theory in this setting is impressive. Many of these studies show support for its general propositions (e.g., Certo, Daily, Cannella, & Dalton, 2003; Jensen & Murphy, 1990; Sanders, 2001a). It is also true, however, that other empirical tests suggest that further refinements are needed to better explain the conditions that influence how principals' actions mitigate or intensify the agency problem. In this section we briefly summarize recent reviews and meta-analyses showing gaps between agency theory and the phenomena it attempts to explain.

One way to align the interests of a firm and its CEO is to have the CEO hold equity or options to buy equity in the firm (Fama & Jensen, 1983; Jensen & Meckling, 1976). CEOs who are also shareholders should be more interested in decisions that maximize the value of the firm than CEOs who are not also shareholders. Several recent studies, however, show that forcing CEOs to hold stock or compensating CEOs with stock options can sometimes *exacerbate* the agency problem (e.g., Bergstresser & Philippon, 2006; Dalton, Daily, Certo, & Roengpitya, 2003; Sanders & Hambrick, 2007; Wowak & Hambrick, 2010). Symptoms of increased agency costs that have been associated with these policies include securities fraud (Denis, Hanouna, & Sarin, 2006), timing of options grants (e.g., Lie, 2005), options backdating (e.g., Heron & Lie, 2007), and options repricing (e.g., Carter & Lynch, 2004).

Monitoring—the other main mechanism used to mitigate agency costs—can also be accomplished in several ways. A board of directors, for example, has a formal responsibility to monitor the CEO. Agency theory logic suggests that the efficacy of this monitoring role depends, at least in part, on the independence of board members (e.g., Walsh & Seward, 1990; Westphal, 1998). Corporate performance should be higher when a firm's board is composed of outside directors who neither are officers of the firm nor have substantial linkages to the firm. The logic is that independent outside directors will be less influenced

by the CEO relative to inside or affiliated directors who work for (or are) the CEO. Meta-analyses of this relationship, however, conclude that board independence does not consistently improve firm performance (Dalton, Daily, Ellstrand, & Johnson, 1998; Dalton & Dalton, 2011). A review of the research empirically testing the effects on firm performance of separating CEO and chairperson roles shows that this, too, receives inconsistent support (Dalton et al., 2007). In a later section we give examples of how the logic we develop offers potential explanations for these varied findings.

This brief review suggests that key parts of agency theory deserve further examination and refinement. Dalton et al. conclude that "there appear to be severe misspecifications of key variables and a host of seemingly relevant, but unexamined, variables that may be obscuring the mitigation of the fundamental agency problem" (2007: 38).

Reactions and Responses

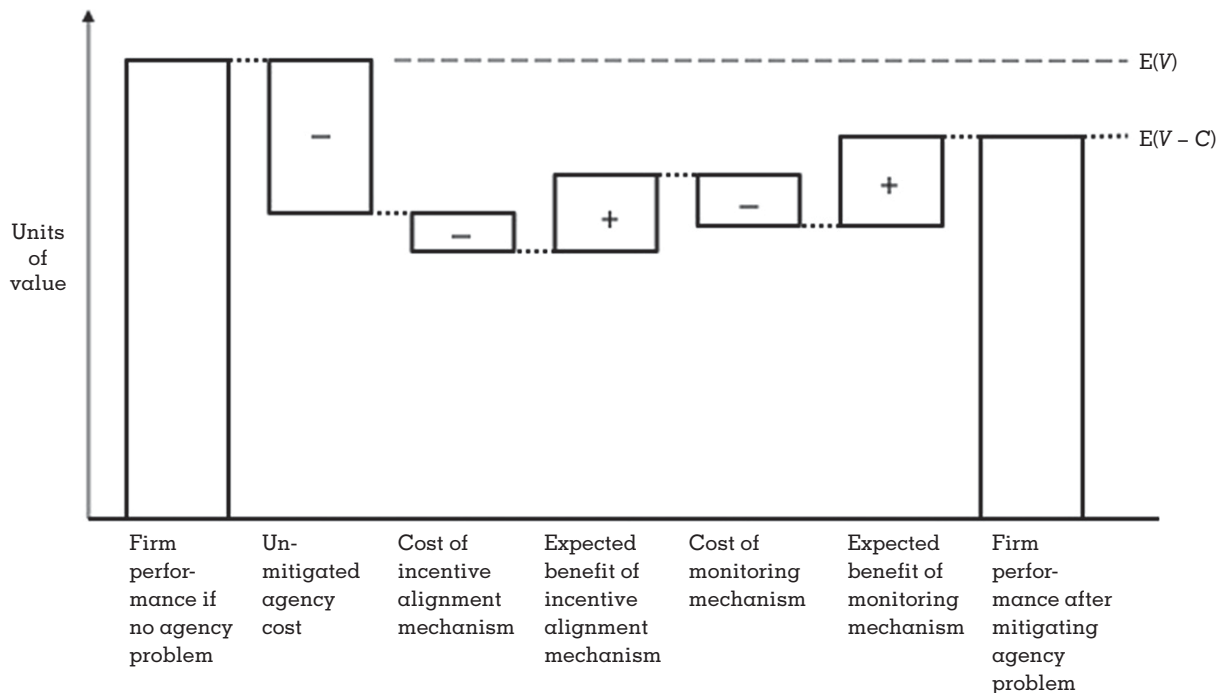
There are several possible reactions to the sometimes withering criticisms of agency theory (e.g., Bergstresser & Philippon, 2006; Dalton et al.,

2003; Sanders & Hambrick, 2007; Wowak & Hambrick, 2010). In this section we briefly address these reactions and place our proposed response in the context of this prior work, paying particular attention to how bounded self-interest differs. The first question for critics of agency theory is "Repair or replace?" One response has been to suggest replacements for agency theory using entirely different assumptions across the board.

For example, stewardship theory (Davis, Schoorman, & Donaldson, 1997) adopts more generous assumptions of human motivation and behavior and has proven influential. Despite some affinities, there are two important differences between our work here and stewardship. First, stewardship theory explicitly offers an *alternative* to agency. Here we hew much closer to the received literature on agency theory, proposing an option to repair rather than replace it. Similarly, stewardship theory involves wholesale changes to several of the core assumptions of agency theory (see Davis et al., 1997: Table 1, and Sundaramurthy & Lewis, 2003: Figure 1). Most antithetically, it replaces the core agency theory assumption of divergent interests. Davis

FIGURE 1
Standard Agency Theory

Illustration



et al. write, "Stewardship theory defines situations in which managers are not motivated by individual goals, but rather are stewards whose motives are aligned with the objectives of their principals" (1997: 21).

In other words, stewardship theory assumes away the fundamental agency problem from the outset. We do not. We maintain all of the standard agency theory assumptions, including that of divergent interests—"the cornerstone of agency theory," according to Hill and Jones (1992: 132). This allows us to stay in close touch with the vast corpus of findings from agency theoretic research. Thus, while sympathetic to the larger goal of examining the potential complementarity of agency and stewardship, our work represents a more modest step in that direction, maintaining closer contact with extant agency theoretic work.

Others have responded to the critiques of agency theory by proposing options for repairing rather than replacing. In "Problems of Explanation in Economic Sociology," Granovetter (1992) analyzed the challenges of "oversocialized" and "undersocialized" theories. The latter, typified by the assumptions of neoclassical economics and reflected in standard agency theory, do not show an appreciation of the social and psychological complexities of human actors. In response to this undersocialization, scholars have introduced new behavioral insights and assumptions that might be applied to those theories.

We argue that attempts to bridge the "socialization gap" in agency theory have leapt too far in the direction of oversocialization. As Granovetter said of an earlier generation, "Modern economists who do attempt to take account of social influences typically represent them in an oversocialized manner" (1992: 31). With the recent explosion of research in the behavioral sciences, such oversocialization has rendered an agent that is too complex for the sort of analysis historically typical of agency theory.

In another example, Van de Ven and Lifschitz (2013) propose "reasonable microfoundations" from the jurisprudential literature and behavioral sciences literature that help socialize our understanding of economic organization. "Reasonableness" provides a potentially useful umbrella term for including the growing mountain of research on human tendencies in social and economic interaction and is remarkable for its range, encompassing the behavioral theory of the firm, transaction cost economics, institutional theory,

and population ecology. This scope is also a disadvantage in terms of depth and specificity. Indeed, Van de Ven and Lifschitz explicitly acknowledge that theirs is only a sketch of the possibilities. Even with an established jurisprudential and philosophical history of usefulness that predates that of the rational economic man, "reasonableness" remains "less parsimonious and elegant than its rational counterpart," resulting in models for which "quantitative analysis is clearly challenging" (Van de Ven & Lifschitz, 2013: 168). Using perceptions of fairness as a mediating variable builds on this sketch while maintaining the tractability of standard agency theory and the bulk of its elegance.

Closer to the ideas presented here in terms of specific application to agency theory, Cohen et al. found that "when individuals perceive an action to be unfair, they are less likely to do so [take the action] regardless of the potential payoff" (2007: 1120).² Their findings are provocative and supportive of bounded self-interest. Their study of an actor's expressed willingness to act unfairly toward others on command, however, is somewhat different from how agents (i.e., CEOs) will act when they perceive *themselves* as being unfairly treated. Additionally, Cohen et al. address only unfairness, whereas our mediated model includes the possibility of positive reciprocity in addition to negative or resistant reactions. Even with these differences, the ideas are mutually reinforcing concerning the importance of perceptions of fairness to agency theory.

In sum, prior theorizing has tended toward a replace rather than repair approach or has been overly broad in introducing prior social and psychological findings at the expense of specificity and parsimony. Using CEO perceptions of fairness as a mediating variable for measuring the effectiveness of agency theoretic interventions maintains the closest contact with prior work in agency theory while offering a compelling, conservative, tractable stepping-stone toward the sort of behavioral agency theory others have proposed but that has so far not gained the same traction as similar work in economics and finance. This closer, more specific contact (both in terms of logic and constructs) with agency theory allows scholars to retain the compelling internal logic of the theory while proposing a reinterpretation

² We thank an anonymous reviewer for pointing us to this study.

of some of the inconsistent findings (a project we begin below).

In the next section we distinguish between narrow self-interest and bounded self-interest. Our objective is to explore how adopting an assumption that actors' self-interest is bounded by norms of fairness—while maintaining the fundamental agency logic—might lead to an explanation that more accurately captures the agency phenomena of interest to scholars.

BOUNDED SELF-INTEREST

The assumption of narrowly self-interested actors has contributed to numerous insights explaining complex behavior in a wide variety of settings—this we do not dispute but, rather, applaud. However, in light of the sustained critique referenced above (e.g., Ghoshal, 2005; Miller, 1999; Schwartz, 1997; Wowak & Hambrick, 2010), as well as recent empirical findings in social psychology and behavioral economics and finance, we believe its use as a foundational assumption of agency theory merits reexamination.

Bounded self-interest provides a parsimonious alternative assumption about the motivation of economic actors. This assumption refers to well-established findings that actors' efforts to maximize their own utility are influenced by norms of fairness. When actors perceive that a norm of fairness has been violated, they will seek to enforce that norm in subsequent interactions with the responsible party (Fong et al., 2010; Greenberg, 1990). For example, if an actor perceives that someone else has acted unfairly, he or she will negatively reciprocate to preserve justice. People are consistently willing to incur costs to enforce norms of fairness. The result is that negatively reciprocal behavior can be more hostile and punitive (e.g., vengeance) than the behavior described by narrow self-interest or opportunism (Fehr & Gächter, 2000; Henrich et al., 2010; Hoff, 2010). Note that even *opportunistically* self-interested actors will not incur personal cost to punish others; this would be seen as irrational and contrary to narrow self-interest. Negative reciprocity, as we explain below, can destroy more total value and social welfare than opportunism.

Alternatively, if a boundedly self-interested actor perceives that someone else has acted fairly, in excess of expectations, he or she will positively reciprocate by rewarding the other

actor. Once again, this is (arguably) irrational according to the standard assumption of narrow self-interest, notwithstanding its pervasiveness. Through positive reciprocity, the behavior described by bounded self-interest can generate beneficial outcomes and additional social welfare unaccounted for by the assumption of narrow self-interest (e.g., Cialdini, 1984; Fong et al., 2010). Such reciprocal behavior is so common across time and human cultures that Dunfee (2006) classifies it as a "hypernorm." Bounded self-interest even extends beyond human beings (Clutton-Brock & Parker, 1995) to address important questions in evolutionary biology (de Waal, 2009; Nowak, 2011).

Negatively (or positively) reciprocal behavior is a response to a perception of fairness that is less (more) than an actor's expectation for fairness in that setting. Actors' expectations for fairness incorporate at least two types of fairness: distributive and procedural.

Building on an extensive body of literature from social psychology, Bosse et al. (2009) argued that all economic actors base their reciprocal behavior on multiple types of fairness. Here we focus on two. The first type, distributive fairness, accounts for the allocation of material outcomes in an exchange (Deutsch, 1985). Both boundedly self-interested agents and principals want to receive the maximum material outcome they can justify as being fair according to distributional norms (Adams, 1965). They also want the other party to receive a fair distribution of material outcomes—and they will sacrifice a portion of their own material outcomes, if necessary, to make the other party's portion fair. Reciprocally, they expect the other party to do the same, if necessary, to restore the balance of fairness in their exchange. The material outcomes associated with distributive fairness are related to the typical components of utility captured in the narrow self-interest assumption, such as material effort, rewards, and risk.

A second type of fairness that boundedly self-interested actors seek to enforce is procedural fairness. Procedural fairness refers to an actor's perception of the degree to which the decision-making process is fair. Actors typically evaluate the fairness of decision processes based, for example, on the extent to which their opinions are considered in the process, the process is consistently executed, the information used in the process is accurate, and poor decisions resulting

from the process can be amended (Colquitt, Conlon, Wesson, Porter, & Yee Ng, 2001).

Actors also assess and reassess their perceptions of distributive and procedural fairness in relation to one another (Colquitt et al., 2001). Lind and Tyler (1988) explained that people who perceive a material outcome that falls below their expectation for distributive justice can still positively reciprocate when they simultaneously perceive procedural fairness that exceeds the norm. Proposing exactly how any individual weighs these two types of justice is beyond the scope of this article, but following Bosse et al. (2009), we do suggest that a perceived deficiency in one type of justice can sometimes be offset by justice of the other type (Luo, 2007).

The assumption of bounded self-interest requires, in addition to an understanding of the types of fairness that actors evaluate, some basis for comparing these types of fairness. Norms of fairness establish expectations for what is fair. But not all actors in a given setting will apply the same norm or arrive at the same expectation. Asymmetrical expectations of what is fair between an agent and a principal may arise. For our purposes we assume that CEOs form their expectations of fairness from their boards of directors by comparing their perceived ratio of inputs to and outcomes from an exchange with the input/outcome ratios of other relevantly similarly situated CEOs (see Adams, 1965; for important recent refinements see Conlon et al., 2004, and Hayibor, 2012; for a review of studies on CEOs' equity-based comparisons of compensation fairness, see Wade, O'Reilly, & Pollock, 2006). If a CEO sees another CEO at a similar firm put in the same effort but get a greater reward, the CEO will perceive unfairness. She will act to correct this perceived injustice by either lowering effort (input) to match her lower compensation or maintaining level of effort and seeking greater compensation (Greenberg, 1988). These expectations have both distributive and procedural components.

The reverse applies as well. If the CEO is receiving more compensation than what she perceives as equitable—based on a comparison with other CEOs' input/output ratios—she will act to correct this by either putting in greater effort to match the greater compensation or maintaining her level of effort and redistributing that portion of her compensation that she deems is generous beyond expectations (Greenberg, 1988). Equity (in

contrast, for example, with other bases of distribution, such as equality and need) provides the implicit basis for most, if not all, of standard agency theory's solutions; properly designed incentive alignment and monitoring mechanisms are expected to assure the equitable distribution of inputs and benefits.

The assumption of bounded self-interest represents a subtle but significant and empirically well-established change to one of agency theory's standard assumptions. Boundedly self-interested actors are not solely concerned with maximizing their material outcomes the way narrowly self-interested actors are. Instead, these actors' motivations include a combination of (1) a material outcome that is distributed fairly and (2) a procedural component that is seen as fair (Harrison, Bosse, & Phillips, 2010). Recognizing these different bases for evaluating fairness begins to answer the vital question, "How can organization-level policies and management practices be altered to improve the welfare of society?"³ In the next section we apply the assumption of bounded self-interest to the agency problem setting and develop testable propositions that explicitly accommodate the behavioral assumption of bounded self-interest.

AGENCY THEORY AND BOUNDED SELF-INTEREST

Agency theory has earned its place of prominence because it provides a parsimonious and clear explanation of a common problem found in economic organization. It also has been found to incompletely explain wide variance in empirical tests. The collective empirical support for the effects of incentive alignment (e.g., Dalton et al., 2003) and monitoring (e.g., Dalton et al., 1998) on performance outcomes suggests that something else (heretofore unidentified) is acting to mediate the efficacy of these mechanisms. We maintain that bounded self-interest provides just such a mediator: the CEO's perception of fairness.

Negative Reciprocity, Positive Reciprocity, and Firm Performance

Applying the bounded self-interest assumption does not eliminate either of the mandatory

³ This was a question asked in the call for papers for this special topic forum.

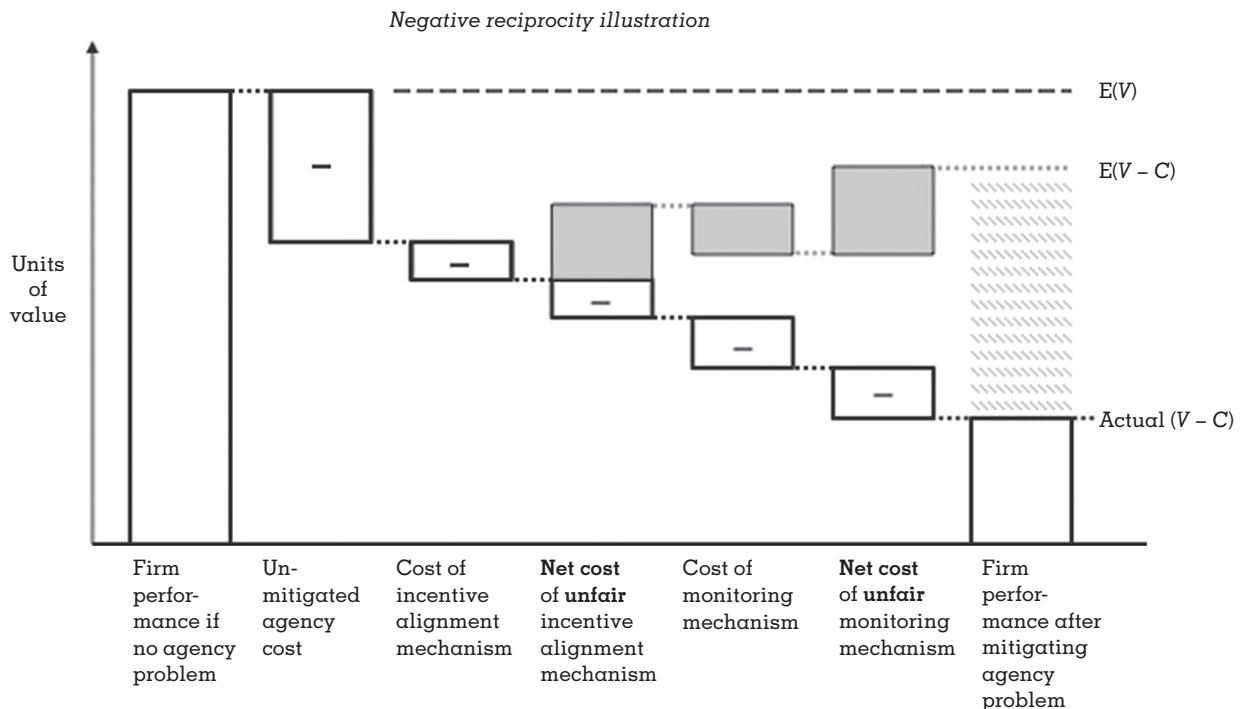
features of the agency problem: diverging interests and information asymmetry. Boards are still challenged to enact governance that maximizes the firm's outcomes by minimizing agency-related costs of certain CEO behaviors. Although neither party is motivated by intractable selfishness, a boundedly self-interested CEO does not always act in the best interests of the firm; *bounded self-interest is still self-interest*. In fact, sometimes the firm will incur *greater* agency costs in light of bounded self-interest than it would under the narrow self-interest assumption ($\text{Actual } (V - C) < E(V - C)$). A CEO who perceives that he is being treated unfairly can generate more costs for the firm than conventionally expected under the assumption of opportunism because of irrational costly punishment behaviors. This sort of counterproductive behavior is well documented in the industrial-organizational psychology literature (see Dalal, 2005). Figure 2 provides a comparative illustration of negative reciprocity generating exacerbated agency costs in relation to the illustration in Figure 1. In this illustration the CEO negatively reciprocates because he

perceives that both incentive alignment and monitoring mechanisms are unfair.

At the other extreme, one outcome from principal-agent exchanges that is unrecognizable using an assumption of narrow self-interest is the possibility that CEOs will put forth greater than expected effort or seek to reallocate more material value to the firm than otherwise expected. Under the assumption of bounded self-interest, a CEO who perceives that the board has exceeded the relevant norm of fairness in the positive direction will positively reciprocate. The result of this positive reciprocation could be that the firm realizes more value than expected ex ante ($\text{Actual } (V - C) > E(V - C)$).

We hold that CEOs are like all other employees (i.e., humans) in that, under certain conditions, they can and do perform extra behaviors that benefit the firm in ways unanticipated by rational, narrow self-interest. The fact that employees sometimes put forth greater effort than stipulated in their labor agreements is evident in several relevant literature streams. Wowak and Hambrick (2010) explained that the executive compensation literature regularly links pay arrangements to varying levels

FIGURE 2
Negative Reciprocity and Exacerbated Agency Costs



of executive contribution (more on this in the Discussion section). In industrial-organizational psychology, researchers have considered the antecedents and performance effects of organizational citizenship behaviors (OCBs). According to Bergeron, "These behaviors normally exceed the minimum role requirements of the job, they are not easily enforceable, and performing them is usually at the discretion of the individual," and they include such activities as "volunteering for additional tasks, orienting new employees, offering to help others accomplish their work, and voluntarily doing more than the job requires" (2007: 1078). Coyle-Shapiro et al. (2004) showed that perceptions of procedural justice are positively associated with OCB.

Labor economics studies also show that when an employer compensates an employee at a level above the employee's reservation wage, the employee positively reciprocates by putting forth greater effort than expected or contracted (Akerlof, 1982). Organizational justice researchers have also noted this phenomenon. Greenberg (1988), for example, found that managers boosted their performance when they were unexpectedly moved to a higher-status office. Figure 3 provides an illustration of the concept of positive reciprocity leading

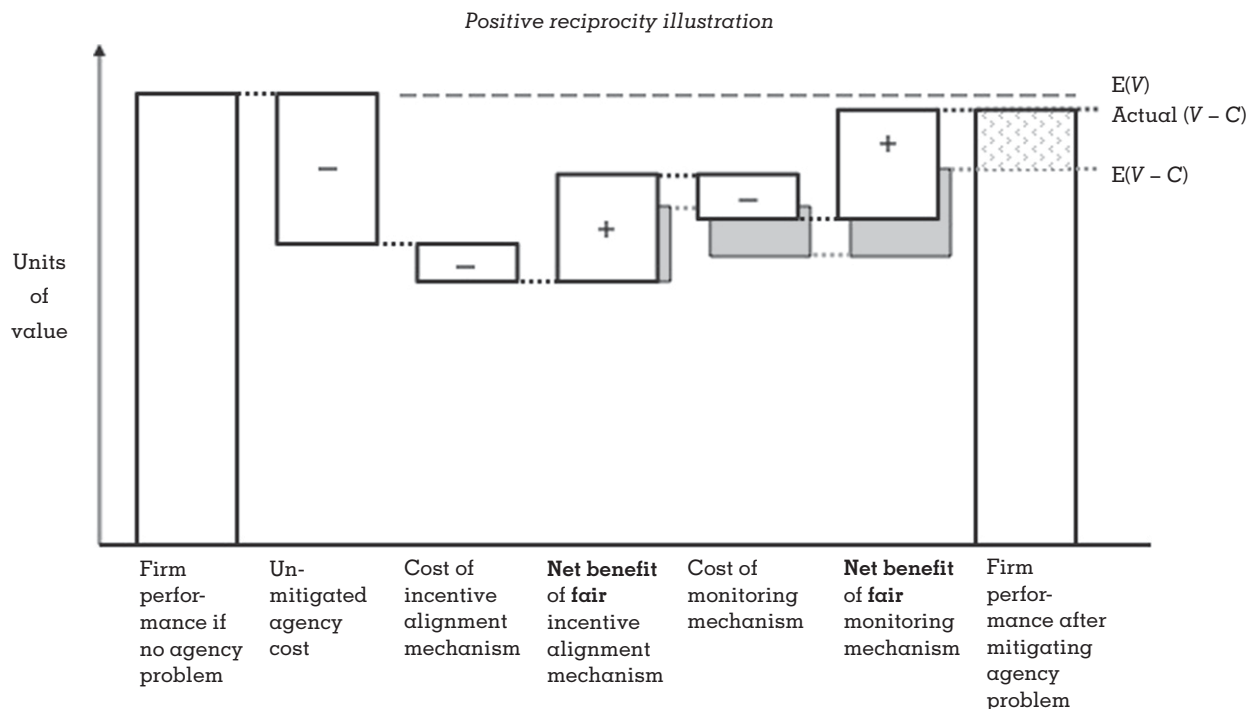
to agency benefits. In this illustration the CEO positively reciprocates because she perceives that both incentive alignment and monitoring mechanisms are fair beyond her expectations.

In sum, this logic suggests that a CEO will generate additional agency costs or benefits for the firm if her net perception of the justice she experiences in her interactions with the board is below or above her expectation, respectively. A CEO's perception of fairness partially mediates the effects of agency theoretic interventions accounting for a significant proportion of the variance in firm performance that is associated with the use of incentive alignment and monitoring mechanisms. In the next section we develop detailed propositions that explain how specific types of fairness are linked with the primary mechanisms prescribed by agency theory and how they mediate the relationship between effective mechanism use and firm performance.

Incentive Alignment, Perceptions of Justice, and Firm Performance

Agency theory, as described above, proposes that boards counteract the effect of diverging

FIGURE 3
Positive Reciprocity and Agency Benefits



interests by structuring the contract in a way that aligns the CEO's material interests with those of the firm. Material outcomes are assessed by boundedly self-interested CEOs against their expectations for distributive justice. As explained by Wiseman and Gomez-Mejia (1998: 138), aligning incentives typically requires the compensation committee of the board (1) to allocate the executive's compensation scheme among fixed and variable components, (2) to design the variable (performance-based) component, (3) to set a performance target on which to base the variable component calculation, and (4) to select measures for evaluating the performance. The CEO may perceive all four of these components as more or less fair than expected. For example, Fong et al. (2010) found that in public firms controlled by a dominant shareholder, CEOs who perceive they are unfairly underpaid (distributive injustice) relative to other CEOs in similar conditions will negatively reciprocate by withdrawing from the firm or seeking to increase the size of the firm (empire building), often at the expense of the firm, in an effort to increase their own rewards.

Incentive alignment mechanisms can, alternatively, exceed the CEO's expectation for distributive fairness. For example, a CEO who recognizes that an incentive alignment mechanism will result in personal wealth exceeding that of her peer group will be motivated to positively reciprocate. Fong et al. (2010) found that in public firms controlled by a dominant nonexecutive shareholder and in public firms in which the CEO is the dominant shareholder, CEOs who perceive they are overpaid relative to other CEOs in similar conditions will positively reciprocate in ways that increase firm profitability. Thus, we propose the following.

Proposition 1: The CEO's perception of distributive justice mediates the effect of an incentive alignment mechanism on firm performance.

Another facet of the perceived fairness of an incentive alignment mechanism is whether the executive has voice in the process through which material outcomes are allocated. CEOs compare the process through which the compensation committee of the board designs incentive-based compensation policies and the process through which the outcomes are determined against their expectation for procedural justice. When CEOs perceive that the process for establishing the performance target for their variable

compensation is based on firms that are not similarly situated or constrained or is pegged to measures outside of the executive's control, they may reduce effort or even resort to duplicity in order to realign their perceptions of fairness. For example, CEO pay can be aligned with the firm's interests through annual adjustments or long-term contingent mechanisms like stock options. Which approach is used, however, matters. Finkelstein and Hambrick (1996) concluded that the use of long-term contingent compensation plans does not improve firm performance, while Sanders (2001b) showed that the alternate choice to align incentives via year-end pay adjustments does improve firm performance. Viewing these findings through the lens of bounded self-interest reveals a plausible explanation based on CEOs' perceptions of procedural fairness: CEOs prefer to have their variable compensation decided by board members with whom they can negotiate or driven by accounting-based performance measures that are more subject to their own control (although sometimes to the point of abuse through "managed earnings") than market-based measures (Wiseman & Gomez-Mejia, 1998).

Incentive alignment processes perceived as fair beyond expectations trigger positive reciprocity from executives. Thus, we propose the following.

Proposition 2: The CEO's perception of procedural justice mediates the effect of an incentive alignment mechanism on firm performance.

Monitoring, Perceptions of Justice, and Firm Performance

The expected effect of monitoring in agency theory is to make the CEO's behavior more productive for the firm by making it more observable. To establish a monitoring mechanism, members of the board (often those serving on the board subcommittees—more on this below) must (1) establish criteria for evaluating the CEO's behavior and (2) assign a direct supervisor to observe and evaluate the CEO (Wiseman & Gomez-Mejia, 1998). CEOs assess these activities and their implementation against their expectations for distributive and procedural justice.

Monitoring does not always make CEOs more productive, however. Under the bounded self-interest assumption, CEOs respond positively or negatively to the board's monitoring based on

a comparison between their expectations and their perceptions of fairness. For example, conscientious executives who expect to experience a drag on their productivity in order to comply with an excessively time-consuming or unnecessarily bureaucratic board may require higher pay to reestablish distributional justice. Hoskisson, Castleton, and Withers (2009) argued that more intense monitoring mechanisms (such as board independence and separating the CEO from board chairperson duties) lead CEOs to demand higher compensation, which, in turn, drives even more intense monitoring, and so on, in a cycle of negative complementarity. The cycle they describe fits neatly into the logic of bounded self-interest—that is to say, when CEOs perceive they are being treated unfairly, they exacerbate the agency problem by seeking to reestablish justice.

Under the bounded self-interest assumption, monitoring can also be perceived by CEOs as distributionally fair beyond their expectations, thereby stimulating positive reciprocity. For example, a CEO might credit the board for observing and acknowledging beneficial behaviors that would otherwise go unnoticed and therefore unrewarded. This would be recognized as an unexpected improvement in distributional outcomes. Thus, we propose the following.

Proposition 3: The CEO's perception of distributional justice mediates the effect of a monitoring mechanism on firm performance.

The procedural justice of a monitoring mechanism is also evaluated by the CEO. CEOs who perceive that the board is inaccurately capturing their true effort or contribution may conclude that the monitoring mechanism is procedurally unfair. For example, Zajac and Westphal (1994) showed monitoring efficacy to be limited by decision-making complexity. It is likely that monitoring in a context of complex decision-making processes gives rise to greater ambiguity and asymmetry in expectations and, hence, greater opportunity for divergent expectations of fairness between the board and CEO.

A CEO might find that a certain monitoring mechanism makes the related decision-making processes fairer than expected because it improves the quality of information on which decisions are based. For example, the CEO who is invited to also assume the board chair position where these two roles have historically been separate might see this

as a procedural sign of confidence. Conversely, the threat to CEO recruiting from micromanaging hedge fund-selected boards has been used as a rationale against takeovers (e.g., Darden Restaurants used this rationale in arguing against Starboard Value in 2014). A board that eschews "micromonitoring" may be perceived as fairer than expected by a CEO steeped in standard agency theory's prescriptions for limited discretion (Shen & Cho, 2005). If the CEO earns wider praise or respect because of the monitor's findings, the perception of additional fairness could be a positive influence on his or her effort.

In proposing solutions to the cycle of negative complementarity uncovered in their study, Hoskisson et al. (2009) suggested that boards (e.g., the audit committee) and CEOs might cooperate on the design of the monitoring mechanism so that both parties can establish trust in each other. In another study Westphal (1999) found that CEOs and board members cooperate more—and generate performance gains—when they have more social ties binding them together. This is seemingly contrary to the board independence hypothesis of agency theory. We speculate that if a CEO's perceptions of procedural fairness were measured, favorable perceptions of fairness likely would stimulate positive reciprocity and, ultimately, agency benefits. Thus, we propose the following.

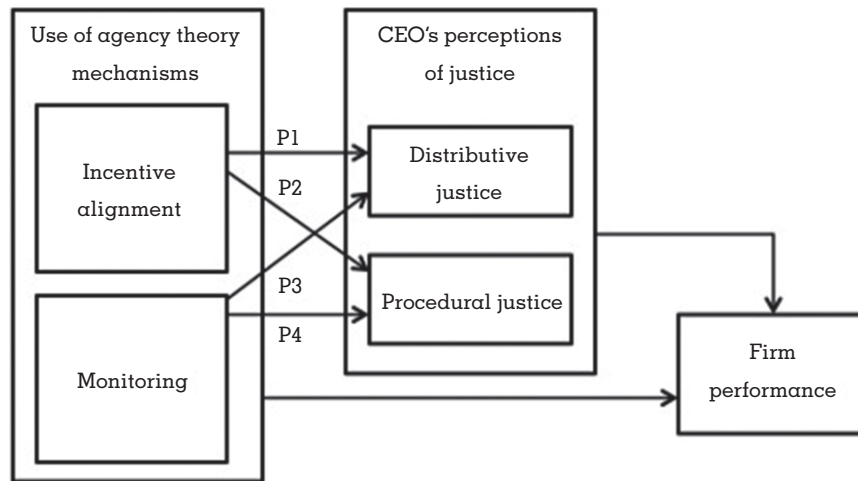
Proposition 4: The CEO's perception of procedural justice mediates the effect of a monitoring mechanism on firm performance.

In sum, Figure 4 illustrates the partially mediated model proposed here. A board uses incentive alignment and monitoring mechanisms to influence and guide the CEO's behavior. The CEO's perceptions of how fair those mechanisms are in terms of both distributive and procedural justice motivate the CEO to reciprocate in ways that partially mediate the effect of those mechanisms on firm performance. There is no reason to believe that the effect sizes among the four mediators will be equal. Sometimes CEOs negatively reciprocate, which negatively affects firm performance, all else being equal, and sometimes they positively reciprocate, which positively affects firm performance.

DISCUSSION

To this point, simplicity and parsimony have been the touchstones for the description of agency

FIGURE 4
Agency Theory Partially Mediated by the CEO's Perceptions of Justice



theory with bounded self-interest. This is not to say, however, that there are not complexities that both underlie and result from this modest adjustment of assumptions. Below we elaborate on some of these complexities.

Bases of Comparison

For agency theoretic and scientific prediction purposes, the ideal would be an objective *ex ante* metric of fairness. Using such a measure, scholars and practitioners could simply include distance from the ideally fair distribution as an additional consideration that could then be included in an optimization function, along with other agency costs and the costs of their mitigation (i.e., incentive alignment and monitoring), and subsequently economized. Or, with knowledge of the independently just outcome in hand, a procedure could be determined that would lead to that result—what Rawls (1971) calls “perfect procedural justice.” However, both what counts as a fair distribution and the costs this will create are a function of the perceptions and expectations of the parties to the joint effort.

This same challenge has bedeviled the assumption of narrow self-interest for economists. Attempts to include other-regarding interests as part of a self-interested utility function have resulted in rhetorical combinations of self-contradiction and tautology in turns. One response has been to assume that whatever an actor does *must* have resulted from self-interest

(very broadly defined). This rather tightly circular reasoning (people act from their narrow self-interest, but this narrow self-interest can include anything that interests a “self,” ergo whatever the self does must have been self-interested, QED) means that it is empirically impossible to observe an action that was not self-interested. Rather than engage in such rhetorical gymnastics concerning ideals of fairness, we must be content in the knowledge that fairness is perceptual and intersubjective.

Fairness, like beauty, is in the eye of the beholder. All that is required for positive and negative reciprocity to alter agency theoretic predictions is that the agent perceives an (un)fair distribution. Generally speaking, such perceptions are not derived from an *a priori* ideal of what is deserved (cf. Rawls, 1971) but result, rather, from expectations created by observations. Agents’ expectations are affected by, among other things, their perceptions of contributions to the joint effort and compensation of comparable others, experiences in prior exchanges with the principal, experiences in exchanges with other principals, experiences serving as principals themselves, knowledge of other agents’ experiences in exchanges with the principal (i.e., reputation), beliefs about the operative basis for fairness, and so forth. In short, fairness perceptions are intersubjective. Because fairness is perceptual and intersubjective—that is, because there is no ideal, formal, or objective basis for what actors will consider fair—we refer

to expected levels of fairness. Because they are intersubjective, fairness and equity perceptions are unavoidably comparative concepts. This raises questions concerning how CEOs establish their bases of comparison.

Standard agency theory simplifies much about the role of the board and the relationship between the board and CEO. The board is, for some, the ultimate monitoring mechanism. The board also plays a role in incentive alignment; however, an important link in the chain of decision making about executive compensation is the role played by the compensation committee of the board. This committee, in turn, is typically advised by compensation consultants who conduct salary surveys of “comparable” executives. This process plays a pivotal role in setting CEO expectations and subsequent perceptions of fairness. While the latter (the advice of compensation consultants) is explicitly comparative, the former (the compensation committee of the board) also invokes equity considerations.

O’Reilly, Main, and Crystal (1988) relied on social comparison theory (an older and broader term for the sorts of social psychological considerations discussed here) to reveal a relationship between the compensation levels of CEOs and that of the members of the compensation committee of the firm’s board. This (among other factors) creates expectations on the part of the CEO that will then serve as the basis for fairness evaluations. What is considered fair compensation among large-corporation CEOs raises eyebrows in nearly every other sector of society. While it may be difficult to accept that CEOs are treated unfairly as a group, the perception of fairness that matters here is the one held by a focal CEO. And his or her perception is likely informed by the input/outcome ratios he/she observes among other relevantly similar CEOs, including members of the board and the compensation committee.

The second consideration concerning CEO bases of comparison is temporal. What is the durability of expectations? While the wider evidence for negative and positive reciprocity as reactions to perceptions of fairness is overwhelming, one might wonder about the durability of these effects in the agency setting. Studies of the “hedonic treadmill” (Brickman & Campbell, 1971; Diener, Lucas, & Scollon, 2006) indicate that people react to both negative and positive life events by reverting to that level of happiness felt prior to the event. There

may be a similar baseline level of perceived fairness that will influence future perceptions of fairness—hence the effects of bounded self-interest—over time. Will negatively or positively reciprocal effects diminish or intensify over time as once novel situations become normalized? Does “more than expected” become “expected,” with a concomitant diminution of additional effort? Do feelings of negative reciprocity (e.g., vengeance) normalize or intensify over time? Will other psychological tendencies (e.g., self-serving bias, attribution error) mitigate or confound expectations? These effects and others on agency theoretic mechanisms and interventions become quite tractable using the lens of bounded self-interest.

Assumptions Regarding CEO Effort and Firm Performance

One unstated assumption of agency theory that is, arguably, intensified in importance when invoking bounded self-interest is that there is a significant positive relationship between CEO effort and firm performance. We are sensitive to the controversial nature of this assumption. Some have suggested that executives actually make very little (positive) difference in firm performance, subject as they are to the controlling powers of environmental forces, external stakeholders, and, notably, their own self-interest (for recent discussions see Phillips, Berman, Elms, & Johnson-Cramer, 2010, and Shen & Cho, 2005). Shen and Cho (2005) characterized managerial discretion specifically in agency theory as largely harmful to firm performance because of the narrow self-interested opportunism critiqued here. For our current purposes we assume that CEOs are able, in fact, to affect firm performance—potentially for the better.

Along similar lines, we also assume that greater effort toward achieving firm goals leads to better firm performance. Again, this connection is itself mediated by such things as ability,⁴

⁴ The relationship between and among effort, ability, and fairness is a complicated one and one that may create frequent disagreements between agents and principals. How much reward is due to someone who presides over times of broader economic growth compared to another who is able to minimize losses during a downturn implicates different ideas of skill and effort and what rewards are due to each. Similarly, we see examples where an executive is given a retention bonus to prevent his or her departure from a failing company—a failure over which the executive presided. Such complications are among the reasons we emphasize perceptions of justice.

a common mutual understanding of the goals of the firm, the ability to measure performance in an accurate, valid manner, and so on. Again, for the sake of simplicity, we assume that effort typically leads to desired, agreed upon, and measurable results, other things being equal, and vice versa (i.e., lower effort leads to lower performance).

Finally, we assume that, for the most part, achievement of firm goals is beneficial for social welfare. This is perhaps the most controversial of our assumptions. Critiques of for-profit business simpliciter are legion (e.g., Bakan, 2005, who argues that the modern corporation itself exhibits all of the clinical definitions of psychopathy). We assume here that in a well-ordered, relatively free society (Rawls, 1971), characterized by a functioning and generally democratically established legal system, most of the goals of most corporations at least do not *harm* social welfare. We further assume that most corporations are a reflection of the basic human rights of free association and property and that they produce goods and services that are generally consistent with the aggregate desires of those affected by them. Again, although controversial, a critique of this assumption is beyond the bounds of the current study.

Summarizing the assumptions about the chain of logic from CEO performance to social welfare, (a) managers matter, (b) level of managerial effort varies, (c) level of effort affects firm performance, and (d) better firm performance increases social welfare. If any one of these assumptions is false, this will represent additional limitations. We turn now to a more general discussion of how a better understanding of bounded self-interest improves social welfare.

Bounded Self-Interest and Social Welfare

Aggregate social welfare is improved through the division of labor and through specialization of the sort engaged in by agents and principals. Much of agency theory concerns how the spoils of this joint production are allocated, rather than how much is created (Blair & Stout, 1999). These aggregate social gains are, in turn, diminished in the amount of the costs of enforcing particular distributions. Strictly speaking, total welfare is not destroyed by narrowly self-interested behavior itself; value is merely reallocated—from principal to agent, or vice versa. Changes in aggregate social welfare arise from the

deployment of assets in service of this reallocation and in the efficiency of the mechanisms used for this task. First and foremost, a better understanding of these mechanisms and the bounded self-interest underlying them will render their functioning more efficient and, hence, less costly.

Additionally, with an understanding of positive reciprocity and the chain of reasoning suggesting that CEO effort improves performance, incentive alignment and monitoring mechanisms have the potential to improve aggregate social welfare by creating agency benefits as well as agency costs. Conversely, and perhaps more enduringly, the loss of social welfare where perceptions of unfairness prevail can be much more severe and may even include actual destruction of value. Negative reciprocity includes accounting for irrational, non-self-interested, "costly punishment" (revenge) behaviors. Revenge for perceived unfair treatment at cost to the agent is irrational and so assumed away by narrow self-interest. Not only is such costly revenge behavior commonly observed bilaterally but often others will act to punish third parties for perceived violations of fairness (Fehr & Gächter, 2000).

This is not a mere reallocation of social welfare but, rather, an actual destruction of value from the moment an agent expends resources to avenge a perceived injustice against him/herself or others to the time when the principal's welfare is damaged by this expenditure. In sum, the widely observed destruction of social welfare in response to perceived unfairness is not only unaccounted for under the assumption of narrow self-interest but is, in fact, assumed away because of its irrationality. Inclusion of bounded self-interest recognizes this prospect and allows for its inclusion in cost-economizing efforts.

Finally, perhaps the most compelling way that moving from narrow to bounded self-interest in agency theory advances the cause of social welfare is by—theoretically and practically—simply getting out of our own way. The self-fulfilling nature of assuming narrow self-interest is well established. And efforts to untie the Gordian knot of social welfare in a world of narrow self-interest are legion, occasionally even heroic. Our approach is simply getting out of our own way. Much of the obstacle to greater efficiency, reduced agency costs, and improved aggregate social welfare is of our own creation. Ceasing to be overly concerned about narrow self-interest

could reduce the cost of trying to prevent its manifestations.

We should recall also the self-fulfilling tendencies of assuming narrow self-interest. CEOs who have internalized the assumption that everyone always acts in their own narrow self-interest will be more likely to commit fraud and more vigorously game compensation systems because of a belief that others are acting in precisely this way in implementing these very systems.

Agency theory, standard or with bounded self-interest, is not about completely eliminating fraud or the gaming of compensation systems. It is about economizing on the total costs of agency losses and the mechanisms designed to eliminate them. To the extent that fairness-sensitive agency interventions are more effective than those that ignore these perceptions, total costs to principals are reduced.

Probable Effects of Bounded Self-Interest on Prior Empirical Studies

Bounded self-interest provides a compelling explanation for recent findings that challenge the logic of standard agency theory. While it would be impossible to profile how this new logic would support all of the prior empirical studies of agency theory had they measured the construct "CEO's perceptions of distributive [or procedural] fairness," we provide selected examples here for both incentive alignment and monitoring studies.

Incentive alignment mechanisms sometimes prompt CEO behavior that hurts firms' fiduciary interests. Harris and Bromily (2007) found that CEOs who are compensated with more stock options and whose firms are performing below their peers are significantly more likely to misrepresent their firms' financial position. Misrepresentations lead to restatements, and restatements linked to aggressive accounting practices precede an average decline in market value of 18 percent (General Accounting Office, 2003). Zhang, Bartol, Smith, Pfarrer, and Khanin (2008) similarly found that CEOs possessing more stock options are the most likely to manipulate earnings when their firms are performing relatively poorly (resulting in more out-of-the-money options). Viewed through the lens of bounded self-interest, these situations likely include CEOs whose perception of distributive justice is low compared to what their peer CEOs receive. This

raises the likelihood of increased agency costs (e.g., accounting manipulation) in our model. If in either of these studies the researchers had measured either or both types of CEO perceived justice, we expect this would have mediated the relationship between the incentive alignment mechanism and the firm's performance, thus adding to the explanatory power of our revised agency theory.

One might also see fraud and options gaming as perfectly consistent with standard agency theory and narrow self-interest. The question we raise is "Can agency theory with bounded self-interest do a better job of mitigating agency problems and economizing on the total costs to the principal, thereby improving aggregate social welfare?" For example, to what extent is fraud partially justified or rationalized in the agent's mind by perceptions of unfairness? Could stock options be more effective at interest alignment and agency cost reduction if accompanied by an awareness of the mediating role of fairness in their evaluation by agents? The fact that options did *not* have the intended effect is evidence some important element is missing from standard agency theory.

Narrow self-interest also struggles to explain repricing options as a matter of monitoring. It was the board that approved such repricing. As the practice became more and more common (as evidenced by the transparency of its use), it ultimately became a matter of equity between CEOs of different firms. We would anticipate that perceptions of fairness played a role in justifying the decision to reprice.

Looking further at monitoring, separation of the roles of CEO and board chair is among the more commonly researched CEO monitoring mechanisms. Standard agency theory logic suggests that firms underperform when the board assigns the CEO and board chair roles to the same person (CEO duality), because an agent cannot effectively monitor him/herself. A popular counterargument is that CEO duality provides unity of command that supports stronger leadership (Fayol, 1949). Dalton et al. (1998, 2007), however, reported that there is insufficient support in the empirical literature for a negative relationship (agency theory) or positive relationship (unity of command) between CEO duality and firm performance.

Recent research in which scholars looked more closely at the process of separating these roles

provides insight about the potential for finding the mediating role of CEO perceptions of fairness in agency theory. One alternative when separating the CEO and board chair is to keep the current person in the CEO role and appoint a new chair to oversee the CEO. Krause and Semadeni (2013) refer to this as a demotion separation and show that when the CEO of a high-performing Fortune 1000 firm is demoted this way, firm performance decreases about 42 percent the next year. The opposite separation process, where the person remains chair and a new person is brought in as an apprentice CEO, has no such performance impact. We suggest that a high-performing CEO who is forced out of the chair role through demotion is likely to perceive a procedural injustice that violates his or her expectation of how decisions would get made and therefore is likely to negatively reciprocate, resulting in lower firm performance. Alternatively, the chair who is provided an apprentice CEO is not as likely to perceive an injustice.

Limitations

We have used the context of CEO compensation as our sample case because it is among the most frequently addressed in studies of agency theory. However, not all of the findings used to motivate this theorizing are taken from this context. The agency theoretic studies we examined concern CEOs, but those about fairness more generally do not (indeed, this is among our contributions here). We have suggested that concerns with fairness are widely generalizable to human behavior. It has been suggested,⁵ however, that the context of CEO compensation may be unlike others. It is an interesting, provocative, and somewhat troubling suggestion. Is there reason to believe that CEOs or boards care less about fairness than the general population? Some have even suggested that the population of CEOs may contain a higher proportion of clinical psychopaths (Babiak & Hare, 2006; Ronson, 2011) than the general population. We do not report this to be trite, and, to our knowledge, there are insufficient credible data to back up this speculation. But if CEOs are, in fact, more likely to be clinically psychopathic, we would expect fairness concerns to play a lesser

role in the context described here. This represents a potential limitation of the theory.

Another possible limitation is that perceptions of unfairness may merely correlate with increased agency costs (e.g., fraud and options manipulation), rather than cause them. That is, it may be that CEOs feel a cognitive need to rationalize their behavior through some socially justifiable norm such as fairness. Future research could analyze this question with an eye toward establishing causality. Depending on those findings, as a means to improving social welfare, such rationalization could be used as a lever for critical evaluation of CEO compensation. In other words, if narrow self-interest is a self-fulfilling assumption, could bounded self-interest prompt greater awareness of justice considerations?

There are numerous sources of additional complexity that we intentionally ignored here for the sake of simplicity and theoretical parsimony. These also represent potential limitations. Among them are varieties of equity structure, culturally disparate reactions to perceived unfairness, and gender differences in such reactions. Regarding equity structure, researchers have examined deviations from standard theory based on whether a firm is closely held, family owned, or has a dominant shareholder, among others. Such deviations may also mitigate the simplicity of the model.

Similarly, there may also be cross-cultural differences in the intensity of reactions to injustice and violations of reciprocity (Nisbett & Cohen, 1996). While every culture has norms of fairness and reciprocity, how powerfully they are enforced may present a limitation on the strength of mediation. This may manifest specifically in the structure and interactions of international systems of corporate governance. There may also be gender effects on the parts of both board and CEO that influence the strength of the mediating effects.

While the role of the agent is generally more important than that of the principal in determining firm performance, the principal's expectations of fairness have been underemphasized here. The bounded self-interest assumption applies to all actors, as part of a complex system of interactions, not just to agents. The modifications to agency theory proposed here align with the view of firms as systems of complementary arrangements that serve to mitigate conflicts (Holmstrom & Milgrom, 1994).

⁵ By, among others, an anonymous reviewer of this manuscript.

Finally, the literature on the psychology of fairness and justice has grown quite extensively in recent years, including attention to two new forms—interactional and informational—and presents nuance well beyond the model presented here. We would expect this additional nuance to become better integrated over time as these findings are consolidated in ways that permit the sort of simplicity agency theory has historically demanded.

Future Research

Milton Friedman famously claimed that

the relevant question to ask about the “assumptions” of a theory is not whether they are descriptively “realistic,” for they never are, but whether they are sufficiently good approximations for the purpose in hand. And this question can be answered only by seeing whether the theory works, which means whether it yields sufficiently accurate predictions (1966: 15).

Contrariwise, Tsang (2006) argued that the behavioral assumptions underlying strategy theories can be—in fact, need to be—tested for empirical accuracy (cf. Lam, 2010). Tsang’s (2006) argument applied to agency theory is that scholars need to explain and test how incentive alignment and monitoring actually change agents’ behavior. It is not enough to test agency theory by measuring the presence of these mechanisms and regressing them on firm performance, because the theory hinges on the assumption that agents are exclusively self-regarding in all situations. Our arguments—that agents are boundedly self-interested—imply that future empirical studies of agency phenomena might effectively borrow research methods from studies in labor economics, organizational justice, and corporate governance (e.g., Fong et al., 2010; Wade et al., 2006) to measure the mediating effects of CEOs’ perceptions of fairness.

Following Cohen et al. (2007), an interesting extension of bounded self-interest would be an examination of CEOs’ willingness to execute orders perceived as *ex ante* unfair. Using the terms derived here, would CEOs require additional incentives or monitoring to assure execution of orders perceived as unfair? Would additional dissonance arise for CEOs in executing such orders, and how might this manifest?

Thus far, the discussion of replacing narrow self-interest with bounded self-interest has been largely analytical in nature. That is, we propose

ways in which empirical findings about firm performance could be made more robust with the addition of a mediating variable. However, this analysis has some reasonably clear prescriptive implications as well.

As a matter of instrumental (if/then) prescription, there are implications of fairness mediation on questions of corporate governance. While incentive alignment and monitoring remain the key mechanisms for addressing agency problems, the content of these mechanisms will be significantly affected by the new assumption. In short, if boards wish to improve the chances of success of their incentive alignment and monitoring, they would be well-advised to consider how these mechanisms will be received and perceived by their CEO.

As a matter of normative (moral) prescription, fairness has received extensive and sustained attention in the corporate social responsibility literature and stakeholder literature (Aguilera, Rupp, Williams, & Ganapathi, 2007; Phillips, 2003). There have also been increasing calls to better assimilate agency theory with these bodies of literature, including some successful and influential ones (e.g., Hill & Jones, 1992). These calls have prompted Dalton et al. to write:

In addition, we readily concede that one might properly regard agency theory and its mitigations as a subset of broader literatures (e.g., corporate social responsibility, shareholder value maximization/stakeholder theory, stewardship). We also accept the responsibility for our perhaps overly targeted focus on that subset. On that point, however, both the dominance of agency theory as a theoretical perspective over the last approximately 70 years and the extensive research grounded in its tenets have guided us. Even so, there are common attributes of agency theory and its mitigations and the broader lens of corporate social responsibility that are notable. With each, the empirical evidence is unconvincing, the debates concerning the adequacy of empirical protocols continue, and the search for moderators/mediators is unabated (2007: 35).

While maintaining a similar “perhaps overly targeted focus,” we are optimistic about the prospects for a theoretical joining of forces among perspectives such as agency theory, corporate social responsibility, and stakeholder theory, with bounded self-interest providing a keystone in this conceptual bridge.

After the initial propositions of the new theory are tested in several settings, scholars might examine possible interactions between the two

types of justice used here or expand the examination to additional dimensions of justice that might be perceived by CEOs, such as interpersonal and informational justice. Following the direction taken in the organizational justice literature, the targets of CEOs' reciprocative behaviors might be examined, with possibilities including some person (e.g., a board member) and a collective as a whole (e.g., the firm). Finally, future studies might test the influence of other top executives' pay on the expectations of CEOs (Wright, Kroll, Lado, & Elenkov, 2005).

CONCLUSION

In the same essay quoted above, Milton Friedman went on to write:

As we have seen, criticism of this type is largely beside the point unless supplemented by evidence that a hypothesis differing in one or another of these respects from the theory being criticized yields better predictions for as wide a range of phenomena. Yet most such criticism is not so supplemented; it is based almost entirely on supposedly directly perceived discrepancies between the "assumptions" and the "real world" (1966: 31).

Past critiques of agency theory (and economics more generally) have tended to criticize inaccurate assumptions without considering important questions of parsimony or proposing superior alternatives. Our contribution navigates the narrow (but growing) space between realism and parsimony. Agency theory with bounded self-interest renders more accurate predictions of the effects of agency theoretic interventions while continuing to make those predictions scientifically and mathematically manageable.

Bolstered by an overwhelming tide of evidence from a variety of disciplines, we argue that the bounded self-interest assumption provides a more accurate lens for explaining the ubiquitous agency problem among firms and their CEOs than the pure self-interest assumption, and it is both parsimonious and general enough to provide more accurate predictions. Our logic suggests that treating CEOs unfairly can produce costly outcomes that have, until now, been under-anticipated in agency theory. Perhaps more surprising, the agency benefits we define that result from treating CEOs in ways they perceive as exceptionally fair, beyond their expectations, are an entire category of outcomes that standard agency theory has not, until now, explained.

The call for papers for this special topic forum asked, "Have applications of agency theory led to improvements in social welfare? Or can theories based on less pessimistic assumptions about human behavior—that is, other than opportunism—help us develop theory better able to advance social welfare?" By ignoring costly revenge behaviors and the potential for agency benefits, agency theory's assumption of narrow self-interest not only miscalculates social welfare but may, in fact, reduce it through normatively prescribing⁶ practices and arrangements that motivate social welfare-reducing behaviors. Moreover, and more constructively, if boards and those advising them and negotiating on their behalf consider the positive effects of unexpected fairness, they can structure relationships with top executives so as to take advantage of agency benefits and minimize unfairness-related agency costs.

Making the assumption of bounded self-interest a part of agency theory provides something Ghoshal (2005) sought—an optimistic assumption about human behavior (positive reciprocity) that simultaneously allows for the seemingly untoward behavior we know exists (negative reciprocity; see also, Lubatkin, Ling, & Schulze, 2007).

The modest reconceptualization envisioned here might ultimately help to break the pattern through which the use of the pure self-interest assumption in management theories stimulates purely self-interested behavior in firms (e.g., Miller, 1999). Our logic assumes that all agents are not purely self-interested actors determined to grab a larger slice of pie at the expense of all principals. Some agents might act in a way that leads principals to think this only because the principals are unaware of the unfairness they unwittingly impose on the agents. As Andrews wrote, "Personal values, aspirations, and ideals do, and in our judgment quite properly should, influence the final choice of purposes. Thus, what the people in a company want to do must be brought into the strategic decision" (1987: 19).

The combination of ceasing pessimistic, unflattering, psychologically unrealistic, and self-fulfilling assumptions about human behavior and replacing them with more optimistic, realistic, aspirational, and scientifically founded assumptions

⁶ As Donaldson points out, "What is notably different about agency theory, in contrast to TCE, is its unabashed use of explicitly normative language from the outset" (2012: 262).

creates space for business to become the social welfare-maximizing institution it is capable of being.

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