Categories and Organizational Status: The Role of Industry Status in the Response to Organizational Deviance[1]

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Extant research in organizational and economic sociology posits that organizations derive status from their prior demonstrations of quality, as well as their affiliations with high-status alters. Yet there are also indications that organizations may acquire status by virtue of their membership in salient social categories that are themselves status valued. In this article, the author explicitly theorizes and measure the concept of categorical status among organizations and test whether it influences the evaluation of organizational actions. More concretely, she develops a measure of industry status and test whether it affects the market reaction to U.S. firms announcing earnings restatements between 2000 and 2009. Results of the empirical analyses indicate that investors react less negatively to earnings restatements announced by firms from higher-status industries, supporting the argument that category status acts as a lens that shapes the extent to which an organization's actions are viewed favorably.

INTRODUCTION

Economic and organizational sociologists have long been interested in how an organization's social standing in markets affects its ability to obtain

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valued rewards. Much research in this vein has taken as its starting point Podolny's (1993, 2005) conceptualization of status among organizations as denoting an audience's perception of the quality of a firm's outputs vis-à-vis other producers engaged in substantially similar business activities. As a result, knowledge of how status influences market outcomes is based primarily on insights gleaned from empirical analyses of groups of organizations engaged in similar activities, such as banking (Jensen 2003) or wine production (Benjamin and Podolny 1999; Zhao and Zhou 2011).

This line of work has been instrumental in demonstrating that an organization's social standing, rather than its performance alone, often influences its success in markets (Podolny, Stuart, and Hannan 1996; Stuart, Hoang, and Hybels 1999; Jensen 2003; Roberts, Khaire, and Rider 2011). Yet, the conceptualization of status as a within-category quality signal implicitly constrains the influence of status in markets to settings in which organizations of the same type are being compared. This overlooks situations in which actors have reason to evaluate organizations that belong to different categories (e.g., the organizer of a charity event selecting either a biotechnology firm or a waste-management company to be its public sponsor). The prevailing conceptualization also sheds little light on instances in which actors express evaluative social judgments about particular organizations without knowing anything more than the type of business in which a company engages (e.g., viewing an individual who works as an accountant for a software company as having more prestige than someone who works as an accountant for a paper and packaging firm, without knowing the relative standing of either firm within its industry). In each of these scenarios, it seems intuitive that shared beliefs about the relative esteem of different types of organizations shape the tenor of evaluation. Yet, given that information about quality is incommensurable in the first case and absent in the second, it seems implausible that status as a signal of quality could account for the evaluative outcome. This indicates that organizations may possess a type of status apart from that which denotes quality relative to a firm's peers in the same category.

If this is the case, what might form the basis for organizational status in settings such as those described earlier? A possible answer to this question

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can be obtained by considering that every organization derives part of its social identity from membership in a category, or socially legitimated grouping of perceived similar organizations (Zuckerman 1999; Hsu and Hannan 2005; Hannan, Polos, and Carroll 2007). Recent research demonstrates that audiences often evaluate a firm's actions differently depending on the firm's identity as a member of a particular category (Phillips and Zuckerman 2001; Hsu 2006; Smith 2011; Zhao and Zhou 2011). Taken together with the examples of evaluation offered above, this suggests the possibility that categories of organizations are associated with varying levels of status and that the status of the category to which a firm belongs may affect how individual organizations and their actions are perceived.

The idea that categories of organizations may be associated with different levels of status has occasionally appeared in the literature, although it has not received in-depth treatment. In their study of the rise of the microbrewing industry, Carroll and Swaminathan (2000, p. 753) contrast the social standing of microbreweries with that of mass brewers, noting in passing that many microbrews "now have high status and greater appeal [relative to mass brewers]." Similarly, Phillips and Zuckerman (2001, p. 402) draw upon the fact that "relevant audiences evaluate a [law] firm's status through reference to the types of law it practices" in their study of middle-status conformity in the legal field. They observe, for instance, that corporate law firms tend to be held in higher regard than firms practicing family law. Zhao and Zhou (2011, p. 1436) offer perhaps the most explicit statement to date of the idea that categories of organizations vary in status, asserting that "institutionalized categories in a classification system create status hierarchies." The authors instantiate category status in their study of wine prices by using dichotomous indicators of a winery's membership in a high- or low-status geographic appellation and in a high- or low-status extra designation category. Looking beyond the organizations literature, research on social categorization in other domains has amply demonstrated that the creation of categorical boundaries can mark the first step toward establishing some groups of actors as worthy of greater social standing than others (e.g., on race, Omi and Winant [1996]; on gender, Hartmann [1976]; on class, Bourdieu [1984], Lareau [2003]; on occupations, Blau and Duncan [1967]). To summarize, although no one has tested the idea that broad categories of organizations, such as biotechnology firms, airlines, and tobacco producers, may differ in terms of status, there are many reasons to suspect that this is the case.

The contribution of this article is to explicitly theorize and measure the concept of category status among a wide range of organizations and to test whether category status influences the evaluation of organizational actions. In doing so, this article offers pertinent insights for three bodies of work in economic sociology. First, I deepen our understanding of the meaning of status in markets. I provide evidence that organizational status is not

only about how well an organization does (i.e., quality) or about the pattern of relationships an organization has formed, but also, perhaps more fundamentally, what the organization does. Second, I contribute to the sociology of financial markets. In recent decades, behavioral economists and sociologists alike have shown that information-processing heuristics and biases shape how the efficient market hypothesis (Fama 1970) plays out. This study identifies another mechanism through which widely held cultural beliefs influence the processing of information about firms. Finally, I contribute to the growing body of work examining the role of classification systems in markets. Whereas prior work has demonstrated the important role of categories and systems of classification as screening devices that determine which offers attract attention (Zuckerman 1999) or are interpretable (Zuckerman 2004), this study contributes to an emerging view that categories also act as lenses in that they color how market participants perceive a given performance (see, e.g., Smith 2011).

The article proceeds as follows. First, I develop the concept of category status and articulate a theoretical rationale for how status differences among categories of organizations might play out in market evaluations. Second, I present empirical evidence that members of the business community view industries as varying in status. To my knowledge, this represents the first attempt at measuring status at the category level across a wide range of different types of organizations. Finally, I demonstrate that category status shapes how market participants interpret new information about organizations. In particular, I test whether category status systematically influenced how stock market participants responded to announcements of earnings restatements by American public companies between 2000 and 2009.

STATUS IN MARKETS

An actor's status denotes his position within a social hierarchy, where higher-ranking positions are associated with greater esteem, honor, and respect (Goode 1978). Economic and organizational sociologists have conceptualized an actor's status as deriving from two sources: one's past performance (i.e., quality) and the status of one's affiliates (Podolny and Phillips 1996). I discuss each of these in turn. Introducing his influential status-based model of market competition, Podolny (1993) proposed that status acts as a "signal of quality," with status and quality having a "loose linkage." Two factors produce and maintain the positive correlation between status and quality. First, status enables actors of greater social standing to develop products of a given quality level at a lower cost and to realize greater returns to quality (Podolny 1993; Benjamin and Podolny 1999). Second, status acts as a lens through which performance is evaluated, which increases the likelihood that a product created by a high-status actor will be viewed as attrac-

tive (Podolny 1993; Benjamin and Podolny 1999; Roberts et al. 2011). Taken together, these factors induce high-status producers to choose to produce at the higher end of the quality spectrum. Organizational status is also positively related to the "pattern of relations and affiliations in which the actor does and does not choose to engage"; audiences esteem those who associate with high-status actors and who avoid relations with low-status actors (Podolny 2005, p. 13). As a result, two organizations producing goods of the same quality may accrue differential rewards simply due to disparities in the status of their affiliates. Overall, as prior work has shown, the conceptualization of status as a signal of quality aptly characterizes the operation of status processes in contexts where audiences are interested in comparing firms that operate in the same line of business.

It is, however, worth remarking on two aspects of this conceptualization that stand in contrast to how status is thought of in other areas of sociology. First, when economic sociologists note the reciprocal relationship between status and quality, the concept of "quality" is typically invoked to refer to product quality or to a firm's overall performance. Yet, in developing a formal model of status allocation processes that derive in part from perceptions of quality, Gould (2002, p. 1153) construes quality in a much broader manner to denote "whatever attribute a social context makes salient as a determinant of social desirability." Although Gould's broad conceptualization of quality informs a model that is patently about individuals allocating status to one another, it also seems applicable to the organizational world.

To be sure, in some situations, individuals allocate status to organizations in part based on perceived quality and treat status as a signal of quality, as Podolny's model posits. However, in other settings, individuals clearly regard some organizations as more socially worthy than others, regardless of product quality. To return to the example given earlier, it is unlikely that the charity event organizer choosing between a waste-management firm and a biotechnology company for its sponsor would care much about whether the waste-management firm was top within its industry. In that case, quality seems to have more to do with operating in a respectable type of business rather than anything about product performance relative to a set of same-industry peers. To better understand such settings, it seems important to consider bases for organizational status other than those that theory currently specifies.

A second point that distinguishes the dominant perspective on status within organizational sociology from that within the stratification literature centers around the degree of emphasis on the benefits of status that are unearned. Organizational and stratification scholars alike use the concept of status to denote differences in esteem that follow from one's position in a social hierarchy, above and beyond what might be merited on the

basis of one's performance. Such differences in esteem are of great interest to stratification scholars because they typically follow from characteristics that are socially valued but not intrinsically performance relevant (e.g., race, gender), meaning that any disparities in rewards that follow from those characteristics are unearned. Organizational scholars are also interested in position-based advantages, but it is less clear whether advantages from status as it is currently conceptualized should be viewed as cause for concern, for two reasons. First, status differences often arise endogenously in competitive markets through processes whereby consumers and others use status to gauge quality under conditions of uncertainty (Podolny 1993) or use status to choose the option that is most defensible in the face of possible critiques by third parties to which an actor is accountable (Jensen 2006). Second, an actor's affiliation choices are thought to be the major mechanism through which status and quality might become significantly decoupled (Podolny 2005). Yet, while an organization's pattern of affiliations can certainly attenuate the link between status and quality, previous studies that demonstrate the tendency for status-based homophily in the choice of relationship partners (Podolny 1994; Chung, Singh, and Lee 2000; Li and Berta 2002) seem inconsistent with a great degree of decoupling. Research has demonstrated that fear of status loss constrains high-status actors from associating with low-status (and likely, low-quality) actors—a tendency that is particularly acute where actors are more accountable to others (Jensen 2006; Jensen and Roy 2008). Thus, although affiliations may drive a wedge between status and quality, the extent to which decoupling is widespread and persistent among organizations in practice is an open empirical question.[2] The more closely aligned the two are, the less reason there is to be concerned about unearned advantages due to status.

Although the view of status within organizational sociology contrasts somewhat with perspective of stratification scholars, it is in many ways consistent with the more economic concept of reputation (Kreps and Wilson 1982; Shapiro 1983), defined as expectations of future performance based on past demonstrations of quality. Concerns about the conflation of status and reputation have appeared regularly in the literature (see, e.g., Washington and Zajac 2005; Jensen, Kim, and Kim 2011; Piazza and Castelluci 2013) and are often expressed in terms of apprehension about the choice of a particular measure as a proxy for status (i.e., scholars theorizing about status while measuring reputation). Yet, the problem at its core

[2] Lynn, Podolny, and Tao (2009) use simulation models to study the extent to which various contextual factors can produce a significant decoupling of status from quality. Their analyses offer powerful insights about the link between status and quality under different conditions. However, the implications of their work are clearer for interactions among individuals than for evaluations of organizations in market settings, primarily because their simulations seem to most closely resemble the former.

revolves around how status in markets has been conceptualized. In reviewing the literature on status among management and organizations, Jensen et al. (2011, p. 90) commented that "viewing status as a signal of quality provided the theoretical foundation for equating status with reputation in subsequent research," an observation echoed in Piazza and Castellucci's (2013) review.

Taken together, then, existing theory usefully asserts a distinction between status and quality, while at the same time emphasizing mechanisms whereby reciprocal linkages between the two tend to persist. Moreover, the existing view focuses primarily on one aspect of "quality," while overlooking other possible meanings of the term. Thus, to examine how status might lead to unearned rewards in markets, thereby further distinguishing the concept from that of reputation, and to better understand situations in which evaluation occurs across categories, it is necessary to specify a basis for organizational status that is rooted in something that exists apart from quality.

CATEGORIES AND VALUATION

I address this issue by drawing upon the established conceptualization of how status processes operate among categories of people to argue that an analogous process occurs for organizations. Status among individuals operates at two levels, referring to both the social standing of people in one category of difference relative to another (e.g., doctors vs. nurses, men vs. women) and to the relative standing of particular individuals (Ridgeway and Correll 2006). Status beliefs, or culturally shared notions that associate greater perceived competence and esteem with people in some categories rather than others, provide the link between status at the category level and at the individual level. Status beliefs powerfully frame social interactions by providing scripts and schemas that suggest what to expect from individuals in certain social categories and, accordingly, how to treat them (Ridgeway 2011). For example, status beliefs about mothers frame members of this social category as less competent and committed to work, resulting in reduced rates of hiring and lower salaries, even in the absence of any true differences in qualifications (Correll, Benard, and Paik 2007). More generally, such status beliefs contribute to social inequalities whereby members of high-status categories tend to receive more favorable treatment and thereby obtain the most advantageous outcomes (e.g., positions of power, higher salaries) relative to their low-status peers.

Just as a person's status derives in part from categorical social identity characteristics such as race, gender, or occupation, it is likely that an organization's social status stems in part from categorical aspects of its social identity. This supposition builds on recent work focusing on the role of or-

ganizational identity in shaping the perceptions and evaluations of relevant audiences, such as consumers, analysts, and competitors (Zuckerman 1999; Phillips and Zuckerman 2001; Hsu, Hannan, and Kocak 2009; Patterson and Reuf 2009; Smith 2011). In this line of work, organizational identity derives in part from a firm's membership in socially defined categories, such as "bank," "university," or "semi-conductor manufacturer," which external audiences use to identify and make sense of organizations (Zuckerman 1999; Hsu and Hannan 2005; Hannan et al. 2007). Categorical identity has been shown to matter for organizational outcomes at least in part because audiences use category membership to distinguish the real or legitimate "players" in a market from those that are irrelevant or not interpretable.

While this view emphasizes the role of categories as screening devices or sieves that govern which organizations are worthy of attention or are comprehensible, an emerging perspective suggests that categories also function as lenses, shaping how a given performance is perceived. Consistent with this view, Smith (2011) found that the investor response to a hedge fund's performance is contingent on the typicality of its investment strategy relative to others claiming the same categorical identity. Similarly, Pontikes (2012) showed that the ambiguity of the category to which a software firm belonged affected consumer and venture capitalist evaluations. Smith (2011) and Pontikes (2012) focus on different characteristics of categories, but both show that an organization's performance is interpreted through the lens of category membership.

Building on this perspective and drawing upon examples of higher- and lower-status categories of organizations that can be found in the literature, I propose that an organization's categorical identity shapes evaluations in a more abstract, evaluative sense as well. I argue that beliefs about categories of organizations are not exclusively value neutral but rather are associated with differential levels of esteem. Put another way, organizational categories have status value. These category-level status beliefs create the context in which the organization's performance is evaluated. When an organization is identified with a given category, the status of the category immediately and automatically affects whether the organization is viewed as worthy of deference. As a result, the same action can be interpreted as better or worse simply due to the status of the category to which an organization belongs.

As noted earlier, the model I am proposing for identity-based status processes among organizations operates in a manner similar to that in which expectations states theorists have shown status characteristics such as gender and race play out among individuals, with status beliefs at the category level affecting interaction patterns and rewards at the individual level (Berger, Rosenholtz, and Zelditch 1980; Ridgeway 1991; Correll et al. 2007). The idea that categories of organizations differ in terms of their social sta-

tus also bears some similarities to economist Jean Tirole's (1996) theory of collective reputation. Tirole proposes that the esteem in which an individual organization is held is shaped in part by beliefs about the larger group or class to which the organization belongs. However, my conceptualization of category status differs from the notion of collective reputation in that, while Tirole theorizes collective reputation as deriving from past behaviors, I argue that perceptions of social worth need not be closely aligned with actual performance or behaviors. As decades of research on race and gender have shown, for example, beliefs about the social worth of different groups may persist even absent a grounding in intrinsic performance differentials.

THE RESPONSE TO ORGANIZATIONAL DEVIANCE

Research Setting

In order to show that it is useful to conceptualize an organization's status as stemming in part from its categorical identity, I tested whether category status affected how new information about a firm was received by investors. In particular, I analyzed the market reaction to announcements of earnings restatements by U.S. public companies between January 1, 2000, and December 30, 2009. The Securities and Exchange Commission (SEC) requires publicly traded companies to periodically report financial information about themselves, also stipulating that firms must acknowledge and correct any financial information that is later discovered to be inaccurate, incomplete, or misleading. Correcting such inaccuracies is known as issuing an earnings restatement. Earnings restatements can come about because the company or its auditor discovered incorrect information or because the SEC did. In any case, the company must formally disclose the restatement by filing the appropriate forms with the SEC. Investors learn about earnings restatements through press releases issued by the firm itself, media coverage of the restatement, or SEC filings, which are publicly available. Restatements exist on a continuum of wrongdoing ranging from mere accidental misapplication of generally accepted accounting rules (GAAP) through so-called aggressive accounting practices, which push the boundaries of GAAP, to outright fraud, which is punishable by law.

The problem faced by investors in determining the appropriate response to a restatement is one of interpretation: the way in which news of a restatement is incorporated into a firm's stock price depends on what investors believe the restatement reveals about the underlying viability and future prospects of the firm and on how investors think other investors will react. It is difficult for investors to rely only on the objective facts of the situation to interpret a restatement, simply because information provided is often incomplete, ambiguous, or unreliable at the time the restatement is an-

nounced (Burks 2011). This setting is therefore an instance in which evaluation occurs under considerable uncertainty and ambiguity, meaning it is an empirical context in which status processes are likely to operate. There are two additional motivations for studying restatements. First, the evidence of a public response indicative of a change in valuation is clearly measurable via stock returns around the time of the announcement. Second, firms that restate exist within a socially meaningful category system: industries.

In general, the market tends to frown upon restatements, as evidenced by the fact that firms typically experience abnormally negative returns in the days immediately following a restatement announcement (Palmrose, Richardson, and Scholz 2004; Agrawal and Chadha 2005; Srinivasan 2005; Scholz 2008). Restatements also tend to be followed by an increase in executive turnover (Arthaud-Day et al. 2006; Desai, Hogan, and Wilkins 2006; Hennes, Leone, and Miller 2008) as well as shareholder lawsuits (Palmrose and Scholz 2004). Although the average negative abnormal returns surrounding restatement announcements no doubt indicate that the market devalues restating firms based on downward expectations of future cash flows, there also seems to be a punitive element to the response. In particular, media coverage of restatements as a general phenomenon has tended toward moral outrage (see, e.g., Stoller 2002), especially after several high-profile accounting scandals (e.g., Enron, WorldCom) resulted in restatements in the early 2000s.

Theory and Hypotheses

I outlined earlier how category status might influence the perception and evaluation of an organization's actions in general. Here I develop more fully the theory for how category status should affect the market response to an earnings restatement. Typically, social status acts as an evaluative lens that enhances the perceived worth of legitimate or socially acceptable actions (Merton 1968; Podolny 1993; Benjamin and Podolny 1999). However, earnings restatements fit Becker's (1963) definition of deviance as "publicly labeled wrongdoing." While not all restatements are due to fraud, there is sufficient ambiguity to taint most restatements as unsavory events. Thus, in this setting, the relevant question is whether high-status actors benefit in terms of enjoying more leeway to deviate when they take actions that normally garner social disapproval.

Previous work on the role of status in the reaction to deviant behavior has produced mixed findings. On the one hand, status may buffer actors from negative repercussions, perhaps because the trust placed in high-status actors makes people less likely to believe accusations of deviance or because status acts as a lens through which any deviant act is viewed as less diagnostic (Hollander 1958; Alvarez 1968; Ungar 1981). On the other

hand, high-status actors may be disproportionately punished for their transgressions, because their actions represent a violation of not only norms but also status expectations or because their actions are viewed as a more significant threat to societal institutions (Adut 2005). Alternatively, high-status actors may be more likely to be punished because their transgressions may be more publicized (Graffin et al. 2013).

As Giordano noted in her review (1983) of the literature on high-status deviance, part of the difficulty in answering the question of how status affects the response to deviance is that being punished for an errant behavior involves a chain of events. First, the deviant act must be discovered. Then, accusations of deviance must be brought to light and given credence. Finally, the deviant act must be interpreted negatively, and punishment must be meted out. The effects of status may differ at each stage. For example, deviance by high-status actors may be more likely to be discovered due to greater targeting, but it may be punished to a lesser extent, conditional on discovery. Overall, empirical work in this area has produced divergent findings, and theoretical development has lagged in resolving the conflicting evidence.

In organizational and economic sociology, the most prominent work on this topic (i.e., Phillips and Zuckerman 2001; Phillips, Turco, and Zuckerman 2013) has focused largely on the relationship between status and role conformity among organizations or actors of a given type (i.e., all investment banking analysts, all Silicon Valley law firms). Phillips and Zuckerman (2001) documented an inverted U-shaped relationship between status and role conformity, explaining it with reference to status-based variation in the need of market actors to establish themselves as legitimate "players" or members of a group (i.e., the field of investment banking or the field of law). According to the theory of middle-status conformity, low-status actors are viewed as outsiders regardless of what they do, while high-status actors enjoy security in membership by virtue of their status alone. Only middle-status actors face pressure to conform. In subsequent work, Phillips et al. (2013) show that high-status actors' ability to violate norms with impunity is only likely to hold in situations where the norm violation does not call into question the violator's loyalty to the relevant evaluating audience.

I focus on a type of behavior that differs from most previously studied acts of organizational deviance in two important ways. Whereas the theory of middle-status conformity pertains to acts of role nonconformity where an actor's legitimate claim to membership in a group was at question, I study acts that suggest—though they do not necessarily confirm—that an organization has intentionally violated moral norms or laws. The question of membership in a group is not at issue in the case of earnings restatements. Rather, market actors considering how to respond to an earnings restatement are merely trying to discern what the restatement implies about

the underlying prospects of the firm. Thus, the question is whether relevant audiences interpret the announcement of news indicating deviance differently for high-status organizational actors than they do for others.

I argue that actors from high-status categories should be advantaged in the setting at hand for two reasons. First, status confers an aura of trustworthiness, and bad news about high-status actors may be given less credence for this reason (Goode 1978, pp. 252, 300). As a result, investors may require that a greater burden of proof be met in order for a negative signal such as a restatement to be seen as truly indicative of serious or pervasive underlying problems that might negatively affect the firm's future prospects. Second, even if investors were to view restatements from firms in different status categories as equally serious, they may devalue restating firms from high-status categories less if they believe firms from such categories will be able to recover more rapidly. Pfarrer, Pollock, and Rindova (2010) make a similar argument in their study of the effect of reputation on the market reaction to firms that announce negative earnings surprises, noting that evaluators may tend to view a failure as less meaningful when considered in conjunction with the track record of strong performance that high-reputation firms have.

To be clear, my arguments do not require or assume that investors are explicitly attending to status considerations; most likely they are not. Rather, I expect that judgments are socially situated, even in achievement-oriented settings, such as markets. As a result, status beliefs may play a role. Thus, I predict:

HYPOTHESIS 1.—*Investors will react less negatively to earnings restatements from organizations that belong to higher-status categories.*

Recent work, however, notes that status-related biases may attenuate under conditions in which evaluators engage in greater scrutiny or are held to account for their assessments.[3] Foschi (1996), for example, found that bias against a low-status group attenuated when evaluators knew they would have to justify their decisions to an audience. Reviewing the literature on the impact of accountability, Lerner and Tetlock (1999) noted numerous conditions under which accountability should lead decision makers to avoid cognitive shortcuts and biases. Using a natural experiment to identify the signaling effect of status on evaluations of proposals to an Internet engineering task force, Simcoe and Waguespack (2011) demon-

[3] Other work in the status literature pertaining to the selection of exchange partners indicates that status matters more when the focal choosing actor is more accountable to others (Jensen 2006; Jensen and Roy 2008). However, the focus here is on how scrutiny and accountability alter the effect of status on biases in evaluation, rather than on the selection of partners. Future research should further investigate why the operation of status processes under conditions of greater accountability/scrutiny seems to have a different effect on evaluations than it does on exchange partner choice.

strated that status played a role in how proposals were evaluated when attention to or scrutiny of a proposal was low, but that status was immaterial to evaluative outcomes for a subset of proposals that were prescreened to receive greater scrutiny.

In the context of earnings restatements, it is clear that the level of accountability and scrutiny around restatements has varied across the time frame for this study. In the early 2000s, several high-profile accounting scandals generated public outrage and prompted regulatory concerns, which culminated in the passage of Sarbanes-Oxley (SOX) financial reform legislation in July 2002. The legislation encompassed a number of provisions intended to strengthen the quality of financial reporting and, in turn, to restore public faith in securities markets. The law mandated the creation of the Public Company Accounting Oversight Board (PCAOB), which "required that auditors of U.S. public companies be subject to external and independent oversight for the first time in history" (PCAOB website), and also put in place rules to minimize potential conflicts of interest that might cause securities analysts to issue recommendations biased in favor of companies that also did investment banking business with their firm. Overall, researchers have widely characterized this legislation as having increased the level of scrutiny and accountability around financial reporting, and, relatedly, restatements (see, e.g., Her, Lim, and Son 2010, p. 7; Burks 2011, p. 522). I argue that the increased accountability of auditors, managers, and securities analysts to investors and regulators created an environment in which restatements were scrutinized to a greater degree. This increased scrutiny should reduce the benefit to firms from high-status categories.

Thus, I predict:

HYPOTHESIS 2.—*The effect of category status on the reaction to an earnings restatement announcement will be smaller during periods of heightened scrutiny in financial markets, namely, immediately following the passage of the Sarbanes-Oxley Act of 2002.*

DATA AND METHODS

Measuring Industry Status

To my knowledge, no one has previously attempted to measure the status of a wide range of business industries. As such, this article necessarily represents an initial attempt at measuring and validating the concept of category status among organizations, with the expectation that an initial demonstration of its fruitfulness will spark future refinements of the measure. In developing a measure for category status, I drew heavily on precedent set by the extensive empirical literature on occupational prestige (e.g., Duncan 1961; Siegal 1971; Tremain 1977; Zhou 2005). I chose to measure category status via a survey that closely mirrors the General Social Survey's (GSS)

module on occupational prestige (Nakao and Treas 1994). In the survey, I asked a sample of individuals who are familiar with and active in the business world about their perceptions of how highly regarded different categories (i.e., industries) of organizations are. They also answered questions about their perceptions of an industry's virtue, complexity, investor performance, and pay. Individual-level responses were then aggregated to identify status beliefs at the industry level.

Surveys are, of course, prone to bias in terms of respondents voicing only socially acceptable opinions. However, there are two reasons why this should not be a serious concern in this case. First, because respondents were asked about their ratings of industries rather than some of the more sensitive societal hierarchies (e.g., race, gender), they should be more likely to voice their true opinions. Second, if any social desirability bias does exist (i.e., if respondents' beliefs about what most other people think of industries influences their own reporting of status for an industry), it actually works in favor of my measure, as such third-order beliefs are constitutive of status (Ridgeway and Correll 2006) and are precisely what is important to tap.

Sample.—The intent of the survey was to measure perceptions of industry status among individuals who are familiar with and participate in markets, rather than among the general public. I focused on this narrower population because I suspected that its members' beliefs about industry status were more pertinent to the topic of study here. Of course, the beliefs of the business community may differ from those of other groups. Questions of how much consensus on industry status exists across different populations and whose status beliefs are most important for organizational outcomes were beyond the scope of this project, although they are interesting topics for future research.

The surveyed population consisted of MBA students from the classes of 2010 and 2011 at a top-tier business school on the West Coast. The survey was distributed in the fall of 2009 to all current MBA students. Approximately 192 students, or 25% of the student body, responded. Respondents were similar to the overall population of the business school on most observable dimensions; thus, nonresponse bias should not be a serious concern. (See the methodological appendix for a detailed comparison.) Given the range of career backgrounds and aspirations of this population, the status beliefs of this group should represent the perceptions of people across a range of business areas and should correspond to the beliefs of people who are influential in markets more generally.

Industry categories.—The relevant category system for this analysis was based on the industries in which firms operated. Although organizations could potentially be classified on a number of different characteristics (e.g., size, geographic location, industry) that might be represented in categorical

terms, industry affiliation is one of the most salient categorical aspects of an organization's identity. Producers often highlight industry membership in their names (e.g., American Airlines) and in self-descriptions (Pontikes 2012). Elements of the organizational environment, such as securities analysts (Zuckerman 1999), trade associations, and the media (Fombrun 1996), are also structured in ways that reinforce the centrality of industry affiliations as a taken-for-granted aspect of markets.

Several different industry classification schemas exist (e.g., Standard Industrial Classification codes, North American Industrial Classification System [NAICS], Fama-French industry codes), each suited to the purposes of its creator. In order to measure industry status, I needed to use a classification system that was consistent with how relevant organizational audiences categorize firms in practice. I began by reviewing the classification system of Standard and Poor's, an important market mediator that provides data, research, and analytics products to institutional investors and investment advisors. Standard and Poor's classifies firms into one of 121 industries, and this classification is listed in Compustat, a commonly used database of financial information on public companies. However, because I suspected that several of the 121 industries were artificially narrow compared to the way people think about organizational status in markets, I cross-checked this list of 121 with the groupings Standard and Poor's uses when it issues analyst research reports on different industries. Market participants actually read reports from Standard and Poor's for guidance but do not tend to use Compustat, so the divisions found in these analyst reports should correspond more closely to how market participants view industries. On this basis, I reduced the list of 121 to 92 industries, combining industries wherever Standard and Poor's covered them together in a single report. Most of these combinations have face validity. For example, the categories "Autos" and "Auto Parts" became a single category, "Autos and Auto Parts." Finally, because this list of 92 industries still seemed to contain some artificial distinctions, I turned to the business magazine *Institutional Investor*, which conducts an annual survey to rank investment analysts within their respective coverage category (e.g., best analyst in insurance or in leisure goods). The survey has been conducted for many years by asking respondents to nominate the best analysts in specific industry-based categories, so it seems likely that a business audience would find *Institutional Investor*'s categories recognizable and meaningful. Using *Institutional Investor*'s categorization schema, I again reduced the list of categories, combining industries where *Institutional Investor* treated them as a single category. In the end, this resulted in 61 industries for which to measure status.[4]

[4] The same final set of industry categories would be arrived at if this process had been undertaken in reverse, starting with the *Institutional Investor* categories and adding to

One important question related to my classification system is the extent to which Standard and Poor's assignment of firms to industries corresponds to the classification of firms by important organizational audience members, such as sell-side analysts more generally. I assessed this in the following manner. First, it is well known that analysts tend to specialize in covering firms in only a few industries (Zuckerman 1999). Thus, on average, if the assignment of a firm to an industry according to my Standard and Poor's classification system is correct, analysts should specialize in relatively few industries, and firms should be more likely to be covered by securities analysts who specialize in the industry to which they belong according to my Standard and Poor's–based classification system. By analyzing data from the Institutional Brokers' Estimate System (IBES) on analyst coverage of firms over the 2000–2009 period, I was able to determine that sell-side analysts devote an average of 71% of their attention to their top industry (i.e., the industry to which they devote the largest share of their coverage), where industry is defined in the manner described above. This indicates substantial specialization. In addition, an average of 83% of the analysts covering a firm specialized either primarily or secondarily in the industry to which the firm was assigned according to my classification system. Thus, my assignment of firms to industries appears to be consistent with the attention allocation patterns of securities analysts, offering validation of my classification system.[5]

A second question related to the classification of firms concerns the issue of multiple-category membership. Standard and Poor's assigns each firm to one primary industry. However, in practice, some firms occupy market positions that span multiple industries, and recent empirical work has shown that an actor spanning multiple categories "risks sowing confusion among relevant audiences, thereby producing social penalties in the form of lack of attention or outright rejection" (Zuckerman et al. 2003, p. 1019). In the case of earnings restatements, however, attention is not a key issue.

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them. I chose to begin with the Standard and Poor's classification because it was the system by which firms in Compustat, a major data source for this study, were classified.

[5] These figures were ascertained via an analysis of data downloaded on all earnings forecasts issued by any analyst for all firms in I/B/E/S from 2000 to 2009. I coded each analyst as covering a firm in a given year if she had issued either a quarterly or annual earnings forecast for that period. I then matched each firm to its relevant industry classification using my modification of the Standard and Poor's based classification system found in Compustat. I calculated for each analyst-industry-year the amount of attention the analyst devoted to that industry as a proportion of his overall coverage (i.e., the number of firms in a given industry that an analyst covered in a given year as a share of the total number of firms he covered in that year). I then designated an analyst as a "specialist" in an industry if the industry captured either the largest or second-largest share of his attention. This allowed me to calculate for each firm-year the number of specialists covering the firm as a proportion of the total analysts following it.

Rather, the question facing investors is what they should infer about the firm's future, given the announcement of an earnings restatement. Work in cognitive psychology indicates that individuals have a strong tendency to make inferences and predictions on the basis of membership in a single category, even when an item is difficult to classify (Murphy and Ross 1994; Ross and Murphy 1996). Thus, I assigned firms status scores on the basis of membership in a single category.

Status measure.—Having identified the relevant set of industry categories, I then measured status for each industry using a survey in which respondents were first asked "how prestigious, respected, or esteemed" they thought organizations in different industries were. The survey was designed to emphasize the group ranking aspect of status in that respondents were asked to answer by dragging the names of 61 randomly ordered business industries to one of five boxes with labels ranging from "very low prestige" to "very high prestige." Throughout the process, respondents could easily see which industries they had grouped as similar in status and how those industries compared to others they had rated. Respondents could choose "don't know" if they were unsure about an industry's status, although this response was rarely given in practice.

Although respondents did not directly compare industries in terms of status, they did so implicitly by grouping them into five prestige buckets. Using these implicit comparisons, I transformed the survey responses into a 61×61 relational matrix (**R**), where each cell r_{ij} represents the proportion of times industry i was rated as more prestigious than industry j among all respondents who rated both industries. I then calculated industry status using Bonacich's centrality-based status measure (Bonacich 1987). This measure incorporates the idea that it matters not only how often an industry outranks others but also which other industries it outranks. Outranking a more prestigious industry is given more weight than outranking a less prestigious industry.

In addition, I generated three other status measures. First, I calculated the mean percentage of respondents rating an industry i higher than industry j. Second, I coded the status groups on a scale from one (low-status) to five (high-status) and took the mean rating for each industry across all respondents. Finally, I calculated the percentage of respondents ranking the industry as high or very high status. The industry status ordering did not vary considerably across the measures; the bivariate correlations among the four measures were greater than 0.95. Because there are theoretical and methodological reasons for preferring the Bonacich measure, I used this in subsequent analyses of earnings restatements, although I also tested whether the reported results were sensitive to the measure chosen. Results (reported summarily in the "Robustness Checks" section) confirm that the findings are not specific to a particular measure.

I also measured the degree of consensus on the status rating for a given industry by calculating the Herfindahl-Hirschman Index (HHI) for the status ranking of each industry. The measure is calculated as the squared proportion of respondents in each rating bucket, summed across all possible rating buckets and converted to a percentage. In a where there are five rating buckets, the measure could theoretically range from a minimum of 20%, indicating that respondent ratings were distributed perfectly equally across the five rating buckets, to a maximum of 100%, indicating that all the respondents rated the industry as being in the same prestige bucket.

Table 1 presents status measures by industry as well as the level of consensus on status, with industries listed in descending order of their Bonacich status. Overall, the status ordering that emerged from respondents' self-reported ratings shows clearly that categories of organizations vary in terms of status; the top-ranking industry was cited as "high status" or "very high status" nearly 94 times as often as the lowest-ranking industry. In addition, informal consultations with executives and other academics suggest that the emergent ranking has face validity; industries that one might suspect to be high status (e.g., biotechnology, banking, computer software) are indeed at the top of the rankings while industries that one might suspect to be low status (e.g., tobacco, construction, waste management) fall toward the bottom of the rankings.

While the survey results demonstrate variation across industries in terms of status level, they also show a reasonable degree of consensus on industry status scores across respondents. Consensus, measured by HHI scores, ranged from a low of 23% for the gaming industry to a high of 44% for the biotechnology industry. To put this in perspective, consider that the HHI score for an industry would be 50% if all respondents were to categorize it as belonging to two of the five categories. How much consensus on status is necessary in order for actors to take it into account in making evaluative judgments is an open empirical question. However, the levels of consensus found here would seem to suggest that, in many cases, it cannot be ignored.

Validation.—Given that this is the first attempt at measuring category status across a wide variety of organizations, I undertook two additional exercises that more formally test the validity of the measure. One set of potential concerns about the measure relates to the measurement instrument and its ability to accurately capture people's status beliefs. Researchers typically address this type of concern by assessing a measure's construct validity, or the extent to which the measure is correlated with other concepts for which there are theoretical reasons to expect an association (Schutt 2006). In this case, I assessed construct validity by testing whether the measure of category status correlates with concepts such as industry complexity, virtue, investment performance, and pay. I now discuss the theoretical rationale for each of these variables in turn.

TABLE 1
INDUSTRY STATUS AND CONSENSUS ON STATUS

Industry	Bonacich Status	Mean % Dominance	Mean Status Score	%High/ Very High Status	%Low/ Very Low Status	Consensus
Biotechnology	2.20	82.13	4.41	93.72	.52	44.26
Investment services	1.89	72.62	4.09	74.48	6.77	32.26
Banking	1.81	70.59	4.02	75.52	6.77	32.00
Computers—software	1.80	70.88	4.01	75.00	3.65	34.04
Aerospace defense	1.77	70.07	3.96	70.83	4.69	31.69
Diversified financial services	1.74	68.16	3.91	71.58	10.53	29.93
Movies and home entertainment	1.60	64.54	3.79	64.92	8.38	30.34
Pharmaceuticals	1.53	63.15	3.66	64.58	8.85	36.72
Semiconductors	1.51	61.94	3.65	59.04	10.11	29.95
Advertising and marketing	1.44	60.35	3.59	53.93	6.81	34.88
Broadcasting	1.38	58.05	3.51	52.38	11.64	31.26
Computers—commercial services	1.35	57.22	3.51	49.48	9.38	32.44
Telecommunications	1.33	57.16	3.51	50.52	8.85	33.87
Computers—hardware	1.33	56.70	3.49	48.69	9.95	33.33
Health care, medical products	1.27	54.91	3.41	44.50	8.90	36.63
Electronics and electrical equipment	1.22	52.74	3.34	44.21	15.79	33.59
Jewelry novelties and gifts	1.20	50.77	3.27	42.41	21.47	27.16
Oil and gas	1.13	48.56	3.21	40.84	24.61	25.81
Leisure time products	1.08	48.39	3.22	33.85	15.10	36.03
Health care—hospital management	1.05	46.94	3.13	33.33	22.40	31.04
Publishing	1.02	45.56	3.06	29.26	24.47	32.67
Gaming	1.01	43.12	2.97	38.42	35.79	23.45
Lodging	1.00	45.03	3.10	31.05	22.11	33.87
Photography and imaging	.98	43.51	3.01	28.80	28.26	29.51
Commercial and consumer services	.97	44.56	3.07	27.12	19.21	38.22
Alcoholic beverages	.96	43.11	3.00	28.27	26.18	30.42
Restaurants	.94	42.60	3.01	28.95	28.95	30.33
Cosmetics, household and personal care	.92	41.85	2.97	25.00	27.08	32.89
Health care—long-term care	.89	40.59	2.87	26.20	33.69	28.53
Textiles, apparel, and footwear	.85	39.55	2.90	21.47	30.37	33.46
Engineering and construction	.84	39.22	2.88	20.21	28.19	35.10
Food and nonalcoholic beverages	.79	37.30	2.86	18.52	30.16	36.13
Airlines	.74	35.29	2.69	16.67	36.46	31.47

TABLE 1 (*Continued*)

Industry	Bonacich Status	Mean % Dominance	Mean Status Score	%High/ Very High Status	%Low/ Very Low Status	Consensus
Natural gas distributors	.64	30.21	2.58	12.50	46.20	30.83
Retailing	.62	30.56	2.61	10.53	41.58	35.05
Chemicals	.61	29.65	2.54	8.70	45.11	34.84
Savings and loan companies	.60	29.43	2.49	10.11	48.94	32.76
Insurance	.57	28.41	2.48	9.38	51.56	34.39
Insurance brokers	.52	25.65	2.38	7.89	55.79	32.37
Housewares and household durables	.46	23.05	2.32	4.76	58.20	34.28
Homebuilding	.46	22.97	2.30	8.02	63.10	34.31
Manufacturing	.45	22.38	2.25	2.65	61.90	36.32
Metals and mining	.42	19.77	2.16	8.06	68.28	30.69
Autos and auto parts	.40	19.72	2.14	6.81	67.54	30.69
Electric utilities	.38	18.96	2.11	4.79	70.74	33.29
Supermarkets and drugstores	.35	18.59	2.18	1.58	69.47	40.53
Industrial machinery	.35	17.38	2.07	3.28	75.41	38.06
Employment services	.34	17.80	2.08	2.19	73.22	37.59
Commercial transportation	.33	17.01	2.10	4.92	76.50	41.13
Agricultural products	.29	14.50	1.94	3.19	77.66	34.85
Hardware and tools	.26	13.53	1.95	2.72	84.24	43.89
Heavy construction materials	.25	12.29	1.85	2.65	83.07	37.32
Distributors	.24	13.13	1.93	1.11	83.89	43.57
Printing	.24	12.16	1.87	2.73	85.25	40.46
Water utilities	.24	11.15	1.76	3.70	85.71	37.94
Office equipment and supplies	.21	11.77	1.88	0.53	83.96	41.08
Tobacco	.20	9.73	1.58	3.16	83.68	45.01
Trucks and heavy equipment	.20	10.17	1.78	1.06	86.77	40.09
Waste management	.17	7.91	1.54	3.19	88.30	45.60
Containers	.17	8.66	1.70	1.10	90.11	41.60
Paper and packaging	.16	8.34	1.69	1.08	90.32	41.83

NOTE.—$N = 192$ respondents. Mean status score is computed on a 1–scale. Consensus is calculated as the HHI of respondents' ratings.

Industry complexity is intended to denote how complicated a type of business is in terms of its organization and operations. Researchers have argued that features of an organization's formal structure, such as the number of legally independent subsidiaries that an organization has, are a key driver of complexity (Prechel and Morris 2010; Prechel and Zheng 2012). I argue that categories of organizations that are perceived as doing a more "complex" type of business (i.e., an industry where members typically have

a more complex organizational form and operations) will also be seen as higher status. This follows from the fact that formal structure is associated with legitimacy in modern society (Meyer and Rowan 1977) and, as Zhou (2005) shows in the case of occupations, prestige derives from a group's ability to make legitimate claims to social honor.

Second, I propose that categories that are perceived to be more virtuous will also be viewed as more deserving of social standing. The proposed association between status and virtue stems in part from the fact that status among individuals is positively related to contributions to collective action (Willer 2009). Perhaps more relevant to the organizational world is work indicating a positive relationship between a firm's overall reputation and its corporate citizenship behavior (Turban and Greening 1997). These findings suggest that virtuous categories of organization will be seen as more prestigious, ceteris paribus, even in market contexts dominated by the logic of profit maximization.

In addition to these two dimensions, I anticipate that perceptions of stronger investment performance and higher pay will be associated with greater social standing for a category. There are two reasons to believe that this may be the case. First, in a society that espouses meritocratic values, industry-level characteristics such as investment performance and pay are likely seen as legitimate bases for social honor and esteem; categories of organizations that perform well on these dimensions will be seen as deserving of respect. Experimental work, for example, shows that the random allocation of differential rewards can, in and of itself, create status and influence hierarchies (Cook 1975; Harrod 1980; Ridgeway 1991; Stewart and Moore 1992). This occurs because people tend to infer levels of ability from the distribution of rewards, and ability is seen as a legitimate basis for status. In a different vein, research at the firm level also shows that corporate reputation is positively correlated with various measures of financial performance (Fombrun and Shanley 1990), suggesting that a similar link may hold at the category level. Thus, there is reason to expect that higher status categories will also be perceived as having stronger investment performance and higher pay.

Each participant in my status survey was asked not only to provide his status perceptions on 61 industries but also to rate a subset of approximately 20 industries on the basis of perceived investor performance, pay, complexity, and virtue. The 20 industries chosen varied across respondents such that it was possible to generate aggregate ratings for all 61 industries. As before, respondents could choose one of five ratings ranging from "very low complexity," for example, to "very high complexity." Respondents were asked to drag the name of the industry into the appropriate box, so that respondents at the end would see all the industries they had grouped

together as similar on each dimension. These four questions were presented in random order, as were the industries being rated.

Figures 1–4 graphically depict the relationship between status and mean perceptions of virtue, complexity, investor performance, and pay, respectively. There are positive correlations between status and each of the variables, indicating that the measure has substantial construct validity. Of the four, however, the relationship between status and virtue appears to be the most tenuous. Research on status among individuals suggests that people often associate status with competence and that they hold compensating beliefs about low-status individuals such that those individuals are seen as particularly "warm" or good (Fiske et al. 2002). A similar process may be at work among organizations.

Table 2 presents partial correlations between individual's rankings of status, virtue, pay, complexity, and investor performance. As expected, status had a significant positive correlation with all the measures. Overall, the fact that the status measure behaves as expected with respect to related concepts suggests that the measure adequately captured beliefs about the esteem in which an industry is held.

A second potential concern relates to the population from which the status measure was obtained. The ideal measure of category status among members of the business community would involve a random sample with a high response rate. Unfortunately, a comprehensive sample frame of the business community does not exist, and response rates are unlikely to be as

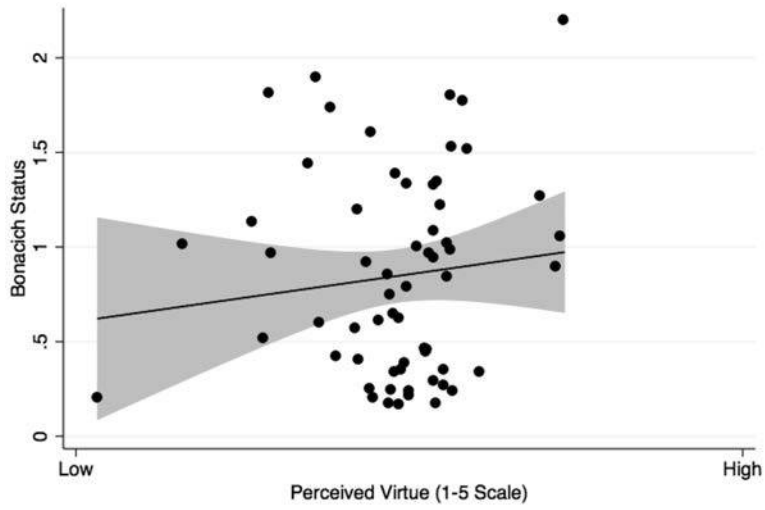

FIG. 1.—Industry status and virtue

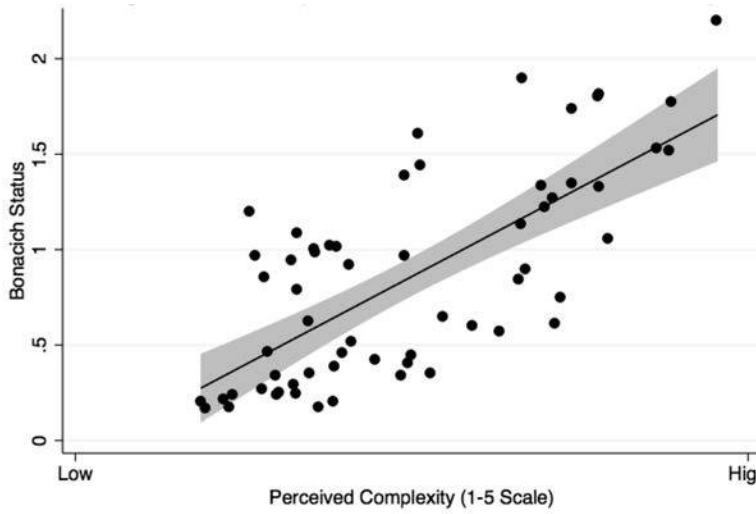

FIG. 2.—Industry status and perceived complexity

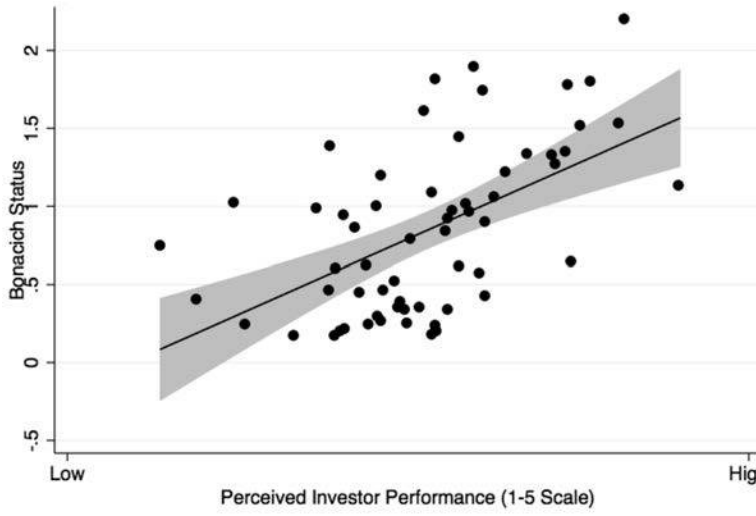

FIG. 3.—Industry status and perceived investor performance

high as one would like, due to the nature of the individuals involved (i.e., busy individuals who are unlikely to respond to small-scale financial incentives). Thus, it is reasonable to ask how well status beliefs reported by a group of MBA students in a particular geographic area correspond to beliefs among working members of the business community more generally.

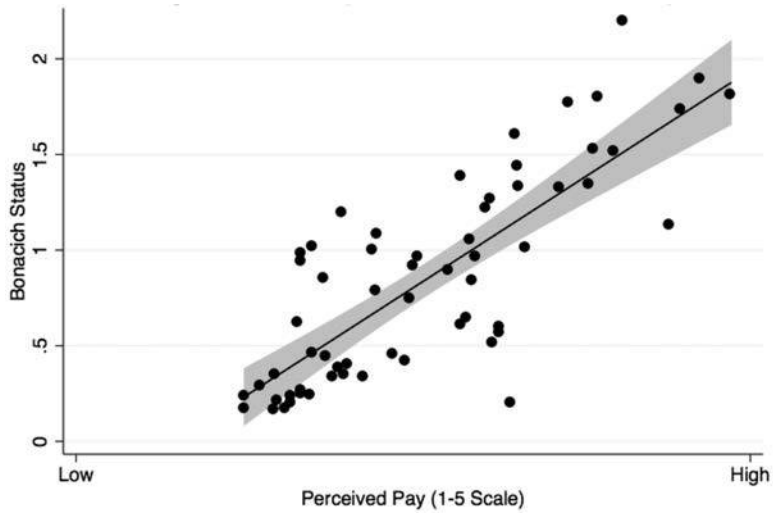

FIG. 4.—Industry status and perceived pay

To address this concern, I performed a sensitivity analysis in which I conducted a rating exercise among a small group of high-level executives and assessed the extent to which their ratings of industries were consistent with the status ordering that emerged from the survey of full-time MBA students reported earlier. In particular, I asked a small group of working professionals ($n = 43$) in an executive MBA program at a large Midwestern school to complete a survey that involved a series of 32 paired industry comparisons. The average respondent had 16 years of work experience, and gauging from their reported job titles, many held senior positions in their organizations.

Participants were given pairs of industries and were asked to select the industry they believed to be more prestigious, esteemed, or respected. The

TABLE 2
PARTIAL CORRELATIONS AMONG STATUS AND PERCEIVED INVESTOR PERFORMANCE, VIRTUE, COMPLEXITY, AND PAY

	Status	Investor Performance	Virtue	Complexity	Pay
Status	1.00				
Investor performance	.08	1.00			
Virtue	.13	.04	1.00		
Complexity	.23	.09	.17	1.00	
Pay	.35	.26	−.22	.35	1.00

NOTE.—$N = 3{,}498$ individual-industry observations. For all partial correlations shown here, $P < .01$.

industry pairings were chosen such that they represented prespecified levels of status difference based on the full-time MBA survey results (i.e., status differences of less than 0.1 SD, 1 SD, 2 SDs, and 3 SDs). For example, participants were asked to compare the semiconductor industry with the metal/mining industry, which represents a 2-SD difference in status according to the full-time MBA sample. Respondents completed eight paired comparisons at each of the four levels of status difference for a total of 32 ratings each.

Table 3 reports the results of this validation exercise. The first column indicates the mean proportion of executives who agreed with the status ranking that emerged from the full-time MBA sample. The second column indicates the level of agreement expected if we were to randomly select numbers from two normally distributed variables with identical variances and means that were less than 0.1 SD apart, 1 SD apart, 2 SDs apart, and 3 SDs apart, respectively. For example, the results show that when the executives were presented with industries that were 2 SDs apart, 86% of them agreed with the status ordering generated by the full-time MBAs (i.e., on average, if industry A was higher than industry B according to the status ordering that emerged from the full-time MBA sample, 86% of executives independently rated industry A as higher status as well). In comparison, we would expect 92% agreement if we drew at random from two normally distributed variables with means 2 SDs apart.

Agreement increases monotonically with the difference in status between the industries. While there is only 53% agreement when the executives are presented with two industries that were rated as almost equal by the full-time MBAs (vs. the expectation of a 50% agreement rate), there is

TABLE 3
AGREEMENT ON INDUSTRY STATUS BETWEEN FULL-TIME MBA SAMPLE AND WORKING EXECUTIVE SAMPLE

Status Difference between Industries	Observed Agreement Rate (%)	Predicted Agreement Rate (%)
<.10 SD	53	50
1 SD	62	77
2 SDs	86	92
3 SDs	94	98

NOTE.—Observed Agreement Rate is the mean proportion of executives that rated an industry as higher status when the industry was higher status according to the status ordering that emerged from the survey of full-time MBA students. This is calculated based on 32 paired industry comparisons. Predicted Agreement Rate is calculated based on 10,000 random draws from two normally distributed variables with identical variances and means that differ by the amounts in col. 1.

94% agreement when industries are 3 SDs apart. Overall, the results indicate a level of agreement between the executives and full-time MBAs that is similar to what would be expected if we compared random draws of industries where the true status scores differed from one another at the levels specified above. While there are differences between the responses of the two groups, they are not substantial. Thus, it appears that the full-time MBAs do not materially differ in their assessment of status from the working executives, who might be thought of as more representative of the business community on other demographic dimensions.

Taken together, the results of these validation exercises offer several reasons to be confident that the status ordering reported earlier accurately reflects the beliefs of members of the business community. Industry status correlates with other concepts as theoretically predicted. Moreover, the status ordering generated by full-time MBA students exhibits a high degree of correspondence with status ratings completed by working executives. Although it is prudent to further test and refine any novel measure, it is reasonable to conclude from the validation activities undertaken here that the measure of category status is an appropriate one.

Earnings Restatements

Turning now to the empirical context in which I test for the effect of industry status on the interpretation of new information about a firm, I describe the data on earnings restatements. Restatements analyzed in this study come from the Audit Analytics (AA) database for the years 2000–2009. AA identifies restatement events by searching the text of filings that firms make with the SEC, which means that the database captures a wide range of restatements, including so-called stealth restatements that firms do not announce in a press release or in the required disclosure announcement 8-K form. The AA database includes restatements announced for a variety of reasons, including clerical errors, unintentional misapplication of Generally Accepted Accounting Principles, aggressive (but not illegal) accounting practices, and outright fraud.

Dependent Variable

I measure the extent to which social audiences, such as investors in the U.S. equities market, devalue firms following earnings restatement announcements by calculating the cumulative abnormal return (CAR) for the firm's stock from the day before the announcement to the day after it. The CAR is commonly used in the accounting and finance literature to assess the market impact of a particular event (see MacKinley [1997] for a review), and it is the main outcome examined in studies of the reaction to an earn-

ings restatement (see, e.g., Palmrose et al. 2004; Agrawal and Chadha 2005; Srinivasan 2005; Scholz 2008). The CAR is calculated as the actual returns for a firm during a given period minus expected returns, where expected returns are calculated based on the overall performance of the market as well as the extent to which the firm's returns were correlated with the market in the past. Put another way, it represents the percentage gain or loss an investor would have experienced by holding the firm's stock for a given period, after netting out the return predicted for the stock based on the performance of the overall market during the event period and on the correlation between the firm's performance and market performance historically. Specifically, I calculate the CAR for firm i over the period (t_{-1}, t_1) as

$$\mathrm{CAR}_{t_{-1},t_1} = \sum_{t=-1}^{t=1} a_{it},$$

where a_{it} is the abnormal return for firm i on day t and is computed as

$$a_{it} = r_{it} - E(r_{it}).$$

In the previous equation, r_{it} is the actual return for firm i on day t and $E(r_{it})$ is the expected return for firm i on day t had the event not occurred. The term $E(r_{it})$ is predicted by estimating the following linear regression model:

$$E(r_{it}) = \alpha_{it} + \beta_i r_{mt} + \varepsilon_{it},$$

where $E(r_{it})$ is the expected return for firm i on day t and r_{mt} is the overall market return on that day, as measured by the Center for Research in Security Prices (CRSP) value-weighted index. The term α_{it} is a constant, and β_{it} is a parameter representing the linear relationship between overall market returns and the return on a particular stock. This is estimated using data from closing prices from a minimum of 120 trading days and up to 240 days prior to the event window. The results from this regression are then used to predict $E(r_{it})$ for the day in question. Overall, a positive CAR indicates that a firm's stock performed better than what was predicted based on past performance, and a negative CAR indicates that a firm did worse than predicted.

Consistent with prior research on the market reaction to earnings restatements, I measure the CAR from the day before the announcement through the day after it, although results are substantively the same using only data from the day of and immediately following the event. Although studying the longer-term reaction to a restatement would be interesting, I do not do so because lengthening the observation window increases the possibility of confounding events.

Control Variables

Restatement-level controls.—Using the AA database, I constructed several control variables intended to capture the nature and severity of the restatement. First, I controlled for the type of account(s) to which the restatement pertained by including three binary variables indicating that the restatement pertained to revenue recognition issues, expenses, or lease issues, respectively. Restatements related to revenue recognition issues tend to be associated with a more negative market reaction, because such restatements often carry larger implications for the firm's future earnings (Palmrose et al. 2004; Scholz 2008). A 2005 change in the rules regarding lease accounting prompted a number of restatements in that year; such restatements tended to be viewed less harshly (Scholz 2008). Findings regarding expense-related restatements have been more mixed.

While the vast majority of restatements reduce a firm's earnings or negatively affect the firm's balance sheet, firms do occasionally restate upward (Scholz 2008; Burks 2011; Myers, Scholz, and Sharp 2011). Therefore, I include a dummy variable indicating that the restatement had an adverse impact on the firm's income statement or balance sheet. In my sample, 86% of restatements had a negative impact, similar to what other researchers have found.[6] I control for the magnitude of the restatement by counting the (logged) number of quarters of financial information that were restated (Scholz 2008). I also include a dummy variable for whether the restatement involved fraud, irregularities, and misrepresentations, according to the AA database (Palmrose et al. 2004; Scholz 2008; Burks 2011). Not surprisingly, such restatements tend to garner a particularly negative reaction. Approximately 3% of restatements in my sample were classified as fraudulent. This figure is low relative to the proportion of fraudulent restatements in the late 1990s and early 2000s, but it is similar to the level found by other researchers across the time frame of interest here (Scholz 2008; Her et al. 2010). I also control for whether the restatement was accompanied by an SEC investigation. Taken together, these variables should capture a great deal of the variation in severity across restatements.[7]

I control for factors related to how and when the restatement was announced. Since August 2004, restating firms have been required under item 4.02, "Non-Reliance on Previously Issued Financial Statements of a Related Audit Report or Completed Interim Review," to file form 8-K, which

[6] Results of regression analyses presented later in the article are robust to excluding restatements that have a positive impact.

[7] Ideally, I would also capture the severity of the restatement by including the dollar amount of the restatement. However, this is not available in Audit Analytics. Moreover, firms often do not disclose the size of the restatement at the time of the announcement, which raises the question of whether size of the restatement affects the typical announcement of a restatement.

is used broadly to alert investors of a wide variety of material events. In practice, however, firms announce restatements in a variety of more or less prominent ways, ranging from highlighting the restatement in a press release to burying the restatement in a regularly scheduled financial report (Myers et al. 2011). Restatements that are announced in a way that attracts less attention tend to garner less negative reactions, although it is unclear if this is due to disclosure venue or differences in the average underlying characteristics of the restatement. I control for disclosure venue by including dummy variables indicating that the restatement was announced in a press release or that it was announced in a regularly scheduled financial filing (i.e., 10-K or 10-Q), respectively. The omitted category represents restatements disclosed in more standard fashion, meaning either the required 8-K or an announcement of an amended 10-K or 10-Q. I also include an indicator variable for whether an auditor letter was issued, indicating that the firm's auditor was involved in the restatement. In order to capture whether the announcement of the restatement was delayed, I also include the(logged) number of quarters between the end of the restated period and the date upon which the restatement was announced.

Finally, I control for whether the restatement was announced in the high-scrutiny period immediately following the passage of SOX financial reporting reform legislation in July 2002. I define this period as spanning August 2002–December 2004. During this time frame, a number of the key provisions of the law were put into place. The Public Company Accounting Oversight Board, which oversees auditors, was formed and began to take action. Company executives were required to certify their financial statements. Provisions for auditor independence were put into place. In August 2004, the SEC also issued new rules about the appropriate disclosure venue for restatements. Thus, it is appropriate to think of the law as ushering in a high-scrutiny period that unfolded over time as firms began to determine how to behave in this new legal environment. However, there are reasons to think that the increased scrutiny was not entirely sustainable, as it became clear over time that a perhaps unintended consequence of SOX was a rise in the number of restatements announced, which may have made restating seem like a more "normal" event. This included a rise in so-called minor restatements that some have argued stemmed from overly conservative reporting practices (Burks 2011). Thus, while the passage of SOX crystallized concerns about financial reporting and marked the beginning of a high-scrutiny period, this level of scrutiny did not persist. Because it is not entirely clear when this high-scrutiny period ended, I experimented with a number of different end dates. Results are insensitive to either lengthening or shortening the high-scrutiny period by three months.

Industry-level controls.—The analyses also include a number of industry-level variables that facilitate better identification of the status effect. The most

crucial of these is a control for industry complexity. As described earlier, this variable was calculated on the basis of survey respondents' assignment of an industry to one of five categories indicating an industry's complexity level. I coded each category from 1 (low complexity) to 5 (high complexity) and took the mean across respondents for each industry. Industry complexity is positively correlated with industry status, as shown previously. Moreover, in my sample, industry complexity is also correlated with the reaction to an earnings restatement. This is consistent with research in a number of areas. First, in Giordano's (1983) review of the deviance literature, she hypothesizes that the type of deviance engaged in by high-status actors may be more complicated, which may then influence the extent of an associated penalty. Second, Prechel and Morris's (2010) study of factors leading to financial malfeasance showed that firms with more complex structures were more likely to issue earnings restatements. Finally, other researchers have observed that it is more difficult to audit firms that have more complex structures or operations (Levinthal and Fichman 1988; Jensen and Roy 2008). Thus, investors may react more negatively to restatements by firms from complex industries either because they have a harder time understanding those restatements, because they suspect that management will incur greater difficulties in addressing the root causes of such restatements, or because restatements by firms in such industries may actually be differentially worse on some unobserved dimension.[8] Regardless, to the extent that status and industry complexity are positively correlated and have opposing influences on the market reaction to a restatement, it is important to control for industry complexity in order to be able to parse out the independent effect of status.

Finally, I test whether the effects of industry are robust to inclusion of controls for industry return on equity (ROE), profit margin, and pay in order to ensure that these are not driving the results. The former two of these were calculated on an annual basis by taking the within-industry median of the respective measure across all firms listed in Compustat. I obtained the (logged) average annual pay by industry from the Quarterly Census of Employed Workers (QCEW).[9] The industry-level ROE and profit margin variables were calculated at the level of my Standard and Poor's–based classification system (i.e., the same level as the industry status measure). The QCEW is done only at the level of NAICS industry codes.

[8] However, the lack of a significant correlation between industry complexity and measures of restatement severity (i.e., fraud, adverse financial impact, number of quarters restated, and time between the end of the restated period and the restatement announcement) suggests that it is unlikely that restatements from firms in complex industries are actually more severe.

[9] I would prefer to use the median, but the QCEW only reports industry means.

Thus, I match firms to their industry pay on the basis of the firm's NAICS code.

The final analyzable sample included 1,894 restatements that had relevant information from CRSP, Compustat, and IBES. The requirement of data from IBES for robustness checks means that all firms in the sample had some level of analyst coverage. Table 4 shows the number of restatements by industry as well as the average number of public firms within each industry during the 2000–2009 period. Restatements were announced by firms in 60 of the 61 industries for which I had measured industry status. Restatements are spread across industries such that the most heavily represented industry (computer software and services) accounts for 9.24% of the restatements in the sample. Table 5 presents descriptive statistics for the variables used in the analysis, and table 6 reports correlations.

RESULTS

Restatements Analysis

Tables 7 and 8 present the results of linear regression models predicting the CAR at the time of a restatement as a function of restatement-level and industry-level attributes. All models include year fixed effects to control for time-varying external factors affecting the market reaction, as well as 11 economic sector fixed effects, which help mitigate possible concerns that the effect of the key industry status variable is related to underlying fundamentals associated with different types of businesses.

Model 1 of table 7 presents the effects of the control variables, which generally operate in a manner consistent with previous research. As expected, restatements indicating fraud are viewed more negatively than others, as are restatements involving revenue recognition. Restatements with an adverse financial impact garner a more negative reaction, although the effect is only marginally significant. Not surprisingly, disclosure venue matters. Restatements revealed in regular financial reports generate a less negative reaction, whereas those disclosed in more prominent venues (i.e., press releases) are associated with a more negative reaction. In general, these results remain stable across the different model specifications that follow.

Model 2 incorporates the measure of category status. The effect of this variable is not statistically different from zero. However, as alluded to earlier in the discussion of control variables, this is not surprising given that the model does not include a control for industry complexity, which is highly correlated with industry status and is likely to have an opposite effect on the reaction to an earnings restatement. Model 3, which includes the effect of restatement-level control variables as well as industry complexity (but not industry status), confirms that industry complexity has a significant negative effect on the market reaction to an earnings restatement.

Given the findings from models 2 and 3, I proceed to test the main hypothesis of this article—that investors penalize firms for issuing an earnings restatement less if they are from a higher-status industry—by adding industry status to the variables shown in model 3 (i.e., restatement-level control variables and industry complexity). Results presented in model 4 indicate that the effect of industry status is positive and significant, providing support for hypothesis 1. In terms of effect size, the model predicts that a 1-SD increase in industry status is associated with an increase in CAR of 0.62 (=1.215 × 0.51) percentage points. This is sizable, considering that the mean CAR in the overall sample is −1.49 percentage points.

Model 5 incorporates an indicator for whether the restatement occurred in the 2.5-year period following the passage of SOX. As described earlier, the key provisions of SOX were implemented in this time frame, increasing the scrutiny surrounding restatements. Model 6 includes an interaction between industry status and the post-SOX indicator to test hypothesis 2, which predicted that the positive effect of industry status would attenuate during a high-scrutiny period. In both models, the main effect of status is positive and significant. The period indicator is positive, as has been shown in other work (Scholz 2008; Burks 2011), although the effect is nonsignificant in model 5 and only reaches marginal significance in model 6. Existing research interprets the less negative overall reaction to restatements in the post-SOX period as evidence that SOX increased the credibility of financial reporting overall, thereby limiting the valuation effects of restatement announcements (Hirschey, Smith, and Wilson 2010), and that restatements during this time frame were less severe, which may not be completely captured by controls. Consistent with the predictions of hypothesis 2, the interaction term in model 6 is negative and significant, suggesting that the benefits of greater industry status are smaller during a period of high scrutiny. Taken together, the results indicate that firms from high-status industries are penalized less than their peers from lower-status industries when they announce a restatement during periods in which scrutiny is not particularly high. However, this effect attenuates during high-scrutiny periods such that industry status effectively plays no role in how restatements are interpreted during those times.[10] In models not reported here, I tested whether the weakened effect of status persisted throughout the entire post-SOX period. This was not the case. The fact that the reduced effect of status does not endure beyond the end of 2004 is consistent with the idea that SOX defined a new

[10] I formally test that the coefficients on industry status and the interaction of industry status and the high-scrutiny period dummy cancel one another out by performing a Wald test of the joint significance of the status variable and the interaction. This test fails to rule out the null hypothesis that the coefficients on the two variables jointly equal zero ($F = 1.11$; $df = 1, 59$; $P = .30$). This confirms that there is no effect of industry status during that period.

TABLE 4
FIRMS AND RESTATEMENTS BY INDUSTRY, 2000–2009

Industry	Average Number of Public Firms per Year	Total Restatements	% of All Sampled Restatements
Computers—software and services	593	175	9.24
Retailing—discount, department, and specialty stores	265	156	8.24
Electronics and electrical equipment	541	126	6.65
Commercial and consumer services	341	97	5.12
Banking	428	87	4.59
Semiconductors	187	79	4.17
Oil and gas	337	78	4.12
Manufacturing	204	65	3.43
Computers—commercial services and IT consulting	163	55	2.90
Computers—hardware, networking, and peripherals	179	52	2.75
Telecommunications—wireless and wireline	207	50	2.64
Health care—medical products and supplies	221	47	2.48
Electric utilities	201	43	2.27
Pharmaceuticals and generic drugs	200	40	2.11
Insurance—life and health and property and casualty	141	40	2.11
Metals and mining	293	39	2.06
Health care—hospital management and managed care	183	38	2.01
Restaurants	97	36	1.90
Chemicals	126	34	1.80
Biotechnology	199	33	1.74
Natural gas distribution	79	31	1.64
Savings and loan companies	206	30	1.58
Broadcasting	80	29	1.53
Diversified financial services	1005	26	1.37
Industrial machinery	131	24	1.27
Commercial transportation and shipping	135	24	1.27
Textiles, apparel, and footwear	97	24	1.27
Autos and auto parts	85	23	1.21
Homebuilding	171	23	1.21
Lodging	66	22	1.16
Food and nonalcoholic beverages	133	20	1.06
Leisure time products	61	19	1.00
Publishing	57	18	.95
Airlines	35	18	.95
Paper and packaging	93	16	.84
Supermarkets and drugstores	49	16	.84
Advertising and marketing	39	16	.84
Waste management	50	13	.69
Movies and home entertainment	59	12	.63
Housewares and household durables	73	10	.53
Office equipment and supplies	35	10	.53
Engineering and construction	64	9	.48

TABLE 4 (*Continued*)

Industry	Average Number of Public Firms per Year	Total Restatements	% of All Sampled Restatements
Insurance brokers	29	9	.48
Investment services—brokers and asset managers	95	9	.48
Aerospace and defense	42	7	.37
Water utilities	16	7	.37
Printing	26	7	.37
Photography and imaging	22	6	.32
Employment services	42	6	.32
Agricultural products	26	5	.26
Trucks and heavy equipment	12	5	.26
Heavy construction materials	32	5	.26
Distributors	35	4	.21
Gaming	29	4	.21
Health care—long-term care	21	4	.21
Alcoholic beverages	26	3	.16
Hardware and tools	23	3	.16
Jewelry, novelty, and gifts	21	3	.16
Tobacco	11	2	.11
Cosmetics, household and personal care products	39	2	.11
Containers—metal and glass	9	0	.00

NOTE.—The count of public firms per industry represents a count of all firms in Compustat each year. This count should not be interpreted as a measure of industry size, because Compustat does not include privately held firms, and the proportion of firms that are privately held likely varies across industries.

level of "normal" scrutiny to which investors became accustomed or that investors simply reverted to their pre-SOX levels of scrutiny at some point. The resurgence of "normal" status effects may also be due in part to the fading memory of the accounting scandals of the early 2000s.

Table 8 provides evidence that the industry status effect is not driven by other plausible industry-level factors. Model 1 includes the median profit margin for firms in the industry. This variable has a small but statistically significantly negative effect on the predicted CAR. The effect of industry status remains statistically significant and weakens only slightly compared to the effect in model 6 of table 7. Model 2 removes the status variable to test whether the industry profit margin variable alone would achieve a similar effect to the status variable. This does not appear to be the case, as the effect size is in the opposite direction to that of the status variable in prior models. In addition, the effect size is smaller. A 1-SD increase in industry median profit margin is associated with a 0.35 $(= -0.013 \times 26.81)$ percentage point decrease in CAR. Models 3 and 4 focus on the effects of the industry median ROE. The findings are similar to those reported for the industry profit margin in that the status variable remains significant

TABLE 5
Summary Statistics for Variables Used in Analysis of Restatements

	Mean	SD	Min	Max
Cumulative abnormal return	−1.49	8.87	−68.26	72.17
Auditor letter issued	.64	.48	.00	1.00
Disclosed in press release[1]	.13	.33	.00	1.00
Disclosed in regular 10-K or 10-Q[1]	.17	.37	.00	1.00
Fraud	.03	.16	.00	1.00
Revenue-related	.20	.40	.00	1.00
Expense-related	.13	.33	.00	1.00
Lease-related	.11	.32	.00	1.00
Ln no. quarters restated	2.06	.80	.54	4.23
Ln no. quarters announcement delayed	1.03	.45	.00	3.09
SEC investigation	.10	.30	.00	1.00
Adverse financial impact	.86	.34	.00	1.00
Industry complexity	3.38	.77	1.75	4.81
Post-SOX scrutiny period	.25	.43	.00	1.00
Industry status	1.06	.51	.16	2.20
Industry profit margin (%)	−1.75	26.81	−229.42	20.22
Industry ROE (%)	6.23	8.07	−38.40	62.96
Ln industry pay	10.86	.47	9.48	12.26

Note.—N = 1,894 restatements.
[1]The reference category includes restatements filed through the required form 8-K or through a formally amended annual or quarterly report (10-K/A or 10-Q/A).

when industry ROE is included, and the effect of industry ROE is in the opposite direction of the status variable. The accounting literature does not make predictions about how industry-level profit margin and ROE should affect restatements. However, one interpretation of the negative effects found here is that restatements often portend a reduction in profit margin or ROE, which investors react to more negatively when they were expecting a higher ROE or profit margin, by virtue of a firm belonging to an industry where median ROE or profit margin had historically been higher. Thus, greater industry ROE or profit margin makes a restating firm appear less attractive compared to its peers, whereas industry status seems to have a protective effect, mitigating the punishment for a restatement. Finally, model 5 and model 6 test for the effects of industry average pay. The industry pay variable never reaches statistical significance, and the coefficient on the status variable is similar to what it was in previous models.

Although I have tested for three prime industry-level characteristics that might explain the estimated effects of industry status, my analysis is open to the criticism that industry status could proxy for any number of unobserved industry characteristics that relate to how a restatement should be interpreted or what a restatement portends. Although it would be impossible to exhaustively test every industry-level control variable that might drive the effect of industry status, there are two reasons to believe this con-

TABLE 6

CORRELATIONS OF VARIABLES USED IN ANALYSIS OF RESTATEMENTS

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. Cumulative abnormal return	1.00																	
2. Auditor letter issued	−.052*	1.00																
3. Disclosed in press release	−.089*	.130*	1.00															
4. Disclosed in regular 10-K or 10-Q	.093*	−.143*	−.170*	1.00														
5. Fraud	−.087*	.051*	.013	.012	1.00													
6. Revenue-related	−.084*	−.021	.061*	−.028	−.020	1.00												
7. Expense-related	−.001	−.006	.017	.023	−.025	.120*	1.000											
8. Lease-related	.045	.104*	.019	−.060*	−.018	−.045	.011	1.000										
9. Ln no. quarters restated	−.006	.232*	.083*	−.013	.047*	.044	−.003	−.073*	1.000									
10. Ln no. quarters announcement delayed	.106*	−.108*	−.153*	.218*	−.059*	−.006	.041	.196*	−.056*	1.000								
11. SEC investigation	−.023	.079*	.044	−.084*	.092*	.009	.003	.057*	.002	.063*	1.000							
12. Adverse financial impact	−.040	−.034	−.008	−.020	.067*	.047*	.045*	.050*	.057*	.002	.063*	1.000						
13. Industry complexity	−.077*	−.034	−.005	−.026	.019	.114*	.015	−.225*	−.045	−.016	.038	−.002	1.000					
14. Post-SOX scrutiny period	.031	−.366*	.022	.068*	.014	.086*	.029	−.076*	−.072*	.061*	−.014	.030	.035	1.000				
15. Industry status	−.047*	−.004	.017	−.013	.010	.101*	.023	−.128*	−.031	−.004	.041	.034	.774*	.008	1.000			
16. Industry profit margin (%)	.014	.038	.046*	−.002	.002	−.019	−.028	.036	.094*	.003	−.002	−.005	−.297*	−.047*	−.438*	1.000		
17. Industry ROE (%)	.028	.143*	.057*	−.035	.020	−.080*	−.057*	.111*	.157*	−.020	−.004	−.017	−.419*	.012	−.343*	.814*	1.000	
18. Ln industry pay	−.051*	−.007	.020	−.018	−.007	.059*	.003	−.036*	−.090*	.011	.019	−.047*	.552*	−.007	.341*	−.165	−.081*	1.000

NOTE.—N = 1,894 restatements.

* $P < .05$ (two-tailed).

TABLE 7
Estimated Coefficients from Regressions of CAR on Industry Status and Other Selected Variables, January 2000–December 2009

	(1)	(2)	(3)	(4)	(5)	(6)
Auditor letter issued	−.059	−.595	−.602	−.622	−.602	−.701
	(.417)	(.416)	(.422)	(.426)	(.430)	(.420)
Disclosed in press release	−1.596**	−1.595**	−1.594**	−1.576**	−1.558**	−1.579**
	(.561)	(.561)	(.559)	(.560)	(.554)	(.550)
Disclosed in regular 10-K or 10-Q	1.582**	1.583**	1.569**	1.581**	1.562**	1.543**
	(.539)	(.541)	(.537)	(.537)	(.547)	(.549)
Fraud	−4.012**	−4.015**	−3.997**	−4.040**	−4.028**	−3.949*
	(1.492)	(1.491)	(1.499)	(1.491)	(1.472)	(1.488)
Revenue-related	−1.427*	−1.427*	−1.425*	−1.417*	−1.396*	−1.336*
	(.671)	(.671)	(.675)	(.681)	(.686)	(.661)
Expense-related	.145	.140	.172	.121	.140	.235
	(.446)	(.449)	(.448)	(.454)	(.453)	(.437)
Lease-related	1.021	1.024	.935	.915	.913	.974
	(.702)	(.702)	(.700)	(.695)	(.685)	(.684)
Ln no. quarters restated	.084	.084	.099	.120	.118	.114
	(.748)	(.259)	(.262)	(.264)	(.263)	(.260)
Ln no. quarters announcement delayed	1.580***	1.581***	1.561***	1.559***	1.596***	1.649***
	(.397)	(.396)	(.396)	(.395)	(.401)	(.393)

SEC investigation	−.170	−.169	−.170	−.160	−.119	−.051
	(.498)	(.498)	(.498)	(.501)	(.497)	(.505)
Adverse financial impact	−.941	−.942	−.960	−.994	−1.012	−.983
	(.512)	(.512)	(.513)	(.515)	(.518)	(.512)
Industry complexity			−.842*	−1.558*	−1.557**	−1.683***
			(.420)	(.485)	(.477)	(.482)
Industry status		.069		1.215*	1.202*	2.013***
		(.461)		(.459)	(.453)	(.520)
Post-SOX scrutiny period					2.097	4.995
					(2.034)	(2.574)
Industry status × scrutiny period						−2.878**
						(.964)
Constant	−3.697**	−1.119	1.749	2.034	3.780	3.314
	(1.401)	(1.634)	(2.322)	(2.067)	(2.134)	(2.025)
R^2	.05	.05	.05	.05	.06	.06

NOTE.—N = 1,894 restatements. Numbers in parentheses are robust SEs clustered on industries. All regressions include sector and year fixed effects.
* $P < .05$ (two tailed).
** $P < .01$ (two tailed).
*** $P < .001$ (two tailed).

TABLE 8
Estimated Coefficients from Regressions of CAR on Industry Status and Other Industry-Level Variables, January 2000–December 2009

	(1)	(2)	(3)	(4)	(5)	(6)
Auditor letter issued	−.708	−.595	−.700	−.585	−.704	−.583
	(.417)	(.424)	(.416)	(.423)	(.418)	(.425)
Disclosed in press release	−1.566**	−1.555**	−1.564**	−1.552**	−1.573**	−1.571**
	(.549)	(.553)	(.550)	(.554)	(.545)	(.549)
Disclosed in regular 10-K or 10-Q	1.542**	1.550**	1.551**	1.562**	1.540**	1.547**
	(.550)	(.546)	(.550)	(.546)	(.551)	(.547)
Fraud	−3.859*	−3.878*	−3.844*	−3.866*	−3.955*	−3.990**
	(1.480)	(1.464)	(1.485)	(1.469)	(1.490)	(1.480)
Revenue-related	−1.321	−1.381*	−1.315	−1.375	−1.324	−1.393*
	(.665)	(.688)	(.668)	(.692)	(.664)	(.684)
Expense-related	.243	.190	.226	.166	.247	.200
	(.436)	(.452)	(.435)	(.452)	(.440)	(.456)
Lease-related	.960	.910	.951	.898	.875	.849
	(.683)	(.689)	(.685)	(.692)	(.698)	(.694)
Ln no. quarters restated	.135	.130	.144	.140	.107	.091
	(.263)	(.264)	(.265)	(.265)	(.257)	(.258)
Ln no. quarters announcement delayed	1.665***	1.619***	1.663***	1.616***	1.658***	1.606***
	(.394)	(.402)	(.396)	(.406)	(.396)	(.405)
SEC investigation	−.063	−.141	−.075	−.155	−.031	−.112
	(.503)	(.491)	(.505)	(.493)	(.497)	(.487)

Adverse financial impact	−.980	−.982	−.963	−.963	−.989	−.983
	(.511)	(.516)	(.510)	(.515)	(.510)	(.515)
Industry complexity	−1.692***	−1.029*	−1.689**	−1.048*	−1.618**	−.786
	(.485)	(.411)	(.499)	(.421)	(.495)	(.430)
Industry status	1.795**		1.752**		2.034***	
	(.518)		(.534)		(.531)	
Post-SOX scrutiny period	5.027	2.173	5.052	2.198	5.034	2.149
	(2.576)	(2.049)	(2.583)	(2.054)	(2.595)	(2.062)
Industry status × scrutiny period	−2.870**		−2.873**		−2.891**	
	(.965)		(.958)		(.967)	
Industry profit margin	−.010*	−.013***				
	(.004)	(.004)				
Industry ROE			−.044*	−.055**		
			(.021)	(.021)		
Ln average annual pay					−.450	−.373
					(.543)	(.594)
Constant	3.316	2.448	3.507	2.745	7.904	5.820
	(2.042)	(2.030)	(2.016)	(1.998)	(5.983)	(6.544)
R^2	.06	.06	.06	.06	.06	.05

NOTE.—N = 1,894 restatements. Numbers in parentheses are robust SEs clustered on industries. All regressions include sector and year fixed effects.
* $P < .05$ (two-tailed).
** $P < .01$ (two-tailed).
*** $P < .001$ (two-tailed).

cern should be mitigated. First, all models include fixed effects for 11 broad economic sectors. These should capture a number of underlying common business practices that might cause restatements in certain industries to look similar or have a similar implication for future performance, generating a reaction that is systematically more or less favorable relative to other industries. Second, the variation in the effect of status over time suggests that, if category status is actually capturing some unobserved industry-level characteristic, it must be an industry-level attribute that can be characterized in one of the two following very particular ways. It might be an industry-level trait that changed dramatically for most industries in the August 2002–December 2004 time frame and then changed back. Alternately, this effect could be accounted for by an industry attribute that did not change but is particularly relevant to restatements only during periods of high scrutiny. These constraints greatly reduce the set of constructs that industry status might be capturing. Overall, the analysis of earnings restatements supports the conclusion that industry status influences investors' interpretation of information about firms.

Finally, it should be noted that the effects found here represent a conservative test of the proposed hypotheses in that the measurement of industry status is no doubt noisy. I have shown in several ways that the measure of industry status employed here is valid. However, the status beliefs of a group of MBA students and executives can only be taken as an approximation of what securities analysts and institutional investors truly think. Despite the fact that this should bias the results toward null findings, the analyses presented here show consistent and sizable effects of industry status.

Robustness Checks

I ran several additional sets of models to test the robustness of the results reported above. First, in models not reported here, I tested whether the results were robust to the inclusion of different covariates. In one set of models, I tested how the inclusion of a variety of firm-level characteristics (e.g, log assets, ROA, stock is under $5, number of analysts following the firm, mean earnings estimate of analysts) affected the results. These control variables were generally found to be nonsignificant, and the effect of industry status was similar in significance and magnitude to what was reported earlier. In a second set of models, I tested whether the results were robust to the exclusion of many of the covariates by running pared-down versions of models 4 and 6 of table 7. The reduced-form models included only sector and year fixed effects, the revenue-restatement indicator, industry complexity, and industry status. All other controls were removed

because they were not significantly correlated either with the industry status variable or with the dependent variable. These reduced-form models produced effects of industry status that are estimated to be similar in the size, direction, and significance to those reported in table 7.[11]

Second, it is possible that the results presented here suffer from sample-selection bias. Perhaps firms that restate differ from nonrestating firms in ways that influence the reaction to a restatement and are correlated with industry status. To test this, I ran the regression models above using the Heckman two-stage selection correction method. Based on the accounting literature, I included in the first-stage equation variables such as assets, revenue, leverage, and number of employees, as well as a series of dummy variables capturing industry, year, and auditor. While some of the variables were significant, the results of the model overall indicated that selectivity was not a concern. Although it should be not surprising given this result, I note that the effect of industry status in the second-stage equation was similar in size and significance to what was reported earlier. Overall, there is no evidence that the results presented earlier suffer from biases due to selection into restating.

I also tested whether the results were sensitive to the event window by examining the effects of category status on the market reaction using the CAR calculated only on the day of and immediately following the restatement announcement. I also reran models 4 and 6 from table 7 using the three status measures from table 1 other than the Bonacich measure that is used throughout the article. The status effect was largely robust. Two of the other measures are significant at $P < .05$, although the mean status score measure was significant at only $P < .10$. Finally, I explored whether outliers were driving the observed effects of status by re-running the models after winsorizing the dependent variable at the first and ninety-ninth percentiles. Again, results remained similar to those presented.

Experimental Results

The analysis of earnings restatements suggests that category status systematically affects the way in which an organization and its actions are evaluated. However, due to the well-known pitfalls of attempting to make causal inferences using observational data (Morgan and Winship 2007), the analysis of earnings restatements represents a less than optimal research design for establishing definitively that category status has a causal effect. In order to address this concern, I conducted an experiment to show conclusively that

[11] For the sake of brevity, I do not show these models in the article. Results are, however, available from the author on request.

the status of the industry to which a firm belongs influences how the firm is evaluated.

The experiment was a vignette study that allowed me to examine the willingness to affiliate with organizations that were perceived as equivalently attractive in every way except the status of the category to which they belonged. I designed the experiment as an affiliation-choice exercise because previous work has shown that status influences affiliation patterns, both among individuals and organizations (Elias and Scotson 1994; Podolny 1994, 2001; Jensen 2006). Therefore, category status should affect the extent to which an organization is viewed as an attractive partner.

Subjects for the study were undergraduates at a large, private research university ($N = 62$). In the study, subjects were told that an anonymous university's contract with the corporate partner for its football stadium was about to expire and that the university was considering switching to a new partner. Subjects read brief descriptions of both the current partner and the potential new partner and were asked to make a recommendation as to which the university should choose. Subjects were told that financial aspects of the relationship would be the same regardless of partner and that the university was seeking the input of college students such as themselves as one component of its decision-making process.

The key manipulation in this study was whether or not there was a category status difference between the university's current partner and the potential new partner. Students were assigned to one of two conditions—either the status-difference condition or the equal-status condition. In both conditions, the potential new partner was a computer software company—exemplifying a relatively high-status category. However, the status of the category to which the current partner belonged varied across conditions. In the status-difference condition, the current partner was a furniture company, which represented a lower-status category than the potential new partner. In the equal-status condition, the current partner was an entertainment company, which represented a category that was equal in status to the potential new partner. Information on the industry to which the organizations belonged was presented as part of the brief descriptions of both organizations that the subjects read. The organizational descriptions had been pretested without category membership information to ensure that they were equal in status, overall attractiveness, and desirability as a partner. Students read the organizational descriptions, made a recommendation as to which company the university should choose, and then answered a series of questions about their perceptions of the different industries involved. These included questions about status and overall attractiveness.

The categories chosen to represent various status levels in this study were selected based on their position in a pilot status survey among a different

group of students. As a result, it is possible that any given individual might not have agreed with the status ranking that was found to exist more broadly. Thus, while the assignment of subjects to different conditions was intended to manipulate whether most people thought there was a category status difference between the two potential partners or whether most people thought there was equality, it was possible that any given individual's own perceptions of such a difference might diverge from what most people thought and from the intent of the manipulation. As a result, it was important to check the status perceptions of individual participants. I did so via a manipulation check in which subjects were asked to rate the industries in their condition according to "how prestigious or respected" they thought the categories were. Ratings were done on a scale from 1 (very low prestige) to 7 (very high prestige). I then took the difference of the two category rankings and coded the result "no difference," "a small status difference" (a one point difference), "a large status difference" (greater than one point difference). Results of the manipulation check (available from the author upon request) show that people in the equal status condition (i.e., an entertainment company and computer software company, both high status) were significantly more likely to rate the two companies as equal in status or having only a small status difference, compared to subjects in the status difference condition (i.e., a furniture company and a computer software company). In contrast, those in the status difference condition were much more likely to see a large status difference. Thus, although there was some individual-level variation, the manipulation was effective.

I analyzed the results of the experiment using logistic regression models predicting the odds of switching to a new partner on the basis of whether the potential new partner was from an equal-status category or from a higher-status category relative to the current partner, which was held constant across conditions. Table 9 presents the findings from this analysis. Model 1 shows that people in the status-difference condition were significantly more likely to switch to the potential new partner, which was from a higher-status category than the current partner. Model 2 predicts switching on the basis of personal beliefs about category status, rather than the societal beliefs captured in the manipulation across conditions. In these models, the effects of category status were even stronger. Finally, model 3 includes variables for both the main effect of being in the status-difference condition and variables for the individual's personal status beliefs about the categories at hand. These models again confirm that people who personally believed the status of the new partner to be significantly higher than the status of the current partner were much more likely to switch. These models also show a nonsignificant main effect of being in the status-difference condition, which provides confidence that there were no unmeasured dif-

TABLE 9
Estimated Coefficients from Logistic Regressions Predicting Switching Partners

	Model 1	Model 2	Model 3
Status difference condition (prospective partner is from higher status category than current partner)	1.43**		.68
	(.56)		(.67)
Perceived category-level status differences (reference category = no difference)			
Alternative is slightly higher status category		1.13	1.07
		(.78)	(.79)
Alternative is much higher status category		2.63***	2.22**
		(.87)	(.95)
Constant	−.19	−.98	−1.12
	(.36)	(.68)	(.71)
Likelihood ratio χ^2 (vs. null model)	6.96**	12.00***	13.03***
Degrees of freedom	1	2	3

Note.—$N = 62$ subjects.
* $P < .10$ (two tailed tests).
** $P < .05$ (two tailed tests).
*** $P < .01$ (two-tailed tests).

ferences between the conditions other than the manipulation of category status beliefs. Overall, the results of the experiment provide strong causal evidence that category status influences perceptions and evaluations of individual organizations.

DISCUSSION

The core contribution of this article has been to establish that categorical boundaries in the organizational world go beyond designating some organizations as similar to one another and different from others; as I have shown empirically, category membership also marks certain types of organizations as more socially worthy than others. By measuring the concept of category status across a wide range of industries and providing evidence of how category status affects the evaluation of information about organizations, I have formalized an idea that had previously received little attention and that carries important implications for the literature on organizational status, as well as research on the role of categories and systems of classification in markets. I discuss each of these in turn.

Whereas previous work on status in markets has focused on the perceived quality of an organization's performance and on the caliber of its network of affiliates as sources of social standing, this article highlights

how the categorical aspects of an organization's social identity shape its status. Results from this study demonstrate that status derives not only from how well an organization performs (i.e., status as a signal of quality) but also, fundamentally, from who or what an organization *is*. This view is consistent with Jensen et al.'s (2011) status-identity framework. Moreover, considering the aspect of status that is driven by an organization's categorical identity suggests another way in which organizational status is at least partially akin to a rent, a positional advantage obtained independently of performance (Sorensen 1996). Focusing on the component of status driven by categorical identity helps further differentiate the concept of status from that of reputation (Shapiro 1983) and renders the conceptualization of status in organizational sociology more consistent with the approach of researchers who study status among categories of individuals.

In this study, I instantiated the concept of "categories" by focusing on business industries and tested whether culturally shared beliefs designate some industries as more worthy of social standing than others. I view this particular approach as valuable in two senses. First, whereas researchers in the area of strategic management have asked the question of how much industry membership matters for a firm's performance (McGahan and Porter 1997) and have heavily emphasized the consequences of industry structure, I focus on a particular mechanism by which industries matter for performance, namely, cultural beliefs about the social standing of industries. As such, the identification of status differences among industries provides a new conceptual foundation for the common research practice of including industry fixed effects in models of organizational outcomes. Perhaps more importantly, however, I focused on a wide range of industries as opposed to other bases of categorization among organizations because I viewed it as a conservative test that places a lower bound on the impact of category status in evaluative outcomes. An alternative approach would be to study category status within a narrower domain of business activity. For example, it seems plausible that status differences exist among categories of restaurants (e.g., molecular gastronomy vs. fast food) or among entertainment providers (e.g., television production companies vs. film studios). I would expect category status to exert a stronger effect in such settings, simply because the level of consensus around norms and standards of performance is likely to be greater when the domain is more narrowly defined.

Finally, this article contributes to the growing body of research within economic sociology on the role of categories and systems of classification in the process of valuation. Thus far, this line of work has typically treated categories as equal in social standing. While some studies mention that status differences among categories of organizations exist in certain empirical settings, this idea is usually presented as a contrast between only a few different

types of organizations and has received little attention theoretically. This study formalizes and confirms the intuition that categories of organizations differ in a general evaluative sense.

Conceptualizing categories as differing in social standing suggests that systems of classification influence the process of valuation in markets to a greater extent than was previously understood. Currently, economic sociologists represent valuation as a two-stage process in which evaluators use markers of categorical identity to screen out irrelevant, illegitimate, or incomprehensible offerings before conducting a more thorough assessment of the remaining offers (Zuckerman 1999; Phillips and Zuckerman 2001; Zuckerman 2004). In this model, members of different categories are never directly compared to one another. Instead, offerings are scrutinized for fit with the focal category of interest to an evaluator, and all offers that conform or are viewed as interpretable are then evaluated against one another. This model helps us understand a large and important class of real-world settings. Yet, it also overlooks some common situations in which relative worth is being assessed across categorical boundaries. I outline two such cases below.

First, presumably there are many situations where offerings are categorized along multiple dimensions. In this case, an evaluator may make an initial screen on one categorical basis but may be left comparing a set of remaining offers that still differ in other important categorical ways. For example, Zuckerman and Kim (2003) note that film critics tend to be organized around whether they review independent or mass films, rather than being segregated by genre. Thus, a critic of mass-market films would screen out independent films but would continue to review films across categorical boundaries—for example, mass-market films in the horror, comedy, and drama genres. It seems unlikely that a film's membership in these different genres has no impact on its ratings; if a film is classified in a lower-status genre (perhaps horror), it seems likely that it would receive less favorable reviews.

Second, the current model of valuation brackets the process by which individuals decide they are in the market for an offering in a given category in the first place. To fully understand the role of categories in valuation, however, we need to learn more about how some categories come to be seen as appropriate and desirable in a given situation while others are not. This is especially important in situations where underlying functional differences between two candidates or offers are small relative to the divergence in social standing between the categories to which they belong. Status differences among categories help explain why some categories are chosen more often than others as the focal area in which valuation occurs. Taken together, these examples illustrate the types of settings where it matters deeply that categories act not only as sieves but also as evaluative lenses.

APPENDIX

Methodological Appendix

Details of Status Survey

Survey Distribution and Respondents

The survey was distributed to all students in the 2010 and 2011 MBA classes at a West Coast business school via a student-run listserv, direct e-mails from two professors in a required course for all first-year students, and flyers in each student's mailbox. Students were told that, in exchange for completing the survey, they would be entered into a drawing in which they had a 1 in 50 chance at winning prizes valued at approximately $300. Appendix table A1 presents descriptive statistics about respondents, as compared to the business school overall. The table shows that first-year students were significantly more likely to respond. This was expected, given the survey distribution method. In terms of gender and U.S. citizenship status, respondents were similar to the overall student population. However, respondents differed from other students in terms of racial/ethnic background; minority students were significantly more likely to respond.[12]

Survey Questions

Respondents answered questions about status as well as the perceived virtue, pay, investor performance, and complexity of different industries. The specific wording of survey questions was as follows:

1. How prestigious, esteemed or respected do you think organizations in the following industries are? {very high prestige – very low prestige}
2. How complex do you think these types of businesses are? {very high complexity – very low complexity}
3. How virtuous or morally good do you think organizations in these industries are? {very high virtue – very low virtue}
4. How well would you say these industries have performed for investors in the last 10 years? {very high performing – very low performing}
5. How high-paying do you think these industries are for most people in managerial positions? {very high-paying – very low-paying}

All participants answered the question about status first and rated 61 industries. The order of the remaining four questions was random, and respondents rated either 20 or 21 of the industries on complexity, virtue, investor performance, and pay.

[12] In results not shown here, I ran Pearson's chi-square tests to check for any association between status scores and minority status. There was a statistically significant association in only 5% (=3/61) of the industries, comparable to what would be expected at random under a null hypothesis of no association.

TABLE A1
Demographic Characteristics of Survey Respondents Compared to Overall Student Population

	Overall Student Population (%)	Survey Respondents (%)
First years	51	78***
Second years	49	22***
Male	65	69
Female	35	31
Minority	22.5	35***
White	77.5	65***
International	33.5	30
Total students	755	192 (25.4%)

* $P < .10$, indicating significant differences between respondents and the overall student population.

** $P < .05$, indicating significant differences between respondents and the overall student population.

*** $P < .01$, indicating significant differences between respondents and the overall student population.

Status Measure

Survey respondents grouped industries into one of five buckets according to status level (very low to very high status). To calculate Bonacich status for each industry, I transformed the survey responses into a 61×61 relational matrix ($\mathbf{R}$), where each cell r_{ij} represents the proportion of times industry i is rated as more prestigious than industry j among all respondents who rated both industries. Formally, in matrix notation, I computed Bonacich status as

$$c(\alpha, \beta) = \alpha(\mathbf{I} - \beta\mathbf{R})^{-1}\mathbf{R}\mathbf{1},$$

where $\mathbf{1}$ is a column vector of ones, $\boldsymbol{I}$ is an identity matrix, and $\mathbf{R}$ is the aforementioned relational matrix. The parameter β represents the weight given to more distant industries and, following Podolny (1993), is set to three-quarters the value of the largest eigenvalue. The parameter α is a scaling factor set so that

$$\sum_{i=1}^{n} c_i(\alpha, \beta)^2 = n,$$

where n is the number of industries being rated.

REFERENCES

Adut, Ari. 2005. "A Theory of Scandal: Victorians, Homosexuality, and the Fall of Oscar Wilde." *American Journal of Sociology* 111 (1): 213–48.

Agrawal, Anup, and Sahiba Chadha. 2005. "Corporate Governance and Accounting Scandals." *Journal of Law and Economics* 48:371–406.
Alvarez, Rodolfo. 1968. "Informal Reactions to Deviance in Simulated Work Organizations: A Laboratory Experiment." *American Sociological Review* 33 (6): 895–912.
Arthaud-Day, Marne L., S. Trevis Certo, Catherine M. Dalton, and Dan R. Dalton. 2006. "A Changing of the Guard: Executive and Director Turnover Following Corporate Financial Restatements." *Academy of Management Journal* 49:119–36.
Becker, Howard. 1963. *Outsiders: Studies in the Sociology of Deviance*. New York: Free Press.
Benjamin, Beth, and Joel Podolny. 1999. "Status, Quality and Social Order in the California Wine Industry." *Administrative Science Quarterly* 44 (3): 563–89.
Berger, Joe, Susan Rosenholtz, and Morris Zelditch. 1980. "Status Organizing Processes." *Annual Review of Sociology* 6:479–508.
Blau, Peter, and Otis D. Duncan. 1967. *The American Occupational Structure*. New York: John Wiley & Sons.
Bonacich, Phillip. 1987. "Power and Centrality: A Family of Measures." *American Journal of Sociology* 92 (5): 1170–82.
Bourdieu, Pierre. 1984. *Distinction: A Social Critique in the Judgment of Taste*, translated by R. Nice. Cambridge, Mass.: Harvard University Press.
Burks, Jeffrey. 2011. "Are Investors Confused by Restatements after Sarbanes-Oxley?" *Accounting Review* 86 (2): 507–39.
Carroll, Glenn, and Anand Swaminathan. 2000. "Why the Microbrewery Movement? Organizational Dynamics of Resource Partitioning in the U.S. Brewing Industry." *American Journal of Sociology* 106 (3): 715–62.
Chung, Seungwha, Harbir Singh, and Kyungmook Lee. 2000. "Complementarity, Status Similarity and Social Capital as Drivers of Alliance Formation." *Strategic Management Journal* 21 (1): 1–22.
Cook, Karen. 1975. "Expectations, Evaluations and Equity." *American Sociological Review* 40:372–88.
Correll, Shelley, Stephen Benard, and In Paik. 2007. "Getting a Job: Is There a Motherhood Penalty?" *American Journal of Sociology* 112 (5): 1297–1338.
Desai, Hemang, Chris Hogan, and Michael S. Wilkins. 2006. "The Reputational Penalty for Aggressive Accounting: Earnings Restatements and Management Turnover." *Accounting Review* 81:83–112.
Duncan, Otis Dudley. 1961. "A Socioeconomic Index for All Occupations." Pp. 109–38 in *Occupations and Social Status*, edited by A. J. Reiss, Jr., et al. New York: Free Press of Glencoe.
Elias, Norbert, and J. L. Scotson. 1994. *The Outsiders: A Sociological Inquiry into Community Problems*. London: Frank Cass.
Fama, Eugene. 1970. "Efficient Capital Markets: A Review of Theory and Empirical Work." *Journal of Finance* 25 (2): 383–417.
Fiske, Susan T., Amy J. C. Cuddy, Peter Glick, and Jun Xu. 2002. "A Model of (Often Mixed) Stereotype Content: Competence and Warmth Respectively Follow from Perceived Status and Competition." *Journal of Personality and Social Psychology* 82 (6): 878–902.
Fombrun, Charles. 1996. *Reputation: Realizing Value from the Corporate Image*. Cambridge, Mass.: Harvard Business School Press.
Fombrun, Charles, and Mark Shanley. 1990. "What's in a Name? Reputation Building and Corporate Strategy." *Academy of Management Journal* 33 (2): 233–58.
Foschi, Martha. 1996. "Double Standards in the Evaluation of Men and Women." *Social Psychology Quarterly* 59 (3): 237–54.
Giordano, Peggy. 1983. "Sanctioning the High-Status Deviant: An Attributional Analysis." *Social Psychology Quarterly* 46 (4): 329–42.

Goode, William J. 1978. *The Celebration of Heroes: Prestige as a Control System*. Berkeley: University of California Press.
Gould, Roger. 2002. "The Origins of Status Hierarchies: A Formal Theory and Empirical Test." *American Journal of Sociology* 107:1143–78.
Graffin, Scott, Jonathan Bundy, Joseph Porac, James Wade, and Dennis Quinn. 2013. "Falls from Grace and the Hazards of High Status: The 2009 British MP Expense Scandal and Its Impacts on Parliamentary Elites." *Administrative Science Quarterly*, 1–33.
Hannan, Michael T., Laszlo Polos, and Glenn Carroll. 2007. *Logics of Organization Theory: Audiences, Codes and Ecologies*. Princeton, N.J.: Princeton University Press.
Harrod, Wendy J. "Expectations from Unequal Rewards." *Social Psychology Quarterly* 43:126–30.
Hartmann, Heidi. 1976. "Capitalism, Patriarchy, and Job Segregation by Sex." *Signs* 1 (3): 137–69.
Hennes, Karen M., Andrew J. Leone, and Brian P. Miller. 2008. "The Importance of Distinguishing Errors from Irregularities in Restatement Research: The Case of Restatements and CEO/CFO Turnover." *Accounting Review* 83 (6): 1487–1519.
Her, Young-Won, Jane Lim, and Myoungsoo Son. 2010. "The Impact of Financial Restatements on Audit Fees: Considerations of Restatement Severity." *International Review of Accounting, Banking and Finance* 2 (4): 1–22.
Hirschey, Mark, Kevin R. Smith, and Wendy Wilson. 2010. "Financial Reporting Credibility after SOX: Evidence from Earnings Restatements." University of Kansas. Working paper.
Hollander, Edwin P. 1958. "Conformity, Status and Idiosyncrasy Credit." *Psychological Review* 65:117–27.
Hsu, Greta. 2006. "Jacks of All Trades and Masters of None: Audiences' Reactions to Genre Spanning in Feature Film Production." *Administrative Science Quarterly* 51: 420–50.
Hsu, Greta, and Michael T. Hannan. 2005. "Identities, Genres and Organizational Forms." *Organization Science* 16 (5): 474–90.
Hsu, Greta, Michael Hannan, and Ozgecan Kocak. 2009. "Multiple Category Membership in Markets: An Integrative Theory and Two Empirical Tests." *American Sociological Review* 74:150–69.
Jensen, Michael. 2003. "The Role of Network Resources in Market Entry: Commercial Banks' Entry into Investment Banking, 1991–1997." *Administrative Science Quarterly* 48:466–97.
———. 2006. "Should We Stay or Should We Go? Accountability, Status Anxiety and Client Defections." *Administrative Science Quarterly* 51:97–128.
Jensen, Michael, Bo Kyung Kim, and Heeyon Kim. 2011. "The Importance of Status in Markets: A Market Identity Perspective." Pp. 87–117 in *Status in Management and Organizations*, edited by Jone L. Pearce. Cambridge: Cambridge University Press.
Jensen, Michael, and Aradhana Roy. 2008. "Staging Exchange Partner Choices: When Do Status and Reputation Matter?" *Academy of Management Journal* 51 (3): 495–516.
Kreps, David, and R. Wilson. 1982. "Reputation and Imperfect Information." *Journal of Economic Theory* 27:253–79.
Lareau, Annette. 2003. *Unequal Childhoods: Race, Class and Family Life*. Berkeley and Los Angeles: University of California Press
Lerner, Jennifer, and Philip Tetlock. 1999. "Accounting for the Effects of Accountability." *Psychological Bulletin* 125:255–75.
Levinthal, Dan, and Mark Fichman. 1988. "Dynamics of Interorganizational Attachments: Auditor-Client Relationships." *Administrative Science Quarterly* 33:345–69.
Li, Stan, and Whitney Berta. 2002. "The Ties That Bind: Strategic Actions and Status Structure in the U.S. Investment Banking Industry." *Organization Studies* 23:339–68.

Lynn, Freda, Joel Podolny, and Lin Tao. 2009. "A Sociological (De)Construction of the Relationship between Status and Quality." *American Journal of Sociology* 115 (3): 755–804.
MacKinlay, A. Craig. 1997. "Event Studies in Economics and Finance." *Journal of Economic Literature* 35:13–39.
McGahan, Anita, and Michael Porter. 1997. "How Much Does Industry Matter, Really?" *Strategic Management Journal* 18:15–30.
Merton, Robert K. 1968. "The Matthew Effect in Science." *Science* 159:56–63.
Meyer, John, and Brian Rowan. 1977. "Institutionalized Organizations: Formal Structure as Myth and Ceremony." *American Journal of Sociology* 83:340–63.
Morgan, Stephen, and Christopher Winship. 2007. *Counterfactuals and Causal Inference: Methods and Principles for Social Research*. New York: Cambridge University Press.
Murphy, Gregory, and Brian Ross. 1994. "Predictions from Uncertain Categorizations." *Cognitive Psychology* 27:1024–41.
Myers, Linda, Susan Scholz, and Nathan Sharp. 2011. "Restating under the Radar? Determinants of Restatement Disclosure Choices and the Related Market Reactions." University of Arkansas working paper.
Nakao, Keiko, and Judith Treas. 1994. "Updating Occupational Prestige and Socioeconomic Scores: How the New Measures Measure Up." *Sociological Methodology* 24: 1–72.
Omi, Michael, and Howard Winant. 1996. "Racial Formation." Pp. 53–76 in *Racial Formation in the United States: From the 1960s to the 1990s*. 2d ed. New York: Routledge.
Palmrose, Zoe-Vonna, Vernon Richardson, and Susan Scholz. 2004. "Determinants of Market Reactions to Restatement Announcements." *Journal of Accounting and Economics* 37:59–89.
Palmrose, Zoe-Vonna, and Susan Scholz. 2004. "The Circumstances and Legal Consequences of Non-GAAP Reporting: Evidence from Restatements." *Contemporary Accounting Research* 21 (1): 139–80.
Patterson, Kelly, and Martin Reuf. 2009. "Credit and Classification: The Impact of Industry Boundaries in 19th Century America." *Administrative Science Quarterly* 54: 486–520.
Pfarrer, Michael, Timothy Pollock, and Violina Rindova. 2010. "A Tale of Two Assets: The Effects of Firm Reputation and Celebrity on Earnings Surprises and Investors' Reactions." *Academy of Management Journal* 53 (5): 1131–52.
Phillips, Damon J., Catherine J. Turco, and Ezra W. Zuckerman. 2013. "Betrayal as a Market Barrier: Identity-Based Limits to Diversification among High-Status Corporate Law Firms." *American Journal of Sociology* 118 (4): 1023–54.
Phillips, Damon J., and Ezra W. Zuckerman. 2001. "Middle-Status Conformity: Theoretical Restatement and Empirical Demonstration in Two Markets." *American Journal of Sociology* 107 (2): 379–429.
Piazza, Alessandro, and Fabrezio Castellucci. 2014. "Status in Organization and Management Theory." *Journal of Management* 40 (1): 287–315.
Podolny, Joel. 1993. "A Status-Based Model of Market Competition." *American Journal of Sociology* 98:829–72.
———. 1994. "Market Uncertainty and the Social Character of Economic Exchange." *Administrative Science Quarterly* 39:458–83.
———. 2001. "Networks as the Pipes and Prisms of the Market." *American Journal of Sociology* 107 (1): 33–60.
———. 2005. *Status Signals*. Princeton, N.J.: Princeton University Press.
Podolny, Joel, and Damon Phillips. 1996. "The Dynamics of Organizational Status." *Industrial and Corporate Change* 5 (2): 453–71.

Podolny, Joel, Toby Stuart, and Michael Hannan. 1996. "Networks, Knowledge, and Niches: Competition in the Worldwide Semiconductor Industry, 1984–1991." *American Journal of Sociology* 102:659–89.

Pontikes, Elizabeth. 2012. "Two Sides of the Same Coin: How Ambiguous Classification Affects Multiple Audiences' Evaluations." *Administrative Science Quarterly* 57 (1): 81–118.

Prechel, Harland, and Theresa Morris. 2010. "The Effects of Organizational and Political Embeddedness on Financial Malfeasance in the Largest U.S. Corporations: Dependence, Incentives and Opportunities." *American Sociological Review* 75 (3): 331–54.

Prechel, Harland, and Lu Zheng. 2012. "Corporate Characteristics, Political Embeddedness and Environmental Pollution by Large U.S. Corporations." *Social Forces* 90 (3): 947–70.

Ridgeway, Cecilia. 1991. "The Social Construction of Status Value: Gender and Other Nominal Characteristics." *Social Forces* 70:367–86.

———. 2011. *Framed by Gender*. New York: Oxford University Press.

Ridgeway, Cecilia, and Shelley Correll. 2006. "Consensus and the Creation of Status Beliefs." *Social Forces* 85:431–53.

Roberts, Peter W., Mukti Khaire, and Christopher I. Rider. 2011. "Isolating the Symbolic Implications of Employee Mobility: Price Increases after Hiring Winemakers from Prominent Wineries." *American Economic Review: Papers and Proceedings* 101(3): 147–51.

Ross, Brian, and Gregory Murphy. 1996. "Category-Based Predictions: Influence of Uncertainty and Feature Associations." *Journal of Experimental Psychology: Learning, Memory and Cognition* 22:736–53.

Scholz, Susan. 2008. "The Changing Nature and Consequences of Public Company Financial Restatements, 1997–2006." Department of the Treasury, Washington, D.C.

Schutt, Russell. 2006. *Investigating the Social World*. Thousand Oaks, Calif.: Sage.

Shapiro, Carl. 1983. "Premiums for High Quality Products as Returns to Reputations." *Quarterly Journal of Economics* 98:659–79.

Siegel, Paul M. 1971. "Prestige in the American Occupational Structure." Ph.D. dissertation. University of Chicago Department of Sociology.

Simcoe, Dave, and Timothy Waguespack. 2011. "Status, Quality, and Attention: What's in a Missing Name?" *Management Science* 57 (2): 274–90.

Smith, Edward Bishop. 2011. "Identities as Lenses: How Organizational Identity Affects Audiences' Evaluation of Organizational Performance." *Administrative Science Quarterly* 56:61–94.

Sorensen, Aage B. 1996. "The Structural Basis of Social Inequality." *American Journal of Sociology* 101 (5): 1333–65.

Srinivasan, Suraj. 2005. "Consequences of Financial Reporting Failure for Outside Directors: Evidence from Accounting Restatements and Audit Committee Members." *Journal of Accounting Research* 43 (2): 291–334.

Stewart, Penni A., and James C. Moore. 1992. "Wage Disparities and Performance Expectations." *Social Psychology Quarterly* 69:797–811.

Stoller, Gary. 2002. "Funny Numbers." *USA Today*, October 21.

Stuart, Toby, Ha Hoang, and Ralph Hybels. 1999. "Interorganizational Endorsements and the Performance of Entrepreneurial Ventures." *Administrative Science Quarterly* 44:315–49.

Tirole, Jean. 1996. "A Theory of Collective Reputations (with Applications to the Persistence of Corruption and to Firm Quality)." *Review of Economic Studies* 63 (1): 1–22.

Treiman, Donald. 1977. *Occupational Prestige in Comparative Perspective*. New York: Academic Press.

Turban, Daniel B., and Daniel W. Greening. 1997. "Corporate Social Performance and Organizational Attractiveness to Prospective Employees." *Academy of Management Journal* 40 (3): 658–72.
Ungar, Sheldon. 1981. "The Effects of Status and Excuse on Interpersonal Reactions to Deviant Behavior." *Social Psychology Quarterly* 44 (3): 260–63.
Washington, Marvin, and Edward Zajac. 2005. "Status Evolution and Competition: Theory and Evidence." *Academy of Management Journal* 48 (2): 282–96.
Willer, Robb. 2009. "Groups Reward Individual Sacrifice: The Status Solution to the Collective Action Problem." *American Sociological Review* 74:23–43.
Zhao, Wei, and Xueguang Zhou. 2011. "Status Inconsistency and Product Valuation in the California Wine Market." *Organization Science* 22 (6): 1435–48.
Zhou, Xueguang. 2005. "The Institutional Logic of Occupational Prestige Ranking: Reconceptualization and Re-analyses." *American Journal of Sociology* 111 (1): 90–140.
Zuckerman, Ezra. 1999. "The Categorical Imperative: Securities Analysts and the Illegitimacy Discount." *American Journal of Sociology* 104 (5): 1398–1438.
———. 2004. "Structural Incoherence and Stock Market Activity." *American Sociological Review* 69:405–32.
Zuckerman, Ezra, and Tai-Young Kim. 2003. "The Critical Trade-off: Identity Assignment and the Box-Office Success in the Feature Film Industry." *Industrial and Corporate Change* 12 (1): 27–67.
Zuckerman, Ezra, Tai-young Kim, Kalinda Ukanwa, and James von Rittman. 2003. "Robust Identities or Nonentities? Typecasting in the Feature-Film Labor Market." *American Journal of Sociology* 108 (5): 1018–73.