Casting Call: The Social Construction of Firms as Actors, 1960-2010

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Abstract:

Organizational scholars today routinely refer to firms as “actors.” In contemporary uses, the term conveys identity, sovereignty and the capacity for purposive action. Understood in this way, the conceptualization of the firm as a social actor is significant in that it diverges from descriptions of the firm as, for example, a “legal fiction” that is the aggregation of individual interests via a web of contracts or a vehicle for powerful owners to achieve their goals. In this paper, we draw on a content analysis of 300 annual reports from a sample of 80 large U.S. public firms to examine changes in the nature of actorhood among businesses between 1960 and 2010. We find that firms increasingly depict themselves as entities with values, agency and responsibility for societal issues, all of which are consistent with modern notions of actorhood. This transformation corresponds to broader processes in society, such as the trend towards managerialism and the explosion of hard and soft law. Overall, we show that institutional pressures do more than provide a set of institutional constraints for “embedded agency”: More fundamentally, cultural shifts constitute firms as actors. They become constructed as autonomous entities that are neither entirely passive conduits for broader environmental trends nor solely an aggregate of the interests of the individuals that own or inhabit them.

Keywords: actors, organizations, managerialism, cultural rationalization, agency
It is an unexpected twist of history that today we routinely discuss firms as coherent social actors with an autonomous “self.” Although legal decisions dating back to the 19th century granted corporations many of the same rights and protections afforded to individuals, firms were not typically envisioned as independent actors *per se* in the sense that the term is used today. They were contexts for action or instruments for achieving owners’ goals and interests, which have been variously described along a spectrum ranging from benevolent to dangerously selfish (Gomory and Sylla 2013). Skeptics argued that corporations were tools of powerful elites that would subvert the public good (Mills 1956) or result in the stifling of individual creativity and innovation (Whyte 1956). Proponents argued that corporations provided the optimal structure for raising capital (Gordon 2004), managing production (Trachtenberg 2007), or minimizing transaction costs (Coase 1937; Williamson 1981). In these views, firms were vehicles for serving other masters; they did not possess an essence of their own. More recently, however, scholars have proposed that firms increasingly act and are treated as social “actors” in their own right, rather than being mere contexts for action or tools for achieving the goals of owners (see, e.g., Strandgaard Pedersen and Dobbin 1997; King, Felin and Whetten 2010; Meyer 2010). In this paper, we provide rare empirical evidence documenting firms’ increasing displays of characteristics corresponding to the modern notion of actorhood. Drawing on a content analysis of annual reports from a sample of large U.S. public firms between 1960 and 2010, we find that an increase in firms’ depictions of themselves as actors is associated with several cultural shifts, especially the trend towards managerialism and the explosion of hard and soft law. Overall, this study shows that institutional pressures increasingly construct firms as independent entities that are neither entirely passive conduits for broader environmental trends nor solely reflective of the interests of the individuals that own or inhabit them.
The term “actor” is rarely defined (Hwang and Colyvas 2013), but we use it here to denote the possession of several related characteristics: identity, sovereignty, and the capacity for purposive action. Our definition builds on the work of Meyer (2010: 3), who writes: “An actor, compared with a mundane person or group is understood to have clearer boundaries, more articulated purposes, a more elaborate and rationalized technology. An actor is thus much more agentic – more bounded, autonomous, coherent, purposive and hard-wired – than a person.” Somewhat surprisingly, given the widespread use of the term “actor” in reference to firms, there is a dearth of empirical evidence related to the historically situated processes that have over time transformed what it means for firms to be social actors. As Westphal and Zajac (2013) observe, although it is now commonplace to accept that agency is socially constrained by existing institutions, there is less attention to the socially constituted elements of agency, particularly at the macro level. Thus, it bears asking how the meaning of actorhood for firms has changed over time.

Understanding changes in social actorhood among firms is important because, in acquiring the traits of modern actors – bounded, autonomous, purposive entities with distinct identities – companies take on characteristics that are poorly accounted for by the dominant conceptions of the firm. As an example, explanations of pure power or function struggle to account for the rise in corporate responsibility (CR) that has occurred over the past several decades. Explanations rooted in the functionality of CR are unsatisfying because evidence of its financial and/or reputational benefits is mixed at best (Margolis and Walsh 2001). At the same time, power-based accounts, which might explain the rise of CR as stemming from the personal interests of powerful CEOs, are weak; for the rise in CR to be a simple manifestation of growing benevolence among CEOs seems unlikely. Similarly, the study of corporate culture is a
burgeoning area of organizational research. As we show later, firms increasingly emphasize their unique corporate identity, culture, and values. While a distinct corporate culture might have functional benefits, such as eliciting greater commitment and coordination among workers (Kreps 1996, Sorensen 2002), firms’ displays of culture and identity at times seem outsized and intended as much for external audiences as for internal coordination. Seen as actors, however, it makes sense for firms to make displays of corporate responsibility and culture beyond what might be beneficial for the pursuit of financial objectives, such as profit or shareholder value. Although corporations no doubt serve economic purposes and are often used as vehicles of power, these views alone fail to account for the rapid expansion in the complexity and nature of firm structures and practices.1

To empirically examine the changing nature of what it means for firms to be social actors, we analyzed text and images from 300 annual reports representing 80 large U.S. companies over the period 1960 to 2010. Our choice of this empirical approach was driven by both theoretical and pragmatic reasons. First, because annual reports are made for outside consumption, they are part of a symbolic repertoire used to construct identity and convey status as an actor (for a similar approach and rationale, see Glynn and Abzug 2002). These public symbols reveal the socially legitimate position of a firm in society. Following the social psychology of Goffman (1959) and Mead (1934), such symbolism speaks to the essence of being, conveying information about the role an actor is authorized and expected to play in the world. Thus, annual reports are appropriate for studying changes in firms’ construction of themselves actors. Second, annual reports are useful because all public companies are legally required to file them, which allows us to obtain comparable data on a wide range of firms as far

1 Related to our approach, a nascent body of research points to the institutional sources of the elaboration of firm structures, purposes, and practices, often using phrases like institutional pluralism, multiple logics, or competing logics (e.g. Kraatz and Block 2008; Greenwood et al 2011; Thornton et al 2012).
back as a half century ago. Data on annual reports is consistently available from 1960 on, bounding our analysis. Although earlier legal decisions played a key role in establishing firms’ rights and responsibilities as corporate actors, our analyses reveal that significant changes what it means for a firm to be a social actor occurred long after the basic legal rights of corporations had been put in place.

Our examination of firms’ annual reports reveals a dramatic shift in how firms have represented themselves between 1960 and today. Reports in earlier years tended to emphasize production and financials exclusively. Annual reports in later years retain discussions of production, but they also increasingly emphasize financials and corporate responsibility. More generally, the fact that we observe variation in the level of actorhood over time and between companies underscores the fact that actorhood is not fixed or inherent; rather it is better thought of as a process, existing on a continuum involving ongoing enactment. This dramatic change in the depiction of the firm as a social actor corresponds to a larger cultural trend toward rationalization. Shaped by this pervasive shift, audiences in modern, rationalized societies favor firms that display signs of their efficiency, reliability and responsibility, all of which are endemic to the modern notion of actorhood. Thus, displays of modern actorhood rise with various indicators of cultural rationalization, such as the growth in managerialism and an explosion of hard and soft law. These rationalizing cultural pressures redefine the boundaries of firm activity, enabling and requiring attentiveness to a growing range of issues: In short, constituting firms as actors (Meyer and Bromley 2013). These changes permeate companies to different degrees, resulting in variation in the extent to which a firm’s portrayal of itself corresponds to the modern conceptualization of a social actor.
THE MEANING OF SOCIAL ACTORHOOD

As we noted earlier, organizational scholars today often use the term “social actor” to refer to firms in a way that implicitly conveys several related characteristics, especially identity, sovereignty, and the capacity for purposive action. We now discuss these aspects of actorhood in more detail. First, the possession of an identity is a central indicator of status as a social actor (Whetten and Mackey 2002). As Gioia et al (2010) have explained, “No concept is more essential to understanding the notion of a “self” in society than the idea of identity” (p. 46). Organizational identity is constitutive; it embodies the core theory of what the entity can and should do (Whetten and Mackey 2002) or the “essential” character that constitutes an organization (Czarniawska-Joerges, 1994). The possession of an identity, which simultaneously situates an entity in a general category and emphasizes uniqueness, also implies autonomy and defined boundaries (Brunsson and Sahlin-Andersson 2000). That is, for a firm to have an identity or culture that is distinct from other firms, one must assume (in theory, not in practice) sharply defined borders demarcating where the uniqueness begins.

Perhaps most importantly, contemporary actors are, by definition, constituted by their ability to act purposively and autonomously. They make means-ends calculations and behave with intention as they work towards goals (Thompson 1967). That is, action is expected to take a particular form; actors are rational, not erratic or self-destructive (Brunsson and Sahlin-Andersson 2000). An entity that leaves its fate to the gods or acts against its own interests is not an actor—or at least is less of one.

Being an actor in the pursuit of interests, often material and cultural resources, involves a great deal of attentiveness to the external environment (Pfeffer and Salancik 1978). And being a proper actor, as opposed to an irresponsible or amoral one, requires consideration of other actors,
balancing self-interested goals with the interests and capacities of external stakeholders. Consistent with this view, King, Felin and Whetten (2010), argue that the concept of an organizational actor is undergirded by two core assumptions – that of external attribution (i.e., society holds organizational actors accountable and responsible for their actions) and that of intentionality (i.e., organizational actors are capable of purposive action).

In this paper we emphasize how, in becoming proper modern actors, firms increasingly make broad identity claims, highlight displays of internal and external control, and emphasize responsibility to a growing array of stakeholders. A few concrete examples illustrate how these characteristics of actorhood are displayed in annual reports. Baker Hughes, an oilfield service company, describes their “core values of integrity, teamwork, performance and learning” (2010: p. 12). These “core values” are brought up nine times in the report, have been approved by the board, and are elaborated in a one-page discussion, using phrases such as “Integrity: We are a responsible corporate citizen committed to the health and safety of people, protection of the environment, and compliance with laws, regulations, and company policies” (p. 46). In addition to claiming distinctive values and status as a bounded citizen, the report signals responsibility to health, safety, and the natural world, implying the capacity for purposive action on these dimensions.

Similar discourse emerges in a range of industries. Abbott Laboratories, a pharmaceutical company, says, “We view our commitment to global citizenship as another opportunity to improve lives around the world” (2010: p. 36). In their 2010 report Goodrich, a supplier of aerospace components, systems and services to the commercial and general aviation airplane markets, emphasizes abstract principles of firm culture, leadership, and continuous improvement; which connote identity, autonomy, and purposiveness, illustrated in Figure 1.
General displays of being a good corporate actor are so prominent that we gain no sense of what the firm actually produces until page ten of Goodrich’s report. These displays of modern actorhood stand in stark contrast to how firms portrayed themselves in the 1960s, when annual reports emphasized production and financial exclusively.

[Insert Figure 1. Goodrich Annual Report 2010]

**CULTURAL RATIONALIZATION AND THE FIRM AS SOCIAL ACTOR**

We argue that a cultural transformation whereby society has grown increasingly “rationalized” is a major cause of the increasing construction of the firm as a social actor. Weber (1927) used the concept of rationalization to refer to a process whereby means-end (rational) calculation, rather than tradition, values or emotion, was increasingly presented as the driver of and appropriate justification for human behavior. Building upon this definition, Drori, Jang and Meyer (2006: 202) refer to rationalization as “the explicit organization of clearly defined social entities and their roles, relationships, and activities around clear and general rules and toward clear and general purposes.” More specifically, rationalization involves both the systematic expansion of knowledge, and, related, a broadening recognition of a wide range of human rights and capacities (Meyer and Bromley, 2013). Thus, in rationalized societies individuals are assumed to have the capability and responsibility to act in a way that is simultaneously rational or strategic (i.e. based on actual or perceived understandings of available knowledge) and attentive to the empowerment of other individuals (i.e. human rights and capacities).

In parallel, individuals in rationalized societies create collective structures that are intended to reflect the same principles; namely, organizations that are envisioned as autonomous
entities efficiently pursuing their own self-interested goals while attending to pressures from diverse stakeholders (Dobbin, 1994; Meyer and Jepperson, 2000; Drori, Meyer and Hwang 2006, 2009; Meyer 2010; Hwang and Colyvas, 2013). Applied to the business world, processes of cultural rationalization shape what relevant audiences, such as shareholders, customers, employees and regulatory bodies, expect in terms of both the goals that are considered suitable for firms and the means through which firms might pursue them. Accordingly, firms devote a great deal of energy to conveying characteristics that are consistent with the principles of rationalization, doing so by making identity statements, as well as incorporating policies, practices and structures that signal means-ends logic and efficiency, regardless of whether such practices or structures promote the actual efficiency of outcomes (Meyer and Rowan, 1977).

Although the arguments above are core tenets of some variants of neoinstitutional research, scholars across a wide range of research traditions within organizational theory have acknowledged society’s preference for organizations that display characteristics associated with rationalization. For example, population ecologists decades ago posited, “The modern world favors collective actors that can demonstrate or at least credibly claim a capacity for reliable performance and can account rationally for their actions” (Hannan and Freeman 1984: 153).

Three concrete manifestations of the overarching cultural change seem most relevant to the transformation of older organizational structures (e.g., a manufacturing firm organized primarily around an assembly line and oriented toward enriching its owner) into the more socially complex entities we now call “actors” (e.g. a firm organized around theories of finance, human resources, and sustainability and oriented toward the creation of shareholder value). First, schools of management appeared in the late 19th and early 20th century and rapidly proliferated, representing one manifestation of the increasing emphasis on scientific knowledge
and knowledge-seeking that is a hallmark of culturally rationalized society. According to Khurana (2007), business schools arose out of a professional project whereby managers sought to establish their legitimacy, justify their authority, and enhance their social status via claims of knowledge. Creators of the first business schools “succeeded in articulating a new public account of the role of management in society by locating it within three institutions that had recently come to be seen as pillars of this new social order: science, the professions, and the university” Khurana (2007: 49). Professors at the new business schools conducted scientific experiments (e.g., Mayo and the Hawthorne experiments) that began to form the basis for new theories of management, and schools turned out an ever-increasing number of credentialed professional managers. These managers specialized in rationalized decision-making and coordination, in contrast to the older imperative authority of traditional professions or owners at the top of a hierarchy (Presthus, 1962 (1978); Sahlin-Andersson and Engwall, 2002). The traditional professions (e.g. doctors, lawyers, academics) and substantive experts (e.g. industry specialists) come under the influence of these newly minted experts, who are trained in generic managerial knowledge that is assumed to transcend most any setting. Whereas leaders of old-style firms might have been principals, in the economic meaning of the term, in the contemporary firm managers, virtually by definition, balance the interests of many stakeholders more than they exercise raw power. Managerial theories simultaneously advocate attentiveness to the external environment, resulting in the displays of accountability to others that are characteristic of actorhood, while dramatizing managerial abilities to control firm responses (e.g. by planning or through the establishment of organizational culture) and emphasizing the importance of vision and values for organizational performance.
Second, there is an equally striking explosion of law that redefines the boundaries of what an organization can and should do (Schneiberg and Bartley, 2008). Many new laws during the period that we examine pertain to issues of rights and equality, which as we noted above as representing a core tenet of cultural rationalization. These developments in the legal world press responsibility for societal issues onto firms, shifting ideas about what a firm is and should do away from pure financial and production objectives and towards something more like a corporate citizen (in theory if not in practice). Structures and practices within firms, as well as firms’ representations of themselves, change dramatically to incorporate society’s shifting ideas about the appropriate role of firms in addressing these issues. Dobbin (2009), for example, outlines the rise of human resources professionals and the accompanying expansion of activities like diversity training, as well as changes in hiring practices. Mere compliance with legal mandates is not sufficient, however; in order to be viewed as legitimate, firms must also make public displays demonstrating that they have acted responsibly and accountably on these dimensions. These displays, of course, may not reduce actual inequality in society, as Edelman (1992) observes with the rise of Equal Employment Opportunity offices in large firms. One consequence of firms making these displays, however, is that they perhaps unknowingly bolster their status as actors in at least two ways. First, displays of responsibility are consistent with how actors are supposed to behave in the sense of respecting individual rights and upholding principles that are agreed upon as important to society. Second, in a more subtle manner, these displays convey agency and purposiveness, which are hallmarks of modern actorhood, by implicitly acknowledging that firms have some power to influence seemingly intractable outcomes, such as social inequality.

Third, soft-law pressures drive firms to incorporate other matters of general social
concern even beyond the force of hard law. For example, Briscoe and Safford (2008) document the spread of same-sex partner benefits among large firms in the absence of legal requirements and despite the substantial cost of this practice. Sometimes actions such as those occur as firms respond to social movement-like pressures, for example in areas of Fair Trade certifications or overseas labor practices (see, e.g., Bartley, 2007). At times firms may face conflicting pressures from different social-movement organizations, but many of the areas firms display attentiveness to, such as education or housing, are broadly recognized as socially important. Thus, we use the phrase “soft law” very broadly, to include both active advocacy and the generalized moral force of public good organizing. The general point is that firms respond to the overall expansion of social problems where it is expected that humans can find a solution. As the public good domain becomes more organized and less left in the hands of the gods or a centralized government authority, new issues are pressed into firms.

These trends, the expansion of business knowledge, hard law, and soft law, are related in two ways. First, together they can be thought of as stemming from a general process of cultural rationalization (Meyer and Jepperson 2000). Second, the rise of managerialism on the one hand and the growing set of legal and societal obligations that firms face, on the other, are self-reinforcing. As managerial solutions increase in prominence, they are increasingly seen as appropriate for addressing societal issues that once might have been viewed as the purvey of the family, church, or the government, and therefore they find application in a variety of areas beyond traditional production. At the same time, as obligations to address societal issues are pressed on firms, they spur the development and application of new management techniques and even new types of for-profit organizations (e.g., education-related venture funds). Thus, we
propose an overarching hypothesis, with sub-arguments related to specific dimensions of cultural change:

Hypothesis 1: The rationalization of culture is associated with an increase in firms’ portrayals of themselves as modern social actors.

Hypothesis 1a: The expansion of managerialism is associated with an increase in firms’ portrayals of themselves as modern social actors.

Hypothesis 1b: The expansion of hard law is associated with an increase in firms’ portrayals of themselves as modern social actors.

Hypothesis 1c: The expansion of soft law is associated with an increase in firms’ portrayals of themselves as modern social actors.

Although cultural shifts that unfold over time likely influence all firms to some extent, there is variation in how and how much companies are exposed or linked to these external changes. Parallel to our macro-cultural measures of managerialism and law, we consider variations in how attuned each firm is to these pressures in a given year. As discussed, managers are the individuals assumed to exert control and bear responsibility for the organization (Fayol (1949) 1916; Brunsson and Sahlin-Andersson 2000). To the extent a firm celebrates managerialism, it is likely to display more of the characteristics associated with modern actorhood.
Recent research has also extensively documented how both legal changes, in terms of hard laws and the soft law pressures of ratings, rankings, and certifications, provide new avenues of accountability for firms, thereby pressing organizations to become more responsible (Power, 1994; Strathern, 2000; Fombrun, 2007; Dobbin, 2009). But firms vary both in how much they pay attention to these outside pressures, and in how much the external pressures target the firm directly. Whether a firm desires it or not, as legal pressures expand, the dimensions of expected action expand, changing the meaning of actorhood to include responsibility for individual rights. Firms that are more attuned to these pressures respond accordingly in an effort to retain their legitimacy in the eyes of relevant audiences. Again, we propose an overarching hypothesis and more specific sub-arguments:

*Hypothesis 2:* Greater linkages to external cultural rationalization processes are associated with an increase in firms’ portrayals of themselves as modern social actors.

*Hypothesis 2a:* Increased managerialism is associated with an increase in firms’ portrayals of themselves as modern social actors.

*Hypothesis 2b:* Greater attentiveness to ratings, rankings, or awards as well as legal compliance, standards and certifications is associated with an increase in firms’ portrayals of themselves as modern social actors.

**DATA & METHODS**

The Setting: A Short History of Annual Reporting in the U.S.
We examine changes in social actorhood over time using data from 300 annual reports from 80 U.S. firms between 1960-2010. As an alternative approach to documenting the historically situated cultural processes whereby firms came to be constructed as actors, we could have examined court rulings pertaining to corporate personhood. To be sure, a series of legal decisions beginning with the U.S. Supreme Court’s 1819 ruling that corporations had the same contracting rights as persons (Trustees of Dartmouth College vs. Woodward) and culminating most recently with the court’s 2010 ruling that firms have First Amendment rights to make political contributions (Citizens United vs. the Federal Election Commission) have delineated an ever-expanding set of rights afforded to firms. The legal system represents an important venue through which the firm has come to be constructed as a social actor. However, our examination of self-portrayals is advantageous in two regards for testing our theoretical arguments. First, annual reports contain a more nuanced set of indicators of actorhood that an analysis of legal changes would overlook because they are not mandated by law (e.g., displays of corporate culture and identity). Second, firms create annual reports, which underscores the active role that firms take in constructing themselves as actors and in turn shaping the meaning of actorhood. In addition, annual reports are useful for pragmatic reasons; all public companies have been legally required to produce one for a long period of time. Thus, a benefit of this source is that we can gather a relatively comparable sample across many firms over time, versus other data sources that are less widely applicable across firms or represent more voluntary activities.

The reports must, by law, include material financial disclosures. Generally, an annual report includes a balance sheet reflecting changes in the corporation’s financial worth, an income and cash flow statement, and other relevant documentation, all of which must be reviewed first.
by outside auditors. But reports are valuable to us because there is a wide margin for what additional information can be included; firms use them as public relations and marketing tools as well. The content reflects the concerns of numerous stakeholders, including investors, customers, employees, the government, and local communities.

Due to their legal requirements, annual reports are likely biased towards financial emphases. Firms produce a great many other reports and conduct many other activities that convey aspects of actorhood and are not captured by our data. The Coca-Cola Company, for instance, keeps an on-line archive of “Annual and Other Reports” on their website (Coca-Cola Company 2013). This includes their Annual Report, an Annual Review (which highlights major achievements of the year, such as in 2012 winning an award for “Creative Marketer of the Year” and receiving over 1.3 million tweets per quarter), and a total of 81 different Sustainability Reports written for markets around the world. As a result, we likely vastly underestimate the scope of the transformation of firms into actors relative to what we might find in other sources that are less bound by financial reporting requirements (e.g. websites, corporate responsibility reports, or job descriptions).

It is noteworthy that large amounts of time and money go into producing annual reports. A survey by the National Investor Relations Institute (2013) reported that large firms (defined as those with a market capitalization of over $10 billion) spent an average of $81,597 on producing their annual report in 2012, while mega firms (market capitalization of over $25 billion) spent $143,778. Over a third of respondents in their survey noted that the Chief Executive Officer, the Chief Financial Officer, the Investor Relations Officer, and Legal Counsel all played a “significant” role in developing reports. Nearly 80 percent of reports in the NIRI survey include a letter from the Chief Executive Officer (CEO), 71 percent include a list of directors and
officers, many discuss company strategy (41%), market segmentation (28%), or include corporate social responsibility or environmental social and governance information (21%).

Federal law governing financial reporting dates back to the 1930s. In the wake of the market collapse that triggered the Great Depression, Congress created reporting requirements and a mechanism for the public to examine reports about publicly traded companies. The two foundational legal instruments are the Securities Act of 1933, which requires issuers of securities to file financial information with the federal government, and the Securities Exchange Act of 1934, which authorizes the Securities and Exchange Commission (SEC) to act as a regulatory body over the financial industry (Lydenberg 2012). Examination of some of these early reports indicates they were short and rather dry; they were typically just a few pages long, consisting simply of a few tables of financial data.

Overall, there has been a gradual expansion of reporting requirements from the 1960s through the 1990s (Transparency Policy Project 2013). For example, in the 1960s a wave of mergers, followed by a series of unexpected share-price collapses culminated in the Williams Act of 1968, which required disclosure of cash tender offers that would change ownership of more than 10 percent of company stock. In 1978 and 1979, the SEC issued rules requiring new disclosures concerning the independence of board members, board committee oversight of company operations, and failure of directors to attend meetings. Under the Securities Enforcement Remedies and Penny Stock Reform Act of 1990, the SEC can use violations of any securities laws to force corporations to make full disclosures in their reports.

In 2002, annual reports became a source of widespread public interest after the collapse of the energy giant, Enron, which generated a dramatic leap in legally obligated reporting
elements with the Sarbanes-Oxley Act.\(^2\) Pethokoukis (2008) describes, “When Congress hurriedly passed the Sarbanes-Oxley bill back in 2002, it was the most sweeping securities and corporate governance reform since the New Deal….Companies also have to disclose more information, including full reporting on the effectiveness of their internal financial controls.” As a result of these legal changes, we examine trends before and after this period in our analyses. These reforms drove a sharp rise in financial reporting and generated speculation that reports will become dry “10-k wraps” with few visionary statements due to fear of litigation (National Investor Relations Institute 2013).

Even more recently, the Dodd-Frank Wall Street Reform and Consumer Protection Act became law in 2010, the final year of our study. The legislation set out to reshape the U.S. regulatory system in a number of areas including but not limited to consumer protection, trading restrictions, credit ratings, regulation of financial products, corporate governance and disclosure, and transparency. In cases of noncompliance, the SEC has the power to invalidate the election of directors and decisions made at the shareholders’ meeting, which can necessitate issuing a revised annual report. Corporations that fail to comply with all the requirements can face enforcement proceedings, and throughout this history, firms have faced class-action lawsuits from shareholders for making misleading claims in their annual reports. Our measures of actorhood are not, however, directly required by any mandatory reporting requirements.

The Sample

\(^2\) The Sarbanes-Oxley Act seeks to address corporate misconduct by, among other things, requiring chief executive and chief financial officers to personally certify the accuracy of the financial information contained in quarterly and annual reports. The certification must state that the officers have read the report, and confirm it contains no misstatements or omissions and that it is a fair presentation. An officer who knowingly makes a false certification will be subject to fines of up to $5 million and a prison sentence of up to 20 years.
Our dataset consists of annual reports from S&P 500 firms collected at approximately ten-year intervals over the period 1960-2010. Our final sample consists of 300 reports gathered from 80 unique firms, with an average of 3.75 reports per firm. We focused on large firms (S&P members) because their reports are available over a long period of time and they represent an important part of the economy. To consider adaption/selection processes and the possibility of survivor bias, we drew three random samples of 25 firms each – 25 firms that were continually listed on the S&P from 1965-2010, 25 firms listed in 2010, and 25 firms listed in 1960. For the firms continuously listed, we obtained annual reports in ten-year increments (or as close to each decade as we could find). For the firms listed in 2010, we gathered their annual reports back to either 1960, or the founding of the firm if it was later than 1960. For the firms listed in 1960, we collected annual reports at decade intervals going forward as far as the firm existed.

In the course of developing and conducting the coding, we made every effort to reduce error and followed well-developed methodologies for content analyses (Krippendorf 2012). We checked the reliability of questions across reports with widely varied characteristics (e.g. firm age, size, and industry) as we developed the coding, making adjustments or omitting questions when raters did not agree on how to respond to a question. For coding, we randomly assigned six research assistants to the reports, so that potential coder bias was distributed unsystematically.

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3 There were several mergers and acquisitions among the firms we analyzed and in these cases we researched each instance individually. Typically, our large sampled firm was clearly the dominant party in a merger or acquisition and we kept it as a constant case (e.g. the name didn’t change, our firm was substantially larger than the other firm, or in reading firm histories one is depicted as existing as a coherent entity over the period of the merger and the other is depicted as absorbed even if the firm identifier, gvkey, changed). To be consistent with this approach, in rare instances our sampled firm was not dominant, so we considered it a ‘death’ and dropped it from the sample. In a handful of merger cases it was not possible to determine a dominant firm and both were listed on the S&P, so we expanded our sample to include both parties.
rather than clustered in particular firms or years. We trained each researcher by co-coding a report with them, then having each person independently code another report and compare results amongst themselves and with us, and lastly discussing any differences to calibrate the interpretation of each question. Once we had finalized the coding protocol, it took researchers approximately sixty to ninety minutes to code each report. A final check yielded an overall inter-rater reliability of 82%.

**Dependent Variable**

The key dependent variable in our analysis is the extent to which a firm is portrayed as a modern social actor. It is not immediately apparent how to measure this multifaceted concept, but our aim was to capture core aspects of modern social actorhood that we discussed earlier; namely, identity, sovereignty, and the capacity for purposive action. To do so, we collected the following 11 indicators: (a) whether the report discusses a firm’s unique culture, identity, or values; (b) the number of pages discussing the firm’s history; the number of times the words, or any variation, (c) manage, (d) plan, (e) stakeholder, (f) citizen appear; and whether the report mentions responsibility to (g) employees, (h) customers, (i) investors, (j) the public or broader society or (k) local communities where it operates.

As the different concepts underlying actorhood are related (e.g., sovereignty implies some degree of capacity for purposive action), it is difficult to allocate each of these items to only one of the core aspects of actorhood listed above. Generally speaking, however, we view items (a) and (b) as relating to organizational identity while (c) and (d) speak both to the capacity for purposive action and to notions of sovereignty. For example, it makes little sense to speak of
planning and managing if one does not believe s/he will have any control over future outcomes. Items (e), (g), (h), (i), (j) and (k), which denote responsibility to various parties, also speak to the capacity for purposive action; firms can only be held responsible to others if they have a capacity for purposive action as well as some degree of sovereignty. Finally, item (f), use of the term citizen, denotes the idea that organizations are increasingly viewed as citizens in the sense that the term is used for people – to indicate membership in a community and the existence of a set of rights and obligations that follow automatically from membership.

We aggregated these indicators into an index of modern social actorhood. We chose to capture the core construct of interest with an index for two reasons. First, as noted above, the mapping of our indicators to the concepts underlying actorhood is not one-to-one; several of the measures could be used to capture multiple aspects modern actorhood. Second, parallel to survey research, any single item in our protocol likely contains measurement error despite extensive reliability checking and coder training. To be conservative in our approach, we included multiple items to measure the core concepts underlying actorhood, and we combined hand-coded items with computer-generated word counts.

To create the index of actorhood, we used the approach that Bloom and Van Reenen (2007) employed in their measurement of the concept of management practices. We took z-scores of the items above and averaged across them. The z-score is useful because it converts items measured on different scales into comparable units, and it gives equal weight to each item, which is appropriate in cases like ours when there is no a priori reason to believe any single item deserves more weight than the others.

The process by which we arrived at the indicators that comprise the index was iterative. We first selected items based on their face validity, putting together those that we viewed as
linked to the concept of firms as social actors. From there we examined the inter-item correlations (assessed using Cronbach’s alpha) and the uni-dimensionality of the concept (assessed using the Eigenvalues from factor analysis), making adjustments to strengthen the index’s alignment with the latent concept of actorhood. A key change was to omit a variable for whether the report contained an organization chart (as an illustration of boundedness) as this item was less connected to other measures. Although organization charts are commonplace in practice, an inspection revealed that only three percent of annual reports contained a chart versus 35 to 85 percent of occurrences on other dichotomous variables in the index.

Through this process, we arrived at the 11 items described above. Empirical tests supported the decision to combine the items: Cronbach’s alpha, a measure of internal consistency of the index, is a satisfactory 0.705. A factor analysis reveals a unidimensional latent concept, there is one factor with an Eigenvalue substantially above one, and it explains 73 percent of the variance.

Finally, we experimented with creating an index using factor analysis rather than averaging the z-scores. Results of the analyses shown later in the paper are highly similar to those reported when run with these alternative measures.

*Independent Variables*

Substantively, we include three measures of societal changes that we believe are associated with the reconstruction of firms into actors. The items are highly correlated, so we combine them into a single index of cultural rationalization using the same method of summing and averaging the z-scores as we used for our dependent variables. The three items are:
a) Societal managerialism (H1a): Number of business degrees per 1,000 population (National Center for Education Statistics, 2011)

b) Hard law (H1b): Number of civil and criminal cases commenced in District Courts (Federal Judicial Center, 2013)

c) Soft law (H1c): Number of public good nonprofits and advocacy organizations (National Center for Charitable Statistics 2013)

We provide more fine-grained tests of our overall theory by making predictions about several factors at the firm level as well. To test hypotheses 2a-2c, we include measures of firm linkages or attunement to the external environment through indicators from our coding of the reports. The three measures of exposure to external cultural shifts are:

- Managerialism (H2a). Taking inspiration from Chatterji and Hambrick (2007), who used the prominence of a CEO’s photograph in annual reports as an indicator of their self-perceived importance to the firm, we use a count of the number of photos of managers in an annual report as an indicator of the perceived importance of managerialism. The more managers are celebrated, the more we would expect firms to become actors, as managers are the key carriers of organizational actorhood. The language in the coding document was: “How many pictures include managers (e.g. headshots of leaders, pictures of the boardroom, people in suits)?”

- Whether ratings, rankings, or awards are discussed (H2b). The exact wording was: “Does the report mention receiving rankings, ratings, awards or the like (exclude winning contracts)? (0=no, 1=yes)”. A complete list of the rankings, ratings, or awards mentioned in the reports is provided in Appendix A.
• Whether compliance with the law, standards, or certifications are discussed (H2c). The
exact wording was: “Does the report indicate that the company meets any laws, external
standards, or certifications (voluntary or involuntary; excluding an auditor’s certification
of the report)? (e.g. Weyerhauser 2010 Sustainable Forestry Initiative, Forest
Stewardship Council, Program Endorsement of Forest Certification) (0=no, 1=yes)”. A
complete list of the laws, standards, or certifications mentioned is provided in Appendix
B.

In addition to these arguments, we readily acknowledge a number of other factors may be
at work. We include as controls the number of pages in a report (logged), as well as the
proportion of pages in the report that focus on finance (both obtained from our coding). These
contROLS are important because reports have gotten longer over time and because practitioner-
oriented literature and news reports suggest that the recently growing emphases on complete
disclosure tends to expand financial reporting and diminish emphases on mission and vision,
which convey actorhood (e.g. Pethokoukis 2008; NIRI 2013). At the firm level, we hold size
constant using the number of employees and net sales (both from Compustat, logged to correct
for skewness). Following standard practice in organizational research, we also controlled for
firm age using data obtained from the Center for Research in Security Prices (CRSP 2013).
Further, macro-economic changes that move firms towards abstract forms of profit-making
(especially finance), along with the decline of unions, may drastically shape social expectations
of firms (Davis 2009). We account for these effects by running robustness checks that include
unionization, measured by the percent of the non-farm workforce that is unionized (Hirsch et al

4 It would be useful to distinguish between the pressures involuntary hard laws and influences from voluntary soft laws. Unfortunately, reliability checks demonstrated that coders were unable to consistently distinguish between standards, certifications, and laws.
2013), as well as finance as a percent of GDP (Bureau of Economic Analysis 2013). In addition, we examined linear time predictions, dummies for each decade, and time breakdowns pre- and post-Sarbanes Oxley based on our reading of the history of annual reporting requirements.

Table 1 presents descriptive statistics for the variables used in the analyses, and correlations are shown in Table 2.

[Insert Table 1. Descriptive Statistics]

[Insert Table 2. Correlations]

Given the structure of our data (reports within firms) we use fixed effects models to control for all time invariant characteristics of firms. We also examined results using multilevel models to examine time invariant measures for industry and founding date; our findings are similar.

RESULTS

Descriptively, there is strong evidence that firms increasingly portray themselves as modern social actors. Figure 2 illustrates changes over time in our actorhood index, as well as the eleven items that constitute it. Linked to expressions of identity, firms more often discuss a unique culture, identity, or values; discussions of the firm’s history are on the rise; and the word “citizen” appears more often. Linked to emphases on purposive action, as well as sovereignty, the words “manage”, “plan”, and “stakeholder” appear more often. Reflecting the importance of
navigating external pressures in the rational pursuit of interests, firms also increasingly discuss responsibility to investors, customers, employees, the public, and local communities.

[Insert Figure 2. Trends in Actorhood Emphases over time]

We now turn to demonstrating how the increasing construction of the firm as a social actor corresponds to the broader societal trend toward cultural rationalization. Table 3 reports the results of fixed effects models predicting the extent to which firms depict themselves as actors in their annual reports. In analyses not presented here, we initially examined time trends (both linear and using decade dummies) and compared these to models with the cultural rationalization index. A comparison of overall model fit (using AIC and BIC) and the total variation explained indicated that the measure of cultural rationalization produced a stronger overall model than either linear year or time dummies. (Results available from authors). Thus, in Table 3, we focus on models with substantive indicators of a cultural shift; we return to the time issue in our robustness checks.

[Insert Table 3. Fixed Effects Models of Cultural Rationalization on Identity Emphases]

The controls in model 1 show that longer reports tend to contain more displays of actorhood. The proportion of pages related to finance has a positive but non-significant effect on the portrayal of firms as social actors. Despite popular rhetoric that annual reports are becoming “10-k wraps”, it does not seem to be the case that increased emphases on financial disclosure, as measured by the proportion of pages in a report dedicated to financial information, dampen a
firm’s ability to emphasize its status as an actor. Likewise, the number of employees and firm age appear to have little effect. Firms that are larger in terms of net sales emphasize dimensions related to being an actor more, although this association disappears after controlling for time and other substantive variables in subsequent models.

In model 2 we add a control for the year a report is released. As expected, this variable is positive and significant, indicating that emphases on actorhood increase over time. In models 3-6 we replace this general time trend with three distinct indicators of cultural rationalization and an overall index, all of which are highly correlated with time (over 0.9). As expected, the number of business degrees held per 1,000 persons (model 3), the number of civil and criminal court cases commenced each year (model 3), and the number of advocacy and public good nonprofits registered with the Internal Revenue Service (model 4) are positively associated with identity emphases, with the effect of the business degree variable being relatively more substantial as indicated by the magnitude of the improvement in BIC/AIC. These items are conceptually related indicators of macro-cultural rationalization, and they are highly collinear, so we combine them into an index. As model 6 shows, the Cultural Rationalization Index is positive and significant. The link between cultural rationalization and actor emphases remains strong net of controls, and net of the measures of firm external embeddedness we consider next.

[Insert Table 4. Fixed-Effects Models of External Embeddedness on Identity Emphases]

Although the results presented in Table 3 are consistent with our theory, the process behind the observed effects of the macro-level cultural variables are, as in any such analysis, are unobserved and therefore open to alternative interpretations. To provide more direct evidence of
our theory, in Table 4 we present models that include measures of firms’ linkages to or embeddedness in their external environment. These indicators speak to the paths through which culture constitutes actors. Model 1 shows a positive association between a firm’s celebration of managerialism, measured by the number of images of managers in the report, and emphases on actorhood. We interpret this as evidence that managers are the central builders and promoters of a firm’s status as a social actor. Managers are the people who endow firms with their interpretation of actorhood. As Meyer describes, the status of organizations as actors is derived from the activities of professionalized persons (2010: 10): “In becoming organizations, older structures indeed acquire the properties of actorhood: clear purposes and missions, plans and strategies, sovereign decision structures, internal coordination and control systems…These structures derive their contemporary authority from the commitments of the now-professionalized and highly participatory persons who comprise them (Wilensky 1964).”

Model 2 shows that mentions of rankings, ratings, or awards in a firm’s report significantly increase their overall identity emphasis. We interpret this measure as speaking to the influence of reputational pressures. Some ratings, rankings, or awards are on dimensions that might be linked more directly to profits (e.g. innovation), but others are fairly distantly removed (e.g. best place to work, environmentalism, supporting women and diversity). Rankings and standards expand the boundaries of what constitutes a firm’s identity. Firms that mention their ratings in their reports may be ranked more than others, or perhaps they receive higher ratings than others and so celebrate their success. Regardless of whether the firm is ranked more often, or more aware of outside evaluations, or simply does better on them, mentions of rankings are an indication that a firm is more attuned to the external environment. As commensuration of the social world proceeds (Espeland and Stevens 1998), firms become assessed on a growing array
of domains. These domains provide a basis for expanding the meaning of actorhood to encompass responsibility for rights and equality and pressing firms to demonstrate purposive action on new dimensions.

Similarly, Model 3 shows that discussions of legal compliance or conformity to standards or accreditation increase actor emphases. Most of these discussions are linked to compliance with directives from government agencies, such as the Environmental Protection Agency, the Food and Drug Administration, the Equal Employment Opportunity Commission, or the Securities and Exchange Commission. A few instances speak to softer forms of law, such as conformity to International Standards Organization requirements, or adherence to principles found in things like the United Nations Compact or the Sustainable Forest Initiative. Like ratings and rankings, legal pressures and the influences of various certifications, which are typically developed and administered by nonprofit organizations, work to expand the realm of domains firms must deal with. In doing so, the meaning of actorhood changes as well.

Model 4 presents a full model, showing the robustness of these associations. Overall, these findings provide support for arguments that institutional pressures are not simply a set of constraints within which actors operate; they also serve to constitute social entities as actors (Dobbin, 1994; Glynn, 2008; Strandgaard Pedersen and Dobbin, 2006; Meyer, 2010).

Robustness Checks and Limitations

A challenge of our study is in definitively deciphering the causal story associated with these trends. We argue that macro-level, societal characteristics construct firms as actors, but the indicators of processes that might be involved are highly collinear (i.e. the rise of business
degrees, legalization, and nonprofits). It was not possible to definitively disentangle the effects of these sweeping societal changes that have unfolded since the 1960s. However, our firm-level findings suggest that these multiple rationalizing processes, manifest in managerialism plus pressures from ratings, rankings and awards, and well as hard and soft law pressures of certification, accreditation, and legal requirements – are at work simultaneously.

An additional challenge might be that our macro-cultural variables simply grow over time and any correlate of time would also be tied to our outcome. However, there is evidence, shown in Table 5, that our cultural rationalization index provides a stronger explanation of variation in the Actor Index than time or other potentially relevant macro-level changes. First, when considered with time, cultural rationalization remains positive and significant (model 1). Second, cultural rationalization outperforms central alternative or additional explanations to our focus on how cultural changes construct contemporary firms. Financialization and de-unionization of the economy have been discussed as playing a key role in constructing contemporary firms, albeit in ways somewhat different than we propose here (Fligstein 1987; Davis 2009). Model 2 shows there is no significant relationship between the percent of the non-agricultural workforce that is unionized and emphases on modern actorhood. Thus, it does not seem to be the case that some of the displays associated with modern actorhood (e.g., responsibility to stakeholders) are merely used to make more palatable the changes in the employee relationship that have accompanied deunionization. In contrast, model 3 shows a positive and significant relationship between the percent of Gross Domestic Product that comes from finance and the transformation of firms into modern actors. In subsequent models we seek to disentangle the effects of financialization from time and cultural rationalization. Model 4 shows that financialization has no effects after controlling for time. Similarly, model 5 shows
that cultural rationalization remains positive and significant after controlling for financialization, which becomes insignificant. As additional checks, in models not reported here we considered two forms of residualization – commonly used in social science research (e.g. Kentor and Kick 2008; Jorgenson and Clark 2009; Bandelj and Mahutga 2010). This method has its critics (York 2012), but we use it here only as part of a robustness check. In all models the effects of cultural rationalization remain significant after netting out effects of time and/or financialization, but we found no effects of financialization net of time or cultural rationalization.

[Table 5. Alternatives]

CONCLUSION

The main purpose of this paper was to provide empirical evidence of the evolving cultural construction of firms as social actors. We also undertook the goal of identifying factors associated with this profound shift. Our analyses of the annual reports of a sample of large, American public firms indicates that firms increasingly portray themselves as modern social actors, reflecting a change in societal expectations about what a firm is and should do. Understanding this transformation is important, because, as Scott argued: “We will fail to perceive the importance of organizations for our lives if we view them only as contexts—as arrangements influencing the activities of individual actors. Organizations must also be viewed as actors in their own right, as ‘collective social actors.’” (2003: 7). Understanding that firms are

5 First, we used Stata to calculate residuals when manually typing regressions, and, second, we used the “orthog” command to automatically generate the regression and new variables.
indeed modern social actors, and that this is reflected in both how they act and in how they are viewed, helps make sense of practices and actions that are not well explained by theories in which firms are conceptualized as mere webs of contracts or tools that powerful elites use to enact their wishes.

Firms that take on characteristics of social actors look and behave differently than those who are pure production vehicles or tools of elites. The firm’s maintenance of its status as a proper actor in itself provides a rationale for certain practices and actions, producing structures that are more elaborate and less integrated than would be predicted if they solely reflected power or efficiency. Moreover, a wealth of studies provides evidence that some of the actions that firms do at least in part to enact their status as social actors – such as making displays of identity – are consequential. For instance, identity can be a core source of conflict (Glynn, 2000), shape strategy and decision-making (Dutton and Dukerich, 1991; Elsbach and Kramer, 1996), and influence outcomes like knowledge transfer (Child and Rodrigues, 2008), change (Chreim, 2005; Martins, 2005; Hannan et al 2006), and stakeholder relations (Brickson, 2007).

Beyond documenting the transformation of what it means for a firm to be a social actor, our analyses showed that these changes corresponded with growing cultural rationalization and with firm linkages to the external environment. Although our findings represent an important first step toward explaining how the modern conceptualization of firms as social actors arose, our analyses remain open to alternative explanations. It is difficult to find indicators covering a long period of time that can clearly capture the independent-variable effects we propose, and it is challenging to show distinct effects of societal-level predictors that change in similar ways over time. We are also limited by the availability of data for control variables for many firms over half a century.
At the same time, while we emphasize that how firms represent themselves in annual reports provides valuable insights into the firm’s understanding of its appropriate role in society, we also note, following Goffman (1959), that there is likely to be a distinction between the “front-stage” and “back-stage” elements of social actors. Front-stage performances are polished, refined, and cleaned-up manifestations intended for audiences who will judge the actor. Behind the scenes there can be a great deal of disagreement, cynicism, and activities or intentions that audiences would find unacceptable. We can be skeptical, for instance, about how much Goodrich (illustrated in Figure 1) truly cares about giving back to local communities, while still observing a central shift over time in the legitimate role of firms in society. Further, front-stage performances often entail a great deal of effort and resources resulting in a decoupling between means and ends (e.g. firms produce elaborate, expensive annual reports often going far beyond the minimum legal requirements with little evidence of how this contributes to profits) as well as between policy and practice, as recently noted by Bromley and Powell (2012). Work that examines effects of the rise of actorhood on organizational or societal outcomes is critical (e.g. performance or inequality), but we also call for further studies examining the enactment of societal expectations. For instance, to what extent are external pressures reshaping the technologies of production and finance (e.g. in terms of how risks on many dimensions shape perceived financial value or how expectations of consumer preferences shape the cost of production by increasing emphases on safety or environmental protection)?

Despite limitations, this study provides a rare quantitative glimpse into changes in the firm’s construction as a social actor. A main implication is that the adoption by firms of characteristics that signal their status as modern social actors creates a series of tensions and inconsistencies. First, actorhood implies increased complexity in firm goals and structures. A
firm that is a social actor is multifaceted in a way that a firm that is solely a tool for profit and/or power is not. Proper actors respond to an array of social pressures weakly related to production or finances such as behaving ethically, with transparency, respecting the environment or the rights of employees or customers. Maintaining status as a proper actor creates another inherent paradox. As firms become modern actors, they transform, descriptively, to look more like a network than a tightly-controlled hierarchy. They become enmeshed in a web of external influences and responsibilities with linkages to many domains, and authority shifts to reside, not with principals at the top of a chain of command, but in other actors, which are emerging all around a firm in multiple arenas. Dialectically, the creation of more interpenetrated and externally-dependent firms with multiple responsibilities is inextricably tied to their emergence as autonomous, bounded social actors, envisioned with the capacity for rational, purposive action on an array of dimensions. Overall, our study demonstrates that institutional pressures do more than provide a set of constraints for “embedded agency”: More fundamentally, cultural shifts constitute firms as actors.


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### Table 1. Descriptive Statistics (n=300)$^{a,b}$

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<th>St. Dev.</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
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<td></td>
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<tr>
<td>Actor Index</td>
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<td>0.77</td>
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<td>7.09</td>
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<td>f. Word count of &quot;citizen&quot;</td>
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<td>11</td>
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<tr>
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<td>0.84</td>
<td>0.37</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>h. Discusses resp. to customers</td>
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<td>0.45</td>
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<td>0.40</td>
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<tr>
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<td>0.49</td>
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<td>0.36</td>
<td>0.48</td>
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<td><strong>Independent Variables</strong></td>
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<tr>
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<td>0.67</td>
<td>1.79</td>
<td>5.55</td>
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<td>0.56</td>
<td>0.19</td>
<td>0</td>
<td>1</td>
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<tr>
<td>N. employees (log)</td>
<td>2.96</td>
<td>1.21</td>
<td>0.10</td>
<td>7.65</td>
</tr>
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<td>Sales (log)</td>
<td>7.67</td>
<td>1.84</td>
<td>1.88</td>
<td>12.95</td>
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<td>17</td>
<td>1960</td>
<td>2010</td>
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<td>Finance as Pct. of GDP</td>
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<td>0.03</td>
<td>0.14</td>
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<td>Unionization (Pct. Nonfarm Workforce)</td>
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<td>7.07</td>
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<td>Cultural Rationalization Index</td>
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<td>0.99</td>
<td>-1.35</td>
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<td>a. N. business degrees per 1,000 pop.</td>
<td>1.00</td>
<td>0.46</td>
<td>0.31</td>
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</tr>
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<td>187.35</td>
<td>88.09</td>
<td>68.27</td>
<td>318.29</td>
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<tr>
<td>c. N. advocacy and public good nonprofits</td>
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<td>37.58</td>
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<td>0.45</td>
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<td>7.90</td>
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</table>

Notes: (a) Lettered items are the components of the preceding index. (b) Raw scores on items in each index are presented for ease of interpretation, to construct indices the items were standardized using a z-score, then summed and averaged.
Table 2. Correlation Table (n=300)

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<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
<th>(7)</th>
<th>(8)</th>
<th>(9)</th>
<th>(10)</th>
<th>(11)</th>
<th>(12)</th>
<th>(13)</th>
<th>(14)</th>
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</thead>
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<td></td>
<td></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Prop'n pages finance</td>
<td>0.37</td>
<td>1.00</td>
<td></td>
<td></td>
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<td>N. employees (log)</td>
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<td>-0.02</td>
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### Table 3. Fixed-Effects Models of Actor Index on Cultural Rationalization

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Standard errors in parentheses; + p<.1, * p<.05, ** p<.01, *** p<.001, two-tailed tests
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Standard errors in parentheses; + p<.1, * p<.05, ** p<.01, *** p<.001, two-tailed tests
Table 5. Fixed Effects Models of Actor Index on Cultural Rationalization, Unionization, Finance

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Standard errors in parentheses; + p<.1, * p<.05, ** p<.01, *** p<.001, two-tailed tests
Figure 1. Goodrich Annual Report 2010

Figure 2. Trends in Actor Measures and Actor Index, 1960-2010

Notes: Time trends calculated by decade. Number of cases in each decade are 1960s (n=45), 1970s (n=54), 1980s (n=48), 1990s (n=46), 2000s (n=55), 2010 (n=52).
Appendix A. List of Ratings, Rankings, or Awards Mentioned (n=75; of the 300 firms in the sample 227 do not mention ratings, rankings or awards)

- Conservation Award from the American Institute of Building Design
- "One of the Best Places to Work" by Graduate Engineer and Working Mother magazines and by the National Society of Black Engineers; "14th Most Admired Company, 1990" by Fortune Magazine
- Pennsylvania Governor's Award for Environmental Excellence 2000
- Best of Industry Award, Financial World magazine; Award for Meritorious Achievement in the Field of Management-Shareholder Relations, United Shareholders of America
- Top marks from US Dept. of Labor's Mine Safety and Health Administration
- Ohio Quality Excellence Award; Ranked highest for air, coolant fuel and lube filtration by leading independent market research company, Q1 supplier designation for engines by Ford
- National recognition for promotional program in pork production (rural sales division); favorable customer opinions in survey by national research organization (undertaken by company)
- President's Safety Award (Rocky Flats and Madison plants)
- The Atomic Energy Commission ranks the process as a major breakthrough in peaceful application of nuclear technology, one of best job safety records in American industry at Rocky Flats plant, Dow President's Safety Award
- Advanced Product Division won Navy pennant for excellence in the development and production of special loran sensors
- President's Award for energy efficiency in January 1981 from then-President Carter; the State of California's first business award for energy conservation in 1980 from Governor Brown
- Quality and safety rating system endorsed by Lloyd's of London.
- SMART program named one of the US top 10 waste-reduction efforts by the U.S. Congressional Office of Technology Assessment; 1990 Environmental Safety Award from the California Tracking Association
- Industry Medallion Award from the Air Traffic Control Association, Certificate of Excellence for technological innovation at Montreal Exposition of Kitchens and Baths, products named Best Buys by Consumer Digest magazine, employees recognized as Black Achiever by Greater Boston YMCA, 1990 National Award for Excellence in Assisting Small Disadvantaged Business
- Ranked first nationally in Edison Electric Institute 1996 Survey of the Occupational Safety and Health Administration Recordable Incident Rate
- No. 21 most innovative company in customer service and satisfaction by InformationWeek, top vendor award from Ford Motor Company, no.1 technology innovator in the manufacturing industry by InformationWeek, National Environmental Achievement Track by the US Environmental Protection Agency
- General Electric named Fermi 2 power plant the No. 1 Boiling Reactor in the world, 2000 Kansas Pollution Prevention Award from the Kansas Department of Health and Environment and the EPA
- management individual named '50 Most Powerful Women" in U.S. Business by Fortune magazine and top 25 business manager by Business Week magazine; transaction named Cross-Border Deal of the Year for 1999 by Mergers & Acquisitions; "Retailer of the Century by Discount Store News magazine; Fortune's list of top 10 America's Most Admired Companies in 2000, CIO-100 award for excellence in information systems field; Wal-Mart Foundation ranked 5th in giving out of all U.S. foundations by Foundation Center; ranked first in 1999 Cone/Roper Report (annual national public survey on philanthropy and corporate citizenship); best 100 companies to work for in the US for Hispanics and Latinas by Hispanic Magazine and Latino Magazine
- Best of Sensors Expo Fall 2000 award for technology, top 10 on Fortune magazine's list of "Most Admired Companies," Forbes magazine's "Platinum List of America's Best Big Companies"
- Semiconductor International's Best Product in 2000 Award for SLK, corporate sustainability leader in the Chemical Industry sector for the global Dow Jones Sustainability Group Index, Dow Canada wins environmental leadership award, U.S. Environmental Protection Agency and Department recognizes Dow's leadership in cogeneration, Sentricon Termite Colony Elimination System receives U.S. government's top environmental honor, Dow Automotive receives Society of Plastics Industry award, CIO Magazine’s CIO 100 Award, Top ranking in chemical industry by InformationWeek Magazine, R&D 100 Award from R&D Magazine, Named top 50 companies by eWeek magazine,
- Super STAR Site by the U.S. Occupation Safety and Health Administration
- BusinessWeek magazine's "Customer Service Champs"; Key scored consistently higher than its large competitor banks in customer surveys conducted by the American Customer Satisfaction Index; national and regional winner of Excellence Awards in the small business banking and treasury management service categories by Greenwich Associates; Corporate Insight 2010 Monitor Awards for service excellence; "Outstanding" ratings from the federal government for investing in its communities, especially underserved neighborhoods, and for providing unique solutions to underserved individuals; Recipient of LEED gold certification from the US Green Building Council; ranked 4th nationally in Diversity Magazine's Top Ten Companies for Supplier Diversity for spend with women- and minority-owned suppliers;
- Success of the company's efforts to provide quality service was illustrated in a survey of more than 5000 pilots made by professional pilot magazine; BN Airmotive ranked 16th out of 3,000 fixed based aircraft operations
- "Inside Market Data Award for 'Best Real-Time Market Data Initiative' in 2010; "Derivatives Exchange of the Year" by CME Group in 2010
- Dow Jones Sustainability North American Index, as one of the region's most sustainable companies; included in the FTSE4Good Index of Companies, a leading corporate social responsibility investment index; Justmeans Global 1000 list of Sustainable Performance Leaders; "World's Most Ethical Companies" by Ethisphere Institute; Gold Award by Singapore Ministry of Manpower and Workplace Safety and Health Council; CEO named (U.S.) National Safety Council's (NSC) 2010 List of "CEOs Who Get It"
- No.1 provider of wind energy in the nation according to the American Wind Energy Association, Power Company of the Year by Platt's, Dow Jones Sustainability (DJSI) for North America
- online product cited in Forbes magazine's Best of Web issue as "ultimate resource for going-to-college information"
- "Export E Award" from U.S. Department of Commerce
- Highest vendor rating for quality products and timeliness of delivery from companies Caterpillar Tractor, International Harvester, John Deere, and Harmschleger
- 9 brands awarded with 2009 Impact Hot Brand Awards; 5 brands awarded with 2010 Growth Brand Awards from the Bevage Information Group; 5 brands featured on 2010 Power 100 List; ranked #7 Biggest Brand Owner
- Conservation award from Society of American Travel Writers; 1970 Tourism Award from Wisconsin Tourism Advisory Council
• "Corporation of the Year" from the Society of Hispanic Professional Engineers; "Golden Nugget" award from Department of Defense's Joint Warrior Interoperability Demonstrations office (for a Raytheon software system); George M. Low Award from NASA
• "Grocery Distributor of the Year" from Second Harvest; named one of America's "100 Best Corporate Citizens" by Business Ethics (magazine)
• 1959 Packaging Institute Corporate Award (won by Dobeckmun, a division of Dow)
• 2 scientists received American Paper Institute's George Olmsted Award (excellence in technological research), recognized by National Wild Turkey Federation for wildlife management innovation; given one of industry's highest awards for responsible forestry
• Corporation of the Year Award from the New York/New Jersey Minority Purchasing Council
• 1989 Mass Market Retailers of the Year (from Mass Market Retailers publication)
• award from National Council on Aging for outreach to seniors; national recognition as leader in responding to public health concerns about effects of electric/magnetic fields (EMF)
• Bay Shore Station consistently ranked in the top 10 most efficient U.S. fossil stations
• award/grant from state of Kentucky to investigate ways of decreasing air pollution
• Reader's Digest Public Service Award
• two executives received Honorary Membership in the American Dental Association and the American Association of Dental Schools; publicly acclaimed by American Student Dental Association and American Association of Dental Schools
• Sentinels of Safety Award (for the safest nonmetal mine in the U.S.); Arthur Hoyt Scott Award (top performance in paper industry)
• Employer of Choice Award from Minority Corporate Counsel Association; ranked #7 in Cannondale Associates PoweRanking Survey; ranked at the top of American Customer Satisfaction Index
• Singapore's Global Headquarters Award
• named to Dow Jones Sustainability World Index seven times
• a Top 50 company for corporate sustainability reporting in The Global Reporters for the United Nations Environmental Program by Sustainability Ltd., London
• "100 Best Companies" (Working Mother magazine); "Best Places to Work" (Human Rights Campaign Foundation); "top companies for diversity" (DiversityInc); "Training Top 125" (Training magazine); #10 on "BusinessWeek 50" list (BusinessWeek magazine); "World's Most Admired Companies" (Fortune magazine)
• Robert W. Campbell Award (National Safety Council); 2010 Presidential Green Chemistry Challenge Award; 2010 American Chemistry Council Responsible Care Energy Efficiency Awards; NASDAQ OMX CRD Global Sustainability 50 Index; Carbon Disclosure Leadership Index (Carbon Disclosure Project); 2010 Leader of Change (Foundation for Social Change and the United Nations Office for Partnerships); "Employee Volunteers in Action Award" (Keep America Beautiful); A+ rating for Global Reporting Initiative report; Dow Jones Sustainability World Index
• Forbes "100 Best Companies to Work For"
• named for 6th consecutive year to Dow Jones World Sustainability Index
• PA Consulting Group's 2010 ReliabilityOne Award in Midwest Region; plant recognized as industry's construction project of the year at 2010 Platts Global Energy Awards and received honors from "Power Engineering" magazine

Small Business Administration Preferred Contractor Award, Air Force "Exemplary Facility", commendation from the EPA
• J. William Fulbright Award for International Trade Development; "Point of Light" (President George H.W. Bush); Edison Electric Initiative Common Goals Award; citation by US Dept. of Education as a "prototype [for] commitment to literacy and lifelong learning"
• Employer Award - Detroit Chapter of American Society of for Training & Development; Nicholson Award - best annual report
• Clio award - excellence in advertising; National Brotherhood Award (National Conference of Christians and Jews)
• Top Industry Practice Award - Nuclear Energy Institute; Dow Jones Sustainability World Index; Edison Electric Institute Emergency Assistance Award; GovernanceMetrics rating of 10 (corporate governance); National Fuel Funds Network Corporate Excellence Award (for poverty reduction efforts and helping low-income customers); Minority Engineer Magazine Top 50 Employers 2010
• Company of the Year - Beverage World magazine
• Save Energy Now LEADER (Dept. of Energy); Energy Star Sustained Excellence Award (EPA); Worker Safety Excellence Award (Aerospace Industries Association)
• Utility of the Year - Electric Light & Power magazine; highest customer satisfaction - J.D. Power & Associates
• A rating for environmental performance - Council on Economic Priorities
• p.7: in 2010, we were named to the Dow Jones Sustainability Index for the sixth consecutive year and, for the first time ever, were recognized as the most admired company in our industry by Fortune magazine.
• For the second year, CCE was ranked number one in the food and beverage sector in Newsweek's Green Rankings. (p. 24)
• Peer group ranking
• Most admired company by the Fortune Magazine
• Fortune 100 Best Companies to work for (#32 overall and #1 in the industry); A Certificate of Recognition for military reserve recruiting efforts; 2010 Best diversity company by Engineering and Information Technology Magazine; Best Investor Relations in Energy Sector and Best Investors Relations Website at the 2010 IR Magazine U.S. Awards
• the chemical industry as a whole as the second of 43 industries in safety performance, by National Safety Council data for 1979
• Global Waste Generation Rate, The Toxic Release Inventory Report
• One of the 100 Best Companies for Working Mothers for a third consecutive year, by Working Mother Magazine, Top Five of 50 companies studied for benefits program for US employees, by Money magazine, One of the world's 100 Best-Managed Companies, by IndustryWeek
• Gold Medal from the Technical Association of the Pulp and Paper Industry
• Fortune 500 (40th in the industry); &P Rating
• "Our divisions won supplier awards from Wal-Mart, McCrory, Target Stores and Fleming Companies"
Appendix B. Laws, Standards, Certifications List (n=82; of the 300 firms in the sample 218 do not mention specific laws, standards, or certifications)

- National Housing Partnership; Colorado Plateau Environmental Advisory Council
- Federal Power Commission regulation; Atomic Energy Commission safety requirements
- Compliance with Supreme Court decision requiring severance with Procter & Gamble
- Equal Employment Opportunity
- Federal Trade Commission Act
- Civil Aeronautic Board requirements
- Environmental Advisory Council study of Zion nuclear plant, environmental mandate from regulators (no explicit law stated)
- Filed application with Securities and Exchange Commission requesting removal of registration as investment company under the Investment Company Act of 1940
- General Industry Law and Agrarian Reform Law (related to International Business operations in Peru); compliance with federal rulings on NTA (potential health hazard found in chemical used in detergent; shutdown of production plant)
- Restrictions on aircraft laws
- Products under review by Food and Drug Administration
- (no specific law) environmental regulations regarding coke ovens
- With no specificity, Company indicates compliance with governmental licensing requirements, to SEC filing and disclosure requirements, and to certain other regulations related to nuclear energy and nuclear plant construction, environmental protection, fuel supplies and land use; company contested Air Quality rule adopted by the California Air Resources Board and gained revision to rule
- Significant Event Evaluation Information Network (industry-wide reporting and analysis system for irregular nuclear events at plants)
- FDA approval of drugs/diagnostic tools/packaging
- FDA regulation
- EPA (and misc. oil spill clean-up directives), amended 1990 Clean Air Act, EPA provisions
- U.S. Department of Education regulation
- Federal Employers’ Liability Act (FELA); Federal Comprehensive Environmental Response, Compensation and Liability Act of 1980
- Clean Air Act
- Comprehensive Response, Compensation and Liability Act of 1980, EPA-related standards
- Clean Air Amendments of 1990, compliance with Rate Reduction and Economic Development Plan by Public Utilities Commission of Ohio and Penn's Rate Stability and Economic Development Plan by Pennsylvania Public Utility Commission,
- North Carolina Inactive Sites Response Act, regulation by Federal Railroad Administration and Association of American Railroads
- Clean Air Act
- Regulation from the Michigan Public Service Commission and Federal Energy Regulatory Commission, air pollution regulation from the EPA and Michigan Department of Environmental Quality, State Implementation Plan (limits nitrogen oxide emissions)
- EPA regulation
- Partnership with the National Association for the Advancement of Colored Persons Scholarships
- Partnership with the US State Department–British Foreign Office; Voluntary Principles on Human Rights and Security
- environmental regulation by EPA, state departments of environmental quality
- EPA regulation
- Resource Conservation and Recovery Act, adherence guidelines established by American Petroleum Institute
- Dodd-Frank Act
- antitrust laws
- Dodd-Frank Act
- regulations by Federal Communications Commission and Federal Aviation Administration; Zoning restrictions and restrictive covenants by local authorities, environmental laws and regulations, health and safety laws
- U.S. Foreign Corrupt Practices Act; superfund cleanup
- U.S. laws, American with Disabilities Act, International compliance
- Colorado's Clean Air-Clean Jobs Act, nuclear and energy regulation,
- Wall Street Reform and Consumer Protection Act, Federal Trade Commission Regulation, Credit CARD Act, USA Patriot Act, regulation on consumer privacy/security
- LEED certification, Mine Safety and Health Act of 1977, Dodd-Frank Wall Street Reform and Consumer Protection Act, other EPA regulation
- requirements established by federal and state laws for harvest techniques, road building, reforestation, slash and disposal and chemical applications
Intuit-owned and operated websites certified by TRUSTe, an independent, non-profit privacy organization; Federal and state mortgage and loan broker regulations, international regulations

- regulation by the Food and Drug Administration; comparable foreign agencies; Comprehensive Environmental Response, Compensation, Liability Act,
- SEC accounting requirements
- International Organization for Standardization 14001 environmental management system standard, Forest Stewardship Council, Sustainable Forestry Initiative, Programme for the Endorsement of Forest Certification, CERFLOR (Brazilian National Forest Certification Program)
- received full power operating license from Atomic Energy Commission
- FDA approval for various drugs
- Federal Clean Air Act
- FDA regulations
- NASA's line certification in 1969
- Clean Air Act (and Clean Air Act Amendments of 1990)
- Clean Air Act of 1990
- 1990 Clean Air Act Amendments
- all lands certified under Sustainable Forestry Initiative
- standards consistent with Global Social Compliance Program
- forestlands managed under internationally-recognized forest certification standards
- coverage under Support Anti-terrorism by Furthering Effective Technologies Act (SAFETY Act)
- in compliance with all emission standards of the EPA and the California Air Resources Board (CARB)
- EU financial reporting standards, Danish financial reporting standards, food safety certifications, UN Global Compact, UN Convention on Biodiversity
- Sustainable Forest Initiative of American Forest & Paper Association
- Star Status - Occupational Safety and Health Administration (OSHA)
- Abbott has been identified as a potentially responsible party for investigation and cleanup costs at a number of locations in the United States and Puerto Rico under federal and state remediation laws and is investigating potential contamination at a number of company-owned locations.
- various legal claims and proceedings including numerous antitrust suits and investigations in connection with the pricing of prescription pharmaceuticals; Federal Food, Drug and Cosmetic Act, US Food and Drug Administration’s (FDA) Quality System Regulation (QSR); Statement of Financial Accounting Standards No. 133; Emerging Issues Task Force (EITF) No.00-10 “Accounting for Shipping and Handling Fees and Costs” and No.00-14 “Accounting for Certain Sales Incentives”; Staff Accounting Bulletin (SAB) No. 101 “Revenue Recognition in Financial Statements”
- Environmental Protection Agency’s (EPA) cluster Rule regulations, Notice of Violation (NOV) on Commonwealth of Virginia’s Prevention of Significant Deterioration (PSD) regulations, Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), litigations and lawsuits on premature manufacturing, antitrust law and shareholder rights law
- Sarbanes-Oxley Act and related regulations, SEC rules and regulations (in general)
- regulations regarding employment and environment in general
- SEC regulations in general, safety regulations (for employees) in general
- Consumer Price Index for All Urban Consumers prepared by the US Department of Labor and prescribed by Statement 33; Statement of Financial Accounting Standards No. 33, issued by the Financial Accounting Standards Board
- regulations on safety of workers and environment in general
- “The US Internal Revenue (IRS) has proposed additional taxes (no mention of a specific law)”
- Statement of Financial Accounting Standards (SFAS) No. 133
- Illinois Restructuring Law, legislation enacted in Illinois in December 1997 (the 1997 Act) on competitive transition change (CTC), from a Retail Electric Supplier (RES)
- recommendations from the White House Conference (in general)
- Environmental regulations in general
- Environmental regulations in general
- Health regulations in general