How do foreign initial public offerings attract investor attention? A study of the impact of language

Dane P Blevins
The University of North Carolina at Greensboro, USA

Amy Ingram
Clemson University, USA

Eric WK Tsang and Mike W Peng
The University of Texas at Dallas, USA

Abstract
Language is increasingly recognized as having the ability to shape strategic outcomes. To understand language's impact in entrepreneurial settings, we study language in the context of foreign initial public offerings, a setting where organizations may suffer from both the liabilities of newness and foreignness. Our sample consists of the population of foreign initial public offerings debuting in the United States between 2001 and 2014, which collectively raised over US$60 billion in capital. We find that both new ventures' and the media's language impact investors by influencing the level of interest in the foreign initial public offerings. We also reveal that the media's use of analogies plays a pivotal role in familiarizing and legitimizing unfamiliar organizations. Overall, our study offers insights into the power of words in managing the challenges associated with the liabilities of newness and foreignness.

Increasingly, language is being used to understand strategic outcomes (Gao et al., 2016). Language is a medium through which stakeholders acquire relevant information about organizations (Ashcraft et al., 2009). How organizations use language can enhance their legitimacy (Suddaby and Greenwood, 2005), increase their access to financial resources (Petkova et al., 2013), and help

Corresponding author:
Dane P Blevins, Bryan School of Business and Economics, The University of North Carolina at Greensboro, 516 Stirling Street, Greensboro, NC 27402, USA.
Email: dpblevin@uncg.edu

them achieve competitive advantages (Rindova et al., 2004). However, effectively communicating an organization's potential value to stakeholders remains challenging (Cornelissen and Clarke, 2010). For new ventures, this challenge can be even greater (Navis and Glynn, 2010) since they are often characterized by their uniqueness (i.e. liability of newness; Aldrich and Fiol, 1994), and they are often entering unstable, developing industries (Santos and Eisenhardt, 2009). Therefore, given these inherent challenges, it can be difficult for stakeholders to evaluate new ventures (Lounsbury and Glynn, 2001).

Accordingly, within the realm of entrepreneurial settings, language is thought to be salient in its ability to shape new venture outcomes (Cornelissen and Clarke, 2010). Existing research has focused on how language, from the organization itself (Martens et al., 2007) and from infomediaries (such as the media; Pollock and Rindova, 2003), impacts new ventures. For example, new ventures can use language to craft their narratives to better engage with external audiences (Lounsbury and Glynn, 2001; Martens et al., 2007), which in turn, permits potential stakeholders such as investors to build an understanding about the new ventures and make sense about their viability (Gioia and Chittipeddi, 1991). Within our article's context, due to both the liabilities of newness (Freeman et al., 1983; Stinchcombe, 1965) and foreignness (Zaheer, 1995), *foreign* new ventures may face an even more daunting challenge as they transition from private to public by having their initial public offering (IPO) in the United States (Moore et al., 2012). As such, language, which is important for any new venture, may be even more critical for those that are both new and foreign. Thus, to gain a more nuanced understanding of the importance of language, we investigate how language affects the level of investor interest in foreign new ventures' IPOs on US stock exchanges. Our specific question is: How does language impact investor attention in foreign IPOs?

We focus on foreign IPOs because this unique context can provide valuable insights about how language can impact new ventures' strategic outcomes. For our study, foreign IPOs refer to new ventures that are undergoing a transition from private to public outside of their *home* country by pursuing a listing on US stock exchanges (Bell et al., 2014). While an IPO is a positive development, challenges stemming from the liabilities of newness (Freeman et al., 1983) and foreignness (Zaheer, 1995) remain for foreign IPOs since they are often not well established in the United States at the time of their stock market debut (Bell et al., 2014; Peng and Su, 2014). Thus, foreign IPOs not only need to attract attention to reduce their newness but also disseminate information to alleviate any negative perceptions tied to their foreignness. Therefore, the language surrounding foreign IPOs is especially germane to our study's context.

The purpose of this article is to gain a deeper understanding of how language may enable a foreign IPO to achieve more successful outcomes and overcome inherent challenges. In doing so, we examine the impact of the internal language used by the IPO and the external language used by infomediaries (such as the media) about the IPO. Specifically, we study the sentiment embedded in the language used by the IPOs' prospectuses, media articles, and the media's use of analogies that make comparisons between one organization and another (Cornelissen and Clarke, 2010). We hypothesize that foreign IPOs that have more positive sentiment, defined as having more positive language based on the words used to describe themselves or in the language used by the media (Tetlock, 2007), will increase the level of attention garnered by foreign IPOs. Similarly, we also expect that through the more illustrative use of analogy, the media can provide familiarity and disseminate information in a way that garners more investor attention. Overall, we find support for language's impact on attracting investor interest. However, while we find *some* empirical support that positive sentiment in a foreign IPO's prospectus is important, our results show that having more positive media sentiment overall is more influential in attracting investor interest. Furthermore, the use of an analogy by the media significantly influences investors' attention. Thus, our results suggest that foreign new ventures' use of positive language juxtaposed with the media's positive

sentiment and use of analogies aids these ventures in overcoming both the liabilities of newness and foreignness.

Our study aims to make two contributions. First, most studies examining the impact of language have focused on the effect of the actual entrepreneur's (or new venture's) use of analogies rather than an external source's use of analogy. Our study broadens this relatively narrow focus by examining the effect of analogies used by "others," with our results indicating that language effects can help foreign organizations appear *less* foreign. We contribute to discussions of how language used by new ventures shapes their outcomes—catching investor attention in IPOs for our study. Second, to our knowledge, we are one of the first to empirically show how entrepreneurial *foreign* new ventures can benefit from the use of language to reduce their liabilities of foreignness and newness as they expand internationally.

Theory development and hypotheses

Language in entrepreneurial settings

The impact of language in entrepreneurial settings is a growing area of research (Cornelissen and Clarke, 2010; Cornelissen et al., 2011; Martens et al., 2007; Navis and Glynn, 2010). This is because new ventures suffer from the liability of newness with lower levels of legitimacy and less resources, making it difficult to compete with more established organizations and ultimately leading to a higher risk of failure (Freeman et al., 1983; Stinchcombe, 1965). Therefore, to gain credibility, new organizations must communicate their value and overcome this newness. One way to do so is by using convincing language to garner attention (Martens et al., 2007). Surprisingly, there have been relatively few *empirical* studies directly testing the effects of language within this context (Gao et al., 2016), with most studies being conceptual in nature (Cornelissen and Clarke, 2010; Cornelissen et al., 2011; Navis and Glynn, 2011) or based on qualitative methods (Navis and Glynn, 2010). However, these earlier contributions have pointed out that language is indeed fertile ground for exploring strategic outcomes of new ventures and overcoming the liability of newness.

The topic of language in new ventures generally is covered by studying either the entrepreneur's or the organization's framing of language (Martens et al., 2007) or the language originating from an external infomediary, such as the media (Pollock et al., 2008). The first body of research aims to understand how language is used to develop narratives, which, in turn, can shape a new venture's ability to acquire resources for fueling its growth (Lounsbury and Glynn, 2001; Martens et al., 2007). The second stream examines how external language from other organizations (such as the media) communicates relevant information that helps legitimize and clarify the value of new ventures (Pollock and Rindova, 2003). Our study aims to build on both streams, focusing first on foreign IPOs' *internally* generated language and second on the impact of the *external* language used by the media pertaining to foreign IPOs.

Internal language

Language is an important tool in an entrepreneur's repertoire (Martens et al., 2007). At early stages in the entrepreneurial life cycle, an entrepreneur uses language in an attempt to attract interest in a new venture. To be effective, such language needs to convey relevant information about the prospects of the organization. As such, language is a medium that aids in the sensemaking and sensegiving process (Cornelissen et al., 2012; Lamin and Zaheer, 2012; Santos and Eisenhardt, 2009). Ideally, language that is used should help articulate how an entrepreneur envisions and makes sense of his or her ventures' ability to create value and recognize opportunities, which in turn helps

give "sense" to potential investors and other stakeholders that are evaluating the viability of the organization (Petkova et al., 2013). In essence, the better the overall narrative and story that can be told about the venture and its viability, the more likely the new venture will be able to shape future outcomes in its favor (Navis and Glynn, 2010).

Scholars note at least two ways that language may benefit an organization by making its story more compelling to stakeholders. First, from a broader perspective, by using more positive sentiment a new venture may attract more attention (Tan et al., 2014; Tetlock et al., 2008). This occurs because the more compelling the story and image used to depict the opportunity and potential value of the venture (Lounsbury and Glynn, 2001; Manning and Bejarano, 2017), the more likely the new venture will be successful in its acquiring resources. Second, in addition to influencing the sentiment with words, specific types of language tactics, such as analogies, may also help a new venture gain legitimacy (Cornelissen et al., 2011; Etzion and Ferraro, 2010). Indeed, scholars note that analogies give sense by making direct comparisons with familiar, other organizations, creating cognitive legitimacy (Bitektine, 2011; van Werven et al., 2015). Accordingly, the language used by a foreign IPO may be quite salient in understanding how it attracts attention from potential investors.

Foreign IPOs and positive language in the prospectus

In an IPO, garnering attention is particularly important since there are three main parties involved before the shares start trading publicly—the underlying organization, the underwriter, and institutional investors. Consequently, the conflicts of interests found at the time of an IPO are plentiful (Filatotchev and Bishop, 2002; Ragozzino and Reuer, 2011), and there are diverging demands that need to be satisfied in the process. For example, the organization raising the capital wants to raise as much capital as possible and relies on an underwriter to do so. However, the underwriter is dependent upon institutional investors to complete the IPO, but institutional investors are often hesitant to invest in IPOs as they are new organizations with limited track records and substantial risk. Thus, investors need to be convinced by the underwriter that there is enough market interest in the IPO.

For example, if there is not enough investor interest in the IPO once the shares start trading, the initial institutional investors will likely suffer negative consequences (Rock, 1986). This is because the shares may decline, resulting in *immediate* losses for the investors. Accordingly, the organizations undergoing the IPOs and their underwriters seek to promote the IPOs to potential investors in a positive way, and in doing so, they attempt to alleviate the perceived risk associated with the IPOs (Cook et al., 2006). Within our article's context, it is important to reiterate that investors may consider the foreign new ventures' IPOs a higher risk than domestic IPOs. This is because while foreign IPOs are similar to domestic IPOs in the sense that they generally have less resources and legitimacy due to the liability of newness, which may make it difficult to compete with more established organizations, foreign IPOs—by definition—also suffer from their liability of foreignness (Zaheer, 1995).

The liability of foreignness is a crucial factor to understand when examining the cognitive nature of the legitimation process (Kostova and Zaheer, 1999). Specifically, many foreign IPOs do not have significant revenue streams (and some have none) outside of their home markets. This can be problematic for generating investor interest. Not having enough interest can in turn lead to substantial hurdles for a foreign IPO since without enough interest, there may be little demand for the organization's shares. Therefore, having enough attention and trading volume in the IPO is a desirable outcome because it provides liquidity to institutional investors and other stakeholders that are involved in helping the foreign IPO make its public debut (Rock, 1986). Overall, the language that

the foreign IPO uses to describe itself is likely to be critically important in attracting attention and reducing its foreignness and newness.

One possible way that an organization may attract investor interest is to use *positive* language to characterize itself in its prospectus during its IPO filing and to build positive sentiment around the IPO (Lamertz and Martens, 2011; Martens et al., 2007). Prior work argues that language aids in both the sensemaking and sensegiving processes (Weick, 1995), by conveying information about the organization that ultimately can help a new venture acquire important resources as it grows (Navis and Glynn, 2010). Building on the power of language in the IPO setting, Martens et al. (2007) find that the language used by an IPO in its prospectus can help a new venture capitalize on its *existing* resource endowment, allowing an IPO to garner additional investment interest to fuel subsequent growth. Martens et al. (2007) demonstrate that language in the prospectus (1) conveys the new venture's intangible and tangible capital, (2) helps construct its identity, and (3) illustrates its pitch to investors. Therefore, the IPO prospectus provides a rich context to understand how the overall *sentiment* of the language and the words used within it may be related to subsequent investor interest.

Positive sentiment, which refers to organizations' abilities to use more positive words and language to describe themselves, is thought to be especially important in the capital markets (Tan et al., 2014). In general, managers are thought to use more positive language when describing their organizations and potential outcomes to build positive sentiment around their organizations and their prospects (Henry, 2008). However, within the context of an IPOs' prospectuses, managers (and their lawyers and underwriters) must follow strict rules with the Securities and Exchange Commission (SEC); otherwise, if an IPO oversells itself, it can face substantial legal liability. Therefore, while most IPOs are likely to use positive language overall, some will not be able to because they cannot exaggerate their potential.

Accordingly, recognizing the value of generating positive sentiment with investors, we argue that foreign IPOs and their underwriters are likely to use the most positive language in the prospectus that is legally permissible. They have an incentive to do so, not only because the positive sentiment helps the organization complete its IPO, but also because the prospectus is a key source of information for subsequent stakeholders such as research analysts, investors, and the media. Therefore,

> *Hypothesis 1.* Foreign IPOs that have more positive sentiment in their prospectus will attract higher levels of investor attention.

External language: positive media sentiment

While the language provided by an organization itself is certainly important in entrepreneurial settings, another body of research recognizes the potential impact of language by *others* such as the media (Petkova et al., 2013). We focus specifically on the media as an information intermediary (Love et al., 2017; Pollock et al., 2008; Pollock and Rindova, 2003; Tetlock, 2007) since other information providers such as research analysts are generally forbidden from issuing reports on an IPO for a few months after the IPO debut. Past findings demonstrate that the media plays a very important role in the information dissemination process because it can reach a broad set of audiences and can play a pivotal role in making information available about organizations (Bednar, 2012; Love et al., 2017; Pfarrer et al., 2010), especially in the case of IPOs (Pollock et al., 2008; Pollock and Rindova, 2003).

However, the media does not report broadly about every organization, and it can be particularly challenging for new ventures to attract media attention (Pollock and Rindova, 2003). Furthermore, the media often serves as a filter of information about *specific* organizations, which in turn can increase the cognitive focus of its audience (Pfarrer et al., 2010). For organizations that *do* garner media attention, the media can play a critical role in building their intangible organization-specific assets such as reputation, status, and identity (Deephouse, 2000; Fombrun and Shanley, 1990; Podolny, 1993), and this legitimization process is perhaps even more relevant in the context of new ventures (Petkova et al., 2013). As a result, the sheer event of attracting media attention for foreign IPOs is likely to be an important way that they garner investor interest.

Juxtaposed with media volume, the language the media uses to characterize an organization may assist in the formulation of the social perception of the organization (Deephouse, 2000). By selecting how to report on an organization, the media helps set the tone for stakeholder views about the organization (Zavyalova et al., 2012), which has important ramifications for the organization. If the overall sentiment of the media is positive, then the organization may be able to leverage the positive perceptions to support its strategic actions (Deephouse, 2000). This is because stakeholders are more likely to be engaged with an organization that conforms with or exceeds their expectations (Scott, 1995). Therefore, a foreign IPO with more positive descriptions in the broader media may benefit from the increased attention that it may garner in comparison to an IPO without any media attention at all or an IPO with less favorable sentiment in popular press.

While the empirical literature on media effects in entrepreneurial settings is relatively small, findings suggest that the media can have a strong influence on a new venture. For instance, Pollock et al. (2003, 2008) show that the volume and overall sentiment in media impacted both initial investor attention and subsequent investor attention following an organization's IPO. Tetlock (2007) finds a strong tie between the media and investor search behavior. Finally, Petkova et al. (2013) demonstrate the media's positive role in helping a new venture acquire venture capital investment. Thus, attracting positive media attention is a valuable achievement for a new venture (Pollock and Rindova, 2003). Therefore,

Hypothesis 2. Foreign IPOs with more positive overall media sentiment will attract higher levels of investor attention.

Analogies in the media

When the media reports on an IPO, it creates awareness and helps make the organization more familiar to potential investors. One way that the media may seek to familiarize a new venture is with the use of analogies. Most research about language's impact on new venture outcomes has centered on language used by the entrepreneur or the new venture itself (Cornelissen and Clarke, 2010; Cornelissen et al., 2011; Martens et al., 2007; Navis and Glynn, 2010; Zamparini and Lurati, 2017). The assumption in this literature is that entrepreneurs must make the opportunities they are pursuing intelligible for both themselves and others. For a journalist to credibly report on an organization, some level of understanding is necessary to afford sense to the potential audience of the media, and analogies are likely to help in this process.

The literature on language and its ability to influence understanding (Nisbett and Ross, 1980) posits that verbally referencing other similar cases or observations can help create understanding and acceptance. Analogies are one specific characteristic of language that may aid in this

sensemaking process and thus may increase potential investors' understanding of a foreign new venture (Cornelissen and Clarke, 2010; Martins et al., 2015). Indeed, as Cornelissen and Clarke (2010) note, analogies play a powerful role in the sensemaking process, and we adopt their definition of analogy in the context of new ventures:

> Analogies, in the context of new ventures, involve literal references to cases and observations associated with entrepreneurship, market, or industry contexts, and ventures and businesses in general. An analogy, in other words, conjoins cases from the same category of observations. (p. 544)

Building upon the importance of an entrepreneur's use of analogy, naturally then, the media's use of analogies is likely to also have a strong potential to influence investors' perceptions of the new venture.

Moreover, since the media creates understanding by disseminating information more broadly (Pollock et al., 2008), if the media uses language encompassing analogies to give sense to stakeholders interested in a new venture, the impact of the media's language can be even more pronounced (Tetlock, 2007). As a few examples, Martins et al. (2015) note the value of analogy in clarifying business models and van Werven et al. (2015) argue that analogies play an important role in the legitimation process of a new venture. Hence, while we are unaware of any other study empirically testing analogies to describe new ventures in the media, the theoretical arguments for the effect of analogy are powerful: analogies used by the media are likely to clarify, familiarize, and legitimize organizations.

In the context of foreign IPOs, analogies can be an influential means for familiarizing external stakeholders with these unfamiliar organizations (Gavetti et al., 2005). Since US investors may not be customers or be aware of foreign IPOs' underlying business models, an analogy to a well-known US organization can be a significant advantage for the organizations—especially, in the role of attracting investors that may be interested in investing in foreign companies that have successful business models (Martins et al., 2015). In our study, nearly one out of ten foreign IPOs had analogies in the media referencing the organization as the "Google of Russia," the "Amazon of China," and so on (see Appendix 1). Without these references, the organizations would likely be less familiar to investors.

Consider Yandex (the Google of Russia) or Baidu (the Google of China). An article that simply reports that Yandex (or Baidu) is a new venture that provides search engines in Russia (or China) may induce some interest, but linking the company with Google both familiarizes and legitimizes its IPO in the United States (Cornelissen and Clarke, 2010; van Werven et al., 2015). Furthermore, such analogies may have an important effect on helping potential investors make sense of the foreign IPO's business model in an uncertain environment (Dane and Pratt, 2007; Martins et al., 2015).

Building on the arguments above, we contend that the media's use of analogy may help generate interest in a foreign IPO in two ways. First, it helps to reduce the foreignness of the IPO by making a direct comparison with a successful US organization, which, in turn, increases familiarity with the foreign IPO. Second, by comparing a foreign IPO with a well-established US organization, the analogy legitimizes the foreign IPO and reduces the liability of newness. Consequently, we expect increased investor attention in such foreign IPOs. Therefore,

Hypothesis 3. Foreign IPOs with analogies likened to well-known US organizations will attract higher levels of investor interest compared to other foreign IPOs without such analogies.

Methodology

Sample

We include all foreign firms that completed their IPOs on the National Association of Securities Dealers Automated Quotation (NASDAQ) or the New York Stock Exchange (NYSE) from 1 January 2001 until 31 December 2014. Our final sample consisted of 208 foreign IPOs, which collectively raised over US$60 billion in capital. Organizations that were found to be reverse mergers, and blank check companies were excluded.[1] This is important because of the surge in reverse IPOs by Chinese organizations (*Bloomberg Business Week*, 2011). Our sample spans 22 different countries of origin, with China (62%) and Israel (13%) as the two most common countries. Overall, only seven IPOs came from English-speaking countries (four from Canada and three from Britain). Finally, the primary sources of financial data were Security Data Corporation (SDC), the NASDAQ, the NYSE, and the IPO's prospectus (424B and F-1 SEC filing) of each organization. Media reports were obtained from Lexus Nexus and credible media outlets themselves.

Measures

Dependent variable: Turnover. An IPO's first day trading is considered an important measure of investor interest (Aggarwal, 2003; Kaustia, 2004; Pollock and Rindova, 2003). Having increased trading affords an IPO many subsequent benefits as it transitions from private to public, in addition to benefiting the IPO's stakeholders, such as underwriters and institutional investors, by offering liquidity (Cornelli and Goldreich, 2001). Therefore, we measured investor interest by the IPO's share turnover (Pollock and Rindova, 2003). This was calculated as the first day's total trading volume divided by the number of shares offered, creating the variable *turnover*. Accordingly, higher turnover illustrates increased investor interest. The data were obtained from Compustat within Wharton Research Database Service (WRDS).

Independent variables. To create the media sentiment and media volume variables, we collected news media about the foreign IPOs in the 30 days prior to the official IPO date. Specifically, we collected articles via the central library database Lexus Nexus and also supplemented results with our own searches at specific credible media outlets, including *Forbes*, *Investor's Business Daily*, *MarketWatch*, the *New York Times*, *Reuters*, *Seeking Alpha*, the *Wall Street Journal*, and the *Washington Post*. Moreover, because we contend that the positive or negative sentiment about the foreign IPOs impacts trading volume, we made sure that the media articles we collected focused on the actual company IPO, with two of the authors manually reading and cleaning each downloaded article to ensure that the text being analyzed was about the specific IPO. Our final cleaned media sample included 708 articles covering 208 foreign IPOs.

Prospectus sentiment. We followed exemplars to assess the sentiment of an IPO prospectus (Bednar, 2012; Love et al., 2017; Pfarrer et al., 2010; Zavyalova et al., 2012). Accordingly, we used the Linguistic Inquiry Word Count (LIWC) content analysis dictionary to examine the language in the prospectus. First, we analyzed each prospectus with the LIWC dictionary and calculated the ratio of positive to negative words by using QDA Miner 4.1 and WordStat 6.0. The language in each prospectus was categorized as positive to create the dummy variable (0=no, 1=yes), *prospectus sentiment* if the percentage of positive affective words to the total number of affective words was 65% or greater (Love et al., 2017; Zavyalova et al., 2012).[2]

Media sentiment. Following the same approach as detailed above in our analysis of the prospectus, we assessed each media article's ratio of positive to negative words from the LIWC dictionary. If the positive affective content was at least 65% of its total affective language, we created a dummy variable (0=no, 1=yes) to indicate that the article was positive. However, since there could be multiple media articles for each foreign IPO, a measure that adjusts for the volume of media is necessary. Again, following Bednar (2012), Love et al. (2017), Pfarrer et al. (2010), and Zavyalova et al. (2012), we used the Janis-Fadner coefficient of imbalance to evaluate the affective resonance of the media's language. The Janis-Fadner (1943) coefficient is commonly used in understanding the effect of the language used by the media (Deephouse, 2000; Love et al., 2017; Pfarrer et al., 2010, 2012; Pollock and Rindova, 2003). Specifically, the Janis-Fadner coefficient equals

$$\frac{\left(P^2 - PN\right)}{V^2} \text{ if } P > N \tag{1}$$

$$0 \text{ if } P = N \tag{2}$$

$$\frac{\left(PN - N^2\right)}{V^2} \text{ if } N > P \tag{3}$$

where P represents the number of positive articles, N the number of negative articles, and V the total number of articles. Accordingly, the Janis-Fadner coefficient ranges from −1 to 1, where −1 equals *all* negative media coverage, 0 equals neutral media coverage, and 1 equals all positive coverage, and the variable *media sentiment* reflects this calculated value.

Analogies. We measured the variable *analogies* as the count of media articles using an analogy to describe a foreign IPO before the close of the first trading day. Each of the analogies directly compared the foreign IPO with a prominent US organization. Appendix 1 provides the list of the analogies.

Control variables. We controlled for six organization-specific characteristics. Organizational size was measured by the variable *total assets* at the time of the IPO and was log transformed to address potential skewness. *Revenue* was measured by the total annual revenue reported for the last full year in the prospectus, and log transformed to remedy skewness. Since investors may be influenced by the organization's potential profits, and not just its sales, we also controlled for the level of *net income* as per the latest year shown on the prospectus; this variable was logged to correct for skewness (since we could not use the log of foreign IPOs with negative net income, we first assigned such organizations a value of 1 before transforming the variable). We also controlled for the human resource component with the variable *employees*, which was measured by the number of employees and was logged to address skewness.

Furthermore, we controlled for the potential risks associated with each organization, by including the variable *risk factors*, which measure the count of the number of risk factors listed in the organization's risk factor section of the prospectus (Certo et al., 2001). Likewise, the literature has shown that high-tech organizations may be evaluated differently than other organizations (Filatotchev and Bishop, 2002). We therefore included a dummy variable (0=no, 1=yes), *high-tech* if the organization was considered a high-tech organization based on its standard industry classification code and the description that was found in SDC platinum.

We also sought to control for other organizational characteristics that may influence interest in investing in shares of the organization. Thus, we assessed whether the chief executive officer (CEO) was also the chair of the board as some investors may be concerned if the CEO has too much control (Boyd, 1995). This variable is labeled *CEO duality* and was measured with a dummy variable (0 = no, 1 = yes). In addition, since some investors may be concerned with the organization's ownership, we obtained the ownership level of all top management team members (Arthurs et al., 2008), calculated as the cumulative percentage of ownership of all members and labeled as *ownership*. Moreover, we controlled for the *offer size*, measured as the amount of capital raised. This variable was logged to remedy skewness.

Organizations that are associated with a prestigious underwriter or are backed by venture capital (VC) may receive different reactions from investors (Carter and Manaster, 1990; Higgins and Gulati, 2003; Khoury et al., 2013). Accordingly, we created the variable *underwriter*, which measures the prestige associated with the underwriter by using an index developed by Carter and Manaster (1990). Because our data are from 2001 to 2014, we used the most recent rankings that are an updated version based on Loughran and Ritter's (2002) continuation of the rankings. The Carter–Manaster scores range from 0 (low prestige) to 9 (high prestige). We based this measure on the lead underwriter for each IPO, and the underwriter data wre taken directly from the prospectus to ensure the highest level of accuracy. We also coded if the IPO was VC-backed by analyzing the prospectus and creating a dummy variable (0 = no, 1 = yes) labeled *VC-backed*.

Since market conditions routinely change over time, the sentiment of investors may also change. Even within the same year, there can be substantial differences. Therefore, to proxy for the effect of "hot markets," we included the number of IPOs debuting in each month, creating the continuous variable *monthly IPOs* (Helwege and Liang, 2004). This helps to control for the general market sentiment because more IPOs debut in hotter markets, which could increase interest in the IPO. Finally, since our sample spans 22 different countries of origin, with varied risk profiles, we used the financial risk rating from the International Country Risk Guide's (ICRG's) ratings to control for country risks (Taussig and Delios, 2015). The ICRG financial risk rating spans from 0 to 50, where 0–24.5 indicates very high risk, and 40 or more indicates very low risk. Accordingly, the variable *financial risk* takes this calculated value.

Analytical approach

Since it is not likely that all foreign IPOs will receive media coverage, and those that do may be different from those that do not, we used Heckman's (1976) method to help correct for sample selection bias (Pollock and Rindova, 2003). This process requires two stages. In the first stage, we used a probit regression to predict whether the foreign IPO would receive media coverage. Importantly in this stage, an omitted variable is necessary to create a correlation between the two error terms between the two stages (Kennedy, 2006). We used the variable *Internet*, since being an Internet organization may attract more interest (Lee, 2001). We included the following other variables in the probit model: total assets, venture-backed, financial risk, underwriter, and the percentage of positive affect found in the prospect us. All of these variables have theoretical support for the potential to affect the likelihood that a foreign IPO receives media attention (see Appendix 2 for the results of this model).

In the second stage, we used ordinary least squares (OLS) predicting the outcomes. OLS is used because it provides the best linear unbiased estimator for our data. Furthermore, we used robust standard errors, as the residuals (wider to the right) indicated that there was heteroscedasticity. The robust standard errors helped remedy the inconsistency from the residual not being homoscedastic. Overall, the mean variable inflation factor for our full estimation model was 2.26, with the highest

individual factor being 6.18, indicating that multicollinearity was not a significant concern. Finally, since there are significant challenges and questions regarding the reliability of Heckman selection models in strategic settings (Certo et al., 2016), we also ran our analysis using the subset of foreign IPOs that received media attention. This approach helps create more of apples-to-apples comparison among foreign IPOs, without relying on the strict criteria of Heckman selection models.

Results

Table 1 provides our descriptive statistics and correlation matrix. All independent variables are positively correlated with the dependent variable turnover. However, the analogies have the strongest relationship. In addition, some of our controls also demonstrate a strong correlation with turnover, namely, the number of IPOs in the month.

Table 2 shows our regression models with share turnover as the dependent variable. Model 1 is the base model estimated without independent variables. This model shows that VC-backed foreign IPOs and foreign IPOs that debut in months with a higher number of IPOs are positively related to generating more investor interest. Model 2 introduces our measure of the sentiment of the IPO's prospectus and tests Hypothesis 1, which predicts that there will be higher levels of investor interest in foreign IPOs that have more positive language in their prospectus. The results indicate that IPOs with more positive sentiment in their prospectus have more related turnover ($p < 0.05$ in Models 2 and 5). This finding supports Hypothesis 1. Models 3 and 5 test the effect of IPOs with more positive media sentiment overall. Hypothesis 2 predicts a positive relationship between investor interest and foreign IPOs with positive media sentiment. The results show support for Hypothesis 2 ($p < 0.001$ in Model 3 and $p < 0.05$ in Model 5). This implies that organizations with more positive media sentiment attract more investors. Models 4 and 5 test our third hypothesis, predicting that analogies used by the media garner more investor attention. The results support Hypothesis 3 ($p < 0.001$ in Models 3 and 5).

While the results are statistically significant in direction, it may also be helpful to shed light on their implications in practical terms. Regarding Hypothesis 1, our results indicate that foreign IPOs with more positive sentiment are associated with 21% greater turnover (Model 5). In economic terms, this implies that in the case of the average offer size in our study (~US$300 million), our full model estimates an additional US$62 million worth of shares are turned over in the first day if the prospectus is positive overall (mean offer size × turnover). The media effect indicates that if a foreign IPO has all positive media sentiment, we would expect it to have 16% greater turnover (Model 5), compared to neutral coverage, and 32% greater turnover than foreign IPOs with all negative media coverage. Finally, for each article that reports about the foreign IPO using an analogy, turnover is expected to be about 8% higher (Model 5). Hence, we interpret these findings as demonstrating how language helps create *significant* "buzz" about foreign IPOs.

Robustness tests

To gain additional insights, we performed several robustness checks. First, we sought to address the potential bias that some foreign IPOs attract media attention but some do not, in an alternative way than using a Heckman selection instrument. Accordingly, we estimated the regressions restricting the sample to only foreign IPOs that receive media attention. This approach has benefits because it allows us to create a context with more of an apples-to-apples approach. As shown by Table 3, the OLS regressions are generally consistent with our full sample. Second, given that our dependent variable has an upper limit, a tobit regression model also is suitable, and we also provide these results for both the samples as another robustness check (see Appendix 3).

Table 1. Descriptive Statistics and Correlation Matrix.

	Variables	Std. Dev.	Mean	Min	Max	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
(1)	Turnover	0.76	0.86	0.03	6.75																		
(2)	Total assets[a]	1.50	4.46	1.08	10.17	0.00																	
(3)	Revenue[a]	1.82	3.72	0.00	9.35	−0.04	0.71																
(4)	Net income[a]	1.57	1.61	0.00	7.60	−0.11	0.41	0.56															
(5)	Employees[a]	1.69	6.38	1.38	11.94	0.03	0.27	0.32	0.16														
(6)	Risk factors	13.89	57.51	26.00	99.00	0.04	0.16	0.00	−0.07	0.12													
(7)	High-tech	0.49	0.38	0.00	1.00	−0.06	−0.03	−0.04	−0.04	−0.02	0.01												
(8)	CEO duality	0.50	0.56	0.00	1.00	0.02	−0.08	−0.07	−0.16	0.01	0.01	0.01											
(9)	Ownership	24.07	43.26	0.00	96.90	0.03	0.03	0.13	0.00	0.20	0.02	−0.09	0.05										
(10)	Offer size[a]	0.99	4.79	2.38	9.99	−0.06	0.55	0.45	0.34	0.21	0.13	−0.02	−0.03	−0.06									
(11)	Underwriter	1.74	8.21	0.00	9.00	0.13	0.29	0.28	0.14	0.25	0.07	−0.01	−0.07	−0.02	0.41								
(12)	VC-backed	0.47	0.66	0.00	1.00	0.06	0.09	0.04	−0.01	0.16	0.19	0.15	0.27	0.07	0.11	0.37							
(13)	Nasdaq	0.50	0.57	0.00	1.00	0.10	−0.26	−0.32	−0.30	−0.20	−0.14	0.13	−0.09	−0.15	−0.29	−0.17	−0.02						
(14)	Monthly IPOs	7.72	20.89	4.00	39.00	0.18	0.07	0.05	−0.04	0.07	0.08	−0.03	−0.06	0.01	0.19	0.13	−0.03	−0.03					
(15)	Financial risk	6.99	36.17	21.08	47.96	0.07	0.10	0.05	−0.12	0.08	0.18	0.12	−0.12	−0.05	0.02	0.00	0.00	0.09	0.16				
(16)	Prospectus sentiment	0.29	0.91	0.00	1.00	0.10	0.06	0.10	0.10	0.06	−0.01	0.07	−0.01	0.10	−0.01	−0.09	0.06	0.03	−0.07	0.02			
(17)	Media sentiment	0.43	0.10	−1.00	1.00	0.25	0.11	0.04	−0.02	0.02	0.10	0.09	0.07	−0.08	0.12	−0.01	0.10	0.05	0.00	0.14	0.13		
(18)	Analogies	2.38	0.56	0.00	17.00	0.35	0.26	0.21	0.10	0.01	0.14	0.14	−0.03	−0.06	0.39	0.09	0.08	−0.02	0.14	0.24	0.08	0.27	
(19)	Mills ratio	0.16	0.36	0.09	0.88	−0.14	−0.35	−0.25	−0.04	−0.24	−0.20	−0.07	0.08	0.01	−0.29	−0.50	−0.35	0.03	−0.18	−0.76	−0.09	−0.16	−0.28

Correlation coefficients above | 0.14 | are statistically significant at p < .05 or higher; N = 208. [a]Indicates variable was logged.

Table 2. OLS regressions on turnover for foreign IPOs.

Variables	Model 1	Model 2	Model 3	Model 4	Model 5
Total assets[a]	−0.01 (0.03)	−0.02 (0.03)	0.00 (0.03)	−0.02 (0.03)	−0.02 (0.03)
Revenue[a]	0.02 (0.03)	0.02 (0.03)	0.02 (0.03)	0.02 (0.02)	0.02 (0.02)
Net income[a]	−0.01 (0.02)	−0.01 (0.02)	−0.02 (0.02)	−0.02 (0.02)	−0.02 (0.02)
Employees[a]	−0.01 (0.02)	−0.01 (0.02)	0.00 (0.02)	0.00 (0.02)	0.00 (0.02)
Risk factors	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
High-tech	−0.04 (0.06)	−0.05 (0.06)	−0.06 (0.06)	−0.03 (0.06)	−0.05 (0.06)
CEO duality	0.00 (0.07)	0.01 (0.06)	−0.01 (0.06)	0.01 (0.06)	0.01 (0.06)
Ownership	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Offer size[a]	0.01 (0.04)	0.02 (0.04)	0.00 (0.04)	−0.08* (0.04)	−0.09* (0.04)
Underwriter	0.03 (0.03)	0.05† (0.03)	0.05† (0.03)	0.05† (0.03)	0.08** (0.03)
VC-backed	0.17* (0.08)	0.18* (0.08)	0.14† (0.08)	0.12 (0.08)	0.12 (0.07)
NASDAQ	0.05 (0.07)	0.02 (0.07)	0.04 (0.07)	0.01 (0.06)	−0.01 (0.06)
Monthly IPOs	0.01** (0.00)	0.01** (0.00)	0.01** (0.00)	0.01** (0.00)	0.01** (0.00)
Financial risk	0.00 (0.01)	0.01 (0.01)	0.00 (0.01)	−0.01 (0.01)	0.00 (0.01)
Prospectus sentiment		0.27* (0.11)			0.21* (0.10)
Media sentiment			0.26*** (0.07)		0.16* (0.07)
Analogies				0.08*** (0.01)	0.08*** (0.01)
Mills ratio	0.14 (0.53)	0.47 (0.53)	0.30 (0.51)	0.04 (0.49)	0.39 (0.49)
Constant	−0.15 (0.80)	−0.83 (0.83)	−0.40 (0.77)	0.47 (0.73)	−0.23 (0.76)
R^2	0.11	0.14	0.18	0.28	0.33
Δ in R^2		0.03	0.07	0.17	0.22
F-statistic	1.55†	1.98*	2.68***	4.73***	5.31***

N = 208, robust standard errors are reported in parentheses.
CEO: chief executive officer; VC: venture capital; NASDAQ: National Association of Securities Dealers Automated Quotation; IPOs: initial public offerings; OLS: ordinary least squares.
[a]Indicates variable was logged.
†$p < 0.10$, *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$.

In the full model for our media-only sample, one interesting finding emerges. The significance level of the IPO's prospectus sentiment is lower and the coefficient is only marginally significant ($p < 0.10$), and in the tobit model, the effect is no longer significant at the $p < 0.10$ level. One plausible explanation is that when there is media availability, investors may refer to the media for consensus in forming their perceptions or for moderating their opinions (Pollock et al., 2008; Pollock and Rindova, 2003). Moreover, a media article is much shorter than a prospectus, and few investors have the patience to read through the prospectus (if they do bother to read it at all). Hence, while the prospectus is still relevant, its influence may be contingent on the media's assessment. In other words, investors are likely using more information than the organization's language alone to form their opinions. In addition, the results help build on the notion that it is not only that the attracting media attention matters but also that more positive media sentiment leads to more investor attention.

Finally, we also explored finer-grained characteristics of the CEO and board members, such as whether the CEO was also the founder. We also controlled for founder ownership stakes alone (Certo et al., 2001) rather than just the cumulative ownership of the top management team. We explored including the independence of the board, among a host of other variables. In none of the cases did the independent variables' signs and significance levels change materially when estimating these alternative models.

Table 3. OLS regressions on turnover for foreign IPOs with media attention.

Variables	Model 1	Model 2	Model 3	Model 4	Model 5
Total assets[a]	−0.03 (0.03)	−0.05 (0.03)	−0.02 (0.03)	−0.06† (0.03)	−0.06† (0.03)
Revenue[a]	0.04 (0.03)	0.04 (0.03)	0.03 (0.03)	0.05† (0.03)	0.05† (0.03)
Net income[a]	−0.03 (0.03)	−0.03 (0.03)	−0.03 (0.03)	−0.03 (0.03)	−0.03 (0.02)
Employees[a]	−0.02 (0.02)	−0.02 (0.02)	−0.01 (0.02)	−0.01 (0.02)	−0.01 (0.02)
Risk factors	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
High-tech	−0.03 (0.07)	−0.04 (0.07)	−0.05 (0.07)	−0.03 (0.06)	−0.04 (0.06)
CEO duality	−0.05 (0.07)	−0.05 (0.07)	−0.07 (0.07)	−0.04 (0.07)	−0.05 (0.06)
Ownership	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Offer size[a]	0.03 (0.04)	0.03 (0.04)	0.01 (0.04)	−0.09* (0.04)	−0.09* (0.04)
Underwriter	0.02 (0.03)	0.03 (0.03)	0.04 (0.03)	0.04† (0.02)	0.06* (0.02)
VC-backed	0.21* (0.09)	0.21* (0.08)	0.15† (0.08)	0.18* (0.08)	0.15† (0.08)
NASDAQ	0.02 (0.08)	0.00 (0.07)	0.01 (0.07)	0.00 (0.07)	−0.02 (0.07)
Monthly IPOs	0.01* (0.00)	0.01† (0.00)	0.01* (0.00)	0.01* (0.00)	0.01 (0.00)
Financial risk	0.00 (0.01)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Prospectus sentiment		0.25* (0.11)			0.19† (0.10)
Media sentiment			0.26*** (0.07)		0.14* (0.07)
Analogies				0.09*** (0.01)	0.08*** (0.01)
Constant	0.05 (0.35)	−0.10 (0.36)	−0.03 (0.34)	0.68 (0.33)	0.48 (0.34)
R^2	0.13	0.16	0.21	0.34	0.38
Δ in R^2		0.03	0.08	0.21	0.25
F-statistic	1.56†	1.93*	2.68***	5.00***	5.30***

N = 165, robust standard errors are reported in parentheses.
CEO: chief executive officer; VC: venture capital; NASDAQ: National Association of Securities Dealers Automated Quotation; IPOs: initial public offerings; OLS: ordinary least squares.
[a]Indicates variable was logged.
†$p < 0.10$, *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$.

Discussion

Contributions

This study contributes to discussions about the importance of language for new ventures in two ways. First, our findings extend prior research by showcasing the importance of the language used by both the new venture itself and by others outside of the organization, such as the media. Indeed, we find strong support that more positive media sentiment leads to a greater level of investor attention, and *some* support for the importance of positive language in the prospectus. Moreover, we also show the positive impact of analogies used by the media to increase attention and familiarize potential investors about foreign IPOs. By studying language originating from the organization and the media within the same context and by looking at a specific language tactic, we add novel insights to the literature studying the power of language.

Specifically, our study is one of the first that investigates the effect of analogies when they are used by an infomediary, such as the media. In doing so, our findings suggest that while having overall positive sentiment in the media is tied with increasing interest, more nuanced aspects of the language it uses, such as analogies, can *potentially* be more impactful than articles that simply convey more positive sentiment. In fact, our results (in Tables 2 and 3) show that the magnitude and significance of the effects of analogies remain highly consistent between the partial

model and the full model, whereas those of prospectus sentiment or media sentiment weaken in the full model (and in our robustness checks, Appendix 3, the prospectus effect is no longer significant).

In addition, our study goes beyond past media studies that have looked at the effect of positive media sentiment by aggregating organizations with and without media coverage. In contrast, our approach demonstrates that within the subset of IPOs that have media coverage, the language in the media matters. Hence it is not just that *all* news is good news, but rather more positive overall media sentiment leads to more investor interest when looking only at foreign IPOs that have media coverage. This finding builds on the notion that studies examining the effect of language used by the media may benefit from settings that take more of an apples-to-apples approach to understand the impact of language since the media does not report broadly about each organization.

Our second contribution is that by simultaneously explicating the importance of the language in an IPO's prospectus (Martens et al., 2007) and the media's ability to shape IPO outcomes (Pollock et al., 2008; Pollock and Rindova, 2003), we add insight to how organizations may overcome the liabilities of newness and foreignness. Our findings support existing research arguing that the language originating from both inside and outside of an organization can help it better engage with stakeholders such as investors, showing that language is salient in reducing challenges stemming from the liability of newness. Furthermore, while our arguments on analogies are tied more to how foreign IPOs reduce foreignness, conceptually analogies and other language tactics should be helpful for domestic IPOs due to their role in legitimizing new ventures (i.e. reducing their newness). Finally, our article is among the first to show language's role in reducing the negative effect of the liability of foreignness. Overall, we find language is quite powerful for newer, foreign organizations.

Managerial implications

Some managerial implications can be drawn from our study. First, managers, especially managers at younger foreign organizations interacting in a non-native financial market, need to be aware that using coherent, positive language can help create a powerful and understandable story that is valued by investors (Navis and Glynn, 2011), and this language is likely to correspond to higher levels of investor interest. However, it is essential that managers recognize the potential value of attracting investor interest and ensure that they use it to their advantage.

For example, Guoqing Li, the CEO of Dangdong, whose organization was commonly referred to as the "Amazon of China" in the media, seemingly did not recognize the value of having an analogy with Amazon. Shortly after Dangdang's IPO, he made negative comments about Morgan Stanley (one of the underwriters) on the Chinese website Sina Weibo. The complaint made by Guoqing Li about Morgan Stanley was subsequently translated and publicized by the US media:

> [Expletive] bastards (referring to Morgan Stanley) knew beforehand the market cap would reach $2 billion and put the price at $16 with market cap of $1.1 billion…The comments should serve as a warning to other Chinese companies seeking a U.S. listing. (*Business Insider*, 2011)

Having the analogy of the "Amazon of China" helped attract strong investor interest in Dangdang, ultimately leading the stock price to almost double in its debut. The CEO complained that there were high levels of investor interest and that his company missed out by raising less capital than it could have given the large amount of interest in the company. In contrast, some other foreign IPOs such as Youku, dubbed as the "YouTube of China," used their high levels of investor interest and the "buzz" generated from the media to their advantage. For instance, from the time of Youku's filing to

its IPO debut, it raised both the shares sold and the valuation per share (presumably from the positive sentiment in the media and the positive analogy), helping the company generate more capital with its IPO. Subsequently, the high interest from Youku's successful IPO helped build momentum, allowing the organization to complete a secondary market offering at more than three times the price of the initial offer. Therefore, Youku used the continued interest to raise capital at an even higher value than months earlier.

The difference in Li's reaction to capitalizing out on the elevated investor interest damaged Dangdang's relationship with the investment community.[3] Because of Dangdang's increased visibility and existing interest in the company from the media, Li's negative commentary on Sina Weibo was circulated by the US media and many began to question Li's leadership. A key takeaway is that foreign managers, especially, those from countries that have reduced press freedoms, need to understand what powerful effects the US media can have. Li's negative reaction might have longer-term negative implications for the organization's success, in terms of its strategy for raising additional capital and forming strategic alliances. Therefore, if Li had been aware of the enthusiasm of investors gained from the analogy to Amazon and the media's legitimation of his organization with the use of the analogy, he might have pushed for a higher valuation. Alternatively, he could have used the media publicity gained from the analogy to do a secondary offering, as Youku did.

Limitations and future research

Although we begin to gain insight into the complex dynamic between parties involved in the IPO process, we focus on the specific case of foreign IPOs debuting on a US exchange. Given the differences in institutions and perceptions of foreign IPOs, domestic IPOs in the United States may face a different set of challenges (Peng and Su, 2014; Rindova et al., 2007). While our results indicate that more positive media sentiment and analogies used by the media can be effective in arousing the interest of investors in foreign IPOs, the same language may be less effective for domestic IPOs because investors may be more familiar with domestic organizations. Therefore, different types of language such as metaphors may be more relevant in other settings. Further studies are needed to explore the relationship between language use and domestic IPO performance.

Another limitation is the fact that generating investor interest is just one of the many potential challenges that foreign IPOs will face when going public on a US stock exchange. How foreign organizations adapt to the pressure of increased attention and communicating to Wall Street and investors needs further research to better understand the longer-term implications (Peng and Su, 2014). As noted, some organizations such as Youku used the increased interest to their advantage, while other organizations such as Dangdang may have missed an opportunity to capitalize on the increased attention. This presents an opportunity to study how the language used in the IPO processes can affect an organization's subsequent strategic outcomes such as their alliance formation, partnerships, and other factors that may drive its success.

Finally, while our findings are by default context specific, they may only be generalizable to domestic organizations to the extent that the new ventures have business models that sound "foreign" or have ideas that are innovative and lack substantial awareness or acceptance. Indeed, in our context, it is intuitive that an analogy to a US organization helps familiarize the foreign firm, however, theoretically an analogy may also delegitimize an organization. For example, during the popular IPO of Snapchat, the firm was often depicted with analogies to Facebook and Twitter. The former analogy made positive comparisons, whereas the latter highlighted the challenges related to the IPO. Hence, while clearly outside the topic of our study, the notion of analogy to convey sentiment for domestic IPOs also seems like fertile ground for future research.

Conclusion

This study contributes novel insights regarding the importance of language within the context of foreign IPOs. Our results suggest that investors may be attracted to foreign organizations when they use more positive language, receive more positive descriptions in the media, and are connected with well-established, legitimate organizations by analogy. These results help further develop the burgeoning literature on language and its impact in shaping organizational outcomes.

Notes

1. In a reverse merger, the company doing the deal injects itself into a dormant shell company and then takes control over the shell company. A blank check company is a developmental stage company that has neither an established business plan nor a business plan to engage in a merger or acquisition with another company. By analyzing firm prospectuses, we were able to check for these potential problems. We began with 2001 because foreign IPOs did not have to file their prospectus online prior to this period.
2. We also checked with other thresholds (60% and 70%), and our results remain robust.
3. After the CEO's rage-filled tweets, Dangdang was initiated with analyst coverage at a price target below its current stock price, and Morgan Stanley did not start coverage on the stock after the quiet period ended (sending a message to the investment community that the company may not be worth following).

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Author biographies

Dane P Blevins is an Assistant Professor of strategy at The University of North Carolina at Greensboro. He received his PhD from The University of Texas at Dallas. Before joining academia, he worked in investment banking at Credit Suisse. His main research interests include new ventures, corporate governance, initial public offerings, and methodological issues.

Amy Ingram is an Assistant Professor of strategy and entrepreneurship at Clemson University. She received her PhD from the University of Cincinnati. Her research builds upon the premise that organizations, both established and emerging, are embedded in a hypercompetitive landscape that fosters a variety of tensions and challenges for organizations. Moreover, the perceived realities of organizations, the actors embedded in them, and the market emerge from dynamic interactions, and these interactions drive stakeholder's evaluations which can hinder or enhance firm outcomes. Stemming from these assumptions, Dr Ingram's work focuses on how firms, executives, and entrepreneurs use language and other tactics to manage these social perceptions.

Eric WK Tsang is the Dallas World Salute Distinguished Professor of Global Strategy at the Naveen Jindal School of Management, The University of Texas at Dallas, and is also a fellow of the Academy of International Business. He received his PhD from the University of Cambridge. Before joining academia, he was a corporate banker at HSBC in Hong Kong. His main research interests include organizational learning, strategic alliances, initial public offerings, corporate social responsibility, and philosophical analysis of methodological issues. He has published widely in leading business journals, such as *Academy of Management Journal, Academy of Management Review, Journal of International Business Studies, Marketing Science, MIS Quarterly, Strategic Management Journal*, and *Strategic Organization*. His publications have been well cited by fellow researchers. For example, his article "Social Capital, Networks, and Knowledge Transfer" (with Andrew Inkpen) is the winner of the 2015 *Academy of Management Review* Decade Award.

Mike W Peng is the Jindal Chair of Global Strategy at The University of Texas at Dallas. He is also a National Science Foundation's CAREER award winner and a fellow of the Academy of International Business. He received his PhD from the University of Washington. His research interests are global strategy, international business, and emerging economies, with a theoretical focus on the institution-based view. He has authored over 140 journal articles and 5 books. His textbooks, *Global Strategy, Global Business*, and *Global*, have been translated into Chinese, Portuguese, and Spanish, and are used in over 40 countries. This article is his third contribution to *Strategic Organization*.

Appendix I

Analogies in the media.

IPO Date	Organization name (home country)	Analogy organization
11 December 2014	Momo (China)	Tinder
29 September 2014	Alibaba (China)	Amazon
20 June 2014	Markit (England)	Bloomberg
22 May 2014	JD (China)	Amazon
17 April 2014	Sina Weibo (China)	Twitter
26 March 2014	King (England)	Zynga
31 October 2013	58.com (China)	Craigslist
17 September 2011	Tudou (China)	YouTube
11 May 2011	Jiayuan (China)	Match
04 May 2011	Renren (China)	Facebook
30 March 2011	Qihoo 360 (China)	McAfee
25 March 2011	Yandex (Russia)	Google
08 December 2010	E-Commerce China Dangdang (China)	Amazon
08 December 2010	Youku (China)	YouTube
03 November 2010	SodaStream (Israel)	Green Mountain Coffee
01 October 2010	ChinaCache (China)	Akamai Technologies
27 July 2007	Lululemon Athletica (Canada)	Under Armour
09 July 2007	MercadoLibre (Argentina)	eBay
05 August 2005	Baidu (China)	Google
28 October 2004	eLong (China)	Expedia
28 September 2004	51job (China)	Monster
08 December 2003	Ctrip (China)	Expedia

IPO: initial public offering.

Appendix 2

Probit model predicting media coverage.

Variables	Probit model
Total assets	0.06 (0.07)
Internet	0.17 (0.31)
VC-backed	0.05 (0.23)
Financial risk	0.04** (0.02)
Underwriter	0.12* (0.06)
Prospectus sentiment	−0.50 (0.75)
Constant	−1.94* (0.76)
Log-likelihood	−97.68
χ^2	16.63*

VC: venture capital.
*$p < 0.05$, **$p < 0.01$.

Appendix 3

Tobit regressions.

Variables	Full Sample	Media only
Total assets[a]	0.03 (0.05)	0.01 (0.06)
Revenue[a]	−0.04 (0.04)	−0.01 (0.05)
Net income[a]	−0.02 (0.04)	−0.03 (0.04)
Employees[a]	0.02 (0.03)	0.01 (0.03)
Risk factors	0.00 (0.00)	0.00 (0.00)
High-tech	−0.15 (0.09)	−0.19[†] (0.11)
Dual role	0.07 (0.10)	0.02 (0.12)
Ownership	0.00 (0.00)	0.00 (0.00)
Offer size[a]	−0.26*** (0.06)	−0.32*** (0.07)
Underwriter	0.11** (0.03)	0.13** (0.04)
VC-backed	−0.09 (0.11)	−0.10 (0.14)
NASDAQ	0.08 (0.10)	0.12 (0.12)
Monthly IPOs	0.02* (0.01)	0.01 (0.01)
Financial risk	−0.01 (0.01)	0.00 (0.01)
Prospectus sentiment	0.25 (0.16)	0.24 (0.18)
Media sentiment	0.32** (0.11)	0.33** (0.12)
Analogies	0.13*** (0.02)	0.14*** (0.02)
Constant	0.66 (0.48)	0.81 (0.60)
Observations	208	165
χ^2	73.65***	64.81***
Log-likelihood	−201.43	−168.95

[a]Indicates variable was logged.
VC: venture capital; NASDAQ: National Association of Securities Dealers Automated Quotation; IPOs: initial public offerings.
[†]$p < 0.10$, *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$.