

MARKET WATCH: INFORMATION AND AVAILABILITY CASCADES AMONG THE MEDIA AND INVESTORS IN THE U.S. IPO MARKET

TIMOTHY G. POLLOCK
Pennsylvania State University

VIOLINA P. RINDOVA
University of Texas–Austin

PATRICK G. MAGGITT
Villanova University

In this study we advance current research on social influence in markets by examining how the recency and availability of information about others' actions within and between different communities influence their allocation of attention and their evaluations. Specifically, we examine how the media and investors allocate attention to and evaluate newly public firms in the days following their initial public offerings (IPOs). Our findings have implications for understanding the fieldwide processes through which the value of new firms is established in markets.

Scholars in a variety of disciplines study how market actors find, provide, and use information because information is essential to the assessment of value in market exchanges. Organizational and strategy researchers have shown that the actions of central, powerful, and high-status actors (Certo, 2003; Certo, Daily, Cannella, & Dalton, 2003; Deeds, Mang, & Frandsen, 2004; Haunschild, 1994; Podolny, 1993; Rao, Greve, & Davis, 2001) and information intermediaries such as financial analysts and the media (Deephouse, 2000; Lamertz & Baum, 1998; Lounsbury & Rao, 2004; Pollock & Rindova, 2003; Rao et al., 2001; Zuckerman, 1999) influence the actions of others and shape market outcomes. Although this research has accumulated considerable evidence that market outcomes reflect social influence and that this influence depends on the attributes of the actors and the social structures that connect them, it has directed less attention to the

influence the accumulation of collective actions has on market behaviors.

In this article, we argue the collective momentum reflected in the aggregation of a social group's actions is an important market-structuring mechanism that conveys information about the prevailing wisdom or preferences of that community.¹ Our work builds on two separate but related streams of research that explore these dynamics. The first stream of research uses the concept of information cascades² (Amihud, Hauser, & Kirsch, 2003; Banerjee, 1992; Bikhchandani, Hirschleifer, & Welch, 1998; Bonardi & Keim, 2005; Welch, 1992) to capture the dynamic processes of social influence. Scholars in this tradition argue that under conditions of uncertainty it is rational for individuals to ignore their private information or preferences and

The first and second authors contributed equally to this article. We gratefully acknowledge the financial support of the Ewing Marion Kauffman Foundation for completing this study. We would like to thank Associate Editor Duane Ireland and three anonymous reviewers for their many helpful comments during the review process. We would also like to thank Martin Kilduff, Huggy Rao, Wes Sine, and seminar participants at Emory University, Michigan State University, Pennsylvania State University, and the University of North Carolina–Chapel Hill for their comments on earlier versions of this paper. We thank Shannon Lamote for help with data collection.

¹ We use the term “community” to refer to a group of market actors who all participate in the same activity and pursue broadly similar goals, perform broadly similar roles, and follow broadly similar norms in pursuit of their market objectives.

² Two studies appeared contemporaneously in the finance literature introducing the terms “information cascade” (Welch, 1992) and “herding” (Banerjee, 1992) to describe the same phenomenon, and both of these terms are used interchangeably in the finance literature (e.g., Banerjee, 1992; Bikhchandani et al., 1992; Welch, 1992; Graham, 1999; Bikhchandani & Sharma, 2001). We primarily use the term “information cascade” because we discuss this phenomenon in relation to availability cascades.

“follow the crowd” by imitating the recent actions of peers who are presumed to be better informed when making investment decisions (Bikhchandani et al., 1998). The concept of information cascades thus recognizes that a firm’s valuation is a function of the prior levels of investor interest it has attracted. In a separate stream of research, political scientists have argued that public opinion (Kuran & Sunstein, 1999; Sunstein, 2003, 2004) is similarly based on follow-the-crowd dynamics. They have introduced the concept of “availability cascades” to describe the “self-reinforcing process of collective belief formation by which an expressed perception triggers a chain reaction that gives the perception increasing plausibility through its rising availability in public discourse” (Kuran & Sunstein, 1999: 683). Thus, both concepts address a similar issue—how the observed actions of others influence a focal actor’s behavior in uncertain environments—yet they suggest different logics of imitation. Whereas *information cascades* are seen as resulting from actors’ efforts to gain information advantages, *availability cascades* are seen as an outcome of the need to reduce cognitive effort and act in ways that are consistent with the majority’s behavior.

Organizational scholars have long been interested in the same question as cascade theorists and have studied it from the perspectives of institutional isomorphism (e.g., DiMaggio & Powell, 1983; Mizruchi & Fein, 1999), interorganizational contagion (e.g., Davis & Greve, 1997; Greve, 1995; Greve & Taylor, 2000), and organizational learning (e.g., Haunschild & Miner, 1997; Haunschild & Sullivan, 2002; Kim & Miner, 2007). Much of this research has emphasized how social actors decide whom to imitate and/or learn from, and how organizational practices become widely adopted, stable features of a given context (Leblebici, Salancik, Copay, & King, 1991). In contrast, the cascades perspectives emphasize the dynamic and reversible nature of the processes of imitation and social influence and stress that even actors who do not have status, prestige, or extensive network ties can nonetheless trigger cascades in the adoption of particular opinions and practices (Kuran & Sunstein, 1999). Further, cascade theorists are attuned to the fragility of these collective processes and the possibilities for changes in collective behaviors as new information becomes available. Thus, cascades perspectives can enrich organizational research on social influence in markets by explicitly focusing on the temporariness of imitation and changes in behavior once new information becomes available (Goeree, Palfrey, Rogers, & McKelvey, 2006; Rao et al., 2001). In considering both information and availability cascades simultaneously, our goal is to increase un-

derstanding of the factors that make social influence in markets both inertial and fragile.

In particular, we build on the observation that, although the availability and the information cascades arguments both concern market actors reducing uncertainty about choices by imitating others, they focus on different underlying mechanisms that can drive follow-the-crowd behaviors. Information cascades are viewed as arising from a rational quest for informational advantages and are expected to be fragile, as they are easily changed by recent news (Goeree et al., 2006; Welch, 1992). In contrast, availability cascades arise from the dominance of information that is easy to recall and use because it has become widely available and therefore socially verified and reinforced (Kuran & Sunstein, 1999; Sunstein, 2004). In this view, social influence is more inertial in the information cascades perspective because it reflects accumulated history and experience. Thus, these different conceptualizations of the logics of imitation imply that different behaviors are likely to be informative to market actors and to stimulate imitation. Prior research, however, has not explicitly considered the implications of these differences and their effects on market actions and outcomes. Instead, scholars have tended to study these processes in isolation (e.g., Amihud et al., 2003; Hung & Plott, 2001; Sunstein, 2004; Welch, 2000) or used the two types of cascades interchangeably without acknowledging their underlying differences (e.g., Bonardi & Keim, 2005; Pollock & Rindova, 2003; Rao et al., 2001). Further, these researchers have only studied situations in which all actors are taking the same type of action and have not explored the extent to which both types of cascades operate simultaneously, leaving open the question of the type of actions that may affect one type of cascade or the other.

To address these issues, we identified two communities of market actors—media organizations and investors—that are likely to exhibit both information and availability cascade dynamics as they attempt to reduce uncertainty regarding the actions to take vis-à-vis firms that have just completed initial public offerings (IPOs). We examine the extent to which the media and investors follow the logics of information and/or availability cascades by considering both the effects of the incoming information conveyed by recent actions and the effects of widely available information based on accumulated past actions. We further theorize that efforts to reduce uncertainty motivate the media and investors to take cues from the other community’s actions, leading to the spread of social influence across communities. Our approach extends work on social influence in mar-

kets by examining both the social influence *within* a given community (i.e., intracascade dynamics) and *between* or *across* two communities (i.e., intercascade dynamics). To gain a greater understanding of the specific mechanisms underlying these influence processes, we examine the dynamics of cascade effects on two different types of actions identified by prior research as distinct components of decision making under uncertainty: allocation of attention and evaluation (Benjamin & Podolny, 1999; Pollock & Gulati, 2007; Pollock & Rindova, 2003; Rindova, Petkova, & Kotha, 2007; Zuckerman, 1999).

Our approach enables us to develop a richer theoretical understanding of social influence in markets, and in particular of the role of different cascade processes in shaping market outcomes. In doing so, we not only respond to calls for more “mechanism-based” theorizing in organization studies (Davis & Marquis, 2005), but also address a question of considerable pragmatic importance: What social processes shape the performance of newly public firms? Our study extends prior research that has shown information intermediaries such as financial analysts and the media influence the market performance of firms (Pollock & Rindova, 2003; Rao et al., 2001; Rindova et al., 2007; Zuckerman, 1999) by examining how information intermediaries themselves are influenced by the actions of those they seek to inform—in our case, investors. Developing a more complete picture of the processes that influence the performance of IPO firms can inform the management practices involved in the transition of entrepreneurial firms from private to public status (Aldrich, 1999; Fischer & Pollock, 2004; Martens, 2004; Pollock & Rindova, 2003).

THEORY AND HYPOTHESES

Cascades among and between Investors and the Media

Before discussing the differences in the theoretical logics of information and availability cascades, we first discuss why the actions of investors and the media in the IPO market context can be fruitfully analyzed from a cascades perspective. Cascades are viewed as pervasive outcomes in situations characterized by high levels of uncertainty, where public choices are made sequentially and actors are rewarded for behaviors consistent with the majority’s behavior (Neill, 2005). The environment faced by the media and investors in the IPO market meets these conditions because: (1) both

communities face a similar problem—assessing the value (either the financial value or the newsworthiness) of newly public firms under highly uncertain conditions arising from the limited track records and lack of prior trading histories for these firms; and (2) actors in both communities stand to gain when they take actions that are consistent with, but slightly ahead of, those of the majority in their respective communities (Shoemaker & Reese, 1996; Welch, 1992).

Finance scholars have long recognized that the IPO context is conducive to information cascades (e.g., Amihud et al., 2003; Welch, 1992) because investors must make trading decisions about stocks that have not been publicly traded and do not have a history of price change they can rely on to determine firm value (Figlewski, 1982). As a result, substantial uncertainty about the appropriate value and potential of IPO firms exists (Thomas, 2002). For investors, making a choice differing from that of the majority can result in either missing an opportunity or sustaining a loss.

Mass media researchers have not analyzed media coverage from a cascade perspective, but they have accumulated extensive evidence that the search for “news” is fraught with uncertainty, leading journalists to imitate each others’ actions. Sigal explained the dynamic of imitation in the media as follows: “So long as newsmen follow the same routines, espousing the same professional values, and using each other as standards of comparison, news-making will tend to be insular and self-reinforcing. . . . It provides them [journalists] with a modicum of certitude that enables them to act in an otherwise uncertain environment” (1973: 180–181). Like other cognitively constrained actors, journalists reduce uncertainty by sharing information and sources (Rogers, 2002) and by relying on the social proof provided by the actions (i.e., the publications and broadcasts) of competing news outlets (Hirsch, 1977; Shoemaker & Reese, 1996; Sigal, 1973).

Further, journalistic success depends less on reporting important stories that others are not covering than on getting the “scoop” and being the first to report on the same story that others are chasing (Shudson, 1986). As Shoemaker and Reese explained: “The desire to be unique is far outweighed by the risk of being different and, perhaps, wrong in full view of the nation” (1996: 125). For this reason, journalists also tend to frame their coverage of stories similarly, as framing a story differently than most other news outlets could lead to questions about the accuracy and fairness of the outlying

organization's reporting.³ In sum, the combined effect of the uncertainty surrounding journalistic work and the rewards for making choices consistent with the majority's choices produces the conditions associated with the emergence of cascades (Hung & Plott, 2001). Although past research has documented the existence of cascades in these communities, it has not studied the full range of factors that shape the cascade process.

As noted earlier, virtually all extant research on cascades demonstrates the assumption that market actors imitate the actions of peers, or actors who are in the same professional community and are taking the same type of action (e.g., investors' decisions to trade a stock; media organizations' decisions to cover particular firms). However, as our previous discussion suggests, both the media and investors stand to gain the most by acting consistently with but slightly ahead of their peers (i.e., buying before others bid a price up; getting a scoop). To accomplish these objectives, investors and the media need to both reduce uncertainty by confirming their expectations against the actions of others and seeking information that gives them some advantage. One potential source of such information is the actions of actors in another professional community. Another community's actions may be viewed as informative if its members are believed to have access to superior information and/or analytical capabilities that they can bring to bear on the decision at hand (Rao et al., 2001). For example, journalists may view investors as having a greater ability than they themselves possess to evaluate the performance potential of IPO firms (Rao et al., 2001), and investors may view journalists as having superior access to specific information about a firm (Busse & Green, 2002; Hoffman & Ocasio, 2001). Thus, the same needs that motivate actors to look at their peers' actions to figure out what to do are also likely to motivate them to look to the actions of actors in other communities as a way to supplement or extend their understanding of the collective wisdom "in the market." By overlooking the possibility that social influence can be propagated through the collective beliefs exhibited via cascade

³ Even if the initial framing turns out to be in error, as long as it is consistent with the framing of the majority no one news organization is likely to be singled out or censured. For example, although the CEOs of Tyco, Enron, and World Com all received consistently positive media coverage lauding them for their strategic acumen, no particular media organization suffered any significant damage after these CEOs were found to have destroyed shareholder value through reckless strategic choices and illegal behaviors.

behaviors in another community, past research has considerably limited the conceptualization and empirical examination of cascade processes.

In sum, both media organizations and investors face the need to reduce uncertainty and have incentives to pursue information advantages when deciding what actions to take regarding newly public firms, and prior finance and mass communication research has pointed to imitation as an important mechanism through which they accomplish these goals. However, though the fact that social influence is central to the valuation and coverage of firms is acknowledged, the dynamics of social influence are not well understood. In particular, the possibility of intercascade influence has been overlooked. This intriguing possibility also suggests the need for a deeper investigation of the mechanisms of social influence that underlie cascades. In the following section, we turn our attention to the logics of influence and action suggested by the concepts of information and availability cascades.

Information and Availability Cascades

The concept of information cascades. The information cascade perspective is a rational actor model that emphasizes the pursuit of information advantages by imitating the actions of those believed to be better informed, even when the signals they are responding to are unobservable (Bikchandani et al., 1998). Even if an actor holds private information that contradicts the action being observed, the information cascades perspective suggests it is more rational for the actor to disregard its private information and instead imitate others' observed actions (Bikchandani et al., 1998; Welch, 1992). Since information cascades arise from a simple, uncertainty-reducing decision heuristic often grounded in little or no "real" information, cascade participants' commitment to the course of action is expected to be fragile and easily changed when new information becomes available (Goeree et al., 2006; Welch, 2000). Supporting these arguments, Rao and colleagues (2001) found that once two analysts started covering a company, other analysts became increasingly likely to initiate coverage. However, later-adopting analysts tended to be overly optimistic in their predictions of the firm's expected earnings and were quicker to cease coverage as new information about the company became available.

The concept of availability cascades. According to the availability cascade perspective (Kuran & Sunstein, 1999), a subset of information can come to dominate the formation of collective beliefs and actions because individuals tend to rely on readily

available information and to seek social approval by behaving in a manner consistent with the majority's behavior (Cialdini, 2004; Rao et al., 2001). As a result, this information tends to become more widely used and persistently available at the collective level, crowding out alternatives and becoming the predominant input underlying future judgments and decisions (Sherman, Cialdini, & Schwartzman, 1985; Slovic, 2000). The literature on availability cascades provides little guidance on the characteristics that lead a particular piece or type of information to become widely available through social reinforcement and collective use, but social cognition research suggests information that is more salient at the individual level may also be more likely to become widely available at the collective level owing to its ease of recall (Fiske & Taylor, 1991).

At the individual level, stimuli become salient if they stand out from their context. Characteristics that make stimuli salient include their extremity (Taylor & Fiske, 1975) and frequency (Crocker & McGraw, 1984; Hawkins & Hoch, 1992; Kahneman, Slovic, & Tversky, 1982; McArthur & Post, 1977). Extreme and/or frequently occurring stimuli tend to dominate perception and are more likely to be recalled and acted upon (Bonardi & Keim, 2005). When this process is aggregated and these individual tendencies are collectively reinforced, salient stimuli can become widely available and trigger availability cascades. Throughout the remainder of this article, we refer to such stimuli as *widely available*. Further, because availability cascades arise from efforts to minimize cognitive effort and increase social conformity, and because they are based on a subset of information that has become widely available through past use, they are expected to persist—even though, like information cascades, they may be based on little substantive information.

The foregoing arguments suggest that, to the extent the information conveyed via the extreme or cumulative past actions of others influences market actors, availability cascades are at work; and to the extent the information conveyed by recent actions influences market actors, information cascades are operating. In other words, the two perspectives place differential importance on the roles that “news” and “history” play in influencing market actors. To address the extent to which these different mechanisms are at work, we distinguish between recent and what we have termed “widely available actions,” which are actions that, because of either their extremity or pervasiveness, are likely to be salient at the individual level and to become magnified and socially reinforced at the collective

level. In the next section, we briefly discuss two types of actions—allocation of attention and evaluation—likely to be influenced by these processes.

Attention from and Evaluation by the Media and Investors

Organizational researchers increasingly recognize that choice under uncertainty involves two distinct actions: selection of a subset of firms to focus attention on, and evaluation of the relative merits of their competing offerings (Hoffman & Ocasio, 2001; Pollock & Rindova, 2003; Rindova, Williamson, Petkova, & Server, 2005; Zuckerman, 1999). Attention determines where market actors focus their cognitive efforts because both individuals and organizations have limited attentional capacities (March & Simon, 1958; Ocasio, 1997). Both widely available and recent actions have the potential to affect the allocation of limited attention. Widely available information tends to be more easily invoked and frequently used, thereby minimizing the cognitive effort required for its identification and processing (Tversky & Kahneman, 1973). As a result, actors are likely to allocate future attention to actors and events that are easily recalled. However, the unfamiliar also draws attention (Starbuck & Milliken, 1988), so recent stimuli can also attract attention because of their potential novelty. Applied to the context of market actors making choices among firms competing for their resources, these arguments suggest that both the cumulative prior and the recent attention a firm has received increase the likelihood it will to continue to attract attention.

In addition to allocating attention, another cognitive task actors perform in uncertain environments is evaluating, which requires drawing conclusions about often unobservable attributes, such as underlying firm or product quality (Connelly, Arkes, & Hammond, 2000; Hsee, Lowenstein, Blount, & Bazerman, 1999). Evaluations are based on interpreting cues about a firm itself as well as on evaluations made by others (Rindova et al., 2005). When the subject is unfamiliar, evaluators are especially uncertain about the accuracy of their assessments (Eagly & Chaiken, 1993; Higgins, 1996); thus, they will be likely to look at the assessments of others when deciding what to do (Benjamin & Podolny, 1999), and their opinions are likely to be easily influenced by the recent evaluations offered by others (Einhorn, 1982; Einhorn & Hogarth, 1981; Schwarz & Bohner, 2001). Therefore, as with attention, both recent and widely available evaluations by others increase the likelihood that similar evaluations will follow.

Investor attention and evaluation. Prior research in both finance and management has treated the demand for an IPO firm's shares (or turnover in shares traded) as an indicator of investor attention, and the price of a stock as an indicator of investors' evaluation of a firm (e.g., Amihud et al., 2003; Certo et al., 2001; Cornelli & Goldreich, 2001; Ellis, Michaely, & O'Hara, 2000; Nelson, 2003; Pollock & Rindova, 2003). Organizational scholars in particular have emphasized that although stock prices "are viewed in the financial economics literature as providing 'hard' numbers that reflect the true underlying economic value of the firm . . . [they] should perhaps be viewed as 'soft' numbers that reflect the subjective perceptions of a heterogeneous audience, neatly quantified and aggregated" (Westphal & Zajac, 1998: 130–131). This process becomes particularly apparent in the IPO context.

The initial price of an IPO firm's stock is set prior to public trading by the underwriters leading the offering, who presumably have both the expertise and market information necessary to accurately price the securities (Cornelli & Goldreich, 2001). However, on their first day of trading most IPO stocks close at a price significantly higher than their initial offering price. Finance scholars have termed this phenomenon "underpricing" (Ibbotson & Ritter, 1995) to reflect the belief that underwriters try to set the initial price of the stock at a level somewhat lower than its expected market value in order to stimulate early investor participation (Benveniste & Spindt, 1989; Ibbotson & Ritter, 1995).⁴ Such discounting is observed systematically across IPOs,⁵ so some level of underpricing is expected; however, some IPOs exhibit dramatic differences between their offering and closing prices (Ritter & Welch, 2002). Such large deviations from the offering price are unusual and surprising, so high levels of underpricing are likely to be noticed and discussed, and likely to become widely available information.

Similarly, prior research has shown that IPO firms also experience high levels of turnover on the day they go public. For example, Ellis and colleagues (2000) found that the first day's turnover is on average 30 times greater than the daily turnover during the 60 days following an IPO. Again, the

more extreme the level of initial turnover, the more salient the actions, and the more available the information is likely to be as an input for future investor decisions. Daily turnover and daily market returns in the days after an IPO are likely to be less notable, and therefore less available; however, because they reflect more recent information about a firm, they may attract investor attention because of their potential to reveal new information.

Media attention and evaluation. The cumulative prior media coverage a firm has received is an indicator of the attention the media has given the firm. In general, newly public firms tend to receive relatively little media coverage (Pollock & Rindova, 2003; Rindova et al., 2007). Thus, in addition to increasing a firm's immediate exposure (Crocker & McGraw, 1984; Hawkins & Hoch, 1992), a high level of coverage also increases the likelihood it will receive subsequent attention, because extensive coverage is somewhat unusual and is thus more widely available to journalists (Pollock & Rindova, 2003; Rindova et al., 2007). Similar arguments can be made about the effects of cumulative prior coverage that offers positive evaluations.⁶ Media coverage tends to be neutral in tenor (Deephouse, 2000; Pollock & Rindova, 2003), so positive evaluations in the media are less common than general coverage. Thus, under the same dynamics discussed above, the more positive evaluations that are published about a firm, the more widely available they are to other journalists, and the less uncertainty these journalists are likely to have about offering positive evaluations themselves. However, as with investors, widely available past actions may convey a different type of information than recent actions, so the tenor of a recent article provides more up-to-date information about the evaluation of others.

To summarize, we argue that the concept of information cascades suggests that the information conveyed by recent collective actions influences market behaviors, whereas the concept of availability cascades suggests that the information conveyed by past collective actions that have become widely available influences market behaviors. Integrating the logic of the two suggests that both recent and available past actions may be informative and influence market actors' behaviors. Further, as discussed earlier, because investors and the media can

⁴ To maintain consistency with the literature in this area, throughout the remainder of this article we refer to the change in stock price on the first day of trading as "underpricing."

⁵ Prior research suggests average underpricing for the period of our study of about 12 percent (Ritter & Welch, 2002).

⁶ Our hypotheses and analysis focus only on positive evaluations because in our data there were very few instances of negative media evaluations. We discuss the implications of this focus later in the paper under future research directions.

be viewed as two communities that are likely to take each other's actions into account when allocating attention and making evaluative judgments, we expect the widely available and recent actions of the members of each community will also have intercascade effects and influence the attention and evaluations that an IPO firm receives in the other community. Together these arguments suggest the following set of hypotheses:

Hypothesis 1a. The widely available attention and the recent attention an IPO firm has received from a focal community are both positively associated with the future attention the firm will receive from that community.

Hypothesis 1b. The widely available attention and the recent attention an IPO firm has received from another community are both positively associated with the future attention the firm will receive from a focal community.

Hypothesis 2a. The widely available and the recent positive evaluations an IPO firm has received in a focal community are both positively associated with the future positive evaluations the firm will receive from that community.

Hypothesis 2b. The widely available and the recent positive evaluations an IPO firm has received from another community are both positively associated with the future positive evaluations the firm will receive from a focal community.

Combined Effects of Recent and Widely Available Actions

In addition to having direct effects, widely available and recent information may also interact when influencing how actors attend to and use information under conditions of uncertainty. Because decisions about allocating attention require mechanisms for identifying potentially valuable candidates among numerous and often ambiguous alternatives, market actors are likely to rely on readily available, externally validated cues in making these determinations (Rindova et al., 2005; Zuckerman, 1999). This reliance occurs because broad scanning for new alternatives is likely to be both costly and risky, given the breadth of possible alternatives and the relatively low likelihood of finding valuable new alternatives (Akerlof, 1970; Stiglitz, 2000).

In keeping with these arguments, research on the social construction of markets provides evidence that market actors rely on preexisting categoriza-

tion schemes to simplify their information processing and focus their limited attention on the most relevant actors and issues (Lounsbury & Rao, 2004; Porac, Thomas, Wilson, Paton, & Kanfer, 1995; Porac, Wade, & Pollock, 1999; Reger & Huff, 1994). By only allocating attention to subjects that fall into particular categories, market actors use their cognitive resources efficiently, just expending effort and other resources to manage interactions with those deemed relevant (Porac et al., 1995). Marketing researchers have similarly observed that consumers focus their evaluation efforts on products and brands that are already included in their "consideration sets," defined as the subset of brands of which the consumers are chronically aware (Mitra, 1995). In other words, competitive categorizations and consideration sets stabilize the allocation of attention, making some firms readily available in memory and reducing the search costs associated with identifying potentially relevant or valuable alternatives (Roberts & Lattin, 1997). Together these ideas suggest structuring mechanisms that direct attention to a given firm and make it likely the firm will continue to receive attention in the future as a matter of course. We argue that widely available information about a firm serves as one such mechanism. To the degree widely available information about a firm's prior collective attention exists, information about recent attention is less likely to be informative to investors and the media when they are deciding where they should focus their own attention. As such, widely available attention is likely to reduce the effect of recent attention on the future attention a firm receives.

In contrast to their effects on attention, widely available evaluations about a firm may increase the effects of recent evaluations on the future evaluations it receives. This dynamic occurs because evaluative judgments are only made within the subset of firms on which attention is focused (Zuckerman, 1999). Further, the cognitive task involved in making evaluations is to increase precision in judging the relative merits of alternative offerings (Hsee et al., 1999; Tversky & Kahneman, 1974). Widely available prior evaluations can facilitate this task by serving as "quasi-prior beliefs." The more available prior evaluations are, the easier it is to categorize recent evaluations as consistent or inconsistent with them (Kelley, 1972). Even if these available evaluations are inaccurate or not fully accepted by an individual, to the degree the individual is aware of them, they can become part of the memory content he or she accesses in processing information to form new evaluations (Edwards & Smith, 1996). Since a good deal of evidence suggests individuals cannot assess new information independently of

their prior knowledge and beliefs (Lord, Ross, & Lepper, 1979; Nisbett & Ross, 1980), prior available evaluations are likely to provide a baseline against which incoming information is compared, increasing the efficiency with which the confirmation and disconfirmation processes required to form new evaluations are accomplished (Kunda, 1990). Thus, we expect that greater availability of prior evaluations within a community will increase the influence of recent evaluations on future evaluations.

Finally, just as we expect availability of information within a community to moderate the effects of recent actions, we similarly expect the availability of information about actions in another community to also moderate the effects of recent attention and evaluations in the focal community. However, the dynamics of intercascade influence are likely to be slightly different from those of intracascade influence. So far our arguments have emphasized how imitating the widely available actions of members of one's focal community provides "confirmation benefits," or ensures that these actions are consistent with those of the majority of one's peers. However, we also argued that market actors seek information advantages that enable them to take actions slightly before the majority of their peers. By looking to the actions of market actors in another community, they can gain such "discovery benefits." The fact that knowledgeable actors in another community are focusing their attention on, or making similar evaluations of, the same firms provides signals that can reduce perceived uncertainty among both the media and investors. What is particularly interesting about the widely available actions of actors in another community is that they hold the potential to offer both confirmation *and* discovery benefits. To the degree that these actions are taken by different types of actors who may have systematically different access to information or expertise, they may reveal new information, thereby yielding discovery benefits. At the same time, because these actions have become widely available in another community, they reflect a collective consensus and provide confirmation benefits. As such, they can reduce uncertainty and search costs sufficiently to enable changes in the consideration sets of actors in the focal community. In other words, the available actions of another community may alter the way market actors use the information conveyed by the actions of their peers. More specifically, widely available actions in another community are also likely to confirm the information revealed by recent actions within the focal community, thereby enhancing the effects of recent attention and evaluations within a community on subsequent attention allocation and evaluations.

Taken together, the preceding arguments lead to the following hypotheses:

Hypothesis 3a. The widely available attention an IPO firm has received from a focal community reduces the effect of recent attention from the focal community on the future attention the firm receives from that community

Hypothesis 3b. The widely available attention an IPO firm has received from another community increases the effect of recent attention from the focal community on the future attention the firm receives from the focal community

Hypothesis 4a. The widely available positive evaluations an IPO firm has received from a focal community increase the effect of recent positive evaluations from the focal community on the future positive evaluations the firm receives from that community

Hypothesis 4b. The widely available positive evaluations an IPO firm has received from another community increase the effect of recent positive evaluations from the focal community on the future positive evaluations the firm receives from the focal community.

DATA AND METHODS

Data

The flow of information about U.S. IPO firms is regulated by the Securities and Exchange Commission (SEC). The SEC restricts public communications by an offering firm from the time the IPO is registered with the SEC until 25 days after the offering (known as "the quiet period") in order to limit possible hyping of the stock (Bradley, Jordan, & Ritter, 2003; Husick & Arrington, 1998). Further, the underwriters' analysts are prohibited from issuing recommendations during the 25 days following the IPO⁷ (Bradley et al., 2003). These regulations limit the flow of information from the IPO firm and provide an excellent opportunity for studying the influence of market actors' observed actions on market dynamics in a realistic setting. Following prior research in this context, we bounded the period of the study to the 60 days following the day of the IPO (Ellis et al., 2000).

The sample for this study was drawn from all IPOs conducted in 1992, which was a relatively typical year for offerings, with neither an unusually

⁷ This time frame was increased to 40 days in 2001 in the wake of the scandals during the IPO market bubble.

large or small number and an average level of underpricing (11.7%) consistent with historical averages (12%) (Ritter & Welch, 2002). Following prior IPO research (e.g., Ritter, 1991; Welbourne & Andrews, 1996), we excluded closed-end mutual funds, real estate investment trusts (REITS), unit offerings, spin-offs, demutualizations of savings banks and insurance companies, and reverse leveraged buyouts (LBOs) from the sample. The final sample contained 245 IPOs. Missing data reduced the sample to 225 IPOs. Since our unit of analysis was the firm-day, our total number of observations was 13,500 firm-days.

Measures

Investor-related dependent measures. Investor evaluations were operationalized as a firm's *daily return*, which is the percent change in stock price from the end of the prior day to the end of the current day. Daily returns were calculated from day 2 through day 61 because the first day's return is the degree of underpricing an IPO experienced, which, because of its distinct theoretical significance, is included in the models as a separate variable. The data used to calculate this measure were drawn from the Center for Research on Securities Pricing (CRSP) database.

Investor attention was operationalized as *daily turnover*, which is the percentage of the total shares a firm has offered that are traded on a given day. Higher turnover indicates greater investor attention to the company (Pollock & Rindova, 2003). Like daily returns, daily turnover was calculated over days 2–61. The data used to calculate this measure were drawn from the CRSP database and the offering prospectuses.

Investor-related independent measures. Available investor evaluations were operationalized as the degree of *underpricing*, which equals the percent change in stock price ($\frac{price_{end} - price_{initial}}{price_{initial}} \times 100$) on the first day of public trading. We used underpricing to operationalize available investor evaluations because large deviations from expectations (i.e., high underpricing) are likely to be highly salient (Fiske & Taylor, 1991).

Available investor attention was operationalized as the *first day's turnover* in a firm's stock, which is the percentage of IPO shares traded on the day the offering company goes public. The number of shares traded on the day of an IPO is typically much higher than the number traded on subsequent days (Ellis et al., 2000; Pollock & Rindova, 2003). So, like underpricing, high levels of trading in a company's stock on the day it goes public can be highly salient to investors.

Recent investor evaluations were operationalized as the daily return lagged by one day (daily return_{*t* - 1}). This measure captured the most recent evaluative choices investors could observe.

Recent investor attention was operationalized as daily turnover lagged by one day (*daily turnover*_{*t* - 1}). This measure captured the most recent attentional choices investors could observe.

Media-related dependent measures. The data used to create the media variables were collected from all newspaper and print magazine articles available on Lexis-Nexis (in the "major newspapers," "major magazines," and "trade magazines" databases) for each IPO firm for the 12 months before an IPO and the 61 trading days after the IPO. Pre-IPO coverage data were collected to help establish the availability of information about the firms. To construct these measures, we collected and content-analyzed 514 pre-IPO and 401 post-IPO media articles.

Media attention was a dummy variable coded 1 if a firm received any media coverage on a given day. To explore cascade effects, we needed to determine the probability of a firm's receiving coverage, given past coverage by the media. Therefore, the dependent variable needed to be a dichotomous variable allowing for the use of event history–modeling techniques, such as the discrete time event history models used in our analysis. The dichotomous variable also accurately captured the pattern of media coverage we observed, because we found only 14 instances out of more than 13,000 firm-day observations in which a company received two media mentions on a given day. No company received more than two mentions a day in our sample.

Media evaluation was a dummy variable coded 1 if a firm received media coverage containing a positive evaluative statement about the firm on a given day. We focused on positive evaluations because only 5 percent of the articles in our sample were negative in tone, making it difficult to obtain statistically valid estimates along this dimension. There were no instances in our sample of a company receiving more than one positive article on a given day. As in prior research (Brown & Deegan, 1998; Deephouse, 2000; Pollock & Rindova, 2003), a trained coder assessed each article as positive, negative, or neutral in its discussion of the company. Neutral statements were those that simply reported facts, whereas positive statements contained evaluative content, as illustrated in the following example (the evaluative content is underlined): "If personal computers had counterparts among network operating systems, the Apple Macintosh's counterpart might be Vines from Banyan Systems Inc., and the IBM PC's might be Net-

ware from Novell. Like the Mac, Vines is the more interesting, even innovative, product. It is easier for most people to use and has some nice design features and a fanatical following among users" (Miller, 1992).

We chose the article as the unit of analysis because each article represents a discrete choice by a media organization regarding whether and how to cover a firm. However, because past research has suggested that one article may contain multiple accounts (Lamertz & Baum, 1998), each reference to the firm was coded as positive, negative, or neutral in tone. Articles with relatively equal instances of positive and negative references were coded as neutral because the negative references tended to qualify or offer counterpoints to positive references, thereby tempering the evaluative tone (e.g., the firm has introduced a potentially technologically superior product, but there are concerns about the product's reliability).

To calculate intercoder reliabilities, one of the authors coded all articles and press releases (used in constructing the control variables, as discussed below) for a random subsample of ten companies. We calculated intercoder reliability using Cohen's kappa (Cohen, 1968), which captures the degree of agreement between two coders, adjusted for the likelihood of agreement by chance. The Cohen's kappa was .86, indicating high interrater agreement.

Media-related independent measures. Available media attention was operationalized as the total number of articles about a firm published from 12 months prior to the IPO's registration with the SEC until two days before the observation day. In our tables, this variable is identified as *cumulative media attention_{t-2}*. We aggregated articles from the pre- and post-IPO periods to better capture the level of accumulated media attention.⁸ If multiple articles were published about a company on a given day, they are captured in the measure.

Available media evaluation was measured the same way as cumulative media coverage and reflects the total number of positive articles about each IPO firm (*cumulative positive media coverage_{t-2}*).

Recent media attention was operationalized as

the daily post-IPO media coverage measure lagged by one day (*daily media attention_{t-1}*).

Recent media evaluation was operationalized as the daily positive post-IPO media coverage measure lagged by one day (*daily positive media coverage_{t-1}*).

Control variables. The growing body of research on IPOs suggests a variety of different factors that may influence the outcomes under consideration in this study. In addition to the various media and stock performance measures mentioned above, we included an extensive set of variables to control for these effects, as well as for factors that could offer alternative explanations of our results.

Although we were focusing on the effects of information conveyed by the choices of market actors, we also controlled for the effects of information provided directly by IPO firms via press releases.⁹ We collected 444 post-IPO press releases from the Business Wires database of Lexis-Nexis and content-analyzed them to construct daily and cumulative total and positive press release measures analogous to the media availability and recency measures.

The characteristics of an IPO firm itself can also influence the demand for and performance of its offering, as well as the likelihood that the firm will receive coverage. Prior research has used the factors identified by Gutterman (1991) as the characteristics employed by the investment community to assess IPO firm quality (Pollock & Rindova, 2003). Following this research, we included the following variables as controls for firm quality: *firm sales in 1991*,¹⁰ *firm net income in 1991* (before interest and taxes), *average top management team tenure*, percentage of an offering represented by insider selling of stock (*percentage of insider selling*), and the number of *risk factors* included in the offering prospectus.

Lead institutional investor size was measured as the total assets under management at the end of 1991 by the institutional investor that owned the largest proportion of an IPO firm's stock at the end of the quarter in which it went public. This variable was transformed into its natural logarithm to pre-

⁸ In analyses not reported here, we separated the pre- and post-IPO time periods and included them as separate measures. Both measures were significant, and the results were substantively the same as those reported here. We retained the aggregate measure because it is more consistent with the theoretical construct of available attention.

⁹ Even during the post-IPO quiet period, "Firms may make statements of fact regarding business developments and may respond to inquiries from analysts and shareholders regarding factual matters" (Bradley et al., 2003: 1).

¹⁰ Sales were transformed into their natural logarithm to reduce the effects of extreme values. Since some of the IPO firms had no sales in 1991, we added 1 to the sales of each company prior to transforming the variable.

vent extreme values from driving the analysis. Larger institutional investors are more likely to be long-term investors, and their participation in an offering can send positive signals to the media and the market about their perceptions of the investment quality of the firm. Institutional investor ownership data were drawn from Disclosure's Compact D SEC database collection. These data were used to identify the lead institutional investor for each IPO. Institutional investor size information was drawn from *Nelson's Directory of Investment Managers, Institutional Investor's* annual listing of the 300 largest investment managers and the *CDA/Wiesenberg Investment Companies Yearbook*.

Underwriter reputation was used to control for the signaling effects and resources that a high-status underwriter brings to bear when it takes a company public (Carter & Manaster, 1990). Following the method employed by Pollock and his colleagues (Fischer & Pollock, 2004; Pollock, 2004; Pollock & Rindova, 2003), the underwriter reputation measure was based on "tombstone" positions in 1991 and ranged from 0 to 1.¹¹ Positions in tombstone announcements have been widely used in academic research as an indicator of investment bank status and reputation (Carter & Manaster, 1990; Podolny, 1993). Each underwriter's status class was reverse-coded and divided by the total number of classes reflected in a tombstone. For example, if a tombstone had three classes of underwriters, the first class was coded 1, the second class was coded .67, and the third class was coded .33. An underwriter's reputation score equaled the average score calculated over all the syndicates in which the underwriter participated. Data on underwriting syndicates used to calculate underwriter reputation were drawn from Disclosure's Compact D database.

Venture capital backing was included as a control because the presence of a venture capitalist at the time of an IPO can influence perceptions of IPO firm legitimacy and market outcomes (Gulati & Higgins, 2003; Megginson & Weiss, 1991). A dummy variable was coded 1 if the company had received venture financing prior to the IPO and 0 otherwise.

Offer value was measured as the total number of shares offered during an IPO multiplied by the

offering price. The value, or size, of an offering can send signals to the market about its relative quality and stability (Ibbotson & Ritter, 1995). We transformed this variable into its natural logarithm to reduce the effect of extreme values.

Dummy variables for year quarters (*quarter 1*, etc.) were included to control for within-year variances in the IPO market, since particular industries, and the IPO market in general, can go in and out of favor in less than a year (Ritter, 1984).

Industry dummies were included because systematic differences could exist between companies in different industries for both the independent and dependent variables. Six industry dummy variables were included in the analysis: *biotechnology, software, electrical manufacturing, finance, retail, and services*. These categories parsimoniously capture the variety of industries represented in the IPO market in 1992.

Firm age at IPO equaled the number of years since incorporation. This variable was log-transformed to reduce the effects of extreme values on the analysis. As some companies went public the same year they were founded, we added a 1 to all observations before transforming the variable.

A *selectivity instrument* was also calculated because unobserved capabilities and other firm-specific factors might increase both media coverage and attention and positive evaluations from investors, creating a potential endogeneity problem in evaluating the relationship between media coverage and investor behaviors (Pollock & Rindova, 2003). To the degree that all firms are not equally likely to receive media coverage, the results of analyses predicting investor behaviors using these media measures may be biased. One approach often used to deal with this problem is to employ Heckman's method for correcting selection bias (see Heckman [1979] and Shaver [1998] for detailed discussions of this approach). We used a probit regression in the first stage of the analysis to predict the likelihood a firm will receive media coverage following its IPO. This regression was used to create a selectivity instrument (Rao et al., 2001) that was included in subsequent regression models. The instrument controlled for biases associated with the likelihood that a firm receives media coverage. The following variables were included in the regression: a dummy variable indicating whether a firm had received media coverage prior to the IPO; the firm's total assets in the year prior to the IPO; dummy variables indicating whether the stock was priced higher than the initial range listed in the prospectus (indicating significant investor interest in the offering) or below the initial offering range (indicating a lack of interest); the total number of

¹¹ Tombstones are the announcements of a new offering of a stock or bond typically found in publications such as the *Wall Street Journal* and the *Investment Dealer's Digest*. A bank's position on the tombstone reflects both the number of shares it will be allocated for sale and its status within the investment banking community (Carter & Manaster, 1990; Podolny, 1993).

press releases the company issued in the post-IPO period; the tenor of these press releases, calculated using the Janis-Fadner coefficient of imbalance (Deephouse, 2000; Janis & Fadner, 1965; Pollock & Rindova, 2003); and two dummy variables indicating whether the company was located in the north-eastern United States or in California. These two regions of the country served as home to almost half the companies in our sample, as well as to a large number of media outlets, thus increasing the likelihood that firms from these regions received media coverage.

Method of Analysis

The data used to test our hypotheses about media attention and evaluation were analyzed using discrete time event history techniques to capture the dynamics of cascade behaviors. We estimated logit models of dichotomous outcomes for pooled time series data in which the same units are observed at multiple intervals (Allison, 1984; Yamaguchi, 1991). Covariates are allowed, but not required, to vary between time periods. Since the data contained multiple observations of the same IPO firm that were not independent across spells, we employed the cluster command in Stata 9.0, which provided a more conservative test of the hypotheses by calculating robust estimators of variance.¹² We used ordinary least squares (OLS) regressions to predict daily returns and turnover, once again employing the cluster command. Finally, to reduce nonessential collinearity in our models (Cohen, Cohen, West, & Aiken, 2003), we mean-centered the variables used in our interactions. These transformed measures were included in all regressions; however, for ease of interpretation, the untransformed measures were used in calculating the descriptive statistics.

RESULTS

Table 1 presents the descriptive statistics and correlations for all the variables. The high correlation between the cumulative media attention and evaluation measures suggested collinearity was a potential problem in our analysis. We conducted variance inflation factor (VIF) tests to assess the potential problem; the overall VIF never exceeded 2.50 and the individual VIFs for the two measures

in question were both approximately 10 (all others were approximately 3 or less). Using rule-of-thumb cutoffs of 10 for the overall model and 30 for individual variables (see the 2003 *Stata 8.0 Manual*), we judged that collinearity did not appear to be a problem in our models. However, as a further precaution, in analyses not reported here we created an instrumental variable for cumulative positive evaluations by regressing this measure on cumulative media attention and included the residual from this regression in our models. The results were the same as those reported here.

Tables 2 and 3 present the results of the discrete time event history regressions predicting daily media attention and positive evaluations. Tables 4 and 5 present the results of the OLS regressions predicting daily turnover and daily returns. In each table, model 1 includes the control variables, model 2 adds the main effect variables, model 3 adds the intracascade interaction between availability and recency, model 4 includes the interaction between intercascade availability and intracascade recency, and model 5 presents the saturated model including both interactions.

Hypotheses 1a and 2a argue that the available and recent attention an IPO firm receives within a focal community affects the future attention and positive evaluations the firm receives within that community. Model 2 in each table tests these hypotheses. Our results strongly support the notion that widely available actions shape the allocation of future attention, as both cumulative media attention and turnover on the first day of an IPO have positive and significant effects in the media and investor models, respectively. The results in support of recent attention were mixed. Although the prior day's turnover, which measures recent attention, positively affects the next day's turnover, recent media attention was not significantly related to receiving subsequent attention. The analyses testing Hypothesis 2a yielded a different pattern of results. Supporting Hypothesis 2a, cumulative prior positive media evaluations have a positive, significant effect on subsequent positive evaluations and recent positive evaluations do not. Further, when the interactions are included, the effects of recent positive coverage become negative and significant. The results in Table 5 show no support for Hypothesis 2a within the investor community. Underpricing does not have a significant effect on daily returns, and the prior day's daily return has a significant negative effect, opposite the relationship predicted in Hypothesis 2a.

In sum, both Hypothesis 1a and Hypothesis 2a receive partial support. Widely available actions have positive, significant effects on both attention

¹² We also reran these analyses using the Cox proportional hazards model. The results were substantially the same as those presented here, and there were no differences in the hypothesized relationships.

TABLE 2
Results of Regression Analyses Predicting Media Attention^a

Variables	Model 1		Model 2		Model 3		Model 4		Model 5	
Quarter 1	-0.26	(0.24)	-0.38 ⁺	(0.22)	-0.38 ⁺	(0.22)	-0.28	(0.22)	-0.28	(0.22)
Quarter 2	0.01	(0.28)	-0.04	(0.23)	-0.04	(0.23)	-0.07	(0.23)	-0.07	(0.23)
Quarter 3	-0.16	(0.31)	-0.31	(0.31)	-0.31	(0.31)	-0.39	(0.32)	-0.39	(0.32)
Finance	0.14	(0.44)	0.04	(0.41)	0.04	(0.41)	-0.02	(0.42)	-0.02	(0.42)
Biotechnology	0.42	(0.34)	0.37	(0.31)	0.37	(0.31)	0.34	(0.31)	0.34	(0.31)
Electrical manufacturing	-0.00	(0.31)	-0.23	(0.33)	-0.23	(0.33)	-0.14	(0.33)	-0.14	(0.33)
Retail	0.61	(0.35)	0.46	(0.33)	0.46	(0.33)	0.51	(0.34)	0.51	(0.34)
Services	0.18	(0.37)	0.07	(0.32)	0.07	(0.32)	0.09	(0.32)	0.09	(0.32)
Software	0.74	(0.33)	0.31	(0.32)	0.31	(0.32)	0.33	(0.32)	0.33	(0.32)
Offer value ^b	0.28 ⁺	(0.17)	0.18	(0.15)	0.18	(0.15)	0.25 ⁺	(0.15)	0.25 ⁺	(0.15)
Underwriter reputation	0.58	(0.59)	0.55	(0.47)	0.55	(0.47)	0.32	(0.47)	0.31	(0.47)
Age ^b	0.00	(0.21)	-0.01	(0.16)	-0.01	(0.17)	-0.02	(0.17)	-0.02	(0.17)
Venture capital backing	0.18	(0.22)	0.17	(0.20)	0.17	(0.20)	0.14	(0.20)	0.14	(0.20)
Average management team tenure	-0.06	(0.04)	-0.04	(0.04)	-0.04	(0.04)	-0.05	(0.04)	-0.05	(0.04)
Percentage of insider selling	0.00	(0.00)	-0.00	(0.01)	-0.00	(0.01)	-0.00	(0.01)	-0.00	(0.01)
Firm sales in 1991	-0.00	(0.00)	-0.00	(0.00)	-0.00	(0.00)	-0.00	(0.00)	-0.00	(0.00)
Firm net income in 1991	-0.00	(0.00)	0.00	(0.00)	0.00	(0.00)	0.00	(0.00)	0.00	(0.00)
Risk factors	0.01	(0.03)	-0.01	(0.03)	-0.01	(0.03)	0.01	(0.03)	0.01	(0.03)
Investor size ^b	0.07	(0.05)	0.09*	(0.04)	0.09*	(0.04)	0.11**	(0.04)	0.11**	(0.04)
Daily press releases _{<i>t</i>-1}	2.23**	(0.20)	2.16**	(0.22)	2.16**	(0.22)	2.09**	(0.23)	2.09**	(0.23)
Cumulative press releases _{<i>t</i>-2}	0.08	(0.06)	0.04	(0.06)	0.04	(0.06)	0.06	(0.06)	0.06	(0.06)
Underpricing			0.01*	(0.00)	0.01*	(0.00)	0.01	(0.01)	0.01	(0.01)
Daily return _{<i>t</i>-1}			0.03*	(0.01)	0.03*	(0.01)	0.02 ⁺	(0.01)	0.02 ⁺	(0.01)
First day's turnover			-0.01	(0.00)	-0.00	(0.00)	-0.01 ⁺	(0.00)	-0.01 ⁺	(0.00)
Daily turnover _{<i>t</i>-1}			0.02 ⁺	(0.01)						
Cumulative media attention _{<i>t</i>-2}			0.12**	(0.03)	0.12**	(0.03)	0.13**	(0.03)	0.13**	(0.03)
Daily media attention _{<i>t</i>-1}			-0.32	(0.45)	-0.35	(0.47)	-0.60	(0.46)	-0.57	(0.48)
Cumulative positive media coverage _{<i>t</i>-2}			-0.15**	(0.05)	-0.15**	(0.06)	-0.17**	(0.05)	-0.17**	(0.05)
Daily positive media coverage _{<i>t</i>-1}			1.47*	(0.58)	1.46*	(0.58)	1.82**	(0.57)	1.84**	(0.59)
Cumulative × daily media attention					0.00	(0.02)			-0.01	(0.02)
First day's turnover × daily media attention							0.05**	(0.02)	0.05**	(0.02)
Constant	-10.40**	(2.94)	-8.46**	(2.50)	-8.47**	(2.51)	-9.90**	(2.54)	-9.89**	(2.54)
Log-likelihood	-1,143.21		-1,114.65		-1,114.63		-1,046.59		-1,046.55	

^a Unstandardized regression coefficients are shown with standard errors in parentheses. $n = 13,500$.

^b Logarithm.

⁺ $p < .10$

* $p < .05$

** $p < .01$

and evaluation within the media community and on attention within the investor community, but not on investors' evaluations. Recent actions have a positive, significant effect on attention within the investor community, but no effect on media attention and a negative effect on both media and investor evaluations.

Hypotheses 1b and 2b argue that widely available and recent actions also have intercascade effects. The results presented in Table 2 provide mixed support for Hypothesis 1b, and the results in Table 4 provide no support for this hypothesis. In support of Hypothesis 1b, recent investor attention reflected in daily turnover has a positive, significant

effect on media attention, but widely available investor attention reflected in turnover on the day of an IPO does not. Neither media attention measure has a significant effect on daily turnover. However, available (underpricing) and recent (daily return) investor evaluations each has a positive, significant relationship with media attention, and recent positive media evaluations have a positive, significant relationship with investor attention, suggesting strong intercascade effects, but across the two types of actions examined.

Hypothesis 2b receives strong support for media evaluations and mixed support for investor evaluations. In line with the hypothesis, available and

TABLE 3
Results of Regression Analyses Predicting Media Evaluation^a

Variables	Model 1		Model 2		Model 3		Model 4		Model 5	
Quarter 1	-0.22	(0.29)	-0.31	(0.28)	-0.09	(0.28)	-0.25	(0.30)	-0.14	(0.30)
Quarter 2	-0.42	(0.33)	-0.18	(0.32)	-0.33	(0.35)	-0.23	(0.33)	-0.33	(0.36)
Quarter 3	-0.35	(0.42)	-0.20	(0.44)	-0.01	(0.45)	-0.24	(0.46)	-0.05	(0.47)
Finance	-0.51	(0.65)	0.35	(0.64)	-0.54	(0.65)	-0.27	(0.68)	-0.40	(0.66)
Biotechnology	-0.40	(0.49)	-0.29	(0.47)	-0.33	(0.51)	-0.33	(0.49)	-0.33	(0.49)
Electrical manufacturing	-0.26	(0.39)	-0.48	(0.45)	-0.34	(0.45)	-0.48	(0.49)	-0.32	(0.47)
Retail	0.54	(0.44)	0.25	(0.41)	0.03	(0.45)	0.38	(0.44)	0.10	(0.44)
Services	-0.21	(0.46)	-0.14	(0.44)	-0.34	(0.45)	-0.19	(0.48)	-0.27	(0.48)
Software	0.54	(0.39)	0.10	(0.37)	-0.34	(0.45)	0.11	(0.39)	-0.16	(0.42)
Offer value ^b	0.31	(0.21)	0.15	(0.20)	0.03	(0.21)	-0.03	(0.23)	-0.06	(0.23)
Underwriter reputation	0.68	(0.89)	0.65	(0.75)	0.80	(0.78)	1.13	(1.03)	0.99	(0.91)
Age ^b	-0.10	(0.29)	-0.06	(0.25)	-0.21	(0.27)	0.04	(0.27)	-0.13	(0.29)
Venture capital backing	0.06	(0.27)	-0.06	(0.26)	-0.13	(0.28)	-0.09	(0.27)	-0.23	(0.30)
Average management team tenure	-0.01	(0.06)	0.01	(0.05)	0.07	(0.05)	-0.01	(0.05)	0.04	(0.05)
Percentage of insider selling	0.01	(0.01)	0.00	(0.01)	0.00	(0.01)	-0.00	(0.01)	-0.00	(0.01)
Firm sales in 1991	-0.00	(0.00)	-0.00	(0.00)	-0.00	(0.00)	-0.00	(0.00)	-0.00	(0.00)
Firm net income in 1991	0.00	(0.00)	0.00	(0.00)	0.00	(0.00)	0.00	(0.00)	0.00	(0.00)
Risk factors	-0.01	(0.05)	-0.04	(0.05)	0.00	(0.05)	-0.03	(0.06)	-0.01	(0.05)
Investor size ^b	0.12*	(0.06)	0.19**	(0.06)	0.21**	(0.06)	0.22**	(0.06)	0.22**	(0.06)
Daily positive press releases _{<i>t</i>-1}	2.42**	(0.31)	2.35**	(0.33)	2.50**	(0.33)	2.30**	(0.35)	2.48**	(0.35)
Cumulative positive press releases _{<i>t</i>-2}	0.25*	(0.11)	0.18 [†]	(0.10)	0.01	(0.15)	0.22*	(0.10)	0.03	(0.14)
Underpricing			0.02**	(0.01)	0.02**	(0.01)	-0.00	(0.01)	0.00	(0.01)
Daily return _{<i>t</i>-1}			0.04 [†]	(0.02)	0.05 [†]	(0.03)	0.05*	(0.02)	0.07**	(0.02)
First day's turnover			0.00	(0.00)	0.00	(0.00)	0.01	(0.00)	0.00	(0.00)
Daily turnover _{<i>t</i>-1}			0.03 [†]	(0.01)	0.03 [†]	(0.02)	0.02 [†]	(0.01)	0.02	(0.02)
Cumulative media attention _{<i>t</i>-2}			0.08 [†]	(0.05)	0.13*	(0.05)	0.09 [†]	(0.05)	0.14*	(0.06)
Daily media attention _{<i>t</i>-1}			-0.67	(0.90)	-2.38**	(0.86)	-2.72**	(0.90)	-4.79**	(1.02)
Cumulative positive media coverage _{<i>t</i>-2}			-0.07	(0.08)	-0.26**	(0.10)	-0.08	(0.09)	-0.26*	(0.11)
Daily positive media coverage _{<i>t</i>-1}			1.65 [†]	(0.88)	3.36**	(0.99)	3.65**	(0.94)	6.04**	(1.11)
Cumulative × daily positive media coverage					1.50**	(0.31)			1.48**	(0.32)
Underpricing × daily positive media coverage							0.13**	(0.04)	0.11**	(0.02)
Constant	-11.63**	(3.35)	-9.33**	(3.61)	-8.08*	(3.64)	-7.37 [†]	(3.84)	-6.72 [†]	(3.85)
Log-likelihood	-597.79		-577.98		-478.71		-518.74		-442.67	

^a Unstandardized regression coefficients are shown with standard errors in parentheses. $n = 13,500$.

^b Logarithm.

[†] $p < .10$

* $p < .05$

** $p < .01$

recent investor evaluations have positive, significant relationships with positive media coverage, and cumulative positive media coverage has a positive, significant effect on daily returns. However, recent positive media evaluations have a negative and significant effect on daily returns. Media attention exhibits the same pattern of relationships with daily returns. Widely available media attention has a positive, significant effect on daily returns, and recent attention has a significant, negative effect.

Thus, overall, our results support the ideas that both widely available and recent actions influence subsequent actions and that this influence can be observed both within and between communities.

The intercascade effects stemming from the widely available actions of another community appear to be greater for evaluations than for attention, and recent evaluations reduce the tendency toward similar evaluations within each community. Further, although not hypothesized, positive evaluations tend to have a positive intercascade influence on subsequent attention.

Hypotheses 3a and 4a focus on the relationship between widely available and recent actions within a given community. Hypothesis 3a suggests that widely available attention reduces the effect of recent attention on future attention, and Hypothesis 4a argues that widely available evaluations in-

TABLE 4
Results of Regression Analyses Predicting Investor Attention^a

Variables	Model 1	Model 2	Model 3	Model 4	Model 5
Daily NASDAQ return	0.16* (0.07)	0.05 (0.05)	0.05 (0.05)	0.05 (0.05)	0.05 (0.05)
Quarter 1	-0.73* (0.29)	-0.53** (0.16)	-0.53** (0.16)	-0.53** (0.16)	-0.53** (0.16)
Quarter 2	-1.16** (0.29)	-0.50** (0.17)	-0.51** (0.17)	-0.49** (0.17)	-0.50** (0.17)
Quarter 3	-0.55 [†] (0.32)	-0.12 (0.17)	-0.13 (0.17)	-0.12 (0.17)	-0.13 (0.17)
Finance	-0.73* (0.33)	-0.18 (0.18)	-0.19 (0.18)	-0.18 (0.18)	-0.19 (0.18)
Biotechnology	0.40 (0.35)	0.27 (0.18)	0.27 (0.18)	0.27 (0.18)	0.27 (0.18)
Electrical manufacturing	0.67* (0.31)	0.38* (0.18)	0.39* (0.17)	0.38* (0.18)	0.38* (0.18)
Retail	1.04** (0.32)	0.37* (0.16)	0.37* (0.16)	0.37* (0.16)	0.36* (0.16)
Services	-0.03 (0.27)	0.02 (0.15)	0.02 (0.15)	0.02 (0.15)	0.02 (0.15)
Software	1.03** (0.38)	0.35 (0.22)	0.35 (0.22)	0.34 (0.22)	0.35 (0.22)
Offer value ^b	0.25 (0.17)	-0.01 (0.09)	-0.00 [†] (0.09)	-0.01 (0.09)	-0.00 (0.09)
Underwriter reputation	-0.09 (0.49)	-0.20 (0.27)	-0.20 (0.27)	-0.20 (0.27)	-0.21 (0.27)
Age ^b	0.19 (0.18)	0.10 (0.10)	0.10 (0.10)	0.10 (0.10)	0.10 (0.10)
Venture capital backing	0.10 (0.21)	-0.03 (0.11)	-0.04 (0.11)	-0.03 (0.11)	-0.03 (0.11)
Average management team tenure	-0.10** (0.04)	-0.05* (0.02)	-0.05* (0.02)	-0.05* (0.02)	-0.05* (0.02)
Percentage of insider selling	0.01* (0.01)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Firm sales in 1991	-0.00* (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
Firm net income in 1991	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
Risk factors	-0.03 (0.04)	-0.01 (0.02)	-0.01 (0.02)	-0.01 (0.02)	-0.01 (0.02)
Investor size ^b	-0.09* (0.04)	-0.03 [†] (0.02)	-0.03 [†] (0.02)	-0.03 [†] (0.02)	-0.03 [†] (0.02)
Selectivity instrument	1.41** (0.38)	0.24 (0.23)	0.24 (0.23)	0.22 (0.23)	0.22 (0.23)
Cumulative press releases _{t-2}	-0.36** (0.07)	-0.17** (0.04)	-0.17** (0.04)	-0.16** (0.04)	-0.17** (0.04)
Daily press releases _{t-1}	0.04 (0.20)	-0.03 (0.18)	-0.03 (0.19)	-0.03 (0.18)	-0.03 (0.18)
Underpricing		0.01* (0.00)	0.01 [†] (0.00)	0.01* (0.00)	0.01 [†] (0.00)
Daily return _{t-1}		0.02 [†] (0.01)	0.02 [†] (0.01)	0.02 [†] (0.01)	0.02 [†] (0.01)
First day's turnover		0.01** (0.00)	0.01** (0.00)	0.01** (0.00)	0.01** (0.00)
Daily turnover _{t-1}		0.38** (0.02)	0.37** (0.02)	0.38** (0.02)	0.37** (0.02)
Cumulative media attention _{t-2}		0.02 (0.03)	0.02 (0.03)	0.02 (0.03)	0.02 (0.03)
Daily media attention _{t-1}		0.02 (0.05)	0.02 (0.05)	0.02 (0.05)	0.02 (0.05)
Cumulative positive media coverage _{t-2}		-0.17 (0.24)	-0.17 (0.24)	-0.18 (0.24)	-0.18 (0.23)
Daily positive media coverage _{t-1}		1.13 [†] (0.59)	1.12 [†] (0.58)	1.13 [†] (0.59)	1.12 [†] (0.59)
First day's turnover × daily turnover			0.00 (0.00)		0.00 (0.00)
Cumulative media attention × daily turnover				-0.00 (0.00)	-0.00 (0.00)
Constant	-0.71 (2.72)	3.43* (1.38)	3.41* (1.39)	3.45* (1.38)	3.42* (1.39)
R ²	0.08	0.28	0.28	0.28	0.28

^a Measured as daily turnover. Unstandardized regression coefficients are shown, with standard errors in parentheses. $n = 13,500$.

^b Logarithm.

[†] $p < .10$

* $p < .05$

** $p < .01$

crease the influence of recent evaluations on future evaluations. Our results provide no support for Hypothesis 3a and strong support for Hypothesis 4a. Although neither intracascade interaction is significant in predicting media and investor attention, both intracascade interactions are positive and significant in Tables 3 and 5 predicting future media and investor evaluations.

Finally, Hypotheses 3b and 4b suggest that intracascade attention has a positive moderating effect on recent intracascade attention and evaluations. Hypothesis 3b is partially supported. The interaction between recent investor attention and recent media attention is positive and significant; how-

ever, the interaction between cumulative media attention and recent investor attention is not significant. In contrast, both the interaction between widely available investor evaluations and recent media evaluations, and that between widely available media evaluations and recent investor evaluations, are positive and significant, providing support for Hypothesis 4b.

DISCUSSION

Research in a number of disciplines has adopted a cascades perspective as scholars begin to develop a richer understanding of the dynamics of social

TABLE 5
Results of Regression Analyses Predicting Investor Evaluation^a

Variables	Model 1	Model 2	Model 3	Model 4	Model 5
Daily NASDAQ return	1.41** (0.10)	1.54** (0.10)	1.52** (0.10)	1.53** (0.10)	1.52** (0.10)
Quarter 1	-0.13 (0.09)	-0.16 (0.10)	-0.14 (0.09)	-0.15 (0.10)	-0.14 (0.09)
Quarter 2	0.15 ⁺ (0.08)	0.13 (0.09)	0.13 (0.09)	0.12 (0.09)	0.12 (0.09)
Quarter 3	0.22* (0.09)	0.18 ⁺ (0.10)	0.19 ⁺ (0.10)	0.17 ⁺ (0.10)	0.18 ⁺ (0.10)
Finance	0.08 (0.10)	0.01 (0.12)	0.01 (0.12)	0.01 (0.12)	0.01 (0.12)
Biotechnology	-0.08 (0.12)	-0.13 (0.14)	-0.13 (0.14)	-0.13 (0.14)	-0.14 (0.14)
Electrical manufacturing	0.09 (0.10)	0.10 (0.11)	0.10 (0.11)	0.09 (0.11)	0.09 (0.11)
Retail	-0.04 (0.10)	0.02 (0.11)	0.01 (0.11)	0.01 (0.11)	0.00 (0.11)
Services	0.05 (0.09)	0.03 (0.10)	0.02 (0.10)	0.03 (0.10)	0.02 (0.10)
Software	0.11 (0.11)	0.11 (0.11)	0.12 (0.11)	0.09 (0.11)	0.10 (0.11)
Offer value ^b	-0.14** (0.05)	-0.13* (0.06)	-0.13* (0.06)	-0.13* (0.06)	-0.13* (0.06)
Underwriter reputation	0.35* (0.15)	0.51** (0.17)	0.51** (0.17)	0.52** (0.17)	0.52** (0.17)
Age ^b	-0.01 (0.06)	-0.00 (0.06)	-0.00 (0.06)	-0.01 (0.06)	-0.00 (0.06)
Venture capital backing	-0.10 (0.07)	-0.08 (0.07)	-0.08 (0.07)	-0.08 (0.07)	-0.08 (0.07)
Average management team tenure	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)
Percentage of insider selling	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Firm sales in 1991	0.00 ⁺ (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Firm net income in 1991	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
Risk factors	-0.03* (0.01)	-0.03** (0.01)	-0.03** (0.01)	-0.03** (0.01)	-0.03** (0.01)
Investor size ^b	-0.02 ⁺ (0.01)	-0.02 (0.01)	-0.02 (0.01)	-0.02 (0.01)	-0.02 (0.01)
Selectivity instrument	0.22 (0.13)	0.24 (0.16)	0.23 (0.16)	0.19 (0.17)	0.19 (0.16)
Cumulative press releases _{t-2}	-0.05 ⁺ (0.03)	-0.04 (0.03)	-0.04 (0.03)	-0.03 (0.03)	-0.03 (0.03)
Daily press releases _{t-1}	0.09 (0.28)	0.07 (0.27)	0.09 (0.27)	0.08 (0.27)	0.11 (0.27)
Underpricing		0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Daily return _{t-1}		-0.15** (0.01)	-0.15** (0.01)	-0.16** (0.01)	-0.16** (0.01)
First day's turnover		-0.00** (0.00)	-0.00** (0.00)	-0.00** (0.00)	-0.00** (0.00)
Daily turnover _{t-1}		0.03** (0.01)	0.03** (0.01)	0.04** (0.01)	0.04** (0.01)
Cumulative media attention _{t-2}		0.03* (0.01)	0.03* (0.01)	0.03* (0.01)	0.03* (0.01)
Daily media attention _{t-1}		-0.07** (0.02)	-0.07** (0.02)	-0.06* (0.02)	-0.06* (0.02)
Cumulative positive media coverage _{t-2}		0.71 ⁺ (0.38)	0.69 ⁺ (0.38)	0.72 ⁺ (0.38)	0.70 ⁺ (0.38)
Daily positive media coverage _{t-1}		-1.17* (0.47)	-1.11* (0.47)	-1.18* (0.47)	-1.13* (0.47)
Underpricing × daily return			0.00* (0.00)		0.00* (0.00)
Cumulative positive media coverage × daily return				0.01** (0.00)	0.01** (0.00)
Constant	2.13** (0.77)	1.88* (0.88)	1.84* (0.87)	1.98* (0.88)	1.93* (0.87)
R ²	0.04	0.06	0.06	0.06	0.07

^a Measured as daily returns. Unstandardized regression coefficients are shown, with standard errors in parentheses. $n = 13,500$.

^b Logarithm.

⁺ $p < .10$

* $p < .05$

** $p < .01$

influence in markets (e.g., Banerjee, 1992; Kuran & Sunstein, 1999; Welch, 2000; Rao et al., 2001; Pollock & Rindova, 2003). In this study, we extend this stream of research by theoretically and empirically differentiating between information and availability cascades and identifying distinct influence mechanisms associated with each type of cascade. We demonstrate that information and availability cascades operate simultaneously, yet they influence different types of actions to varying degrees. We also theorize and examine how these influences vary within and across cascades and find that the effects of recently observed actions change when intercascade influences are taken into account. Ta-

ble 6 summarizes the pattern of results over all the relationships we examined. Below we elaborate on the theoretical implications of these results.

Theoretical Implications

The simultaneity and intercascade influence of information and availability cascades. The pattern of effects (summarized in Table 6) demonstrates support for our general theoretical arguments. First, although prior research has not examined the extent to which information and availability cascades operate simultaneously, or the extent to which cascades in different communities

TABLE 6
Summary of Results for all Relationships

Predictor	Media Attention	Investor Attention	Media Evaluation	Investor Evaluation
Widely available investor evaluations (underpricing)	Positive ^a	Positive	Positive ^a	n.s.
Recent investor evaluations (daily return _{<i>t</i> - 1})	Positive	Positive ^b	Positive ^b	Negative
Widely available investor attention (day 1 turnover)	Negative ^{b, c}	Positive	n.s.	Negative
Recent investor attention (daily turnover _{<i>t</i> - 1})	Positive ^b	Positive	Positive ^b	Positive
Widely available media attention (cumulative media articles _{<i>t</i> - 2})	Positive	n.s.	Positive	Positive
Recent media attention (daily media articles _{<i>t</i> - 1})	n.s.	n.s.	Negative ^d	Negative
Widely available media evaluations (cumulative positive media articles _{<i>t</i> - 2})	Negative	n.s.	Negative ^a	Positive ^b
Recent media evaluations (daily positive media articles _{<i>t</i> - 1})	Positive	Positive ^b	Positive	Negative
Available intracascade attention/evaluations × recent intracascade attention/evaluations	n.s.	n.s.	Positive	Positive
Available intercascade attention/evaluations × recent intracascade attention/evaluations	Positive	n.s.	Positive	Positive

^a Significant only when the intracascade interaction is included in the model.

^b Marginally significant result ($p < .10$, two-tailed test).

^c Significant only when the intercascade interaction is included in the model.

^d Significant only when interactions are included in the model.

may interact with each other, our results show that both information and availability cascades influence different actions to different degrees. Further, we advance the general argument that intercascade effects are likely under conditions of uncertainty when actors in different communities face similar issues and can benefit from making choices that precede, but are consistent with, the choices ultimately made by the majority in their own community. Our results provide support for this general argument, as we find both direct and moderating intercascade effects. These findings are particularly noteworthy, because all extant research on cascades has focused on actors making the same choice within the same community.

Generally supportive of our arguments, the pattern of effects summarized in Table 6 is complex, and it suggests interesting avenues for future theorizing and research. First, we observe that the pattern of media influence on investors differs from the pattern of investors' influence on the media. Media attention and evaluations are affected by both the available and recent actions of investors, and the effects are primarily positive and significant. In contrast, investor evaluations appear to be affected negatively by recent media attention and evaluations, but positively by widely available media attention and evaluations. Investor attention is influenced primarily by intracascade dynamics. One possible interpretation of these findings is that daily media coverage, assessed in the short run, may be viewed as a combination of news and noise, and it may put investors on their guard for changes in momentum and the possibility that a firm's stock

is becoming overvalued. In contrast, cumulative media coverage, assessed over a longer period of time, may contribute to the accumulation of positively valued intangible assets for the firm, such as celebrity status (Rindova, Pollock, & Hayward, 2006) and esteem (Rindova et al., 2007). Future research should include endeavors to understand the characteristics of media coverage associated with positive and negative performance outcomes, as the findings of extant research in this area appear to be inconsistent (Fombrun & Shanley, 1990; Pollock & Rindova, 2003). More generally, our results suggest the need for continued research on the consequences and value of media coverage, especially with respect to young firms.

It is also possible that the differences in the patterns of influence are due to the different market roles of the media and investors. For example, recent attention appears to have a greater effect than available attention within the investor community. This pattern is consistent with investors' specialization in rapidly and continuously assessing firm values (Figlewski, 1982). In contrast, the media specialize in "setting the agenda" for public discourse (Carroll & McCombs, 2003; McCombs & Shaw, 1972), which is consistent with our finding that the media are quite responsive to widely available information. Though consistent with our broad expectations about the effects of availability and recency in general, these differences suggest that in future work researchers should give greater consideration to contextual features (Johns, 2006), such as those defined by the specific market roles

of actors, when assessing the dynamics of social influence in markets.

Interaction between recency and availability. Another important theoretical contribution of our study is that we examine how widely available and recent information interact to influence attention and evaluation. We generally find that availability—both within the same community and in another community—increases the effect of recent information, and this effect is more consistent for evaluation than attention. These results suggest that, for firms about which information becomes widely available, recent information has a greater impact because the firm is monitored more actively. These results also support our argument that wide availability of information may be an important market-structuring mechanism leading a subset of firms to become increasingly prominent and to have superior economic performance (Rindova et al., 2005). Future research in strategy and organization theory could benefit from developing a better understanding of the role that such temporary structures based on collective beliefs may play in generating positive feedback effects that lead to the accumulation intangible assets and advantageous market positions for firms.

Implications for organization theory. Finally, our findings offer new insights into the ways market participants use information conveyed by others' actions to manage uncertainty. As such, it advances organizational research on how mimetic behaviors affect market activities (e.g., Derfus, Maggitti, Grimm, & Smith, 2008; Kraatz, 1998; Kraatz & Moore, 2002; Rao et al., 2001). Much of this research has emphasized how social influence is conveyed through institutionalized practices, social networks, and learning, yet we demonstrate a more diffused process of social influence based on the nature of the actions taken by communities of market participants, their collective momentum and direction, and the market roles of different actors. Our study also offers additional insights into the cognitive bases of persistence and change in social systems that may not be apparent when a researcher is studying these systems from a purely structural point of view or considering interactions within a single community. By integrating information and availability cascades arguments, and by contrasting intracascade and intercascade influences, our study opens up an important direction for future research on social influence in markets.

Implications for Managers

In addition to its theoretical implications, our study also has significant implications for entrepreneurs

contemplating or going through the IPO process. Understanding the dynamics and influence of information in markets is critical to successfully garnering all the resources possible from an IPO. Although prior research has demonstrated that information intermediaries such as financial analysts and the media influence firms' legitimacy (Pollock & Rindova, 2003; Zuckerman, 1999) and expectations of their future performance (Rao et al., 2001), our study shows how intermediaries and investors dynamically influence each others' allocation of attention to and evaluation of newly public firms. Our analysis and results also provide some potentially useful insights for entrepreneurs who would like to shape these processes to their advantage. For example, the results of our study suggest that simply courting short-term media attention about single events may not yield positive benefits for a firm, but the ability to sustain media attention can lead to positive effects on its market performance. Thus, entrepreneurs should consider developing a "media strategy" that enables them to attract ongoing media attention, thereby influencing their firms' early market performance. In a recent comparative case study of reputation building by new firms, Rindova and her colleagues (2007) provided evidence that Amazon.com developed such a media strategy by continuously releasing information about a variety of actions, rather than seeking to make "big bang" product announcements. Our results also provide support for this approach. Although the effects of firm press releases are treated as a control variable in our analysis, our results show a positive association between firms' press releases and media attention. In sum, understanding the interactions between firm, media, and investor actions should be considered an important aspect of the IPO process.

Limitations and Future Research Directions

Like any study, this one has limitations that suggest future research directions. One potential limitation of this study arises from the period observed. We chose to focus on a relatively short time period after firms' IPOs to limit the probability that endogenous or exogenous events with significant information value might change the course of the cascades we sought to observe. However, it is possible that a different pattern of results would emerge if a longer post-IPO period were considered. Future research can explore the relative impact of different information attributes and the operation of the two types of cascades over longer periods.

A second limitation of our study is that we were unable to differentiate between information ob-

tained directly by reporters or investors from primary sources and that gleaned through secondary means. Our study design reflects the logic of cascades, which emphasizes that under conditions of uncertainty actors choose to ignore their private information and beliefs, an expectation that has been supported in laboratory settings. However, it is possible that in realistic settings actors use information from different sources differently. It is also important to recognize that, in contrast to event studies (e.g., Busse & Green, 2002; Westphal & Zajac, 1998), this study does not focus on the effect on investors of any particular piece of media-provided information, but rather on the aggregate effects of the collective behaviors of investors and the media on each others' actions. Our approach is consistent with prior research that uses aggregate behaviors as an indicator of information cascades in markets (Amihud et al., 2003). Because it examines aggregate media and investor actions, our study cannot replicate the microstructures of information cascades observed in the laboratory, or differentiate between the effects of actions taken by different types of investors (e.g., institutional investors versus private individuals, public versus private fund managers) and media organizations (e.g., newspapers and general magazines versus specialized trade publications). It is possible, given differences in levels of expertise, reputation, risk orientation, or other characteristics, that different types of investors may interpret media-provided information and other investors' actions in different ways, and different types of media organizations may respond to both the market and other media organizations differently. Future research could endeavor to disaggregate "investors" and "the media" into finer categorical delineations in order to determine what role the characteristics of the different actors themselves play in information use.

We also did not differentiate between prestigious and nonprestigious media outlets in assessing their influence on cascade behaviors. The availability cascade perspective explicitly emphasizes the role that little-known actors (e.g., "availability entrepreneurs"; Kuran & Sunstein, 1999) can play in instigating cascades. However, prestigious individuals have been shown to influence information cascades (Rao et al., 2001). We explored this issue in analyses not reported here by including a dummy variable in our regression models for media coverage issued by *BusinessWeek*, *Fortune*, and the *Wall Street Journal*, three prestigious and nationally distributed business publications. Coverage by these outlets constituted about 8 percent of all the articles published during the post-IPO period, or less than two-tenths of a percent of the observations in

our sample. The effect of this measure was generally nonsignificant,¹³ and none of our substantive results changed. Given the low incidence of articles published by these prominent media outlets in our data, we suggest that understanding the role of actor prestige in cascade dynamics is yet another interesting future direction for the growing area of research on social influence in markets.

Also, we only empirically examined the effects of positive evaluations, because negative coverage was very infrequent in our data, as noted earlier. Thus, although we have endeavored to develop theoretical arguments that apply to both to positive and negative evaluations, we could not empirically test whether negative evaluations affect cascade behaviors differently than positive evaluations. Given that negative coverage tends to be rare for IPO firms in general, an important direction for future research would be to examine the dynamics of cascade influence in contexts associated with specific negative events, such as organizational crises.

Finally, we do not account for influences that may arise from actors other than firm, media, and investors. For example, customers, suppliers, and a firm's investment bank or venture capitalist backers might all engage in activities or share information that could influence our outcomes of interest. However, to the extent that these other sources of information affect media coverage or investor activity, they would create error variance in our models, making it more difficult to find significant results for the relationships of interest in this study. Given our findings about the significance of intercascade influence, future research should continue to disentangle the information effects of the actions of different stakeholder groups and interacting communities.

REFERENCES

- Akerlof, G. A. 1970. The market for "lemons": Quality, uncertainty and the market mechanism. *Quarterly Journal of Economics*, 84: 488–500.
- Aldrich, H. 1999. *Organizations evolving*. London: Sage.
- Allison, P. 1984. *Event history analysis: Regression for longitudinal event data*. Beverly Hills, CA: Sage.
- Amihud, Y., Hauser, S., & Kirsch, A. 2003. Allocations, adverse selection and cascades in IPOs: Evidence

¹³ A marginally significant effect in the main effects model predicting media evaluations was the only exception, and it disappeared once the interactions were included.

- from the Tel Aviv stock exchange. *Journal of Financial Economics*, 68: 137–158.
- Banerjee, A. V. 1992. A simple model of herd behavior. *Quarterly Journal of Economics*, 107: 797–817.
- Benjamin, B. A., & Podolny, J. M. 1999. Status, quality, and social order in the California wine industry. *Administrative Science Quarterly* 44: 563–589.
- Benveniste, L. M., & Spindt, P. A. 1989. How investment bankers determine the offer price and allocation of new issues. *Journal of Financial Economics* 24: 343–361.
- Bikhchandani, S., Herschleifer, D., & Welch, I. 1998. Learning from the behavior of others: Conformity, fads, and informational cascades. *Journal of Economic Perspectives*, 12(3): 151–170.
- Bikhchandani, S., & Sharma, S. 2001. Herding behavior in financial markets. *IMF Staff Papers*, 47: 279–310.
- Bonardi, J. P., & Keim, G. D. 2005. Corporate political strategies for widely salient issues. *Academy of Management Review*, 30: 355–376.
- Bradley, D. J., Jordan, B. D., & Ritter, J. R. 2003. The quiet period goes out with a bang. *Journal of Finance*, 58: 1–36.
- Brown, N., & Deegan, C. 1998. The public discourse of environmental performance information—A dual test of media agenda setting theory and institutional theory. *Accounting and Business Research*, 29: 21–41.
- Busse, J. A., & Green, T. C. 2002. Market efficiency in real time. *Journal of Financial Economics*, 65: 415–437.
- Carroll, C. E., & McCombs, M. 2003. Agenda setting effects of business news on the public's images and opinions about major corporations. *Corporate Reputation Review*, 6: 36–46.
- Carter, R. B., & Manaster, S. 1990. Initial public offerings and underwriter reputation. *Journal of Finance*, 65: 1045–1067.
- Certo, S. T. 2003. Influencing IPO investors with prestige: Signaling with board structures. *Academy of Management Review*, 28: 432–446.
- Certo, S. T., Daily, C. M., Cannella, A. A., & Dalton, D. R. 2003. Giving money to get money: How CEO stock options and CEO equity enhance IPO valuations. *Academy of Management Journal*, 46: 643–644.
- Cialdini, R. B. 2004. The science of persuasion. *Scientific American* (Special edition: Mind), 284(2): 76–82.
- Cohen, J. 1968. Weighted kappa: Nominal scale agreement with provision for scaled agreement or partial credit. *Psychological Bulletin*, 70: 213–220.
- Cohen, J., Cohen, P., West, S., & Aiken, L. 2003. *Applied multiple regression/correlation analysis for the behavioral sciences*. Mahwah, NJ: Erlbaum.
- Connelly, T., Arkes, H. R., & Hammond, K. R. 2000. *Judgment and decision making*. New York: Cambridge University Press.
- Cornelli, F., & Goldreich, D. 2001. Bookbuilding and strategic allocation. *Journal of Finance*, 56: 2337–2370.
- Crocker, J. K., & McGraw, M. 1984. What's good for the goose is not good for the gander: Solo status as an obstacle to occupational achievement for males and females. *American Behavioral Scientist*, 27: 357–369.
- Davis, G. F., & Greve, H. R. 1997. Corporate elite networks and governance changes in the 1980's. *American Journal of Sociology*, 103: 1–37.
- Davis, G. F., & Marquis, C. 2005. Prospects for organization theory in the early twenty-first century: Institutional fields and mechanisms. *Organization Science*, 16: 332–343.
- Deeds, D., Mang, P., & Frandsen, M. 2004. The influences of firms' and industries' legitimacy on the flow of capital into high-technology ventures. *Strategic Organization*, 2: 9–34.
- Deephouse, D. L. 2000. Media reputation as a strategic resource: An integration of mass communication and resource based theories. *Journal of Management*, 26: 1091–1112.
- Derfus, P. J., Maggitti, P. G., Grimm, C. M., & Smith, K. G. 2008. The Red Queen effect: Competitive actions and firm performance. *Academy of Management Journal*, 51: 61–80.
- DiMaggio, P. J., & Powell, W. W. 1983. The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48: 147–160.
- Eagly, A. H., & Chaiken, S. 1993. *The psychology of attitudes*. Ft. Worth, TX: Harcourt Brace Jovanovich.
- Edwards, K., & Smith, E. E. 1996. The disconfirmation bias in the evaluation of arguments. *Journal of Personality and Social Psychology*, 71: 5–24.
- Einhorn, H. J. 1982. Learning from experience and sub-optimal rules in decision making. In D. Kahneman, P. Slovic, & A. Tversky (Eds.), *Judgment under uncertainty: Heuristics and biases*: 268–286. Cambridge, U.K.: Cambridge University Press.
- Einhorn, H. J., & Hogarth, R. M. 1981. Behavioral decision theory: Processes of judgement and choice. In M. R. Rosenzweig & L. W. Porter (Eds.), *Annual review of psychology*, 32: 53–88. Palo Alto, CA: Annual Reviews.
- Ellis, K., Michaely, R., & O'Hara, M. 2000. When the underwriter is the market maker: An examination of trading in the IPO aftermarket. *Journal of Finance*, 55: 1039–1074.
- Figlewski, S. 1982. Information diversity and market behavior. *Journal of Finance*, 37: 87–102.
- Fischer, H. M., & Pollock, T. G. 2004. Effects of social

- capital and power on surviving transformational change: The case of initial public offerings. *Academy of Management Journal*, 47: 463–481.
- Fiske, S. T., & Taylor, S. E. 1991. *Social cognition*. New York: McGraw Hill.
- Goeree, J. K., Palfrey, T. R., Rogers, B. W., & McKelvey, R. D. 2006. *Self-correcting information cascades*. Unpublished working paper, Princeton University, Princeton, NJ.
- Graham, J. R. 1999. Herding among investment newsletters: Theory and practice. *Journal of Finance*, 54: 237–268.
- Greve, H. R. 1995. Jumping ship: The diffusion of strategy abandonment. *Administrative Science Quarterly*, 41: 29–60.
- Greve, H. R., & Taylor, A. 2000. Innovations as catalysts for organizational change: Shifts in organizational cognition and search. *Administrative Science Quarterly*, 45: 54–80.
- Gulati, R., & Higgins, M. C. 2003. Which ties matter when? The contingent effects of interorganizational partnerships on IPO success. *Strategic Management Journal*, 24: 127–144.
- Gutterman, A. 1991. Marketing the initial public offering: Strategic planning analysis—Part II. *Securities Regulation Law Journal*, 18: 422–432.
- Haunschild, P. R. 1994. How much is that company worth? Interorganizational relationships, uncertainty and acquisition premiums. *Administrative Science Quarterly*, 39: 391–411.
- Haunschild, P. R., & Miner, A. S. 1997. Modes of interorganizational imitation: The effects of outcome salience and uncertainty. *Administrative Science Quarterly*, 42: 472–500.
- Haunschild, P. R., & Sullivan, B. N. 2002. Learning from complexity: Effects of prior accidents and incidents on airlines' learning. *Administrative Science Quarterly*, 47: 609–643.
- Hawkins, S. A., & Hoch, S. J. 1992. Low-involvement learning: Memory without evaluation. *Journal of Consumer Research*, 19: 212–216.
- Heckman, J. J. 1979. Sample selection bias as a specification error. *Econometrica*, 47: 153–162.
- Higgins, E. T. 1996. Knowledge activation: Accessibility, applicability, and salience. In E. T. Higgins & A. Kruglanski (Eds.), *Social psychology: Handbook of basic principles*: 133–168. New York: Guilford Press.
- Hirsch, P. 1977. Occupational, organizational and institutional models in mass media research: Toward an integrated framework. In P. M. Hirsch, P. V. Miller, & F. G. Kline (Eds.), *Strategies for communication research*: 13–40. Beverly Hills, CA: Sage.
- Hoffman, A., & Ocasio, W. 2001. Not all events are attended equally: Toward a middle range theory of industry attention to external events. *Organization Science* 12: 414–434.
- Hsee, C. K., Loewenstein, G. F., Blount, S., & Bazerman, M. H. 1999. Preference reversal between joint and separate evaluations of options: A review and theoretical analysis. *Psychological Bulletin*, 125: 576–590.
- Hung, A. A., & Plott, C. R. 2001. Information cascades: Replication and an extension to majority rule and conformity-rewarding institutions. *American Economic Review*, 91: 1508–1520.
- Husick, G. C., & Arrington, J. M. 1998. *The initial public offering: A practical guide for executives*. New York: Bowne & Co.
- Ibbotson, R. G., & Ritter, J. R. 1995. Initial public offerings. In R. Jarrow et al. (Eds.), *Handbook in operations research and management science*: 993–1016. London: Elsevier Sciences B.V.
- Janis, I. L., & Fadner, R. 1965. The coefficient of imbalance. In H. Lasswell, N. Leites, & associates (Eds.), *Language of politics*: 153–169. Cambridge, MA: MIT Press.
- Johns, G. 2006. The essential impact of context on organizational behavior. *Academy of Management Review*, 2: 386–408.
- Kahneman, D., Slovic, P., & Tversky, A. 1982. *Judgment under uncertainty: Heuristics and biases*. Cambridge and New York: Cambridge University Press.
- Kelley, H. 1972. Causal schemata in the attribution process. In E. E. Jones, D. E. Kanouse, H. H. Kelly, R. E. Nisbett, S. Valins, & B. Weiner (Eds.), *Attribution: Perceiving the causes of behavior*. Morristown, NJ: General Learning Press.
- Kim, J., & Miner, A. S. 2007. Vicarious learning from the failure and near failure of others: Evidence from the U.S. commercial banking industry. *Academy of Management Journal*, 50: 687–714.
- Kraatz, M. S. 1998. Learning by association? Interorganizational networks and adaptation to environmental change. *Academy of Management Journal*, 41: 621–643.
- Kraatz, M. S., & Moore, J. H. 2002. Executive migration and institutional change. *Academy of Management Journal*, 45: 120–143.
- Kunda, Z. 1990. The case for motivated reasoning. *Psychological Bulletin*, 108: 480–498.
- Kuran, T., & Sunstein, C. 1999. Availability cascades and risk regulation. *Stanford Law Review*, 51: 683–768.
- Lamertz, K., & Baum, J. 1998. The legitimacy of organizational downsizing in Canada: An analysis of explanatory media accounts. *Canadian Journal of Administrative Sciences*, 15: 93–107.
- Leblebici, H., Salancik, G. R., Copay, A., & King, T. 1991. Institutional change and the transformation of interorganizational fields: An organizational history of

- the U.S. radio broadcasting industry. *Administrative Science Quarterly*, 36: 333–363.
- Lord, C. G., Ross, L., & Lepper, M. R. 1979. Biased assimilation and attitude polarization: The effects of prior theories on subsequently considered evidence. *Journal of Personality and Social Psychology*, 37: 2098–2109.
- Lounsbury, M., & Rao, H. 2004. Sources of durability and change in market classifications: A study of the reconstitution of product classifications in the American mutual fund industry, 1944–1985. *Social Forces*, 82: 969–999.
- March, J., & Simon, H. 1958. *Organizations*. New York: Wiley.
- Martens, M. L. 2004. IPO effects: Corporate restructuring when a firm goes public. *Journal of Public Affairs*, 4: 125S–139S.
- McArthur, L. Z., & Post, D. L. 1977. Figural emphasis and person perception. *Journal of Experimental Social Psychology*, 13: 520–535.
- McCombs, M., & Shaw, D. 1972. The agenda-setting function of mass media. *Public Opinion Quarterly* 36: 176–187.
- Meggison, W. L., & Weiss, K. 1991. Venture capitalist certification in initial public offerings. *Journal of Finance*, 46: 879–903.
- Miller, S. C. 1992. Networking: Managing systems with thousands of users. *New York Times*, September 27: 3–8.
- Mitra, A. 1995. Advertising and the stability of consideration sets over multiple purchase occasions. *International Journal of Research in Marketing*, 12: 81–94.
- Mizruchi, M. S., & Fein, L. C. 1999. The social construction of organizational knowledge: A study of the uses of coercive, mimetic and normative isomorphism. *Administrative Science Quarterly*, 44: 653–683.
- Neill, D. B. 2005. Cascade effects in heterogeneous populations. *Rationality and Society*, 17(2): 191–241.
- Nelson, T. 2003. The persistence of founder influence: Management, ownership, and performance effects at initial public offerings. *Strategic Management Journal*, 24: 707–724.
- Nisbett R. E., & Ross, L. 1980. *Human inference: Strategies and shortcomings of social judgment*. Englewood Cliffs, NJ: Prentice Hall.
- Ocasio, W. 1997. Towards an attention-based view of the firm. *Strategic Management Journal*, 18: 187–206.
- Podolny, J. 1993. A status-based model of market competition. *American Journal of Sociology*, 98: 829–872.
- Pollock, T. G. 2004. The benefits and costs of underwriters' social capital in the U.S. initial public offerings market. *Strategic Organization*, 2: 357–388.
- Pollock, T. G., & Gulati, R. 2007. Standing out from the crowd: The visibility enhancing effects of IPO-related signals on alliance formations by entrepreneurial firms. *Strategic Organization*, 5: 339–372.
- Pollock, T. G., & Rindova, V. P. 2003. Media legitimation effects in the market for initial public offerings. *Academy of Management Journal*, 46: 631–642.
- Porac, J. F., Thomas, H., Wilson, F., Paton, D., & Kanfer, A. 1995. Rivalry and the industry model of Scottish knitwear producers. *Administrative Science Quarterly*, 40: 203–227.
- Porac, J. F., Wade, J. B., & Pollock, T. G. 1999. Industry categorizations and the politics of the comparable firm in CEO compensation. *Administrative Science Quarterly*, 44: 112–144.
- Rao, H., Greve, H., & Davis, G. 2001. Fool's gold: Social proof in the initiation and abandonment of coverage by Wall Street analysts. *Administrative Science Quarterly*, 46: 502–526.
- Reger, R. K., & Huff, A. S. 1993. Strategic groups: A cognitive perspective. *Strategic Management Journal*, 14: 103–124.
- Rindova, V. P., Petkova, A., & Kotha S. 2007. Standing out: How new firms in emerging markets build reputation in the media. *Strategic Organization*, 5(1): 1–39.
- Rindova, V. P., Pollock, T. G., & Hayward, M. L. A. 2006. Celebrity firms: The social construction of market popularity. *Academy of Management Review*, 31: 50–71.
- Rindova V. P., Williamson I. O., Petkova, A. P., & Server, J. M. 2005. Being good or being known: An empirical examination of the dimensions, antecedents, and consequences of organizational reputation. *Academy of Management Journal*, 48: 1033–1049.
- Ritter, J. R. 1984. The “hot issue” market of 1980. *Journal of Business*, 57: 215–240.
- Ritter, J. R. 1991. The long-run performance of initial public offerings. *Journal of Finance*, 46: 3–27.
- Ritter, J. R., & Welch, I. 2002. A review of IPO activity, pricing and allocations. *Journal of Finance*, 57: 1795–1828.
- Roberts, J. H., & Lattin, J. M. 1997. Consideration: Review of research and prospects for future insights. *Journal of Marketing Research*, 34: 406–410.
- Rogers, E. M. 2002. Intermedia processes and powerful media effects. In J. Bryant & D. Zillman (Eds.), *Media effects: Advances in theory and research*: 199–214. Mahwah, NJ: Erlbaum.
- Schwarz, N., & Bohner, G. 2001. The construction of attitudes. In A. Tesser & N. Schwarz (Eds.), *Blackwell handbook of social psychology*: 436–457. Oxford, U.K.: Blackwell.
- Shaver, M. 1998. Accounting for endogeneity when assessing strategy performance: Does entry mode

- choice affect FDI survival? *Management Science*, 44: 571–585.
- Sherman, S. J., Gialdini, R. B., & Schwartzman, D. F. 1985. Imagining can heighten or lower the perceived likelihood of contracting a disease: The mediating effect of ease of imagery. *Personality and Social Psychology Bulletin*, 11: 118–127.
- Shoemaker, P. J., & Reese, S. D. 1996. *Mediating the message*. New York: Longman.
- Shudson, M. 1986. *What time means in a news story*. Gannett occasional paper no. 4, Gannett Center for Media Studies, New York.
- Sigal, L. V. 1973. *Reporters and officials*. Lexington, MA: Heath.
- Slovic, P. 2000. *The perception of risk*. Sterling, VA: Earthscan Publications.
- Starbuck, W., & Milliken, F. 1988. Executive perceptual filters: What they notice and how they make sense. In D. Hambrick (Ed.), *The executive effect: Concepts and methods for studying top managers*: 35–65. Greenwich, CT: JAI Press.
- Stiglitz, J. 2000. The contribution of the economics of information to twentieth century economics. *Quarterly Journal of Economics*, 104: 1441–1478.
- Sunstein, C. R. 2003. What's available? Social influences and behavioral economics. *Northwestern Law Review*, 97: 1295–1314.
- Sunstein, C. R. 2004. Fear and liberty. *Social Research*, 71: 967–996.
- Taylor, S. E., & Fiske, S. T. 1975. Point of view and perceptions of causality. *Journal of Personality and Social Psychology*, 32: 439–445.
- Thomas, S. 2002. The saga of the first stock index futures contract: Benchmarks, models and learning. *Journal of Money, Credit and Banking*, 34: 767–808.
- Tversky, A., & Kahneman, D. 1973. Availability: A heuristic for judging frequency and probability. *Cognitive Psychology*, 5: 207–232.
- Welbourne, T. M., & Andrews, A. O. 1996. Predicting the performance of initial public offerings: Should human resource management be in the equation? *Academy of Management Journal*, 39: 891–919.
- Welch, I. 1992. Sequential sales, learning and cascades. *Journal of Finance*, 47: 695–732.
- Welch, I. 2000. Herding among security analysts. *Journal of Financial Economics*, 58: 369–396.
- Westphal, J. D., & Zajac, E. J. 1998. The symbolic management of stockholders: Corporate governance reforms and shareholder reactions. *Administrative Science Quarterly*, 43: 127–153.
- Yamaguchi, K. 1991. *Event history analysis*. Newbury Park, CA: Sage.
- Zuckerman, E. W. 1999. The categorical imperative: Securities analysts and the illegitimacy discount. *American Journal of Sociology*, 104: 1398–1438.



Timothy G. Pollock (tpollock@psu.edu) is an associate professor of management in the Smeal College of Business at the Pennsylvania State University. He received his Ph.D. in organizational behavior from the University of Illinois at Urbana-Champaign. His research focuses on how social and political factors such as reputation, celebrity, social capital, impression management activities, media accounts, and the power of different actors influence corporate governance, strategic decision making in entrepreneurial firms, and the social construction of entrepreneurial market environments.

Violina P. Rindova (vrindova@mcombs.utexas.edu) is an associate professor of management in the McCombs School of Business at the University of Texas–Austin. She received her Ph.D. in strategy from the Stern School of Business, New York University. Her research focuses on the creation of intangible assets, such as reputation and celebrity, and the sociocognitive processes through which value, meaning, and advantages are socially constructed in markets.

Patrick G. Maggitti (patrick.maggitti@villanova.edu) is an assistant professor of management and entrepreneurship in the School of Business at Villanova University. His research focuses on the dynamics of competition, innovation, and decision making. He received his Ph.D. in strategic management from the Robert H. Smith School of Business at the University of Maryland, College Park.

