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Corporate stakeholder engagement

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First Impressions: Stakeholder Networks, Proactive Engagement and Stakeholder Opinions of Corporations

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January 2013

ABSTRACT

Stakeholders receive information about a firm's activities through the media, from other stakeholders, and from the company. We study the relative weight of four different mechanisms through which stakeholders form their opinion of corporations: (1) rational processing of media information; (2) sifting of information received through social networks; (3) following of opinion leaders; and (4) impression formation through interaction with the company. We design our analysis to assess the relative importance of the four mechanisms using data from 4,652 social, political and economic stakeholders (government representatives, communities, non-governmental organizations, unions, etc.) that have voiced a position in relation to one of 26 gold mining projects around the world. We show that stakeholders' *first* impressions of companies are shaped by the media and by direct interactions initiated by the company. These results highlight that through proactive stakeholder engagement companies can go a long way in terms of managing their reputations and building positive social capital with stakeholders.

> *Reputation is to companies what health is to individuals; we may claim that it is our most important possession, but we pay little attention to it until a crisis hits.* (Diermeier, 2011: 10)

Most management practitioners and scholars agree that a company's reputation (Fombrun & Shanley, 1990; Fombrun, 1996; Diermeier, 2011) and its relationship with its stakeholders (Freeman, 1984) affect the company's operations and performance. How different stakeholders view firms may affect their operations through channels as diverse as employee motivation, supplier relations, consumer and investor behavior, enforcement of public regulations, and NGO activism, and consequently shape these firms' performance. Yet, we know little about how people in general, and how specific stakeholders in particular, form their impressions of a company. What shapes the impressions stakeholders hold of corporations? Is it the company's image as portrayed in the media? Is it the opinions of other stakeholders that speak in close proximity? Or is it the frequency and tenor of interactions with the company? We hope to offer compelling answers to these questions by investigating how a diverse set of economic, social and political stakeholders—employees, local communities, government authorities, non-governmental organizations—form their first impressions about 19 gold mining companies operating around the world.

We focus our attention to first impressions because they tend to be sticky, and thus matter more (Rabin & Schrag, 1999). A large and growing body of psychology research suggests that once people have formed an opinion, they process subsequent information in ways that ensure consistency with their initial interpretation or impression, a phenomenon known as "confirmation bias" (Nickerson, 1998; Lord, Ross & Lepper, 1979; Mynatt, Doherty & Tweney, 1977). This cognitive bias seems to inhibit rational actors from using new information to update their beliefs

according to Bayes' Rule, as most economists assume, and therefore places disproportionate weight on initial beliefs, or first impressions.

Stakeholders receive information about a firm's activities through the media, from other stakeholders, and directly from the company. While most stakeholders are likely to receive information through multiple channels over the lifetime of a project, they *first* hear about the company through one of these avenues. We study the relative weight of four different mechanisms of opinion formation: (1) rational processing of media information (Bayesian upgrading of beliefs); (2) sifting of information received through social networks; (3) following of opinion leaders; and (4) impression formation resulting from direct or indirect interaction with the company. While the first three mechanisms are "external" to the company, the last allows room for strategic stakeholder engagement. We design our analysis to assess the relative importance of the four mechanisms above and pay special attention to the impact of corporate proactive behavior in the domain of stakeholder engagement.

We assess the relative strength of these alternative mechanisms of impression formation on the basis of an extensive original dataset of more than 51,000 hand-coded media events that reflect the interactions between 19 gold mining companies and a wide range of social, political and economic stakeholders, as well as the interactions between these stakeholders. From this data, we extract information on the first impressions of 931 unique stakeholders, which we correlate with measures capturing the four mechanisms examined: (1) the image of the company in the media, (2) the information available about the company through social networks, (3) the positions of opinion leaders vis-à-vis the company, and (4) the level of the company's proactive engagement towards individual stakeholders.

Our findings provide strong confirmation for two of the four mechanisms suggested. Perhaps not surprisingly, we show that the image of a company in the media plays a very important role in shaping stakeholder's first impressions of the company. We also find very robust evidence that corporate proactive engagement with stakeholders makes a significant difference. Firms can shape their reputations by proactively engaging with stakeholders rather than passively waiting for opinions to form. They can move the marginal stakeholder away from the mean tendency by interacting with them. Our results show that a unit increase in proactive engagement with stakeholders has just about the same impact as a unit increase in the company's image in the media. These results hold in a wide range of specifications. By contrast the information available to stakeholders through their social networks and through opinion leaders does not play a role in shaping first impressions of corporations.

The questions we ask link into several related, but disjoint bodies of research across multiple disciplines. The original inspiration for the research lies with stakeholder theory which suggests that firms derive value from effective management of their stakeholder relations (Freeman, 1984; Post, Preston & Sachs, 2002; Donaldson & Preston, 1995). We contribute to this theory by empirically demonstrating the importance of the timing of stakeholder engagement (i.e., the need for *proactive initial* engagement with stakeholders).

We also draw from and build on research on corporate reputation (Fombrun & Shanley, 1990), and hope to complement it in important ways. In contrast with the corporate reputation literature which conceptualizes reputation as a firm-level construct, we investigate *individual* stakeholders' opinions of the firm. Thinking about how different stakeholders form their impressions of the company allows for a more nuanced understanding of the company's image as perceived by

different audiences. In today's business environment, it is not uncommon for a firm to have a strong positive reputation among a subset of stakeholders (e.g., investors, analysts, and employers) and a negative one in the eyes of others (e.g., regulators, NGOs, local communities). By analyzing the dynamics in a system of interconnected stakeholders with heterogeneous opinions we provide key insights into the process of development and maintenance of corporate reputations or stakeholder capital. Within this dynamic process, we draw particular attention to the process by which stakeholders' first impressions are shaped.

At the organizational level, researchers have long investigated how individuals try to manage the impressions others form of them (see Gardner & Martinko, 1988, for a review). Scholars of impression and reputation management have explored the use of symbolism and rhetoric in managing external perceptions primarily after controversial events (Elsbach, 1994; Elsbach & Sutton, 1992). We hope to contribute to this literature by exploring mechanisms that shape the first opinions of stakeholders irrespective of conditions.

Mechanisms of first-impression formation

Most companies today operate in highly complex and uncertain settings. In such environments, the disclosure of information, both positive and negative, can have multiple and frequently unforeseen ramifications. Take the example of a small Canadian mining company, Gabriel Resources, who plans to build a large open-pit gold mine in Transylvania, in the heart of Romania. When the company first announced its proposal, few would have anticipated that the Romanian Orthodox Church, French archeologists, the Hungarian government, and actress Vanessa Redgrave would at some point weigh in on the subject. Our study is designed to explain

not why they did, but rather what influenced their first expressed opinions on the project and the first opinions of those that learned about the project from them. Did the Romanian Orthodox Church form a position simply based on the information available on the subject in the media? Was its first opinion influenced by closely connected stakeholders that were already vocal on the topic? Or was it the result of a direct or indirect, positive or negative, interaction with the company?

These simple questions highlight several alternative and possibly complementary mechanisms of opinion formation. First, stakeholders use information that is publicly available—that is, reflected in the media—to update their beliefs (change them from neutral to positive or negative positions) using Bayes' Rule. When this mechanism is at work, stakeholders' beliefs are most likely going to mirror the sentiment reflected in the media at the time their beliefs are formed. We posit that *when stakeholders form their opinions of a corporation on the basis of rational processing of media information (Bayesian updating), stakeholders' first impressions closely reflect the media's aggregate or average portrayal of the company, ceteris paribus (H1: Baseline hypothesis).* To be sure, we acknowledge in our empirical analysis that stakeholders have different agendas which influence how they interpret the information available in the media. Greenpeace is highly unlikely to adopt a positive opinion of a mining company, even when the media portrays it in a favorable light. By contrast, the representative of a mining association most likely would not go very far in criticizing one of its members, no matter how negative the media coverage.

Often, however, stakeholders obtain information about companies from other stakeholders. When this is the case, the information partly reflects the opinion of the actor who provides it.

The first impression of the stakeholder who learns about the company from others is most likely a function of the opinions of proximate actors and her relationship with them (cooperative or conflictual). We examine the influence of social networks on opinion formation in two ways. First, we allow for the possibility that stakeholders collect information from all the stakeholders with whom they are connected and weigh it according to the tenor of their relationship. Information provided by ties with whom the stakeholder has cooperative (positive) relations is weighted positively, while information provided by ties with whom the stakeholder has conflictual relations is weighted negatively. Thus, we argue that *when stakeholders form their opinions of corporations on the basis of information available in close proximity in their social network, stakeholders' first impressions reflect the opinions of stakeholders with whom they are connected, weighted by the tenor of their tie (H2).*

Alternatively, even stakeholders who are connected with multiple other actors may adopt the opinion of influential actors to whom they are connected. Theories of public opinion formation model a two-step flow of information, with "opinion leaders" serving as intermediaries in the propagation of information between the source (usually the mass media) and the broader public (Katz & Lazarfeld, 1955; Lazarfeld, Berelson & Gaudet, 1968). In this view, stakeholders are more likely to be influenced by the positions of opinion leaders, or "influentials" (Merton, 1968; Watts & Dodds, 2007). We therefore examine if *when stakeholders form their opinions of corporations following opinion leaders, stakeholders' first impressions reflect the opinions of the more influential stakeholders with whom they are connected (H3).*

All the mechanisms suggested above are "external" to the company. Information is disclosed by the company or by other monitors and reaches individual stakeholders through the media (H1),

through stakeholder networks (H2), or through opinion leaders (H3). We consider one additional and final mechanism that involves direct or indirect interactions between the company and stakeholders. Through day-to-day operations, project developments, and public relation efforts, companies come in contact with various stakeholders. They employ people, apply for permits to government authorities, criticize or collaborate with NGOs, or build a school for the local community. Each one of these activities provides an opportunity for the company to manage the impressions of the stakeholders with whom it interacts.

Impression management tactics are frequently used by managers to influence stakeholder perceptions (Ginsel, Kramer & Sutton, 1992). We focus our attention towards interactions that are initiated by the firm, that is, events in which the firm behaves *proactively* (acts or expresses a positive or negative opinion) towards the stakeholder. We examine whether proactive behavior has a discernible effect on the stakeholder's first impression. We conjecture that *when stakeholders form their opinions of corporations based on direct interactions with the company, stakeholders' first impressions reflect the tenor of these interactions (H4).* The study of proactive behavior has been primarily located at the organizational level (Crant, 2000; Parker, Williams & Turner, 2006; Griffin, Neal & Parker, 2007; Grant & Ashford, 2008; Grant & Parker, 2009; Grant, Gino & Hofmann, 2011) and more recently extended to the domain of environmental strategy (Sharma & Vredenburg, 1998; Aragon-Correa & Sharma, 2003; Buysse & Verbeke, 2003; Bansal & Clelland, 2004). Our study will complement this research through an examination of proactive behavior in the domain of stakeholder impressions management.

Stakeholder opinions dataset

We evaluate these hypotheses on the basis of media-based information on the opinions of *all* relevant social, political and economic actors that have expressed a position towards one of 26 different gold mines or gold mine proposals owned by 19 publicly traded mining firms in 20 countries around the world. This original data was collected in several phases. First, we identified all publicly traded mining firms on the Toronto Stock Exchange who own and operate one, two or three mines outside of the United States, Canada and Australia that have reached the stage of a feasibility study. This sampling criterion allows us to (1) draw upon strict Canadian disclosure requirements for financial and operating data of mining firms to provide sufficient information to control for market value and the intrinsic value of the gold resource; and (2) to analyze stakeholder networks that are defined by a clear issue (the mine) with limited overlap with networks formed around parallel issues or firm operations.

Second, we collected the data on all stakeholder relations for all 26 mines in our sample. We first created a corpus of all news articles referencing the mine. Within each article, every sentence regarding a stakeholder-firm or stakeholder-stakeholder interaction was coded according to a detailed coding protocol that identified "who did what to whom." Our coding captured the source (who), the action reflected in the verb or verb phrase (did what), and the target (whom). We then used fuzzy matching techniques to map all verbs and verb phrases onto a 20-point cooperation-conflict scale that is widely used in international conflict studies and that we modified to closer match events in a business environment. Our resulting dataset comprises over 51,000 stakeholder events which capture stakeholders' opinions of the firms in our sample,

firms' behavior towards these stakeholders, and the social networks that link them. The data includes 4,652 unique stakeholders active across the different mines.

Third, we classified each of the 4,652 stakeholders according to their type (political, social or non-governmental, and economic) and 26 different subtypes (e.g., ministry, government agency, military, union, non-governmental organization, ethnic group, etc.), nationality, and location relative to the mine (local, provincial, national, neighboring country, continental, and international). Specifically, of all stakeholders, 1971 are political (government, inter-governmental and military actors), 1055 are economic (firms, employees, industry associations, and unions), and 1626 are social (community and non-governmental actors).

Empirical model

The focus of our study is the formation of first impressions. Our stakeholder opinion dataset allows us to identify the first time each stakeholder expressed an opinion about the firm or acted in a way that denoted support or opposition towards the mining project. Because stakeholder interactions are coded on a conflict-cooperation scale ranging from -9 to +10, our dependent variable reflects stakeholder opinions on the same 20-point scale. Similarly, all other variables that reflect the interaction between two stakeholders or the opinion of a specific stakeholder on the focal company are coded on the same scale.

We construct our dependent variable (*first impression*) by selecting only the stakeholder events in which the focal company is the target of an action initiated by or an opinion expressed by a stakeholder, and identify the first such event associated with each stakeholder. There are 931

such observations—that is, 931 different stakeholders express their opinions about one of the 19 mining companies who are developing or proposing to develop gold mining projects around the world, and we capture the first moment when they do this. While our final results reflect an analysis of these 931 first impressions, it is important to mention that we leverage the full breath of the dataset—i.e. the relationships that exist between all the 4,652 actors and how they change over time—in the construction of the independent variables, as described below.

The key independent variables map directly onto the four opinion formation mechanisms examined. The first mechanism suggests that stakeholders form their opinion on the basis of information available in the media. To capture the portrayal of the firm in the media at the time when the stakeholder forms her first impression, we calculate a moving average of the level of conflict/cooperation across the stakeholder events that took place during a 3-month period leading up to the moment when the stakeholder expresses her opinion (*media image, past 90 days*). The measure is designed to weigh more heavily more recently reported events and more frequently reported events, using a discount factor that ranges between 0.99 and 0.999.

To assess the robustness of our measure, we experiment with different time periods ranging between one month and one year and with alternate weighted averages of stakeholder events. We also include a simpler measure in our analysis (*media image at time of last report*) which captures only the level of conflict/cooperation most recently reported in the media. These measures allow for different alternatives. The first measure builds upon Bayes' rule, which posits that people use new information to "update" their assessment of an issue by refining their previous held belief to reflect the newly acquired information. The second measure builds upon a more crude assumption, specifically that when new information becomes available people

discard old information completely and replace it with the newly acquired data. This second measure is therefore an extreme case of the first one, when past information is fully discounted, allowing only new information to shape people's beliefs.

The timing of publicizing information about the company and its projects critically affects the formation of first impressions among stakeholders. We take this very serious and specify our measures to allow for alternative mechanisms of weighing information available through the press. In addition, we also control for the time elapsed since the first press mention (that is, the amount of time the mine proposal has been a media issue) and the cumulative number of press mentions which indicates the salience of the mining operation in the news.

The second mechanism proposed suggests that stakeholders form their opinions of the basis of information obtained through their social networks. To evaluate the extent to which this happens, we generate different measures of *connected ties' opinions*. The first such measure (*connected ties' opinions, unweighted*) is the average of the opinions about the mining company held by all the actors with whom the focal stakeholder is tied. This implies that the stakeholder is aware of his connections' opinions about the company and uses them to inform her own position. The second measure (*connected ties' opinions, weighted by affect*) weighs the information on the opinions of all actors with whom the focal stakeholder is connected by the strength of the tie that links them and the sign of their tie. Thus, this measure captures the fact that stakeholders who inform their opinions based on those of others will reflect positively friends' positive opinions of the firm *as well as* foes' negative opinions, and will reflect negatively friends' negative opinions and foe's positive opinions of the firm. Thus, this second measure modifies the first measure to reflect what is, in our view, a more realistic depiction of how people assess information they

obtain through their social network. Rather than using a simple average of all the ties' opinions, these are weighed by how much the focal actor likes or cooperates with his ties.

The third mechanism we suggest builds directly on theories of public opinion formation, which highlight the critical role of opinion leaders or "influentials." To assess it, we use network measures of status (Bonacich, 1987) to identify the degree of influence of each stakeholder in close proximity to the focal stakeholder, and capture their opinions with the two variables. The first, *opinion leaders (weighted by status and affect)* weighs the opinion of a stakeholder's ties by their degree of influence and by the sign of the relationship between them. The second measure, *opinion leader's position* reflects only the opinion of the *most* influential stakeholder who has expressed an opinion towards the mining company or its project at the time. To ensure robustness, we also consider two alternative measures of this variable. The first imposes an additional restriction that the opinion leaders belong to the same stakeholder category as the focal stakeholder. In this scenario, stakeholders that are identified as "social" are believed to take their clues from other social stakeholders, even when they are connected with highly influential political or economic actors. The second alternative measure restricts the choice set to opinion leaders with whom the focal stakeholder is positively tied. The results do not change when we use these alternative measures.

The final mechanism considered in our study highlights that firms can shape stakeholders' impressions through direct and indirect interactions with them. We examine whether firms that proactively engage stakeholders are more likely to imprint an impression on them that is a close reflection of the tenor of the engagement. To evaluate this mechanism, we construct a measure *proactive engagement* as a moving average of all events in which the focal stakeholder was the

target of the firm's actions or expressions during the last 90 days. This variable is constructed on the basis of the same formula described above for measuring media image and weighs more heavily more recent proactive engagements. To check the robustness of this metric, we alternate with a simpler measure that averages all the engagements initiated by the company up to the point when the focal stakeholder expresses her opinion. The results (not shown) are robust to this alternative specification.

In addition, we include in our analysis a wide range of variables that control for stakeholder and firm characteristics. At the stakeholder level, we specify its type (social, political or economic) or subtype, and its location relative to the mine (local, national, etc.). As mentioned earlier, stakeholder beliefs are also shaped by their agendas, or the roles they play in society. In other words, stakeholders are differently disposed to express a positive or negative opinion towards a mining firm. At the firm level, we control for the age of the mining project proposal (i.e., the time since the first media report), the market value of the company, and the estimated value of gold resources under its control. Table 1 presents summary statistics for all the variables included in the analysis.

To assess the extent to which media image, stakeholder networks, opinion leaders, and proactive engagement by companies affect stakeholders' first impressions of companies, we assess the impact of the variables described above using multi-level random parameter estimation methods. Our data is by design at two different levels: 931 stakeholders linked to 19 firms. The dependent variable *first impressions* is at the lowest level of analysis—the stakeholder level. One of the key variables of interest, *media image,* and several control variables are at the higher firm level. Multi-level analysis allows us to incorporate such clustering in the estimation. Random

parameter models further permit us to assume that the coefficients estimated are randomly drawn from the distribution estimated and vary across observations.

Results and discussion

The results are shown in Table 2. All of our independent variables are constructed on the basis of the same dataset of media reported interactions between the companies and a wide range of stakeholders and between these stakeholders themselves. For this reason, our analysis must take into consideration that *media image* variables incorporate *both* information on firm-initiated events and stakeholder-initiated events, *proactive engagements* reflects only firm-initiated events, while stakeholder networks and opinion leader variables reflect only stakeholder-initiated events. With the exception of one model (which is included only to show that results persist) we separate the analysis of media image variables in models (1) and (2), and pair firm-initiated *proactive engagement* with stakeholder network variables in models (3), (4) and (5), and with opinion leader variables in models (6) and (7), as described below.

Models (1) and (2) show the impact of media image. The variables *media image* reflect the tenor of *all* stakeholder-firm and firm-stakeholder interactions as reflected in the media up to the day before the day when the focal stakeholder expresses her opinion about the mining company. Models (3), (4) and (5) differentiate between information obtained from the company directly through its *proactive engagement* and information obtained through stakeholder networks as reflected in the variables *connected ties' opinions* (unweighted, weighted by affect and weighted by status). Models (6) and (7) differentiate between information obtained from the company directly through its *proactive engagement* and information obtained from opinion leaders. Model

(8) shows that while results weaken if we incorporate both media image, on the one hand, and proactive engagement and opinion leaders or stakeholder networks variables, on the other, they are nonetheless showing the same effects.

We find strong support for the baseline hypothesis which suggests that people update their beliefs using new information provided by the media. While not surprising, this result strongly highlights the importance of a company's image in the press. A unit increase in media image can enhance a stakeholder's first impression of the company by about 0.203. The result is equally strong when we use our alternate measure of media image, which implies that all old information is discarded and replaced with the most recent media reports.

We also find strong and robust support for the proposition that proactive engagement by companies positively induces stakeholders to form a better first impression of companies than they would otherwise. Results using our alternative measure (*proactive engagement, all past*) reveal similar coefficients. A unit increase in proactive engagement improves the first opinion a stakeholder expresses towards the corporation by about 0.2. We have shown elsewhere the financial implications of having strong cooperative relationships with stakeholders [citation removed to ensure anonymity during the review process], as well as the network implications or ripple effects of starting out with positive relationships [citation removed]. It is encouraging to see that companies can play a critical role in the formation of first impressions. Proactive engagement towards stakeholders can go just as far as positive media image in terms of shaping stakeholders' first impressions.

Contrary to our expectations, neither our measures of connected ties' opinions nor those referring to opinion leaders or "influentials" carry much weight in the analysis. Alternative measures designed to capture these two mechanisms remain statistically insignificant in different empirical specifications. While we do not rule out the possibility that further refinements of these measures might reveal different dynamics, we offer an interpretation of this result. It is quite possible that people become aware of an issue—especially something as specific as a mining proposal—from others in their social networks, but once "alerted," they turn to the media for information before they form their first impressions. Information travelling through networks is more likely to reach the interested parties faster. However, such information is believed to be noisy—"I heard it through the grapevine"—and more likely to be discounted.

Similarly, the results show that opinion leaders, or "influentials," are not really influential when it comes to the formation of first impressions about corporations. Our finding resonates with previous work on influentials (Watts and Dodds, 2007), which shows on the basis of computer simulations that the power of influentials to trigger changes in opinion is quite limited. Information offered by opinion leaders might be perceived as biased because they have a specific agenda they pursue. People who hold higher status in society (that is, are more connected to many other actors which also have high status) are likely to have reached this position by advocating for specific issues. Politicians were elected and are well known because they push for certain policies; NGO activists have become known because they advocate publicly and broadly for specific issues they care about; film celebrities are generally associated with leftist ideas; and so on. Thus, it is quite possible that both social networks and opinion leaders are extremely influential in terms of raising awareness on a topic as controversial as mining has become these days, but less effective in actually shaping stakeholders' opinions on the matter.

There is another plausible explanation for the absence of statistically significant coefficients on the variables associated with mechanisms suggesting that first impressions are shaped by social networks and opinions leaders. By definition, first impressions form early. They reflect the first time a stakeholder expresses an opinion towards or acts in a way that conveys support or opposition towards the mining project. This typically happens relatively early in the life of a proposal, when social networks are not fully fledged and when the most influential opinion leaders may not have had a chance to speak out on the subject. It is possible and plausible that as time goes by, the weight of these different mechanisms shifts away from the media and direct engagement from the company towards social networks and opinion leaders. And it is quite possible and plausible that this is even more so for mining proposals that have become controversial with time. Whether this is or not the case is a matter of empirical investigation, and we intend to extend the current analysis to examine more closely the extent to which different mechanisms might be at work at different points in time.

Conclusion

Our study builds across multiple fields in management studies, and hopes to contribute new insights to their development. Studies on reputation management have gained momentum in the last decade, drawing the attention of scholars and managers alike towards understanding the factors that influence it. Equally fruitful has been the development of practitioner-oriented publications in the domain of stakeholder engagement that highlight the importance of communicating and collaborating with stakeholders and offer a menu of recommendations on how to proceed. We see our work as lying at the intersection of these two areas, offering strong

empirical evidence for the effect of proactive stakeholder engagement on a company's reputation with its stakeholders.

Our analysis brings good news to managers of corporations. While most agree that reputation is a precious asset, many would argue that they have little control over what different stakeholders think of them. We beg to differ. Engaging stakeholders in a proactive way—reaching out to them to present their business plans, asking to meet in order to understand their preferences, soliciting their feedback on issues that touch closely to their priorities—goes a long way towards improving stakeholders' first impressions. In a world where managerial time and financial resources are scarce, it is often difficult to make the argument for the value of extensive stakeholder engagement. After all, wouldn't most be inclined to say that a day spent by a top-level executive in the local community cannot really add up to much? But it really can. First impressions are sticky, and as many managers have learned the hard way, it is much harder to change someone's heart and mind than it is to win them in the first place.

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Table 1. Summary statistics.

Variable	Obs	Mean	Std. Dev.	Min	Max
First Impressions	952	1.16	3.70	-9.00	10.00
Media image (past 90 days)	931	0.97	3.51	-9.00	10.00
Media image (at time of last report)	931	0.72	3.28	-13.15	16.46
Proactive engagement (past 90 days)	952	0.30	1.42	-13.03	11.21
Proactive engagement (all previous)	952	0.46	1.64	-9.00	7.00
Connected ties' opinions (unweighted)	952	-0.05	1.12	-20.05	6.05
Connected ties' opinions (weighted by affect)	952	0.01	2.03	-27.63	22.40
Connected ties' opinions (weighted by status)	952	0.00	0.06	-1.12	0.52
Opinion leaders (weighted by status and affect)	952	0.00	0.22	-4.72	2.27
Top opinion leader's position	952	0.08	0.43	0.00	4.48
Times since first report (log)	931	7.77	0.89	2.64	8.93
Number of press mentions (log)	931	5.83	1.77	0.00	8.35
Market value (log)	952	4.02	2.85	0.00	7.33
Resources value (log)	952	3.77	3.13	0.00	7.99

Table 2. Random intercept estimation

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Media Image								
Media image (past 90 days)	0.203***							0.193***
	(5.38)							(5.06)
Media image (at time of last report)		0.223***						
		(6.32)						
Proactive engagement								
Proactive engagement (past 90 days)			0.198*	0.186*	0.197*	0.195*	0.202*	0.158*
			(2.49)	(2.33)	(2.47)	(2.44)	(2.52)	(1.98)
Stakeholder networks								
Connected ties' opinions (unweighted)			0.103					
			(1.04)					
Connected ties' opinions (weighted by affect)				0.0707				
				(1.30)				
Connected ties' opinions (weighted by status)					2.352			
					(1.25)			
Opinion leaders								
Opinion leaders (weighted by status and affect)						0.325		
						(0.44)		
Top Opinion Leader's position							-0.282	-0.344
							(-1.07)	(-1.31)
Controls								
Number of previous press reports (log)	-0.0640	-0.0324	-0.0803	-0.0933	-0.0823	-0.0905	-0.0830	-0.0554
	(-0.65)	(-0.32)	(-0.78)	(-0.90)	(-0.80)	(-0.87)	(-0.80)	(-0.56)
Market value (log)	0.0665	0.0565	0.0456	0.0336	0.0499	0.0425	0.0433	0.0576
	(0.73)	(0.61)	(0.48)	(0.35)	(0.53)	(0.45)	(0.46)	(0.63)
Resource value (log)	-0.114	-0.0888	-0.105	-0.0874	-0.107	-0.0964	-0.103	-0.113
	(-1.32)	(-1.02)	(-1.18)	(-0.98)	(-1.20)	(-1.08)	(-1.16)	(-1.31)
Economic actor (0/1)	1.338***	1.305***	1.422***	1.439***	1.426***	1.444***	1.462***	1.279***
	(4.05)	(4.00)	(4.26)	(4.32)	(4.28)	(4.33)	(4.38)	(3.84)
Social actor (0/1)	-0.696*	-0.665*	-0.674*	-0.685*	-0.683*	-0.680*	-0.689*	-0.681*
	(-2.47)	(-2.39)	(-2.38)	(-2.42)	(-2.41)	(-2.40)	(-2.43)	(-2.42)
National actor (0/1)	-0.297	-0.281	-0.268	-0.289	-0.281	-0.279	-0.280	-0.285
	(-0.89)	(-0.85)	(-0.79)	(-0.86)	(-0.83)	(-0.83)	(-0.83)	(-0.85)
International actor (0/1)	-0.534	-0.550	-0.499	-0.521	-0.513	-0.520	-0.526	-0.517
	(-1.52)	(-1.58)	(-1.40)	(-1.47)	(-1.45)	(-1.46)	(-1.48)	(-1.47)
Constant	1.788**	1.429*	1.976***	2.037***	1.990***	2.008***	2.011***	1.754**
	(3.24)	(2.39)	(3.30)	(3.36)	(3.29)	(3.32)	(3.34)	(3.14)
Observations	903	903	903	903	903	903	903	903

t statistics in parentheses * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$