Strength and Weakness in Numbers? Unpacking the Role of Prevalence in the Diffusion of Reverse Mergers

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Acknowledgments: The authors thank Henrich Greve, John Meyer, Michelle Rogan, Andrew Shipilov and Sarah Soule, as well as Associate Editor Brian Connelly and the anonymous AMJ reviewers for their helpful comments and suggestions on earlier versions of this work.

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ABSTRACT

A common prediction in research on practice diffusion is a "strength in numbers" effect (i.e., that a growing number of past adopters will increase the number of future adopters). We advance and test a theoretical perspective to explain when and how practice prevalence may also generate a "weakness in numbers" effect. Specifically, in seeking to explain the diffusion of reverse mergers (RMs)—a controversial practice that allows a private firm to go public by merging with a publicly listed "shell company"—we suggest that prevalence affected their diffusion in a complex way, based on two divergent social influence pathways, creating: (1) a direct and positive effect of practice prevalence on potential adopters, who view prevalence as evidence of the practice's value, and (2) an indirect and negative effect, mediated through third-party evaluators (i.e., investors, and the media) who view prevalence as a cause for concern and skepticism. We also highlight the utility of this theoretical framework by analyzing how a decline in the status of past adopters exerts a negative effect on diffusion through both social influence pathways. Employing structural equation modeling techniques, we find support for the hypothesized relationships and we discuss the implications of the study for future research on practice diffusion.

Keywords:
Organization and Management Theory, Institutional theory, Structural equation modeling

INTRODUCTION

What does prevalence imply for the subsequent diffusion of a practice? The large body of scholarly research on practice diffusion, despite its diversity, has converged on an expectation that growing prevalence of a practice increases subsequent diffusion (e.g., Banerjee, 1992; Cyert & March, 1963; Granovetter, 1978; Greve, 1995; Rogers, 2003; Ryan & Gross, 1943; Tolbert & Zucker, 1983). The specific explanations underlying this expected *positive* relationship vary between theoretical perspectives, and include the notions that greater prevalence of a diffusing practice (1) increases awareness of the practice, (2) makes the practice more legitimate, and (3) reveals a positive economic value of the practice. While the different lines of diffusion research propose different underlying mechanisms, they agree in predicting that the higher the number of past adopters, the higher the propensity for others to adopt the practice (Colyvas & Jonsson, 2011; Lieberman & Asaba, 2006; Strang & Soule, 1998; Young, 2009).

We analyze a case that runs counter to this prediction. Specifically, we study the diffusion of reverse mergers (RMs), a largely unstudied but important business practice in which a private company attains publicly-traded status without undertaking a traditional initial public offering (IPO). RMs experienced a noteworthy rise in their diffusion in the mid-2000s. In fact, at times during the 2000s, more firms went public using an RM than went public via an IPO. What followed, however, was a period of contestation and negative evaluations by third-party evaluators (the media, investors, and regulators), and a decline as the decade ended. What we find particularly striking about this diffusion trajectory is that, unlike the theoretical predictions about practice prevalence, the upsurge in RMs did not further legitimize the practice and fuel its diffusion. Instead, it led to heightened concerns and skepticism among investors, regulators, and the media, which hindered the further diffusion of the practice.

Indeed, as the number of RMs increased, regulators scrutinized the practice and expressed concerns about its increasing popularity (Frayter, 2011; Pavkov, 2006). Moreover, the media's discussion of the "pick-up in reverse mergers" did not indicate growing social acceptance but suggested "buyer beware" for investors (Ermann & Flaherty, 2010). In this way, reactions to the prevalence of RMs seem atypical when compared to the dominant view in the diffusion literature that prevalence of a practice reinforces and reflects increased legitimacy.

A closer look at prior diffusion research, however, suggests mixed evidence regarding the effect of practice prevalence on subsequent diffusion. For example, in Sanders and Tuschke's (2007: 38) study of stock option pay in Germany, they hypothesized that "the number of prior adopters… *increases* the likelihood that the firm will also adopt the practice," but found exactly the opposite. Similarly, Davis (1991) in his study on the diffusion of poison pills failed to find support for the hypothesis that growing prevalence would positively drive future diffusion.

How does the lack of empirical support for the traditional prevalence hypothesis in these diffusion studies relate to our study of the diffusion of RMs? We suggest that the relevant underlying commonality is that these studies—like our study of RMs—sought to understand the diffusion of *controversial* practices. We define "controversial practices" as practices with strongly counter-normative elements (i.e., practices that contravene prevailing legal/regulatory or social/cultural institutions). Indeed, Sanders and Tuschke (2007: 33) explicitly noted that their study of the diffusion of stock option pay in Germany involved "an institutionally contested practice" in that country. Similarly, Davis (1991: 608) characterized poison pills as "controversial actions." Other diffusion studies, such as Chuang, Church, and Ophir's (2011) and Kraatz and Zajac's (1996), also studied controversial practices and failed to find support for the hypothesis that growing prevalence would positively drive future diffusion.

The discussion above suggests that the traditional "strength in numbers" argument, whereby practice prevalence positively drives subsequent diffusion, is theoretically incomplete and requires further elaboration. In this study, we advance and test a theoretical framework that identifies two distinct social influence pathways through which practice prevalence drives diffusion, allowing us to reconcile the mixed findings on the effect of practice prevalence. Specifically, we posit that the relationship between the past and future number of adopters combines two underlying pathways that—for controversial practices such as RMs—can work at cross-purposes: a *direct* and *positive* one (higher number of past adopters → higher number of new adopters), and a *mediated* and *negative* one (higher number of past adopters→ negative third-party evaluations → lower number of new adopters). The direct effect is rooted in informational social influence, whereby the growing prevalence of a controversial practice generates a greater awareness of the practice and higher assessments of the value of the practice among potential

adopters (a direct "strength in numbers" effect). The mediated effect is rooted in normative social influence involving third-party evaluators, whereby the growing prevalence of a controversial practice generates a heightened awareness of the practice among third-party evaluators (e.g., regulators, investors, the media), which in turn fuel concerns that the practice is a threat to existing institutional arrangements (i.e., a mediated "weakness in numbers" effect).

By developing and testing a dual-pathway model of the relationship between practice prevalence and diffusion, we make several contributions to the literature on diffusion of practices. First, by identifying two distinct (and potentially divergent) social influence pathways through which prevalence affects diffusion, this study provides theoretical and empirical reconciliation of the mixed findings in prior research on the relationship between prevalence and diffusion. Relatedly, we also advance the literature on the diffusion of controversial practices by providing an original analysis of the curious diffusion of the important but understudied practice of RMs. By explicitly highlighting the multi-constituent nature of the institutional environment surrounding RMs, we show how practice prevalence can simultaneously fuel acceptance among adopters and opposition from relevant third parties. Moreover, by demonstrating how and why the diffusion of a practice can plant the seeds of its own rejection, we provide new insights into the question of how some practices diffuse, but not widely or lastingly.

The emphasis on the mediated effect of third-party evaluators offers another original contribution to the diffusion literature. Specifically, while past research has implicitly assumed that third-party evaluations are exogenous to prevalence—both for controversial and non-controversial practices (e.g., Abrahamson 1996; Burns & Wholey, 1993; Fiss, Kennedy, & Davis, 2012; Sanders & Tushcke, 2007)—the theoretical model in this study highlights how third-party evaluations are likely to co-evolve endogenously as a practice gains prevalence (c.f., Rossman,

2014). Another contribution of the dual-pathway model is that it allows us to consider the effect of the status of past adopters (c.f., Rao, Monin, & Durand, 2003), showing why a reduction in the status of past adopters of RMs exerts both a negative direct effect on diffusion, and a negative mediated effect stemming from negative third-party evaluations.

Below, we describe the diffusion of RMs in terms of their swift rise and subsequent fall, followed by a theoretical and empirical analysis explaining this rise and fall in terms of the direct and mediated effects of prevalence, and the status of prior RM adopters. We conclude with an extended discussion of the implications of our theoretical framework and findings for future research on more complex paths of diffusion of controversial practices (such as multiple waves of adoption and rejection), and on the diffusion of non-controversial practices.

REVERSE MERGERS

Reverse mergers (RMs), also referred to as reverse takeovers and reverse acquisitions, are an alternative route for a private company to "go public." Unlike the typical approach of hiring an underwriter to sell the firm's shares in an IPO, in an RM a private firm merges with a firm that is already publicly listed but is only a "shell company"—with no assets or business operations. The shell may be a remnant of a previously operational public firm or a public virgin shell formed to combine with a private company. Typically, the RM practice involves the following steps: (1) shareholders of the private firm are issued a majority stake (usually between 65-95%) in the restructured firm; (2) the management of the shell is replaced by the management of the private firm; and (3) the name of the restructured firm is changed to that of the private firm (De Jong & Naumovska, 2016).[1] In this way, the RM enables the private firm to acquire public status while

[1] As De Jong and Naumovska (2016) documented, studies ostensibly examining stock market reactions to dotcom corporate name changes during the Internet bubble were in fact mostly observing stock market reactions to reverse mergers.

avoiding the expensive and complex IPO process, which includes issuing a prospectus, putting on a roadshow, and filing a S-1 form with the Securities and Exchange Commission (SEC).

Indeed, RMs contrast with the traditional way of accessing capital markets via an IPO, and some see them as the most efficient way to go public: "Executives who undergo a traditional IPO often complain about how cumbersome the process can be. Companies have to file reams of documents with SEC; they have to spend weeks on the road, marketing the idea to potential investors; and they often end up spending more time on the offerings than they do on running their businesses. A reverse merger is far simpler. A company identifies a shell stock, pays what is usually a modest fee—and suddenly, it is listed" (Hennessey, 2002). For example, when asked to motivate the choice of taking the RM route (relative to the IPO route), the CEO of Infinity Pharmaceuticals Inc., a biotech firm replied: "We opted for the method that was the most time and cost effective," and one that "gave the company a secure way to pin down its next round of financing" (Heuser, 2006). Similarly, a manager of the healthcare company Quality of Life said, "The reverse merger with a shell company is a legitimate financing tool that will enable Quality of Life to raise more money quickly" (Nicklaus, 2003).

While it is possible to interpret RMs in terms of greater efficiency vis-à-vis IPOs, it is equally possible to interpret RMs as an illegitimate way for firms to go public, given their lower listing and disclosure requirements that allow firms to skirt some of the compliance requirements and transparency inherent in the traditional IPO route (Gleason, Rosenthal & Wiggins, 2004). It is this feature that makes the RM route a controversial practice on its face. Indeed, RMs have been controversial from the outset because they challenged the longstanding and prevailing norm of how private firms should attain publicly traded status (Pavkov, 2006), with critics saying that "the process enables companies to avoid the scrutiny that comes with a traditional IPO" (Rapoport,

2011). In an article, *The Boston Globe* wrote that "investors look skeptically at a move like that, suspecting companies could not stand up to the scrutiny of a process that typically begins with venture-capital backers and ends with an IPO underwritten by investment bankers" (Syre, 2005). The skepticism towards RMs also extended to regulators; Gerald Laporte, the former chief of the SEC's Office of Small Business Policy, stated that RMs "have been used in ways that cause investors to lose money" (Rosen, 2004).

Given the contrasting interpretations of the RM practice held by advocates versus critics, RMs have encountered both popularity and criticism throughout the years. In the U.S., RMs date back to the 1970s and were occasionally used through the 1980s during the rising penny stock market, which featured several prominent cases of financial fraud. In 1990, the Penny Stock Reform Act in the U.S. was passed by Congress to provide greater regulation and disclosure requirements aimed at reducing fraud among penny stocks, which included RMs. Firms sporadically used RMs during the early/mid 1990s, but in the Internet era RMs became popular and followed a diffusion trajectory with a sharp rise and a sharp fall prior to the Internet bust of 2000, at a time when stock prices and IPO activities were still on the rise. Importantly, the sharp decline in the RM diffusion in the Internet bubble was triggered by regulators' criticism of the practice and investors' skepticism about the quality of the firms that chose the RM route to go public (Feldman & Dresner, 2009).

RMs remained rare through the early 2000s. It was during the mid 2000s that RMs once again became a more popular method for firms to go public. In fact, firms that employed RMs to go public often outnumbered the firms that went public using IPOs. The growing diffusion of RMs was due in part to the activities of an early proponent of RMs: David Feldman, a U.S. attorney specializing in small company financing options, and a leading authority on RMs. In an

interview with the authors, Feldman (2019, 1 July) elaborated on how in 2000, his law firm began offering workshops on RMs, which expanded in 2004 to include hosting larger conferences on RMs, followed soon thereafter by the creation and dissemination of a recurring newsletter about RMs, "The Reverse Merger Report." In addition, potential adopters learned about RMs through word-of-mouth from business acquaintances or personal friends, business school seminars, investment bank presentations, and the media.

In light of all these factors, RMs experienced sharp growth and popularity in the mid 2000s. While the growing prevalence of RM activity suggested increased acceptance of the practice among adopters, it also appeared to spur concern and skepticism among third-party evaluators, specifically regulators, the media, and investors. They started sounding the alarm in 2005, and their criticism of RMs reached its peak in the second half of 2010 through the first half of 2011, which resulted in a sharp decline in the diffusion of RMs.

Namely, in 2005 the SEC, worried by the increase of RMs, adopted rules and regulations aimed at imposing greater RM transparency and more stringent reporting requirements (Feldman & Dresner, 2009). The media also became increasingly negative with the rise of RMs. *The Wall Street Journal* argued that as "reverse mergers move into fashion, small companies gobble up already-public concerns as cheap way to get listed" (Ng, 2005); *Reuters* reported that the "pick-up in reverse mergers" represented a "buyer beware issue from a U.S. investor perspective" (Ermann & Flaherty, 2010). Moreover, the RM practice was challenged when the PCAOB and the SEC set up a task force in 2010 to investigate these "back door" listings. Finally, in June 2011, the SEC issued a letter, warning investors to "be careful when considering investing in the stocks of reverse merger companies" (SEC, 2011).

The concern stemming from the upsurge of RMs was also heightened by the poor accounting practices of some of the firms that chose the RM route to go public. Such a concern was in line with the general view that "reverse mergers and penny stock market activities generally are rife with illicit opportunism and fraudulent conduct" (Pavkov, 2006: 477). Namely, the SEC and the media argued that an increasing number of RMs had significant accounting deficiencies (Rapaport, 2011) as evidenced by numerous RMs hiring trivially small auditors, which generated uncertainty about the accounting practices of many RMs. In fact, the PCAOB "censured auditors found to have turned a blind eye to the questionable accounting of reverse-merger companies." This further led to investors generalizing the perception of accounting deficiencies to all RMs and making negative bets on RMs (Darrough, 2015).

Insert Figure 1 about here

As a popular, but also controversial practice, RMs were subject to negative investors' evaluations, regulatory and media criticism, and ultimately a decline in their diffusion. What had been a popular—though increasingly contested practice—again experienced a decline. As *CNBC* reported, "Hampered by an avalanche of negative publicity and regulatory scrutiny, reverse merger activity plunged to its lowest level in seven years" (Frayter, 2011). Importantly, and as shown in Figure 1, the diffusion trajectory of RMs did not follow the overall stock market sentiment or the trend in IPOs. In fact, RM adoption rates started to decline in the second quarter of 2010, while the Nasdaq Composite Index continued to rise. By 2012, the number of RMs was the lowest since 2005, falling even below the number of RMs observed during the financial crisis of 2009. After their sharp decline, RMs remained rare, and in more recent years their drop has been even more substantial (Deal Flow Media, 2018).

Feldman (2015) used the following metaphor to describe the controversial nature and complex diffusion of RMs: "Like the rise and fall of some Hollywood stars, the RM practice has faced both criticism and popularity." It would seem that the upsurge in RMs did not legitimize the practice, but instead made investors, regulators, and the media increasingly skeptical. We suggest that for controversial practices, such as RMs, popularity may imply a more complex relationship with subsequent diffusion, where prevalence both fuels further diffusion and simultaneously gives rise to third-party skepticism, which in turn hinders further diffusion. We discuss both of these effects in the next section.

THEORY AND HYPOTHESES

RM Prevalence and a Direct "Strength in Numbers" Effect

New practices, much like new organizations, typically face a liability of newness. With early stages of practice diffusion marked by risk and uncertainty about the value of the practice, it is no surprise that early adopters will be few in number and generally motivated to adopt based on their own information about the technical or economic merits of the practice (Abrahamson, 1991; Bikhchandani et al., 1998). As the practice increases in prevalence, so does the awareness among potential adopters of the practice and its perceived value, which serves to increase the subsequent diffusion of the practice. In other words, while potential adopters initially have limited knowledge about the practice, growing prevalence of the practice provides new information about the practice's existence and its likely positive value, propelling potential adopters towards adopting the practice (Lieberman & Asaba, 2006; Young, 2009). Here, diffusion is the result of informational social influence (i.e., social proof) directly from past to prospective adopters.

We envision a similar positive informational effect with respect to the diffusion of RMs, such that the prevalence of the practice increased awareness of its positive value among potential adopters, spurring subsequent adoptions of RMs. As an example of this shift, consider how Sirtris

Pharmaceuticals, a Cambridge biotechnology company, decided to go public via an RM, "bucking a recent biotechnology trend in which companies have steered away from initial public offerings" (Heuser, 2007). From this perspective, the prevalence of RMs is viewed as triggering a direct "strength in numbers" effect that spurred subsequent diffusion of RMs.

RM Prevalence and a Mediated "Weakness in Numbers" Effect

While there is an intuitive appeal to the "strength in numbers" effect, we suggest that, for controversial practices such as RMs, prevalence is likely to provoke further skepticism and even disapproval among third-party evaluators. Such negative third-party reactions are likely rooted in legitimacy judgments (Deephouse & Suchman, 2008; Suchman, 1995). Growing third-party concern about the diffusion of a controversial practice can, of course, temporally coexist with growing adopter acceptance of the practice, given that institutional environments can be fragmented and consist of constituents with diverse beliefs and interests (Ingram & Rao, 2004; Schneiberg & Soule, 2005; Zelner, Henisz & Holburn, 2009). Indeed, as Fiss et al. (2012: 1080) acknowledge, "The wide use of a practice in one sphere of social life need not coincide with or lead to acceptance in other spheres." Consistent with that, we suggest that for a controversial practice, prevalence can heighten negative third-party evaluations—a form of normative social influence—that hinder subsequent diffusion of the practice. These negative third-party evaluations challenge the practice's legitimacy by implying a degree of societal rejection, and therefore have a chilling effect on subsequent adoptions. Note, however, that the argument goes beyond simply suggesting resistance to a new practice; we posit that the practice's prevalence itself will trigger heightened negative reactions from third-party evaluators.

Specifically, we posit that for RMs—a practice that challenges longstanding norms and institutional arrangements for going public—the growing prevalence increased awareness among third-party evaluators, which triggered concern and skepticism about the RMs' counter-normative

nature. Indeed, as RMs became popular, "SEC officials stated they are increasingly concerned about the proliferation of companies that elect to merge with public shell companies" (Ackerman, 2011). Note that even the linguistic choice of "proliferation," rather than "popularity" in the quotation, while technically neutral, implies a rapid increase that can be a cause for concern. Thus, we expect that, for controversial practices such as RMs, prevalence will likely trigger negative third-party evaluations that exert an attenuating effect on diffusion.

Please note that even though prior work has explicitly considered the role of third-party evaluations on the diffusion of (controversial) practices, it has done so by assuming third-party evaluations to be exogenous to practice prevalence.[2] We suggest that the role of third-party evaluators can also emerge endogenously and mediate the relationship between the number of past and future adoptions leading to a "weakness in numbers" effect. That is, our argument extends beyond simply predicting resistance to a new controversial practice, in that we are positing how the growing prevalence of the practice will trigger a heightened level of negative reactions from third-party evaluators, which in turn will slow down the diffusion of the practice.

On the Co-existence of Strength and Weakness in Numbers

As the discussion above suggests, prevalence of a controversial practice such as RMs, has the following *total* (*combined*) effect on future adoptions: a direct "strength in numbers" effect, based on increasing awareness among potential adopters of the practice and its potential desirability, and a mediated "weakness in numbers" effect, based on greater third-party concern and skepticism. Past literature suggests an overall positive relationship between the number of past

[2] Past research has treated the evaluations by third-party evaluators as exogenous forces that drive diffusion (e.g., Abrahamson, 1996; Fiss et al., 2012; Sanders & Tuschke, 2007). For example, during the diffusion of the controversial practice of stock option pay among German companies, regulatory changes affected the adoption rate of the practice. However, such regulatory changes were treated as independent of the existing prevalence of stock options pay. In the case of TQM practices, the media discourse contributed to its diffusion, but it was assumed that the media discourse was independent of the prevalence of TQM (Abrahamson & Fairchild, 1999).

and new adopters. In contrast, we identify two distinct underlying pathways that give rise to the total effect. The lack of explicit attention to these two mechanisms in prior research is likely due to the expectation that, for non-controversial practices, both the direct and mediated effects are convergently positive. For RMs and other controversial practices, however, there is reason to expect that the direct and mediated effects will diverge, with the direct effect being positive and the mediated effect being negative. In other words, we propose a more nuanced dual-pathway relationship between RM prevalence and future adoptions of RMs.

More precisely, we argue that the relationship between the number of past and future adopters is more complex for controversial practices such as RMs, consisting of a combination of two divergent pathways: (1) a direct and positive one stemming from the direct influence of past adopters on prospective adopters (higher number of past RM adopters → higher number of new RM adopters); and (2) a mediated and negative one stemming from third-party reactions to the prevalence of the practice (higher number of past RM adopters → negative third-party evaluations → lower number of new RM adopters). Note that the latter mechanism is a mediated "weakness in numbers" effect. This suggests that the prevalence effect for controversial practices will exert a *competitive mediation*, consisting of a positive direct and a negative mediated effect (Zhao, Lynch, & Chen, 2010). We hypothesize:

> *Hypothesis 1a. An increased number of past adopters of RMs exerts a* ***positive direct*** *influence on the subsequent diffusion of RMs.*
>
> *Hypothesis 1b. An increased number of past adopters of RMs exerts a* ***negative mediated*** *influence on the subsequent diffusion of RMs, mediated by negative third-party evaluations of RMs (i.e., the media and stock markets).*

RM Adopter Status and the Direct and Mediated Effects

Our discussion up to this point has emphasized the relevance of RMs' controversial nature to the expected relationship between their prevalence and subsequent diffusion, whereby the

combined effect of RM prevalence would reflect both increased and decreased practice attractiveness. We now seek to deepen the understanding of the dual-pathway approach by considering the potential dynamic relevance of an adopter characteristic: changes in typical RM adopter status.

Prior diffusion research has considered how past adopters' attributes (e.g., size, status) might affect the presumed positive "strength in numbers" effect of the number of past adopters on future adopters (e.g., Gaba & Meyer, 2008; Gupta & Misangyi, 2018; Haunschild & Miner, 1997; Soule, Swaminathan, & Tihanyi, 2014; Terlaak & King, 2007). Additionally, scholars have documented cases in which the typical prior adopter shifts from higher to lower status or vice versa (Becker, 1970; Burt, 1987; Connelly et al. 2011; Rosenkopf & Abrahamson, 1999).

Within the proposed theoretical framework, we also suggest that changes in adopter status significantly influence the diffusion of RMs. Indeed, the potentially problematic status of firms that opted for the RM route was addressed directly in media and regulatory discourse, and investors' valuations. For example, in 2011 Luis Aguilar, a commissioner at the SEC, was quoted in the business press as saying, "In recent years we have seen a spike in private companies merging with a public shell company as a way of going public." He further suggested that, "A growing number of them are proving to have significant accounting deficiencies or being vessels of outright fraud" (Lynch, 2011). We expect that if the typical status of prior RM adopters trended downwards, it would significantly affect both the direct effect on the number of new adopters and the indirect one mediated via third party evaluations.

Past work on the diffusion of practices has indeed shown that past adopter characteristics matter. For example, Rao et al. (2003) studied the use of nouvelle cuisine in French gastronomy and showed that, when a higher number of high-status chefs abandoned classical cuisine for

nouvelle cuisine, it had a positive effect on other chefs' involvement in nouvelle cuisine. Interestingly, in a study of the adoption of ISO 9000 quality standards, Terlaak and King (2007) found that the effect of prior adoption on future adoptions was more positive when prior adopters were smaller firms. Terlaak and King's (2007) interpretation was that adoptions by smaller firms allowed potential adopters to infer that the adoption would be profitable for their own firms.

While these studies highlight the potential relevance of adopter characteristics on diffusion, their emphasis was on the overall effect of the past adopters' characteristics on the number of new adopters. The two distinct underlying pathways that are proposed in this study, remain theoretically under-examined, namely: informational social influence that explains the direct effect from past to future adopters, and normative social influence that suggests a possible mediated effect involving third-party evaluators. Indeed, we expect that past adopters' status (and any relative changes in past adopters' status over the practice diffusion path), will exhibit both a direct and a mediated effect on the subsequent diffusion of RMs.

Regarding the direct effect, we suggest that potential RM adopters were particularly sensitive to the status of past adopters, especially since RMs are controversial and the "theorization of adopters" is an important condition for diffusion (Strang & Meyer, 1993). That is, when potential adopters are confronted with uncertainty about the value of a practice, they will pay attention to both the prevalence of past adopters and their status, with lower-status adopters exerting less influence as role models or revealing lower value of the diffusing practice (Rao et al 2003; Rosenkopf & Abrahamson, 1999; Strang & Soule, 1998). Because organizations are less motivated to imitate lower-status organizations, the prediction about the direct effect of past on future adopters is straightforward: if the typical adopter status decreases, we expect a lower level of subsequent RM diffusion, *ceteris paribus.*

Regarding the mediated effect, research has shown that adopter characteristics are critical in the formation of theoretical frames and judgments about a practice. Indeed, third-party evaluators such as financial investors and the media may overgeneralize negative traits to organizations of a common type when evaluating a counter-normative organizational practice (e.g., Greve, Kim, & Teh, 2016; Jonsson, Greve, & Fujiwara-Greve, 2009). Accordingly, if there is a decline in the status of a typical RM adopter as RMs diffuse, we would expect third-party evaluations to grow more negative and to have a chilling effect on diffusion. In other words, the effect of RM prevalence on future RM adoptions will be influenced by changes in the status of the typical adopter. For example, if the proportion of low-status adopters increases, it will exert both a direct and a mediated "weakness in numbers" effect on future RM adoptions. Formally, we hypothesize:

Hypothesis 2a. An increased proportion of low-status adopters of RMs exerts a ***negative direct*** *influence on the subsequent diffusion of RMs.*

Hypothesis 2b. An increased proportion of low-status adopters of RMs exerts a ***negative mediated*** *influence on the subsequent diffusion of RMs mediated by negative third-party evaluations.*

In summary, and as depicted in Figure 2a/b, we have hypothesized that the growing prevalence of RMs, along with changes in past adopters' status, will exert both direct and mediated effects on RM diffusion. In positing that the growing prevalence of RMs will be interpreted differently by potential adopters than by third-party evaluators, our theoretical framework considers how diffusion is affected by a direct effect of prevalence on diffusion (Hypothesis 1a) and a negative indirect effect mediated via third-party evaluations (Hypothesis 1b). We also consider how the status of past adopters would affect diffusion, such that a decrease in adopters' status would result in a negative direct effect (Hypothesis 2) and a negative indirect effect mediated via third-party evaluations (Hypothesis 2b).

Insert Figure 2a/b about here

DATA AND METHODS

To test the hypotheses, we examined the diffusion of RMs in the U.S. from 2001 to 2012, whereby private firms merged with public shells (i.e., public firms that have no assets or operational activities). We created a database of the populations of RMs using data from Deal Flow Media, the SDC (Securities Data Company) database, and announcements of RMs in Factiva. Importantly, we restricted our search to RMs in which the target firm was private; on the other side of the arrangement, we identified publicly traded firms that were shell companies, (i.e., firms that had no operating activity before the merger). We manually examined SEC filings, in particular the balance sheets, income statements, and business descriptions of the latest filed annual (10-K) and/or quarterly report (10-Q) prior to the transaction. This information is also often available in the first report filed after the RM takes place, usually an 8-K and/or in the 10-B/10-SB form for the registration of securities. This enabled us to distinguish between RMs, as a route to going public, from standard mergers and acquisitions. The data consists of 1,904 RMs in the period from 2002 to 2012.

To capture third-party evaluations, we used Factiva's Major News and Business Publications to collect data on the media coverage of RMs between 2001 and 2012. Given that RMs have been a controversial practice from the outset, we expected media coverage to skew negative, and indeed that is what we found: of the 267 articles we identified, 148 had a neutral tone, 113 had a negative tone, and only 6 had a positive tone. Therefore, it made sense to contrast negative articles with the combination of neutral and positive articles.[3] Inter-rater reliability, as assessed by the kappa correlation coefficient, was 0.88, which suggests a high degree of agreement between

[3] The majority of the neutral-tone articles were announcements of specific RMs, rather than balanced discussions of the positive and negative aspects of the practice.

the coders—disagreements were resolved through discussions.

To examine how stock markets evaluated RMs, we gathered share price data from DataStream. Other sources, such as the CRSP (Center for Research in Security Prices) database, did not provide full coverage on small firms traded over the counter (OTC). We also used DataStream to collect firm-level information (market value, earnings, total assets, total debt, exchange listing, and industry). To obtain firms' identifiers in DataStream, we used all the names and tickers associated with the firm. We collected data on 1,466 firms, and we created portfolio returns for the 521 weeks in the period 2001-2012.

Data on RMs' auditors came from Audit Analytics and SEC filings (most commonly annual and quarterly reports) from the Edgar database. Finally, we also collected data on IPOs from SDC and Jay Ritter's website (https://site.warrington.ufl.edu/ritter/ipo-data/) to identify the population of IPOs that took place in the US in the period 2001-2012. We describe the value and use of these IPO data below in the main and supplementary analyses.

Diffusion of RMs: Direct and Mediated Effect of RM Popularity and Low-Status RMs

Dependent variable: Diffusion of RMs. To test the hypotheses on the effects of RM prevalence on their subsequent diffusion, the dependent variable is in line with past research, which employs stochastic count models where the number of new adopters is represented as a random variable drawn from a Poisson distribution (see Denrell & Kovacs [2008] for a review). To model the diffusion process, let N_t be the cumulative number of organizations that have adopted a given practice at the end of period t, and in each subsequent period t = 1, 2, ..., T, x_t new organizations adopt the practice such that $N_t = N_{t-1} + x_t$. We assume that the number of new adopters, x_t, can be modeled as a random variable X_t drawn from a Poisson distribution $P(X_t = x_t) = e^{-\lambda(t)} * \frac{\lambda(t)^{x_t}}{x_t!}$, and $\lambda(t) = exp\ (\alpha + \beta N_{t-1})$ is the expected number of new adopters in

period t. Indeed, numerous diffusion studies typically estimate a Poisson (or negative binomial) regression in which the dependent variable is count of new adopters per unit of time (Denrell & Kovacs, 2008). We measured the weekly count of new RMs (*Number of new RMs*) using the day of the announcement of the RMs, starting from August 1, 2002 and ending with December 31, 2012 (521 weeks in total).[4] We aggregated RMs on a weekly level because it takes approximately two weeks for a firm to consummate an RM (Feldman & Dresner, 2009).

Independent variables. The independent variable for Hypotheses 1a and 1b is the logarithm of the cumulative past number of past RMs, with the count starting in 2001 (*Number of past RMs*). The independent variable for Hypotheses 2a and 2b is the proportion of low-status firms that undertook an RM to go public. We divided the past number of RMs by low-status firms by the total number of RMs, creating a percentage (*% past low-status RMs*). To do so, we first categorized firms as having high or low status. We used the discourse surrounding the RM practice itself to categorize adopters' status. In the context of RMs, the contestation was about firms' accounting practices and auditing quality. Specifically, U.S. regulators contended that an increasing number of firms using an RM to go public were hiring trivially small auditors, and this had generated uncertainty about the accounting practices of many RMs.

Following Siegel and Wang (2013), RM adopters were deemed low status if they hired trivially small auditing firms with fewer than five partners and ten professional staff members. Thus, RM status with respect to their accounting quality was reliant on their auditors. Indeed, under conditions of uncertainty firms can signal higher status through third-party affiliations, as is the case in IPOs when firms going public signal their quality through their underwriters and auditors (Gulati & Higgins, 2003; Michaely & Shaw, 1995). In fact, and as expected from status

[4] We started the diffusion analyses in August 2002, in order to have stock market data for at least 10 RMs so as to be able to calculate more meaningful portfolio returns.

and reputational effects, RMs that hired trivially small auditors exhibited more negative outcomes in relation to their accounting practices (Chen et al., 2016; Siegel & Wang, 2013). Moreover, RMs that hired larger and more reputable auditors experienced more positive stock market valuations (Naumovska & Zajac, 2021).

To address the high correlation between the number of past RMs and the proportion of low-status RMs, we used an orthogonalization procedure and employed Stata's *orthog* command. We orthogonalized the proportion of low-status adopters with the past number of adopters. This procedure partials out the common variance and creates variables that are uncorrelated—a technique for reducing multicollinearity when variable derivations are highly correlated (e.g., Sine, Haveman & Tolbert, 2005). In addition, we lagged the two variables to allow for temporal ordering and to avoid simultaneity bias.

Mediating variables—stock market returns and media coverage of RMs. We suggested that the increase in RM adopters and their low status will lead to negative reactions by third-party evaluators, which will in turn reduce the diffusion of RMs. To test this mediating relationship, we focused on (1) how the stock market evaluated RMs, and (2) how the media evaluated RMs. Stock markets represent a key third-party evaluator for RMs (Gleason et al., 2004), and media coverage serves as a critical supplier of knowledge about new corporate practices (Abrahamson, 1996; Briscoe & Murphy, 2012; Fiss et al., 2012). More generally, investors represent "primary stakeholders" (Clarkson, 1995: 106) because they hold important stakes in firms (i.e., shares of ownership). The media are considered "secondary stakeholders" (Clarkson, 1995: 107) because they can "influence or affect, or are influenced or affected by, the corporation." That is, the media can act as a social arbiter by making evaluative judgments of organizations and their practices (Deephouse, 2000; Fiss et al., 2012).

Following past research, we account for the average tendency of collectives by measuring overall media coverage, along with the average stock market value given by investors (e.g., Bednar, 2012; Naumovska, Wernicke & Zajac, 2020). To empirically examine the role of media coverage, we followed the methodology of Fiss et al. (2012); we measured the negative tenor (*Negative media coverage*) as the weekly count of media articles depicting RMs negatively, and we lagged it to avoid simultaneity bias. Next, to examine the mediating role of stock market valuations, we first estimated the weekly abnormal stock market returns of each RM using the market-adjusted model $AR_{it} = R_{it} - R_{mt}$, where R_{it} is the return for firms i in week t and R_{mt} is the Nasdaq Composite Index return. We implicitly assumed a market beta of 1 for all the firms because of the lack of meaningful historical share prices. This is the standard methodology used in the IPO and RM literature (De Jong & Naumovska, 2016; Ritter & Welch, 2002). Next, we constructed an equally weighted portfolio of the weekly abnormal returns of all RMs that were traded at any point in time (*Stock market returns*).

Control variables. We included a number of control variables. First, we controlled for regulatory changes, given that they can affect the evaluations and diffusion of practices (Dobbin & Sutton, 1998). We created two dummy variables, one indicating the period after the SEC adopted new rules in July 2005 (SEC, 2005), and a second indicating the period after June 9, 2011, when the SEC issued a letter on the risks of investing in RMs (SEC, 2011). Next, we controlled for the availability of publicly listed shell companies to address the possibility of a supply restriction that could affect RM activity. We constructed a measure of the available shell companies in each week and derived a logarithm of it (*Available shells*). Importantly, we also included a control for the weekly number of IPOs (*Number of new IPOs*), since the IPO diffusion trend may have been related to the RM trend (Feldman & Dresner, 2009). IPO activity can also

affect the extent to which investors and the media are attentive to RMs, and their evaluations of them. Moreover, controlling for the number of IPOs captures factors which may be associated with the demand for adopters going public, and accounts for the number of RMs relative to IPOs.

Given the possibility that the greater visibility of larger adopters might trigger practice awareness and imitation (Baum, Li, & Usher, 2000), we controlled for the size of the past adopters by measuring the proportion of small RMs (*% past small RMs*), defining as "small" those firms that had a market value of $15 million or less at the time of going public (Kamar, Karaca-Mandic, & Talley, 2007). To address the high correlation between the number of past RMs and the proportion of small RMs, we orthogonalized this measure.

Furthermore, we controlled for analyst recommendations by counting the total number of buy, sell, and hold recommendations made for RMs. Analysts are key third-party evaluators for larger public firms, but the typically smaller RMs are poorly followed by analysts (Bhushan, 1989; Chan & Hameed, 2006). This suggests that analysts are less relevant as third-party evaluators for RMs, and this was also confirmed by the data. We found that only 8.31 percent of RMs had at least one analyst following them, and the average number of analysts following an RM was 0.35. Therefore, we only controlled for the lagged weekly count of recommendations issued for the RMs that got coverage (*Buy/Hold/Sell recommendations*).

We also controlled for investor sentiment, which affects stock market valuations and firms' decisions to go public (Baker & Wurgler, 2006). We measured investors' sentiment using the weekly survey conducted by the American Association of Individual Investors, and used the bull-bear spread as a measure of market optimism (*Investors' sentiment*) (Fisher & Statman, 2000). We also introduced year dummies to account for market movements and included a lagged

measure of the RM portfolio return (*Stock market returns* $_{lag}$), since stock market returns are subject to reversals or momentum (Roll, 1984).

Analytic Methods: Generalized Structural Equation Modeling

We used structural equation modeling (SEM) to simultaneously test the direct and mediated effects of practice prevalence (Hypotheses 1a and 1b) and prior adopters' status (Hypotheses 2a and 2b) on subsequent diffusion. SEM allowed us to test a competitive mediation, whereby the direct and mediated pathways diverged (Zhao et al., 2010). Stated differently, employing SEM allowed us to test the direct effects of RM prevalence (Hypothesis 1a) and prior adopters' status (Hypothesis 2a), as well as the mediated effect of RM prevalence (Hypothesis 1b) and prior adopters' status (Hypothesis 1b)—via media coverage and stock market returns—on the subsequent diffusion rate of RMs.

Our test of the mediated effects in Hypotheses 1b and 2b involved using the *nlcom* command in STATA to calculate the effect of the independent variables of RM practice prevalence and prior RM adopters' status (*Number of past RMs* and *% past low-status RMs*) on the dependent variable (*Number of new RMs*) through the mediators (*Stock market returns* and *Negative media coverage*). That is, we multiplied the effect of the independent variables on the mediator and the estimated direct effect of the mediator on the dependent variable. We employed non-parametric bootstrapping with 1,000 replications to adjust for bias and to estimate the effects, their standard errors, and confidence intervals (Mooney & Duval, 1993).

An advantage of SEM, when compared with estimating three separate regressions, is the ability to control for measurement errors that can lead to under- or over-estimation of mediation effects (Kaplan & Vakili, 2015). Specifically, we used the generalized SEM (GSEM) as this allows for generalized response functions (continuous, binary, ordinal, count, and multinomial) and provides consistent, efficient, and asymptotically normal estimates for the direct and

mediating relationship (Kaplan & Vakili, 2015). Given that the dependent variable (*Number of new RMs*) and one of the mediating variables (*Negative media coverage*) are count measures, GSEM is the appropriate analytic method.

We used a negative binomial specification for the diffusion and media coverage of RMs, and a linear specification for the stock market valuations. Negative binomial and Poisson specifications are stochastic count models, which are common in diffusion studies that examine the "effect which determines the influence of the number of previous adoptions on the expected number of new adopters" (Denrell & Kovacs, 2008: 115).[5] When the dependent variable is over-dispersed, the Poisson assumption of equal mean and variance needs to be relaxed, suggesting that the negative binomial model is more appropriate.

RESULTS

Table 1 shows the descriptive statistics and correlation matrix for the data. On average there were 3.59 RMs per week, and the average proportion of low-status RMs was 0.225. In other words, almost one out of four RM adopters had a low status. Although the average number of weekly RMs was higher than the average number of IPOs (3.59 RMs versus 3.46 IPOs) there was a positive correlation between the cumulative past number of RMs and the new RMs. Moreover, there was a negative correlation between the percentage of low-status adopters and the subsequent diffusion of RMs.

Considering third-party evaluations, the correlation table shows that the growing prevalence of RMs was accompanied by more negative media coverage and negative stock market

[5] The Poisson count model is mathematically equivalent to the exponential hazard rate model typically used in diffusion studies with a risk set. This is with the assumption that the risk to any (unobservable and constant in number) prospective adopter remains constant. Violations of this assumption are routinely and correctly dealt with by entering control variables into the model. Also note that, in the context of RMs, it is virtually impossible to identify a realistic and relevant risk set, given that the risk set of potential RM adopters is unobservable (any private firm in the world is theoretically part of the risk set).

valuations. Moreover, the more negative the media coverage and stock market valuations of RMs, the lower the subsequent diffusion of RMs. In fact, additional descriptive statistics revealed that in 2010, when RM activity peaked, 70 percent of the media articles on RMs had a negative tone. Their stock market returns correspondingly plummeted, with cumulative returns reaching close to minus 45 percent. What followed in 2011 was a 35 percent drop in RM activity.

Insert Table 1 about here

Table 2 reports the results of the GSEM analyses where the diffusion variable is the count of weekly RMs (*Number of new RMs*). Panel A shows the effects of the control and independent variables on the dependent and mediating variables. Model 1 includes the control variables. The theorized independent variables were added in Models 2, 3, and 4. Specifically, Model 2, includes the past number of RMs (*Number of past RMs*), Model 3 includes the percentage of low-status RM adopters (*% past low-status RMs*), and Model 4 includes both. Each model consists of three sub-models (A, B, and C) that estimate the different paths presented in Figure 2a/b. In the "A" sub-models (1A, 2A, 3A, and 4A), the dependent variable is the weekly number of new RMs (*Number of new RMs*) and these models show the effects of different variables on the diffusion rate of RMs. The "B" Models (1B, 2B, 3B, and 4B) and "C" Models (1C, 2C, 3C, and 4C) show the effect of the independent variables on the mediating variables, *Stock market returns* and *Negative media coverage*, respectively. Panel B shows the mediated effects from the independent variables (*Number of past RMs* and *% past low-status RMs*) on the dependent variable (*Number of new RMs*) via the mediators (*Stock market returns*, and *Negative media coverage*), estimated using the *nlcom* command in STATA.

Because Models 4A, 4B, and 4C include the controls, the past number of RMs, and the proportion of low-status adopters, we use these models to interpret the findings. We begin by briefly discussing the controls and then discuss the independent variables and mediators. Model

4A shows that IPO activity was positively associated with RM diffusion, suggesting that the two practices followed a similar trend (Aydogdu, Shekhar & Torbey, 2007). Regarding the regulatory actions, the 2005 regulations slowed down the diffusion of RMs, as did the SEC's warning letter against RMs in 2011—both led to a drop in the number of RMs.

In Model 4B, the dependent variable is the mediator *Stock market returns*, and the effects of the control variables are as expected. For example, the more positive the investor sentiment, the more positive the stock market returns of RMs. Regulatory actions also affected how investors valued RMs in predictable ways, with the SEC's criticism of RMs' accounting and reporting issues leading to more negative stock market valuations. Furthermore, Model 4B documents that third-party evaluators followed each other's cues and evaluations, with increases in negative media coverage exerting a downward effect on the stock market valuations of RMs.

Similarly, Model 4C, where the dependent variable is the mediator *Negative media coverage*, shows that more positive stock market evaluations of RMs reduced the negativity of overall media coverage. This is consistent with prior research suggesting that the media and investors take informational cues from each other, leading to consensus between them (Pollock, Rindova & Maggitti, 2008).

Insert Table 2 about here

The findings in Models 4A, 4B, and 4C show significant support for the direct and mediated relationships. Model 4A tests the direct effects of the past number of RM adopters and the proportion of low-status adopters on the subsequent diffusion of RMs. The results show a *positive direct* effect of RM prevalence on their subsequent diffusion ($\beta=0.61$, $p<0.001$), supporting Hypothesis 1a, and a *negative direct* effect of the proportion of low-status adopters on subsequent RM adoptions ($\beta=-0.11$, $p<0.01$), supporting Hypothesis 2a.

Models 4B and 4C, test whether the increased number of RMs and the proportion of low-status adopters led to negative third-party evaluations of the RM practice. As expected, in Model 4B, the results show that the increase in the number of RMs was followed by more negative stock market returns (β=-1.49, $p<0.05$). Model 4C, shows that the increased diffusion of RMs was followed by an increase in negative media coverage of RMs (β=0.97, $p<0.05$). Moreover, the higher the proportion of low-status adopters, the more negative the stock market reactions (β=-0.81, $p<0.001$) and the more heightened the negative media coverage of RMs (β=0.68, $p<0.01$). Importantly, and in line with our expectations as stated in Hypotheses 1b and 2b, Model 4A shows that third-party evaluations—specifically negative media coverage (β=-0.23, $p<0.001$) and stock market reactions (β=0.05, $p<0.001$)—were significantly related to the diffusion rate of RMs. That is, the more negative the third-party evaluations of RMs, the lower the subsequent diffusion of RMs.

Next, we formally tested the mediation stated in Hypotheses 1b and 2b: the negative third-party evaluations (i.e., negative stock market returns and media coverage as a result of an increased number of RMs adopters and their lower status) would exert a negative influence on RM diffusion. To test these mediating relationships, we used the *nlcom* command in STATA. The results are presented in Panel B, and as hypothesized, they show a diverging *negative mediated* effect of RM popularity on their subsequent adoption rate—mediated by stock market valuations (β=-0.07, $p<0.05$) and negative media coverage (β=-0.22, $p<0.10$). The total mediated effect of the past number of RMs on the subsequent diffusion of RMs was -0.30 ($p<0.05$), supporting Hypothesis 1b. With respect to the proportion of low-status RMs, there is *negative mediated* effects via stock market valuations (β=-0.04, $p<0.05$) and negative media coverage (β=-0.16,

$p<0.05$). The total mediated effect of the proportion of the low-status adopters on the subsequent diffusion of RMs is -0.20 ($p<0.01$), suggesting support of Hypothesis 2b.

In summary, and as depicted in Figure 3a/b, the growing prevalence of RMs and past adopters' status exerted both direct and mediated effects on RM diffusion. Prevalence led to a direct "strength in numbers" effect on diffusion (Hypothesis 1a: $\beta=0.61$, $p<0.001$), but also a "weakness in numbers" effect mediated via negative third-party evaluations (Hypothesis 1b: $\beta=-0.30$ $p<0.05$). Moreover, the proportion of low-status adopters led to a "weakness in numbers" effect on the subsequent RM diffusion both directly (Hypothesis 2a: $\beta=-0.11$, $p<0.01$) and indirectly through third-party evaluations (Hypothesis 2b: $\beta=-0.20$, $p<0.01$).

Insert Figure 3 a/b about here

Supplementary Analyses and Robustness Checks

We conducted numerous supplementary analyses to test the robustness of the results, all of which are available from the authors upon request. First, we addressed the issue that the empirical analyses did not rely on identifying the risk-set of potential RM adopters. Modeling the diffusion process as a count requires a theoretically infinite (or very large) risk-set of potential adopters to assess the effect of the number of past adopters on the number of future adopters. As noted in the methods section above, in the context of RMs any private firm anywhere in the world is theoretically part of that risk set. Having an immense risk set allowed us to confidently rule out demand-side saturation threshold effects. However, it did not address the possibility that the tendency to engage in RMs was related to other factors, such as economic conditions, that could lead to changes in demand for RMs that would confound the interpretation of our findings.

To partly address this concern, we followed the finance literature and the work by Lowry (2003), who studied the diffusion of IPOs in the U.S. and suggested that the diffusion of IPOs should be considered as nonstationary, representing a time aggregation of a random walk (e.g.,

economic growth, technological changes, investor optimism). Inspired by Lowry (2003), we created an alternative measure of the dependent variable by dividing the number of RMs by the number of IPOs. The advantage of this measure is twofold: (1) it allowed us to capture factors such as economic growth and investor sentiment which may be associated with the underlying population of potential adopters, and (2) it allowed us to proxy for potential changes in the underlying population of potential adopters that might stem from firms choosing the IPO route over the RM route to go public. When we repeated the empirical analyses using GSEM with the diffusion variable being the weekly count of RMs divided by the weekly count of IPOs, all the hypotheses remained supported.

Second, as supplemental analyses, we examined whether RMs' media coverage and stock market reactions could moderate the direct relationship between RM prevalence and new RM adoptions (our Hypothesis 1a). Namely, there is a theoretical possibility that negative third-party evaluations could weaken the direct effect of RM prevalence on the subsequent diffusion of RMs. Thus, we re-estimated the mediation model with an added interaction term capturing this possible moderation effect and found that the interaction terms were not significant. In other words, we examined a moderation within the mediation model, whereby the mediating variables that captured third-party evaluations also acted as moderators. We did not find support for this relationship.

Third, we further examined whether differences in status among the new RM adopters might imply different diffusion dynamics in terms of the direct and mediated effects. We divided the set of new RM adopters into low-status and high-status categories, running separate analyses with two dependent variables capturing the number of new high- versus low-status adopters. Of the four hypotheses, the only difference we found concerned Hypothesis 2a, showing that low-status

prospective RM adopters were less sensitive to the lower status of prior RM adopters. Such a finding is informative, since it suggests that the potential RM adopters that were of low-status were less concerned with the standing of past adopters, and they had similar propensity to imitate low- and high-status past adopters.

Fourth, we tested the robustness of the results by running separate regressions to examine: (1) the direct effects of the number of RMs and their status on subsequent RM diffusion, (2) the effect of the number of RMs and their status on stock market valuations, and (3) the effect of the number of RMs and their status on the media coverage of RMs. In line with the reported findings, we found that the greater the prevalence of RMs, the greater the subsequent diffusion of RMs; also, as past adopters' status declined, so did the diffusion of RMs. Moreover, we found that the higher the number of RMs and the higher the proportion of low-status RMs, the more negative the media discourse about the RM practice was.

Fifth, we ran a robustness test considering the country of origin of the firms that had adopted the RM practice, given that investors were particularly skeptical about firms coming from China (Naumovska & Zajac, 2021). There was a possibility that the prevalence of Chinese RM firms heightened negative third-party reactions, exerting a negative influence on the subsequent diffusion of RMs that might confound our results to some extent. Thus, we controlled for the relative prevalence of Chinese firms, and our findings remained unchanged.

Sixth, we also conducted robustness tests to examine the effects of the past number of RM adopters and their status on stock market valuations by changing the level of analysis. Rather than estimating the stock market valuations of the portfolio of RMs, we examined the weekly stock market returns for each of the 1,466 RMs in the 521 weeks between 2001 and 2012. By examining the stock market reactions at the firm level, we assessed how the prevalence of the RM

practice affected each RM's stock market valuation, and thus we examined whether the portfolio-level findings were driven by outliers. We did so by running an RM fixed-effect panel regression model (generalized least square), with robust standard errors clustered on RM level, to account for time-invariant unobserved RM heterogeneity. The results were consistent with our earlier findings: as the number of RM adopters increased, RM share prices declined, and as the past RM adopters' status declined, so did RMs' stock market valuations.

Finally, we estimated the GSEM models without control variables. Our hypothesized relationships held and were, in fact, stronger, ruling out the possibility of collider bias. Overall, the supplementary analyses reaffirmed our findings and their interpretation.

DISCUSSION AND CONCLUSION

While the body of scholarly research on practice diffusion is large and diverse, one notable area of general agreement has emerged: the expectation that the growing prevalence of a practice will fuel subsequent diffusion among potential adopters. Interestingly, the convergence toward a "strength in numbers" effect exists among diffusion researchers despite different underlying assumptions regarding the locus of social influence. For example, some view prevalence as providing informational social influence directly from past to prospective adopters, with prospective adopters gaining increased awareness of the practice or increased belief in the positive value of the practice (e.g., Banerjee, 1992; Bikhchandani et al., 1992; Haunschild & Miner, 1997). Others view prevalence more as a source of normative social influence through third-party evaluations, with prospective adopters noting the growing social legitimacy of the practice and the likely social approval associated with adoption (Scott, 1995; Strang & Soule, 1998; Tolbert & Zucker, 1996).

This study has sought to advance the understanding of practice diffusion by advancing and testing a synthetic perspective that considers how and why these two pathways exert an influence

on the relationship between the past and the future number of adopters. We proposed that the first pathway (informational social influence) is best conceptualized as prevalence exerting a direct effect on subsequent diffusion from past to prospective adopters, while the second pathway (normative social influence) is best conceptualized as prevalence exerting a mediated effect on subsequent diffusion based on third-party reactions to the prevalence of the practice. We suggested that the lack of explicit attention to these two pathways in prior diffusion research was likely due to the general focus on non-controversial practices, since for these practices both the direct and mediated effects would be convergently positive. We noted, however, that for more controversial practices the direct and mediated effects would *diverge*, with the direct effect being positive and the mediated effect being negative.

We therefore analyzed the diffusion of RMs—a controversial corporate practice by which private firms go public, eschewing the longstanding and institutionally accepted IPO route—to assess how a consideration of these potential divergent pathways could provide a deeper theoretical and empirical understanding of the RMs' wave-like diffusion trajectory. Notably, the noteworthy rise in the diffusion of RMs in the mid-2000s was not accompanied by increasing social legitimacy of the practice. Instead it triggered growing societal concern and skepticism about the practice, leading to a sharp decline in its diffusion.

With these puzzles in mind, we posited and tested a more nuanced explanation of the relationship between prevalence and future adoptions based on a dual-pathway framework. Specifically, we showed how and why the growing evidence of practice diffusion may fuel what appears to be a straightforward process of increased acceptance from the perspective of prospective adopters, while simultaneously fueling heightened skepticism, and contestation among relevant third-party constituencies (e.g., regulators, investors, and the media).

Fundamentally, we posited and tested a competitive mediation (Zhao et al., 2010), and the results support the theoretical predictions regarding both the positive direct effect and the negative mediated effect of RM prevalence on future RM adoptions. The theoretical conceptualization of the direct and mediated effects of prevalence on the subsequent diffusion of a controversial practice such as RMs incorporates both a "strength in numbers" and a "weakness in numbers" effect. By incorporating both informational and normative social influence pathways and positioning them in a competitive mediation model, we provide an original contribution to the practice diffusion literature. Indeed, past research has heretofore assumed an overall positive effect of prevalence on diffusion, without considering the possibility of direct and mediated pathways and divergence between the two.

Another important feature of this novel theoretical framework for the diffusion of controversial practices involves the endogenizing of third-party evaluations (c.f. Rossman, 2014). By linking practice diffusion to third-party evaluations, and then linking third-party evaluations to subsequent practice diffusion, we introduced and tested the notion that third-party evaluations are at least partly endogenous to the diffusion process, and specifically, to practice prevalence. In this way, this study extends prior work that has viewed third-party evaluations as exogenous (e.g., Abrahamson & Fairchild, 1999; Mezias, 1990; Sanders & Tuschka, 2007).

This study's theoretical framework also offers an explanation to reconcile prior empirical studies of diffusing practices that predicted—but did not find—a positive relationship between prevalence and practice diffusion (e.g., Ahmadjian & Robinson, 2005; Davis, 1991; Kraatz & Zajac, 1996; Sanders & Tuschke, 2007). It is interesting that these studies also focused on practices with strong counter-normative elements, which suggests the possibility that the direct

"strength in numbers" effect might have been offset by a "weakness in numbers" effect mediated by negative third-party evaluations.

We should also note that the theoretical focus of this study has been on developing a dual-pathway competitive mediation model and highlighting the potential divergent effects on future adoptions, being agnostic as to whether the mediated "weakness in numbers" effect partly offsets, fully offsets, or swamps the direct "strength in numbers" effect. Nonetheless, we encourage future research to use the proposed theoretical approach to examine contingencies that might strengthen the direct or the mediated effect. For example, future research should consider differences in practice characteristics (e.g., by comparing and contrasting multiple practices that differ in their degree of controversy), which would imply differences in the strength of the "weakness in numbers" effect. We expect that the more controversial the practice, the more negative the mediated "weakness in numbers" effect will be. When the mediated "weakness in numbers" effect swamps the direct "strength in numbers" effect, there would be an overall negative effect of prevalence, and a practice would be less likely to diffuse widely, *ceteris paribus*. This suggests that the shape of the S-curve can depend on the extent of controversy of the diffusing practice, with more controversial practices exhibiting flatter S-curves.

Future research could also consider differences in prospective adopter characteristics. These could be differences among prospective adopters in terms of their vulnerability to third-party evaluations, where those adopters that are more vulnerable to third party evaluations are particularly sensitive to normative social influence and the mediated pathway of prevalence. Alternatively, some adopters may experience greater uncertainty about the economic efficiency of a practice, making them particularly sensitive to informational social influence and prone to imitation (i.e., the direct pathway) (Henisz & Delios, 2001).

Given that the two pathways of prevalence we identified can function in any diffusion process, the proposed theoretical framework can also be applied to examine the role of prevalence in the diffusion of non-controversial practices. Note, however, that for such practices we would propose a *complementary mediation* (Zhao et al., 2010) rather than a competitive mediation. In other words, for the diffusion of non-controversial practices we would still hypothesize that prevalence would have a direct "strength in numbers" effect, but we would not hypothesize a mediated "weakness in numbers" effect. If the non-controversial practice has a strong normative component, we would expect strong and positive direct and mediated effects; if the practice has only weak normative elements, we would expect the direct "strength in numbers" effect but little to no positive effect mediated via third-party evaluations.

Moreover, by explicitly recognizing the multi-constituent nature of the organizational field in which the practice is diffusing, we can envision a process whereby one group of third-party evaluators (e.g., investors) reacts positively to the prevalence of a diffusing practice, while another group (e.g., regulators) reacts negatively. Such a divergence in third-party responses would suggest the possibility of two mediating effects: one positive, and one negative. Indeed, legitimacy judgements can be subjected to institutional pluralism (Deephouse et al., 2017), and a diffusing practice can be simultaneously seen as legitimate and illegitimate by different third-party evaluators. There is also the possibility of a diffusing practice becoming increasingly illegitimate in the eyes of adopters, in which case prevalence would begin to exert a direct negative effect on the diffusion of the practice. Such a prediction is in line with Lee and Strang's (2006) suggestion that more socially legitimate innovations are more contagious, and with Jonssson's (2009) suggestion firms refrain from imitating less legitimate practices.

Our theoretical arguments also suggest more complex paths of practice diffusion involving multiple waves of adoption and rejection. That is, by considering the heterogeneity of beliefs surrounding the diffusion of controversial practices, we showed how increased prevalence of a controversial practice can elicit its contestation and rejection. By the same logic, our theoretical framework would predict that contestation wanes as prevalence declines, resulting in a more welcoming institutional environment, and an opportunity for the practice's re-emergence. Indeed, it is likely that practice rejection can be temporary, resulting in a multi-wave diffusion rather than the single-wave typically studied by organizational scholars. Such multi-wave dynamics would resonate with the movement-countermovement dynamic by which social movements ebb and flow in response to each other (Meyer & Staggenborg, 1996).

One can indeed observe such multi-wave patterns in the diffusion of controversial practices. Since the 1970s, RMs have diffused in multiple waves as contestation escalated and subsided. The so-called "golden parachute" is another controversial practice that diffused in multiple waves: it was adopted widely by publicly listed firms in the U.S. in the 1980s and early 1990 through corporate networks publicly (Davis & Greve, 1997), waned in the mid 1990s, re-emerged a few years later, and waned again in 2003 (Rhee & Fess, 2014). The proposed theoretical framework suggests that contestation is latent when the there is a small number of adopters, and becomes manifest when the practice becomes prevalent, eventually resulting in practice rejection, but also a decline in contestation. Once contestation subsides there is an "open window" for practice re-emergence. Moreover, contestation can trigger practice reform, which can re-legitimize a practice. In short, rejected practices can re-emerge when contestation wanes or the practice is modified and adapts to legitimacy challenges. In more recent years, we have witnessed the emergence and increasing popularity of special purpose acquisition companies (SPACs) which resemble standard

RMs in that they enable private firms to get public listing by merging with an empty shell company. A key difference between SPACs and standard RMs is that in the former the shell company is cash-rich, and is actively searching for an acquisition target. Subsequent research should examine multi-wave diffusion dynamics, and how practices get modified as they diffuse.

While this study focused on the controversial practice of RMs, its theoretical framework can be fruitfully applied to a variety of other controversial practices that meet a set of boundary conditions under which the opposing direct and mediated effects of prevalence can occur. First, scholars should begin by choosing a practice that contravenes established legitimacy pillars and presents a threat to relevant actors in the organizational field. This represents a necessary condition for the negative mediated effect stemming from practice prevalence and third-party evaluations. Examples include the increased diffusion of takeover defenses, which threatened the market for corporate control (Bruner, 1991), or the increased diffusion of stock option backdating, which threatened shareholders (Mohliver, 2019). In our study, the increased diffusion of RMs meant that as more firms went public by this less transparent route (compared to the IPO), it potentially threatened the reputation of U.S. financial markets and returns to investors (SEC, 2011).

Second, the increased diffusion of the controversial practice should be visible to opposing third-party evaluators, since increased diffusion and increased societal awareness of a practice do not always go hand-in-hand. As Briscoe and Murphy (2012) showed, some controversial practices diffuse widely because they are opaque and go unnoticed by opposing third-party evaluators. If practice prevalence is only visible to potential adopters but not third-party evaluators, one would not expect the mediated negative effect to appear. An extreme case is the diffusion of an illegal behavior where secrecy is vital to its sustainability. If a given illegal behavior (e.g., white-collar

crime) becomes more prevalent while staying below the radar of regulators and other societal arbiters, its prevalence would not lead those arbiters to contest it. Another issue relating to practice visibility is that some practices diffuse locally, and so are less exposed and affected by third-party evaluations. Relatedly, studies that focus on "local comparison" (e.g., S&P 500 firms)—rather than "global prevalence"—and examine diffusion across a group of adopters that are connected would likely have difficulty capturing the effect of prevalence on third-party evaluations, and thus, the negative mediated effect.

Third, documenting the mediated "weakness in numbers" effect may require taking a longer time frame, rather than focusing on the early stages of diffusion of a practice. While controversial practices can diffuse and become prevalent, they also retain a degree of fragility which is more likely to manifest with time. For example, studies focusing on the early years of the diffusion of takeover defenses (i.e., the 1980s and early 1990s) showed that these practices diffused successfully (e.g., Davis & Greve, 1997). However, more recent studies have shown that takeover defenses fell out of favor in the 2000s (Rhee & Fiss, 2014). In other words, with a longer time frame, one may observe that as takeover defenses became more prevalent, they threatened the market for corporate control (Bruner, 1991) and were associated with negative third-party evaluations such as negative stock market reactions and intensified media contestation (c.f., Fiss et al., 2012; Mahoney & Mahoney, 1993; Mahoney, Sundaramurthy & Mahoney, 1996). Our theoretical framework suggests that these negative third-party evaluations may have been intensified by prevalence, leading to the documented decline in their diffusion.

Fourth, future research on controversial practices would also ideally examine practices where third-party evaluations are expected to be economically and/or socially consequential to practice adopters. This effect would be particularly pronounced in the context of financial markets, where

value is partly socially constructed and a result of collective sense-making (Zajac & Westphal, 2004). Nonetheless, one can easily imagine consequential third-party evaluations in a variety of for-profit and non-profit settings.

Our theoretical arguments are applicable to a broad set of social conditions and practices, such as the recent diffusion of the increased use (and abuse) of prescription opioid drugs (Rudd et al., 2016). While originally considered controversial for their addictive nature, it was the increase in physicians' and patients' acceptance of the practice—as evidenced in the increased rate of prescriptions for such painkillers, and addictions and deaths related to overdose—that prompted growing societal skepticism and contestation (Kalso et al., 2004). Advocates and detractors continue to debate this practice to this day. Nonetheless, it is apparent that the increased third-party awareness of the prevalence of opioid-based painkillers has not normalized and legitimized their use; rather, third-party condemnation has contributed to a degree of stigmatization that is responsible for the recent 22% decline in opioid prescriptions over the last years (following the peak of 2011) (Medicine Use and Spending in the U.S., IQVIA, 2018).

Because this study's theoretical approach and predictions allow to address both the rise and potential fall of diffusing practices, it also relates directly to the process of practice rejection. Prior research has emphasized practice abandonment and the forces driving it; such as, normative pressures (Clemente & Roulet, 2015; Hiatt, Sine, & Tolbert, 2009), and imitation and social learning (Gaba & Dokko, 2016; Greve, 1995). Given the greater likelihood that controversial practices are adopted for economic rather than normative reasons (Kraatz & Zajac, 1996), one might expect them to be more resilient to normative pressures. Future research should examine the specific mechanisms underlying the abandonment of a controversial practice, including the possibility of decoupling (symbolic abandonment). Moreover, future research should examine

how practice adopters may engage in strategies to shield controversial practices from opposing third-party evaluators. Possibilities include symbolic management via framing (Rhee & Fiss, 2014), rhetorical persuasion (Perkmann & Spicer, 2008), knowledge transfers across adopters (Compagni, Mele & Ravasi, 2015), and practice adaptation (Ansari, Fiss & Zajac, 2010).

In conclusion, we have sought to provide a more nuanced theoretical and empirical analysis of how practice prevalence affects the diffusion of controversial practices. We hope that our emphasis on the differences in how practice prevalence is perceived by potential adopters and third-party evaluators, and on the implications of such differences in influencing subsequent diffusion, can both reconcile prior mixed findings and stimulate future research. In particular, we hope to have shown that the relevance of the prevalence of controversial practices on their subsequent diffusion includes a "strength in numbers" effect alongside a more subtle but important "weakness in numbers" effect.

REFERENCES

Abrahamson, E. 1991. Managerial fads and fashions: The diffusion and rejection of innovations. ***Academy of Management Review***, 16(3): 586–612.

Abrahamson, E. 1996. Management fashion. ***Academy of management review***, 21(1): 254–285.

Abrahamson, E., & Fairchild, G. 1999. Management fashion: Lifecycles, triggers, and collective learning processes. ***Administrative science quarterly***, 44(4): 708–740.

Abrahamson, E., & Rosenkopf, L. 1993. Institutional and competitive bandwagons: Using mathematical modeling as a tool to explore innovation diffusion. ***Academy of Management Review,*** 18(3): 487–517.

Ackerman, A. 2011. SEC probes backdoor mergers by Chinese firms. ***The Wall Street Journal.*** April 4 Accessed online at https://www.wsj.com/articles/SB10001424052748703712504576242973187563498.

Ahmadjian, C. L., & Robbins, G. E. 2005. A clash of capitalisms: Foreign shareholders and corporate restructuring in 1990s Japan. ***American Sociological Review***, 70(3): 451–471.

Ansari, S. M., Fiss, P. C., & Zajac, E. J. 2010. Made to fit: How practices vary as they diffuse. ***Academy of Management Review***, 35(1): 67–92.

Aydogdu, M., Shekhar, C., & Torbey, V. 2007. Shell companies as IPO alternatives: An analysis of trading activity around reverse mergers. ***Applied Financial Economics***, 17(16–18): 1335–1347.

Baker, M., & Wurgler, J. 2006. Investor sentiment and the cross-section of stock returns. ***Journal of Finance***, 61(4): 1645–1680.

Banerjee, A. V. 1992. A simple model of herd behavior. ***Quarterly Journal of Economics***, 107(3): 797–817.

Baum, J. A., Li, S. X., & Usher, J. M. 2000. Making the next move: How experiential and vicarious learning shape the locations of chains' acquisitions. ***Administrative Science Quarterly*****,** 45(4): 766–801.

Becker, M. H. 1970. Sociometric location and innovativeness: Reformulation and extension of the diffusion model. ***American Sociological review***, 35(2): 267–282.

Bednar, M. K. 2012. Watchdog or lapdog? A behavioral view of the media as a corporate governance mechanism. ***Academy of Management Journal***, 55(1): 131–150.

Bhushan, R. 1989. Firm characteristics and analyst following. ***Journal of Accounting and Economics***, 11(2-3): 255–274.

Bikhchandani, S., Hirshleifer, D., & Welch, I. 1998. Learning from the behavior of others: Conformity, fads, and informational cascades. ***Journal of Economic Perspectives***, 12(3): 151–170.

Briscoe, F., & Murphy, C. 2012. Sleight of hand? Practice opacity, third-party responses, and the interorganizational diffusion of controversial practices. ***Administrative Science Quarterly***, 57(4): 553–584.

Bruner, R. F. 1991. ***The poison pill anti-takeover defense: The price of strategic deterrence.*** Charlottesville, VA: Institute of Chartered Financial Analysts.

Burns, L. R. & Wholey, D. R. 1993. Adoption and abandonment of matrix management programs: Effects of organizational characteristics and interorganizational networks. ***Academy of Management Journal*****,** 36(1): 106–138.

Burt, R. S. 1987. Social contagion and innovation: Cohesion versus structural equivalence. ***American Journal of Sociology***, 92(6): 1287–1335.

Chan, K., & Hameed, A. 2006. Stock price synchronicity and analyst coverage in emerging markets. ***Journal of Financial Economics*****,** 80(1): 115–147.
Chen, C., Gotti, G., Herrmann, D., & Schumann, K. 2016. Earnings quality of foreign versus U.S. reverse mergers: Geographical location or firm-level incentives? ***Journal of International Accounting Research***, 15(1): 49–66.
Chuang, Y. T., Church, R., & Ophir, R. 2011. Taking sides: The interactive influences of institutional mechanisms on the adoption of same-sex partner health benefits by Fortune 500 corporations, 1990–2003. ***Organization Science*****,** 22(1): 190–209.
Clarkson, M. E. 1995. A stakeholder framework for analyzing and evaluating corporate social performance. ***Academy of Management Review***, 20(1): 92–117.
Clemente, M., & Roulet, T. J. 2015. Public opinion as a source of deinstitutionalization: A "spiral of silence" approach. ***Academy of Management Review***, 40(1): 96–114.
Connelly, B. L., Johnson, J. L., Tihanyi, L., & Ellstrand, A. E. 2011. More than adopters: Competing influences in the interlocking directorate. ***Organization Science***, 22(3): 688–703.
Compagni, A., Mele, V. & Ravasi, D., 2015. How early implementations influence later adoptions of innovation: Social positioning and skill reproduction in the diffusion of robotic surgery. ***Academy of Management Journal*****,** 58(1): 242–278.
Colyvas, J. A., & Jonsson, S. 2011. Ubiquity and legitimacy: Disentangling diffusion and institutionalization. ***Sociological Theory,*** 29(1): 27–53.
Cyert, R., & March, J. G. 1963. ***Behavioral theory of the firm***. Englewood Cliffs, NJ: Prentice-Hall.
Darrough, M. N. 2015. The spillover effect of fraud allegations against Chinese reverse mergers. Accessed online at https://ssrn.com/abstract=2545685.
Davis, G. F. 1991. Agents without principles? The spread of the poison pill through the intercorporate network. ***Administrative Science Quarterly*****,** 36(4): 583–613.
Davis, G. F., & Greve, H. R. 1997. Corporate elite networks and governance changes in the 1980s. ***American Journal of Sociology***, 103(1): 1–37.
De Jong, A., & Naumovska, I. 2016. A note on event studies in finance and management research. ***Review of Finance***, 20(4): 1659–1672.
Deephouse, D. L. 2000. Media reputation as a strategic resource: An integration of mass communication and resource-based theories. ***Journal of Management*****,** 26(6): 1091–1112.
Deephouse, D. L., Bundy, J., Tost, L. P., & Suchman, M. C. 2017. Organizational Legitimacy: Six Key Questions. In R. Greenwood, C. Oliver, T. B. Lawrence, & R. E. Meyer (Eds.), T*he SAGE Handbook of Organizational Institutionalism* (2nd ed.): 27–54. SAGE
Deephouse, D. L., & Suchman, M. C. 2008. Legitimacy in Organizational Institutionalism. In R. Greenwood, C. Oliver, R. Suddaby, & K. Sahlin-Andersson (Eds.), T***he SAGE Handbook of Organizational Institutionalism***: 49–77. SAGE.
Denrell, J., & Kovács, B. 2008. Selective sampling of empirical settings in organizational studies. ***Administrative Science Quarterly*****,** 53(1): 109–144.
DiMaggio, P. J., & Powell, W. W. 1983. The Iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. ***American Sociological Review***, 48(2): 147–160.
Dobbin, F., & Sutton, J. R. 1998. The strength of a weak state: The rights revolution and the rise of human resources management divisions. ***American Journal of Sociology***, 104(2):441–476.
Ermann, M., & Flaherty, M. 2010. Reverse mergers shed shady image, surge in US. ***Reuters.***

April 15. Accessed online https://in.reuters.com/article/us-chinesereversemergers-analysis/reverse-mergers-shed-shady-image-surge-in-u-s-idINTRE63E4TW20100415.
Evanson, D. R., & Beroff, A. 1999, 1 January. Private matters. ***Entrepreneur Magazine.***
Feldman, D. N. 2015, March 16. Five reasons reverse mergers are still attractive. ***Legal Newsroom Corporate***.
Feldman, D. N., & Dresner, S. 2009. ***Reverse Mergers***. New York: Bloomberg Press.
Fisher, K. L., & Statman, M., 2000. Investor sentiment and stock returns. ***Financial Analysts Journal***, 56(2): 16–23.
Fiss, P. C., Kennedy, M. T., & Davis, G. F. 2012. How golden parachutes unfolded: Diffusion and variation of a controversial practice. ***Organization Science***, 23(4): 1077–1099.
Fiss, P. C., & Zajac, E. J. 2004. The diffusion of ideas over contested terrain: The (non)adoption of a shareholder value orientation among German firms. ***Administrative Science Quarterly***, 49(4): 501–534.
Fiss, P. C., & Zajac, E. J. 2006. The symbolic management of strategic change: Sensegiving via framing and decoupling. ***Academy of Management Journal*****,** 49(6): 1173–1193.
Frayter, K. 2011, December 14. Dismal outlook for reverse mergers. ***CNBC***.
Gaba, V., & Dokko, G. 2016. Learning to let go: Social influence, learning, and the abandonment of corporate venture capital practices. ***Strategic Management Journal***, 37(8): 1558–1577.
Gaba, V., & Meyer, A. D. 2008. Crossing the organizational species barrier: How venture capital practices infiltrated the information technology sector. ***Academy of Management Journal*****,** 51(5): 976–998.
Gleason, K. C., Rosenthal, L., & Wiggins, R. A. 2004. Backing into being public: An exploratory analysis of reverse takeovers. ***Journal of Corporate Finance***, 12(1): 54–79.
Granovetter, M. 1978. Threshold models of collective behavior. ***American Journal of Sociology***, 83(6): 1420–1443.
Greve, H. R. 1995. Jumping ship: The diffusion of strategy abandonment. ***Administrative Science Quarterly***, 40(3): 444–473.
Greve, H. R., Kim, J.-Y., & Teh, D. 2016. Ripples of fear: The diffusion of a bank panic. ***American Sociological Review***, 81(2): 396–420.
Gulati, R., & Higgins, M. C. 2003. Which ties matter when? The contingent effects of interorganizational Partnerships on IPO Success. ***Strategic Management Journal***, 24(2): 127–144.
Gupta, A., & Misangyi, V. F. 2018. Follow the leader (or not): The influence of peer CEOs' characteristics on interorganizational imitation. ***Strategic Management Journal***, 39(5): 1437–1472.
Haunschild, P. R., & Miner, A. S. 1997. Modes of interorganizational imitation: The effects of outcome salience and uncertainty. ***Administrative Science Quarterly***, 42(3): 472–500.
Haveman, H. A., & Rao, H. (1997). Structuring a theory of moral sentiments: Institutional and organizational coevolution in the early thrift industry. ***American Journal of Sociology*****,** 102(6): 1606–51651.
Henisz, W. J., & Delios, A. 2001. Uncertainty, imitation, and plant location: Japanese multinational corporations, 1990-1996. ***Administrative Science Quarterly***, 46(3): 443–475.
Hennessey, R. 2002. Companies opting for easy way to go public still remain rare. ***The Wall Street Journal***. June 26: 15.
Heuser, S. 2006. Cambridge Biotech to go public in deal with a Calif. firm. ***The Boston Globe***. April 13. Accessed online at

http://archive.boston.com/business/globe/articles/2006/04/13/cambridge_biotech_to_go_public_in_deal_with_a_calif_firm/. Viewed January 30, 2020.
Heuser, S. 2007. A rock star of biotechs plans an IPO; Longevity researcher Sirtris of Cambridge seeks $60m. ***The Boston Globe.*** March 2. Accessed online at http://archive.boston.com/business/globe/articles/2007/03/02/a_rock_star_of_biotechs_plans_ipo
Hiatt, S. R., Sine, W. D., & Tolbert, P. S. 2009. From Pabst to Pepsi: The deinstitutionalization of social practices and the creation of entrepreneurial opportunities. ***Administrative Science Quarterly***, 54(4): 635–667.
Ingram, P., & Rao, H. 2004. Store wars: The enactment and repeal of anti-chain-store legislation in America. ***American Journal of Sociology***, 110(2): 446–487.
Jonsson, S. 2009. Refraining from imitation: Professional resistance and limited diffusion in a financial market. ***Organization Science***: 20(1): 172–186.
Jonsson, S., Greve, H. R., & Fujiwara-Greve, T. 2009. Undeserved loss: The spread of legitimacy loss to innocent organizations in response to reported corporate deviance. ***Administrative Science Quarterly***, 54(2): 195–228.
Kalso, E., Edwards, J. E., Moore, R. A., & McQuay, H. J. 2004. Opioids in chronic non-cancer pain: Systematic review of efficacy and safety. ***Pain***, 112(3): 372–380.
Kamar, E., Karaca-Mandic, P., & Talley, E. L. 2007. Sarbanes-Oxley's effects on small firms: What is the evidence?. ***Harvard Law and Economics Discussion Paper Series,*** Paper No. 588.
Kaplan, S., & Vakili, K. 2015. The double-edged sword of recombination in breakthrough innovation. ***Strategic Management Journal***, 36(10): 1435–1457.
Kraatz, M. S., & Zajac, E. J. 1996. Exploring the limits of the new institutionalism: The causes and consequences of illegitimate organizational change. ***American Sociological Review***, 61(5): 812–836.
Lee, J. L. 2007. More Chinese companies turn to OTC to raise cash. ***The Wall Street Journal.*** June 7. Accessed online at https://www.wsj.com/articles/SB118115749204526771.
Lee, C. K. & Strang, D. 2006. The international diffusion of public-sector downsizing: Network emulation and theory-driven learning. ***International Organization***, 60(4): 883–909.
Lieberman, M. B., & Asaba, S. 2006. Why do firms imitate each other?. ***Academy of Management Review***, 31(2): 366–385.
Lowry, M. 2003. Why does IPO volume fluctuate so much? ***Journal of Financial Economics,*** 67(1): 3–40.
Lynch S. N. 2011. SEC probing fraud at U.S.-listed foreign companies. ***Reuters.*** April 16. Accessed online at https://www.reuters.com/article/us-sec-aguilar/sec-probing-fraud-at-u-s-listed-foreign-companies-idUSTRE7333U320110404.
Mahoney, J. M., & Mahoney, J. T. 1993. An empirical investigation of the effect of corporate charter antitakeover amendments on stockholder wealth***. Strategic Management Journal***, 14(1): 17–31.
Mahoney, J. M., Sundaramurthy, C., & Mahoney, J. T. 1996. The differential impact on stockholder wealth of various antitakeover provisions. ***Managerial and Decision Economics***, 17(6): 531–549.
Meyer, J. W., & Rowan, B. 1977. Institutionalized organizations: Formal structure as myth and ceremony institutionalized organizations. ***American Journal of Sociology***, 83(2): 340–363.

Meyer, D. S., & Staggenborg, S. 1996. Movements, countermovements, and the structure of political opportunity. ***American Journal of Sociology***, 101(6): 1628–1660.
Mezias, S. J. 1990. An institutional model of organizational practice: Financial reporting at the Fortune 200. ***Administrattve Science Quarterly***, 35(3): 431–457.
Michaely, R., & Shaw, W. H. 1995. Does the choice of auditor convey quality in an initial public offering? ***Financial Management***, 24(4): 15–30.
Mohliver, A. 2019. How misconduct spreads: Auditors' role in the diffusion of stock-option backdating. ***Administrative Science Quarterly***, 1–27.
Mooney, C. Z., & Duval, R. D. 1993. ***Bootstrapping: A nonparametric approach to statistical inference***. Newbury Park, California: Sage Publications.
Naumovska, I., Wernicke, G.. & Zajac, E. J. 2020. Last to come and last to go? On the complex role of gender and ethnicity in the reputational penalties for directors linked to corporate fraud. ***Academy of Management Journal*****,** 63(3): 881-902.
Naumovska, I., & Zajac, E. J. 2021 "How inductive and deductive generalization shape the guilt by association phenomenon among firms: Theory and evidence." ***Organization Science,*** forthcoming.
Ng, S. 2005. Reverse mergers move into fashion. ***The Wall Street Journal***. June 29. Accssed online at https://www.wsj.com/articles/SB111999755301172121.
Nicklaus, D. 2003. New public company breaks out of an old, worn shell. ***St. Louis Post-Dispatch.*** April 20. Accessed online at https://www.stltoday.com/news/archives/.
Pavkov, A. R. 2006. Ghouls and godsends - A critique of reverse merger policy. ***Berkeley Business Law Journal***, 3(2): 475–513.
PCAOB. 2011. PCAOB Issues First Research Note on Chinese Reverse Mergers. March 15. Washington, D.C. Accessed online https://pcaobus.org/News/Releases/Pages/03152011_ResearchNote.aspx.
Perkmann, M., & Spicer, A. 2008. How are management fashions institutionalized? The role of institutional work. ***Human Relations***, 61(6): 811–844.
Pollock, T. G., Rindova, V. P., & Maggitti, P. G. 2008. Market watch: Information and availability cascades among the media and investors in the US IPO market. ***Academy of Management Journal***, 51(2): 335–358.
Rao, H., Monin, P., & Durand, R. 2003. Institutional change in Toque Ville: Nouvelle cuisine as an identity movement in French gastronomy. ***American Journal of Sociology***, 108(4): 795–843.
Rapoport, M. 2011. Alarms sounded on reverse mergers. ***The Wall Street Journal***. June 10:2.
Reuters. 2005. U.S. SEC looks into AMEX 'blank check' listings. ***Reuters.*** July 27.
Rhee, E. Y., & Fiss, P. C. 2014. Framing controversial actions: Regulatory focus, source credibility, and stock market reaction to poison pill adoption. ***Academy of Management Journal***, 57(6): 1734–1758.
Rindova, V. P., Williamson, I. O., Petkova, A. P., & Sever, 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(6): 1033–1049.
Ritter, J. R., & Welch, I. 2002. A review of IPO activity, pricing, and allocations. ***Journal of Finance***, 57(4): 1795–1828.
Rogers, E. M. 2003. ***Diffusion of innovations (Fifth edition).*** New York: Free Press.
Roll, R. 1984. A simple implicit measure of the effective bid-ask spread in an efficient market. ***Journal of Finance***, 39(4): 1127–1139.

Rosen, E. L. 2004. An often risky route for going public. ***The New York Times***. April 29:7.
Rosenkopf, L. Abrahamson, E. 1999. Modeling Reputational and Informational Influences in Threshold Models of Bandwagon Innovation Diffusion.***Computational & Mathematical Organization Theory***. 5(4): 361-384.
Rossman, G. 2014. The Diffusion of the legitimate and the diffusion of legitimacy. ***Sociological Science***, 1: 49–69.
Rudd, R. A., Aleshire, N., Zibbell, J. E., & Gladden, R. 2016. Increases in drug and opioid overdose deaths—United States, 2000–2014. ***American Journal of Transplantation***, 16(4): 1323–1327.
Ryan, B., & Gross, N. C. 1943. The diffusion of hybrid seed corn in two Iowa communities. ***Rural Sociology***, 8(1): 15–24.
Sanders, W. G., & Tuschke, A. 2007. The adoption of institutionally contested organizational practices: The emergence of stock option pay in Germany. ***Academy of Management Journal***, 50(1): 33–56.
Schneiberg, M., & Bartley, T. 2001. Regulating American industries: Markets, politics, and the institutional determinants of fire insurance regulation. ***American Journal of Sociology*****,** 107(1): 101–146.
Schneiberg, M., & Soule, S. 2005. Institutionalization as a contested, multilevel process: The case of rate regulation in American fire insurance. In G. F. Davis, D. McAdam, W. R. Scott, & M. N. Zald (Eds.), ***Social movements and organization theory***: 122–160. Cambridge, UK: Cambridge University Press.
Scott, W. R. 1995. ***Institutions and organizations: Foundations for organizational science***. London: Sage Publications.
SEC. 2005. ***SEC Votes to Adopt Securities Act Rule Reform and Shell Company Regulations; Considers Matters Remanded by Court of Appeals***. Washington D.C. July 1. Accessed online https://www.sec.gov/news/press/2005-99.htm. Viewed January 30, 2020.
SEC. 2011. ***SEC Issues Bulletin on Risks of Investing in Reverse Merger Companies***. Washington D.C. June 9. Accessed online https://www.sec.gov/investor/alerts/reversemergers.pdf.
Siegel, J. I., & Wang, Y. 2013. ***Cross-border reverse mergers: Causes and consequences***. Working Paper No. 12–089, Harward Business School Strategy Unit.
Sine, W. D., Haveman, H. A., & Tolbert, P. S. 2005. Risky business? Entrepreneurship in the new independent-power sector. ***Administrative Science Quarterly***, 50(2): 200–232.
Soule, S. A., Swaminathan, A., & Tihanyi, L. 2014. The diffusion of foreign divestment from Burma. ***Strategic Management Journal*****,** 35(7): 1032-1052.
Strang, D., & Meyer, J. W. 1993. Institutional conditions for diffusion. ***Theory and Society***, 22(4): 487–511.
Strang, D., & Soule, S. A. 1998. Diffusion in organizations and social movements: From hybrid corn to poison pills. ***Annual Review of Sociology***, 24(1): 265–290.
Suchman, M. C. 1995. Managing legitimacy: Strategic and institutional approaches. ***Academy of Management Review***, 20(3): 571–610.
Syre, S. 2005. Shell games. ***The Boston Globe.*** April 21: 1.
Terlaak, A., & King, A. A. 2007. Follow the small? Information-revealing adoption bandwagons when observers expect larger firms to benefit more from adoption. ***Strategic Management Journal***, 28(12): 1167–1185.
Tolbert, P. S., & Zucker, L. G. 1983. Institutional sources of change in the formal structure of

organizations: The diffusion of civil service reform, 1880-1935. ***Administrative Science Quarterly***, 28(1): 22–39.

Tolbert, P. S., & Zucker, L. G. 1996. Institutionalization of institutional theory. In S. Clegg, C. Hardy, & W. R. Nord (Eds.), ***Handbook of organization studies***: 175–190. Thousand Oaks, CA: Sage Publications.

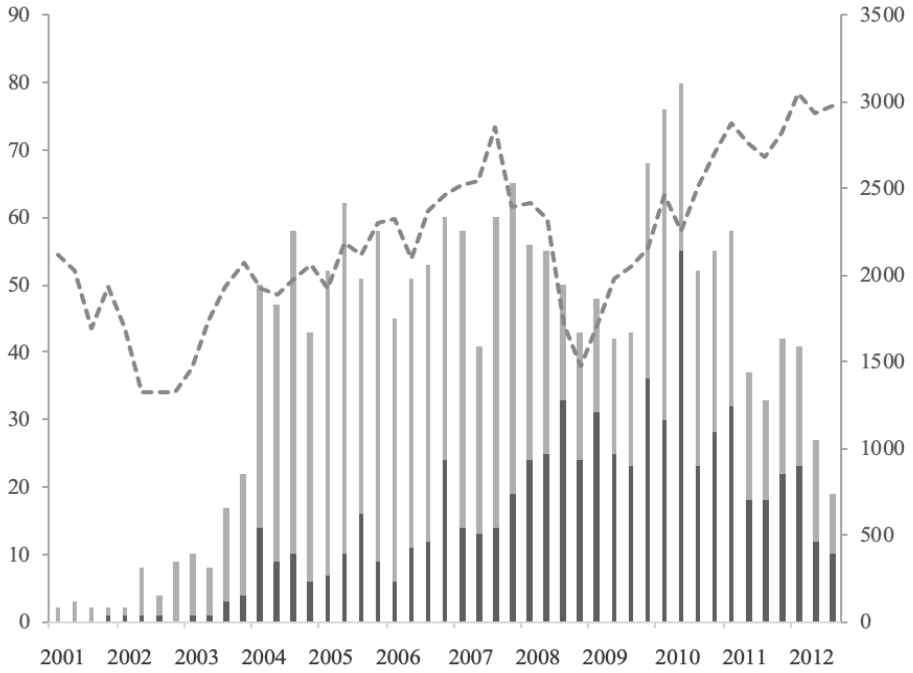
Young, H. P. 2009. Innovation diffusion in heterogeneous populations: Contagion, social influence, and social learning. ***American Economic Review*****,** 99(5): 899–1924.

Zajac, E. J., & Westphal, J. D. 2004. The social construction of market value: Institutionalization and learning perspectives on stock market reactions. ***American Sociological Review***, 69(3): 433–457.

Zelner, B. A., Henisz, W. J., & Holburn, G. L., 2009. Contentious implementation and retrenchment in neoliberal policy reform: The global electric power industry, 1989–2001. ***Administrative Science Quarterly*****,** 54(3): 379–412.

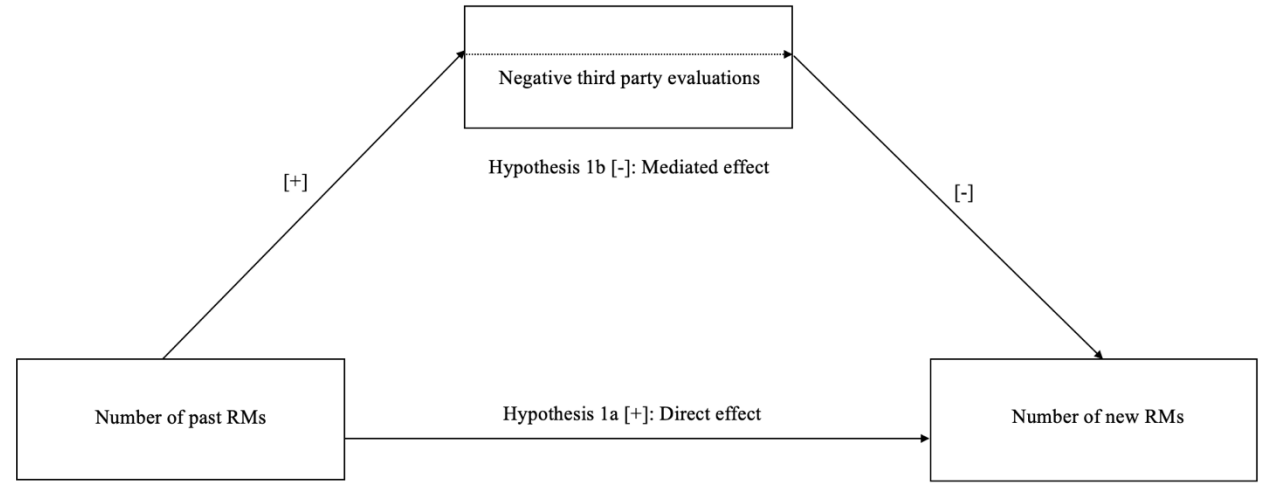
Zhao, X., Lynch, J. G., & Chen, Q. 2010. Reconsidering Baron and Kenny: Myths and truths about mediation analysis. ***Journal of Consumer Research***, 37(2): 197–206.

FIGURE 1 Diffusion of RMs (2001-2012)



Notes: The left-hand y-axis measures the number of RMs per quarter. The number of RMs are represented with grey columns, and the darker grey part shows the portion that was low-status RMs. The right-hand y-axis measures the Nasdaq Composite Index, which is represented with a dotted line. The time scale on the x-axis is quarterly.

FIGURE 2 a/b Theoretical Model of Prevalence and Third-party Evaluation Effects on Subsequent Diffusion of RMs



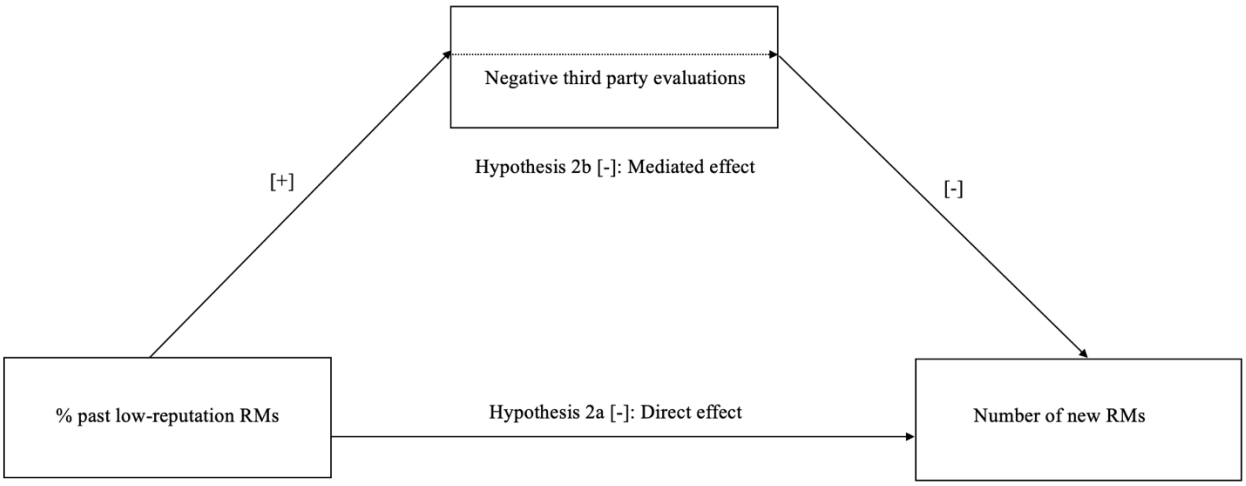


TABLE 1 Descriptive Statistics and Correlations for the Analyses of Diffusion of RMs

Variables	Mean	S.D.	1	2	3	4	5	6	7
1. Number of new RMs	3.59	2.68							
2. Stock market returns	-1.16	2.13	0.16						
3. Stock market returns $_{lag}$	-1.15	2.14	0.00	-0.07					
4. Available shells[a]	5.53	0.91	-0.05	-0.01	-0.01				
5. % past small RMs	0.53	0.41	0.03	-0.01	-0.01	-0.12			
6. Investors' sentiment	6.24	19.39	-0.04	0.08	0.07	-0.24	0.03		
7. Buy recommendations	1.70	2.13	0.09	-0.07	-0.03	0.40	-0.03	-0.20	
8. Hold recommendations	0.62	1.13	0.06	-0.05	0.01	0.30	-0.03	-0.08	0.53
9. Sell recommendations	0.08	0.29	0.07	-0.05	-0.03	0.19	0.10	-0.03	0.29
10. Number of new IPOs	3.46	3.44	0.14	0.03	0.01	-0.26	0.01	0.22	-0.04
11. RM rules - July 2005	0.73	0.44	0.19	-0.05	-0.06	0.34	0.02	-0.40	0.44
12. SEC letter – June 2011	0.15	0.36	-0.16	-0.09	-0.09	0.38	-0.10	-0.10	0.11
13. Neutral media coverage	0.30	0.61	-0.01	-0.03	-0.04	-0.09	0.01	-0.05	-0.02
14. Negative media coverage	0.22	0.59	-0.16	-0.12	-0.02	0.23	-0.04	-0.09	0.15
15. Number of past RMs[a]	6.31	1.33	0.25	-0.06	-0.07	0.42	0.07	-0.37	0.46
16. % past low-status RMs	0.25	0.09	0.12	-0.06	0.06	0.70	-0.01	-0.24	0.48

Variables	8	9	10	11	12	13	14	15
9. Sell recommendations	0.26							
10. Number of new IPOs	-0.06	-0.01						
11. RM rules - July 2005	0.31	0.17	-0.09					
12. SEC letter – June 2011	0.13	0.09	0.03	0.25				
13. Neutral media coverage	-0.09	-0.04	0.01	0.04	-0.08			
14. Negative media coverage	0.12	0.11	0.00	0.17	0.34	0.05		
15. Number of past RMs[a]	0.33	0.19	-0.04	0.85	0.37	0.02	0.24	
16. % past low-status RMs	0.39	0.25	-0.06	0.65	0.59	-0.06	0.34	0.85

Notes: n=521; a Variable included in logarithmic form; Values over 0.089 are significant on the 5% level.

TABLE 2 Diffusion of RMs, and the Mediating Role of Stock Market Returns and Negative Media Coverage
- Generalized Structural Equation Model (GSEM) -

Panel A	**Model 1**			**Model 2**			**Model 3**			**Model 4**		
	1A Number of new RMs	**1B** Stock market returns	**1C** Negative media coverage	**2A** Number of new RMs	**2B** Stock market returns	**2C** Negative media coverage	**3A** Number of new RMs	**3B** Stock market returns	**3C** Negative media coverage	**4A** Number of new RMs	**4B** Stock market returns	**4C** Negative media coverage
Stock market returns	0.05***		-0.12*	0.05***		-0.14*	0.04**		-0.12*	0.05***		-0.14*
	(0.01)		(0.06)	(0.01)		(0.06)	(0.01)		(0.06)	(0.01)		(0.06)
Stock market returns *lag*		-0.09*			-0.10*			-0.09*			-0.10*	
		(0.04)			(0.04)			(0.04)			(0.04)	
Available shells[a]	-0.03	0.52	0.63**	-0.12**	0.41	0.40	0.05	0.79†	0.06	-0.05	0.68	-0.15
	(0.04)	(0.47)	(0.23)	(0.04)	(0.47)	(0.25)	(0.05)	(0.47)	(0.28)	(0.05)	(0.47)	(0.31)
% past small RMs[b]	-0.01	-0.05	-0.02	-0.04	-0.04	-0.04	-0.01	-0.06	0.00	-0.04	-0.04	-0.03
	(0.03)	(0.09)	(0.11)	(0.03)	(0.10)	(0.11)	(0.03)	(0.09)	(0.11)	(0.03)	(0.09)	(0.11)
Investors' sentiment	-0.00	0.01	0.00	0.00	0.01†	0.00	0.00	0.01†	-0.01	0.00	0.01*	-0.01
	(0.00)	(0.01)	(0.01)	(0.00)	(0.01)	(0.01)	(0.00)	(0.01)	(0.01)	(0.00)	(0.01)	(0.01)
Buy recommendations	0.01	-0.09	0.03	-0.01	-0.08	0.02	0.01	-0.07	0.03	-0.00	-0.07	0.02
	(0.02)	(0.06)	(0.06)	(0.02)	(0.06)	(0.06)	(0.02)	(0.06)	(0.06)	(0.02)	(0.06)	(0.06)
Hold recommendations	0.01	-0.02	0.03	-0.01	-0.02	0.01	0.01	-0.02	-0.01	-0.00	-0.02	-0.02
	(0.03)	(0.10)	(0.10)	(0.03)	(0.10)	(0.10)	(0.03)	(0.10)	(0.10)	(0.03)	(0.10)	(0.10)
Sell recommendations	0.14	-0.18	0.20	0.12	-0.16	0.18	0.17†	-0.15	0.13	0.14	-0.13	0.12
	(0.10)	(0.34)	(0.30)	(0.10)	(0.34)	(0.30)	(0.10)	(0.33)	(0.30)	(0.10)	(0.33)	(0.29)
Number of new IPOs	0.04***	0.02	0.04	0.03**	0.03	0.03	0.03***	0.01	0.02	0.03**	0.02	0.01
	(0.01)	(0.03)	(0.04)	(0.01)	(0.03)	(0.04)	(0.01)	(0.03)	(0.04)	(0.01)	(0.03)	(0.04)
RM rules – July 2005	0.46***	0.29	0.64	-0.42***	0.46	-1.18	0.34***	0.40	1.33*	-0.49***	0.61	-0.34
	(0.09)	(0.68)	(0.48)	(0.12)	(0.68)	(0.80)	(0.09)	(0.67)	(0.53)	(0.13)	(0.67)	(0.82)
SEC letter – June 2011	-0.38***	-1.24*	1.02***	-0.60***	-1.18*	0.71*	-0.25*	-1.18*	0.52†	-0.48***	-1.10†	0.29
	(0.10)	(0.59)	(0.26)	(0.10)	(0.58)	(0.28)	(0.11)	(0.58)	(0.30)	(0.11)	(0.58)	(0.31)
Neutral media coverage	-0.02	-0.06	0.26†	-0.04	-0.07	0.26†	-0.02	-0.05	0.28†	-0.04	-0.05	0.28*
	(0.05)	(0.15)	(0.15)	(0.05)	(0.15)	(0.15)	(0.05)	(0.15)	(0.15)	(0.05)	(0.15)	(0.15)
Negative media coverage	-0.21***	-0.30†		-0.24***	-0.29†		-0.20**	-0.30†		-0.23***	-0.29†	
	(0.06)	(0.18)		(0.06)	(0.18)		(0.06)	(0.17)		(0.06)	(0.17)	

	Model 1			Model 2			Model 3			Model 4		
	1A	**1B**	**1C**	**2A**	**2B**	**2C**	**3A**	**3B**	**3C**	**4A**	**4B**	**4C**
Number of past RMs[a, b]				0.62***	-1.20†	1.21*				0.61***	-1.49*	0.97*
				(0.07)	(0.64)	(0.51)				(0.07)	(0.64)	(0.45)
% past low-status RMs[b]							-0.13**	-0.73**	0.67**	-0.11**	-0.81***	0.68**
							(0.04)	(0.24)	(0.23)	(0.04)	(0.24)	(0.25)
Intercept	1.07***	-3.49	-6.62***	2.29***	-1.99	-3.99*	0.68**	-4.47	-3.82*	1.92***	-2.69	-1.40
	(0.23)	(3.42)	(1.29)	(0.25)	(3.50)	(1.57)	(0.26)	(3.40)	(1.49)	(0.28)	(3.47)	(1.78)
N		521			521			521			521	
Log-likelihood		-2510.10			-2466.67			-2496.33			-2453.47	

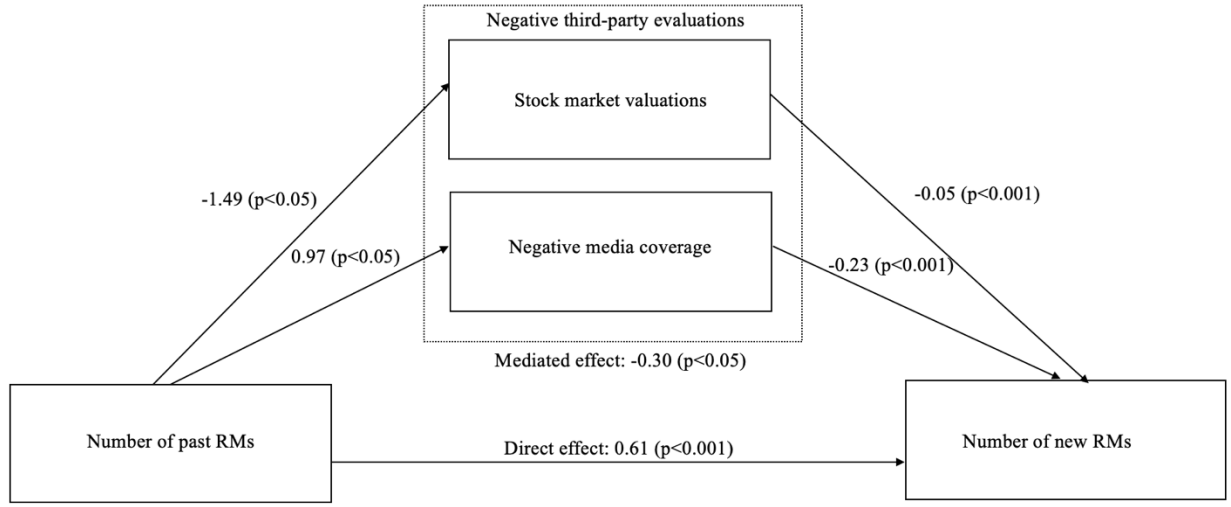
Panel B

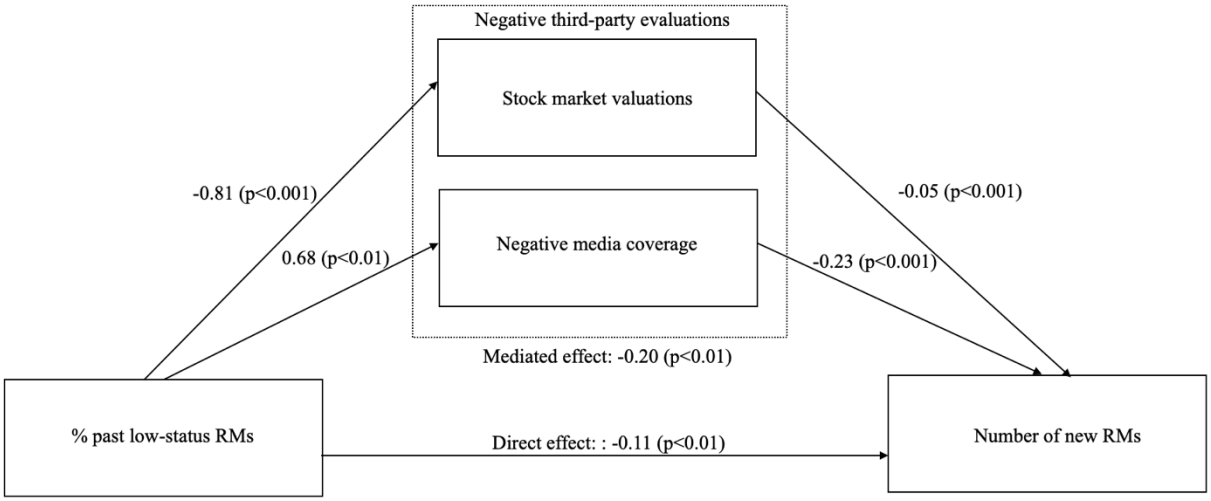
The effects of *Number of past RMs* and *% past low-status RMs* on *Number of new RMs* mediated via *Stock market returns* and *Negative media coverage*

Number of past RMs[a, b] mediated via Stock market returns	-0.07*
	(0.03)
Number of past RMs [a, b] mediated via Negative media coverage	-0.22†
	(0.12)
Total mediated effect of number of past RMs [a, b]	-0.30*
	(0.12)
% past low-status RMs[b] mediated via Stock market returns	-0.04*
	(0.02)
% past low-status RMs[b] mediated via Media coverage	-0.15*
	(0.07)
Total mediated effect of % past low-status RMs [b]	-0.20**
	(0.07)

Notes: a Variable included in logarithmic form, b Variable orthogonalized; Heteroskedasticity-consistent robust standard errors in parentheses;
† p < 0.10, * p < 0.05, ** p < 0.01, *** p < 0.001 significance levels are two-tailed.

FIGURE 3 a/b Generalized Structural Equation Modeling Results: Diffusion of RMs





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