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Measuring Social Capital for Social Performance

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Author
Boutilier, Robert

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ABSTRACT

By definition, measuring the social capital in firm-stakeholder relationships assesses the degree to which the company has met essential preconditions for good CSP. Previous studies identified the three most important dimensions of social capital as the structural (e.g., network ties), the relational (e.g., trust), and the cognitive (e.g., shared goals, shared paradigms). A five-year longitudinal study in Papua New Guinea produced measures of social capital that were consistent with the three dimensional view, including a cross-culturally meaningful measure of trust. A second cross-sectional study of 15 diverse communities on four continents confirmed the cross-cultural applicability of the cognitive and relational dimension measures. The findings suggest that a universal predictor of a company's CSP is feasible.

Measuring Firm-Stakeholder Social Capital for Corporate Social Performance

Corporations aiming to meet their corporate social responsibilities find it useful to have some metric that tracks their performance. However, corporate social responsibilities vary depending on the company, the industry, and the stakeholders involved. As a result, systems for measuring corporate social performance (CSP) are quite diverse.[1] For example, some companies need to measure toxic emissions while others need to focus more on monitoring their employment equity performance. By stepping up to a more abstract level, it may be possible to track performance on elements of CSP that are important across diverse industries, stakeholders, and cultures.

Whether the concrete CSP measure is parts-per-million (PPM) of dioxin or full-time equivalents (FTEs) of employees who are members of visible minorities, the array of activities they measure have impacts on groups of people who are stakeholder of the company. By definition, a stakeholder is a person who is, or could be, impacted by the company's actions or policies, or who has, or could have, have an impact upon the company.[2] A stakeholder group is an aggregate of individual stakeholders or an organized group. Its members have a relationship with the company and that relationship is defined in terms of whatever aspect of the company's social performance is relevant to the stakeholder group. Therefore, every CSP measure has an associated firm-to- stakeholder-group relationship.[3] The relationship presumably improves or deteriorates in response to the company's CSP, no matter how that CSP might be measured.[4] This is the key point that allows us to rise above the morass of incomparable CSP measures. In addition to measuring things as diverse as PPMs and FTEs, we can focus more on also measuring whatever might be universal about firm-stakeholder relationships.[5]

Firm-Stakeholder Relationships as Measurable Universals

Moving from measuring things like PPMs, which do not depend on social perceptions,[6] to measuring universal firm-stakeholder relationship qualities is a bold step with far reaching implications. On the plus side, it means we could reap some of the benefits exhibited by financial measures of corporate performance. For example, the social performances of companies in diverse industries and cultures could be compared. Companies could track their own performance across time and diverse national locations. On the negative side, the move requires us to accept more measurement error. The company's performance on the PPM-style CSP measure is only one of many things that could affect the quality of the firm-stakeholder relationship. Corporate management might not mind this type of imprecision when the stakeholders were contented. Who cares why they are happy, as long as they are happy? But what about those times when despite a company's stellar performance on specific CSP measures, the stakeholders repeatedly make fresh demands and add new performance criteria? Then ulterior sources of stakeholder dissatisfaction with the relationship would matter to management. Relationship-based measures might be able to estimate a company's CSP but will never be as precise as PPMs and FTEs. Both parties to the relationship have need for the more concrete measures in those circumstances when the relationship-based measure contains malfeasance error. For instance, there could be times when stakeholder group members could use them to prove that their own leaders have been bought-off by the company. On the company side, there may be times when managers could use them, for example, to prove that someone else has been polluting the water and letting the company take the blame. With these opportunities and dangers in mind, let us consider what aspects of firm-stakeholder relationships might be the best candidates for more universal measurement schemes.

Universal dimensions of person-to-person relationships are what make it possible for people from different historical periods to understand each other's stories and for individuals from different cultures to form families. Psychologists have developed ways to measure the apparently universal dimensions of interpersonal relationships,[7] while emphasizing that the dimensions are embedded in an equally universal process of evolution that allows for their change and for a multitude of morphological manifestations.[8] At the organization-to-organization level, two intertwined relationship qualities have emerged in a number of fields of interest to both corporations and communities. They are collaboration and social capital. In the management field, Harvard business professors Cohen and Prusak define social capital as, "Social capital consists of the stock of active connections among people: the trust, mutual understanding, and shared values and behaviors that bind the members of human networks and communities and make cooperative action possible"[9] Cohen and Prusak are not alone in defining social capital as the network connections that make collaboration possible. In the field of community development, urbanist Jane Jacobs[10] popularized the concept of social capital as that set of network relationships that allows community members and organizations to collaborate in the pursuit of shared goals.

The Role of Firm-Stakeholder Social Capital in CSP

Social capital and collaboration in firm-stakeholder relationships connect with CSP in three ways. First, the quality of stakeholder relationships is both an element of social capital and a defining characteristic of CSP. Second, firm-stakeholder relationships with plenty of social capital can lead companies to change their ways, thus changing their CSP. Third, collaboration and social capital in firm-stakeholder relationships can cause the stakeholders to revise

misperceptions they might have had. That, in turn, can modify the CSP criteria applied to the company. This section looks at each of these three dynamics in more detail.

The quality of firm-stakeholder relationships can be listed alongside PPM-type measures as a criterion for CSP in and of itself. There are several codes of CSP that have explicitly incorporated elements of the quality of firm-stakeholder relationships into their assessment systems, usually along with an *ad hoc* list of more specific, PPM-type measures.[11] For example, the AA1000 standard is a species of CSP certification. It is devoted entirely to the stakeholder engagement processes a company undertakes. While these systems acknowledge the importance of high quality relationships, there are none that purport to assess the qualities of the relationships that drive positive social performance. In terms of the negative side of the relationship quality continuum, two of the more prominent ethical screening systems for socially responsible investing in the United States count the emergence of stakeholder inspired controversies as *prima facia* evidence of poor CSP. The Dow Jones Sustainability Index and the Kinder Lydenberg Domini database both downgrade companies on the basis of critical reports, articles and press releases issued by media and stakeholders. There is no mention of any investigation or adjudication processes to determine whether or not these accusatory publications are exaggerated, distorted, or outright false. Thus, poor relationships are sometimes taken as a defining characteristic of poor CSP and collaborative stakeholder engagement is taken as evidence of good CSP.

Second, collaboration and social capital can lead the corporation to change its behavior so that non-perceptual CSP measures improve. That might happen, for example, when an environmental group works with a company to find more efficient and yet less environmentally

damaging processes. Social capital in firm-stakeholder relationships can yield corporate responsiveness,[12] which in turn can improve performance on PPM-type measures.

Thirdly, because some CSP assessment systems take stakeholder perceptions as measures of the corporation's performance, social capital in firm-stakeholder relationships can improve CSP by improving the stakeholders' understanding of the company and its actions. For example, environmental activists involved in the Clayoquot controversy adamantly opposed all clear-cut logging for years. Only after a coalition of environmental groups developed a social capital filled relationship with forestry company MacMillan Bloedel were they able to assimilate the scientific evidence from forest ecologists that limited clear-cuts are superior to selective logging or no logging in many circumstances because they mimic the ecological effects of naturally occurring forest fires.[13] The firm-stakeholder relationship yielded an agreement on sustainable forest harvesting.

The Dimensions of Social Capital in Firm-Stakeholder Relationships

Although it is obvious that the development and maintenance of social capital in firm-stakeholder relationships is an important part of CSP, it is so obvious how one should measure that social capital. The concept of social capital has taken root in numerous fields from epidemiology to politics. This is a testament to its likely universality in interorganizational and intergroup relationships. However, the breadth of applications has also led to variations in usage of the term. In the interest of moving towards measuring social capital, it is necessary to distinguish social capital's definitive core from its sources and its effects.[14] The core consists of at least three relationship phenomena, namely, sharing information, providing political support and solidarity, and adhering to group or collective norms. The outcomes include benefits like mutual protection, collaboration towards shared goals, and the sharing of resources. The sources

of social capital can be described along three dimensions of firm-stakeholder relationships. They are the structural (e.g., network links), the relational (e.g., trust), and the cognitive (e.g., shared goals, shared paradigms).[15] Of course, because the outcomes (e.g., collaboration) affect levels of later sources (e.g., trust), the source/core/outcome distinction gets muddied in practice. Nonetheless, it helps clarify what can be measured about social capital.

The structural dimension of social capital's sources, or "source social capital", deals with network structure. Firm-stakeholder relationships exist in a network of relationships. Stakeholder organizations have relationships with each other and with non-stakeholders as well. Some structural measures of social capital can be assessed on a relationship-by-relationship basis. For example, the strength of an actor's tie with a specific other actor can be determined without reference to other relationships. However, many structural variables that describe specific relationships are described relative to all the relationships in the network. For example, actors differ in terms of how many ties they have with others in the network (i.e., "degree"). By some definitions,[16] an actor has more social capital if it is more likely that the actor will be an intermediary for a message flowing between any two randomly chosen actors in the network (i.e., the actor's "betweenness").

The cognitive source dimension of social capital includes shared representations and systems of meaning. These can range from the most basic sharing of a common language to the most complex sharing of a scientific paradigm or cultural narratives. The cognitive dimension plays a particularly prominent role in collaboration because it includes common values, goals, and plans.[17]

The relational source dimension of social capital encompasses a variety group process phenomenon like norms, obligations, reciprocity, mutual identification, and trust. Trust has

become pre-eminent among these,[18] largely because it emerges as a prepotent factor at recursive levels of analysis. Trust has been highlighted as central to social capital at the national societal level,[19] interorganizational network level,[20] the level of one-to-one interorganizational relationships,[21] and the intraorganizational level.[22]

Aims of the Studies

In the studies reported here, the measurement focus was on the three dimensions identified as social capital's sources. These were chosen as the aspects that have the most strategic potential to help firms and stakeholders manage their relationships with one another. Measures of source social capital were taken in two interview-based studies with representatives of a mining company and its stakeholders. The first study was a five-year longitudinal study in Papua New Guinea (PNG). All three of the structural, relational, and cognitive dimensions were measured in four successive waves of interviewing. The second was a cross-sectional study in 14 communities in seven countries. Measures of the relational and cognitive dimensions were taken, along with ratings of satisfaction with the firm-stakeholder relationship. The data from both studies were variously subjected to analyses designed to determine whether the measures of the source dimensions (a) were similar enough to warrant being grouped under the conceptual umbrella of source social capital, (b) were distinct enough to warrant identification as separate dimensions of source social capital, (c) maintained their statistical relationships with one another across cultures, and (d) bore any relationships with indirect and partial indicators of CSP.

The next section describes how each study was conducted with special attention to what measures were taken. At the end of each study description, there is also a brief description of how the company was able to use the findings. While the main focus of this paper is the development of a globally valid measure of social capital in firm-stakeholder relationships, these

anecdotes about the usefulness of such measures to a company help to anchor the sometimes arcane measurement discussion in a practical application to everyday management challenges.

METHODS

Longitudinal Tracking of Social Capital's Source Dimensions

The first study has been dubbed the "Misima study". It was conducted as part of Placer Dome Inc.'s preparations to close its gold mine on Misima Island in the southeast region of Papua New Guinea. Geological analyses showed the mine was coming to the end of its productive life and Placer Dome wanted to "leave behind a better future" for the people of Misima. To help the community prepare for the closing of the mine, they asked the Centre for Innovation in Management (CIM) at Simon Fraser University to track the social capital among the stakeholders and make recommendations aimed at fostering the commitment to shared goals that would be needed to adjust to life after the mine.

Identification of Stakeholders

The initial set of stakeholder organizations were identified as those with whom the company was interacting at the time of CIM's first visit to Misima in 2000. These happened to include the standard set of community leaders typically interviewed for a community profile (e.g., local government leader, clergy, local business leaders, environmental group leaders, union leaders, women's group leaders, etc.). The pre-test wave in April 2001 wave obtained input from those people. We asked the interviewees to nominate additional groups as stakeholders. That process expanded the list of stakeholders. Going into the first of the four waves of data collection reported here, the list of stakeholders included people with both pro and anti company perspectives. There were 82 different stakeholder representatives interviewed over the four

waves. An average of 38 stakeholder representatives were interviewed per wave and they represented an average of 16 stakeholder organizations. At attempt was made to interview at least two representatives from each organization.

Interviewing

CIM solicited the assistance of a local research partner, Dr. Albert Mellam, Dean of Business Administration at the University of Papua New Guinea (UPNG). The UPNG provided trained student interviewers. In April 2001, the researchers conducted interviews using a prototype of the questionnaire. Feedback from stakeholders led to revisions to the questionnaire, especially to the questions that probed the relational dimension. The revised form of the questionnaire was used in the subsequent four waves of interviewing that were done once per calendar year from October 2001 to March 2004. Most of the interviews were conducted in English. Papua New Guinea is home to approximately half of the world's languages, but schooling on Misima is done in English. On Misima, a hundred years of contact with Western missionaries has created a bilingual society with one of the highest average levels of English language proficiency in the country. A few of the interviews with clan elders were conducted in the Misiman language with translation provided by a local missionary's son who grew up on the island and was perfectly bilingual.

Questionnaire Content

The interview included a "bilateral" section that assessed the three source dimensions of social capital in the stakeholders' relationships with the company, and a "multilateral" section that assessed the same dimension in their relationships with one another. The bilateral section generated interval rating scale data that permitted more detailed diagnoses of strengths and weaknesses in each relationship. The multilateral section collected only binary data on each

dimension but permitted the generation of social network maps for the entire set of stakeholders. Both employees and stakeholders were interviewed about their mutual perceptions of the relationships. Here only stakeholders' responses are reported in order to maintain consistency with the second study in which there were no employees interviewed.

Assessment of the structural dimension concentrated on the strength of the ties in terms of the amount of contact. The amount was a joint function of frequency and number of contacts. In the bilateral section of the questionnaire, the stakeholders were asked to list the company representatives they had talked to in the past three months regarding interorganizational matters. They were then asked how frequently they had communicated with each person. The frequencies of contact were divided into six categories plus a category for no contact. The categories were daily (6), weekly (5), fortnightly (4), monthly (3), quarterly (2), less frequently than quarterly (1) and no contact ever (0). For each interviewee the frequencies were summed across all contacts. The sums were then transformed into scores ranging from 1 to 4 depending on which quarter of the range the score fell into. Sums of zero were coded as scores of zero. In the multilateral section, stakeholders were asked to check all the organizations they had talked to, or communicated with, in the past three months and then rank the top three from among those in terms of frequency of contact.

In general, firms and stakeholder might agree on an array cognitive elements ranging from a common language to a shared plan for collaborative action. In the Misima context, the most relevant aspects of the cognitive dimension were the extent of a shared vision for the future and the level of agreement on how to plan for life after closure. Accordingly, the cognitive dimension of source social capital was assessed by asking for a rating on the extent to which the stakeholder's organization agreed with the company on how best to prepare Misima for post-

closure life. In the bilateral section, the agreement was elicited on a four-point rating scale.[23] In the multilateral section, there was a checklist of organizations that could be deemed either in agreement or not. From among those, the respondent then ranked the top three perceived as most in agreement.

The element of trust was chosen as the aspect of the relational dimension that would be assessed. The concept of trust holds the distinction of being widely associated with both social capital and corporate competitive advantage.[24] In the pilot testing, it was discovered that Misimans tend not make global attributions of "trustworthiness".[25] In Misiman culture, trust related behaviors differentiate situations more than people. Drawing in several typologies of trust developed by management theorists,[26] it was decided to ask three separate questions about different aspects of trust. The first asked for ratings of trust in terms of sharing important information, as opposed to keeping secrets from those one deals with. The second question asked probed trust as the tendency to honor promises and follow through on commitments. The third question dealt with trust as a general belief in the goodwill of the other party to the relationship. It asked stakeholders how much they thought the company was concerned about their best interests. As with the cognitive dimension, the bilateral questions were agree/disagree ratings of statements on a four-point rating scale. The multilateral questions consisted of a checklist with a subsequent ranking of the top three among those checked.

Finally, because employees and stakeholder representatives tended to describe up to half a dozen or more relationships, some way was needed to rank the relationships in terms of their importance to each party in the relationship. Research on collaboration among stakeholders has identified two critical factors determining the importance of relationships and the motivation of the parties to engage in the relationships.[27] First, there must be high stakes. The consequences of

collaborating versus going separate ways must be substantial. Second, the parties must be interdependent to the extent that neither can fully reach their goals without the cooperation of the other. One question asked about these joint conditions in terms of how much the interviewee's organization needed the other organization's cooperation in order to reach its most important goals.

Questionnaire Refinement based on Misima Data

The general Misima findings are discussed below in conjunction with the findings from the second study because data from both studies must be considered together in order to answer some of the questions animating this research. However, the questionnaire used in the second study was modified on the basis of Misima findings about how to measure trust. Therefore, Misima's lessons regarding the measurement of trust are discussed here, before turning to the second study.

The "promise keeping" question was highly correlated with the other two but the other two were not as highly correlated with each other. The "concern for interests" question was the most stringent in that only those with the strongest relationships would agree with it. Everyone else tended to disagree with it. It had a bimodal U-shaped distribution. The "sharing information" question also had a bimodal distribution but the skew was towards more stakeholders agreeing with it. The bimodality reduced the predictive power of these two questions It was not surprising then that a principal components analysis of the three trust questions along with the structural measure, the relationship importance question, and the cognitive question, showed the three trust questions to have the defining loadings on the first principal component with the "promise keeping" question having the heaviest loading. This showed that the "promise keeping" question was the most representative of whatever the three trust questions were collectively measuring.

For this reason, when it was necessary to choose only one trust question to carry forward to the second study, the "promise keeping" question was chosen.

Usefulness of the Findings

While the data collected advanced the pursuit of a universally applicable measure of social capital that predicts CSP, they also had immediate practical implications for the company. The bilateral data were more useful in helping the company identify and repair relationships that were not going as well as desired. The multilateral data were more useful for tracking the vagaries of social capital among stakeholders who would have to work together in order to adjust to post-closure life in an optimal way.

The bilateral data identified problem relationships for the company and diagnosed the nature of the problems. Combined stakeholder and employee group average scores on the dimensions were summed to produce social capital scores for each firm-stakeholder relationship. These were plotted against the measure of the importance of the relationship to the company. Relationships that were much higher in importance than they were in social capital were deemed unsatisfactory. The constituent dimension scores were used to diagnose the source of the problem in each relationship. For example, in April 2001, the company's relationship with the provincial administration was lower in social capital that its importance warranted. A closer analysis revealed that cause was lower ratings given by the administration on the relational (trust) and cognitive dimensions. The company had extensive dealings with the district administration, which reported to the provincial administration. The company and the district negotiated infrastructure projects and the allocation of tax credits to these projects. The company had assumed that the district and the province were talking to each other and working together on these issues. However, direct inquires spurred by the social capital scores revealed that the

district had not been keeping the province apprised of its dealings with the company. The company was able to resolve the misunderstanding by instituting regular communications with the province regarding its dealings with the district.

The multilateral data produced social network maps showing all the stakeholders relationships with one another and the strengths of the relationships. These maps revealed political alliances and cleavages in the community and were of particular interest because of the historical context. Papua New Guinea had only experience one previous mine closure since it became an independent Commonwealth country in 1975. That was the Bougainville mine on the island province of Bougainville. That mine was closed in an armed insurrection that produced a concomitant declaration of independence by the Bougainville provisional government. Misima was scheduled to become the first PNG mine to close in a peaceful, legal manner. Keeping the process peaceful, however, meant dealing with many diverse political ambitions and interests.

The social network maps based on social capital ties quickly revealed the political currents. In a nutshell, the company had high levels of social capital in its relationship with the south coast clans that owned the lands where the mine was located. These clans had previously been less prosperous than groups in the north and east. However, those to the north and east received fewer benefits from the mine. As a result, the relative wealth of the groups was reversed. The benefits that the north and east groups did receive were mostly in the form of jobs and infrastructure. With closure, the jobs would disappear and the infrastructure would deteriorate without maintenance by the cash-poor district and province. Meanwhile, the clans that owned the mining land in the south would continue to receive payments from a set of trust funds. Bluntly, some of the northern and eastern people wanted a share of the trust fund money. The district and province wanted a trust fund dedicated to paying for infrastructure maintenance.

A coalition emerged comprising the district, the province, and a few local government representatives from the north and east. The company was unavoidably implicated in the political maneuvering. In the end, the mine did close peacefully, but everyone learned a lesson about the need to provide a sustainable maintenance program along with every infrastructure project.

Over the four years of the study, the social capital based social network maps traced the transition from a relatively cohesive community to a community divided into two camps, the national government and the owners of the mining lands versus the local governments and some of the non-owners of mining land. We first warned the company and the stakeholders about the possibility of such a split in October of 2001. It took until March of 2004 for the split to materialize. This predictive success suggests that the measurement of social capital can provide a very sensitive picture of the socio-political risks in a community of stakeholders. Throughout the course of the study, the findings also provided the company with practical, actionable guidance about how to improve the cohesiveness of the community by fostering specific stakeholder-to-stakeholder relationships.

Cross-Cultural Comparison of Social Capital's Source Dimensions

The second study was dubbed the "international study". It was also for Placer Dome. The company wanted to produce a Sustainability Report focusing on local stakeholders' perceptions of the company and of their own relationships with the company. The study encompassed the stakeholders of 14 Placer Dome mines around the world. The same stakeholder selection processes was used at the beginning of the first study and some of the same social capital questions were repeated. Exact replication of the first study was not possible because additional objectives in the second study created time constraints. Specifically, the international study also

had to allow interview time for probing of stakeholders about their views on sustainability in mining.

The Interviewees

Of the 14 mines included in the international study, three were in northern Ontario, Canada, three were in Nevada, two were in Chile, two were in Western Australia, one was in Tasmania, one was in Papua New Guinea, one was in South Africa, and one potential mine not currently operating was in the Dominican Republic. Collectively, the mines represented a variety of historical arrangements between local people and the company. For example, the Porcupine mine was very close to the City of Timmins, Ontario. Timmins was founded about a hundred years ago as a mining town and was the birthplace of one of the companies that merged to create Placer Dome. Likewise, the city Kalgoorlie in Western Australia was founded on mining and continues to exist because of it. Both Timmins and Kalgoorlie have grown because of mining and now have urban amenities like colleges and university campuses. At the other extreme, the Porgera mine in the rugged highlands of Papua New Guinea, and the Musselwhite mine in the boreal wilderness of northern Ontario, were opened in very remote areas inhabited by tribal populations with subsistence economies. At a range of points between these extremes, the other mines were newcomers to rural areas that already had agricultural economies that traded with more urban centers. Agriculture has remained important in those surrounding areas.

Questionnaire Changes

The international study focused on the stakeholders' bilateral relationships with each of the local Placer Dome subsidiary companies. Unlike the Misima study, the interview did not include a multilateral section about the stakeholders' relationships with other local stakeholders. The cognitive dimension question was included but the focus was changed from plans for life

after closure to plans for the future. The question on the importance of the relationship was also included. In order to keep the interview brief, however, there was no question assessing the structural dimension, and only the "promise keeping" question was carried forward from among the three trust questions used on Misima.

The Misima experience illustrated the difficulty in finding robust cross-cultural measures of the trust in interorganizational relationships. The fact that the "promise keeping" question made sense in cultures as different as North America and Misima inspired confidence that it would also make sense in other cultures. The international study offered an opportunity to pilot one more trust question across many cultures. The second heaviest loading question on Misima's trust principal component, "shares information", seemed to tap an element of open communication and dialogue with stakeholders, but this specific question depended too much on stakeholders having had experiences of companies withholding information from them. Without such experiences, the question had too little variance. Therefore, for the international study there was an attempt to devise a similar question that would garner a wider range of responses. There was research and theory that emphasized the importance of good communications[28] and "trustful dialogue"[29] in relationships with stakeholders. That work emphasizes that the first thing each party to a dialogue wants to be sure of is that they have been heard and understood. It suggested that a question related to the companies "listening" performance might best assess this "open communications" related vein in interorganizational trust. Accordingly, the new trust question asked stakeholders how much they agreed or disagreed with the statement that the local mining company "listens to us."

Finally, the international study included a proxy measure for CSP. As argued earlier, CSP is an ill-defined concept that, in practice, is measured with an apparently *ad hoc* barrage of

measures. The array of measures includes stated values and intentions, physical counts of concrete items, and the social perceptions of analysts, CEOs, stakeholders, and journalists. One of the aims of these studies was to identify more universal measures of CSP producers that could be used as strategic guides for managers involved in the process of trying to improve their corporation's CSP. We wanted to compare our candidate measures with a very short, general, and strategic indicator of CSP. The measure that was chosen was stakeholder satisfaction with the firm-stakeholder relationship. There are three main reasons for this choice.

First, stakeholder satisfaction is explicitly mentioned as a CSP criterion in some ethical investing screening systems.[30] Second, the idea of stakeholder satisfaction with the relationship has been applied extensively in the fields of relationship marketing and total quality management.[31] As the idea of stakeholder satisfaction has evolved in those fields, it does not assume that all stakeholders can or should be completely satisfied. Stakeholders often have competing and contrary interests with one another. Rather, the measurement of stakeholder satisfaction is undertaken with the aim of striking a balance among the satisfaction levels in the firm's relationships with all its stakeholders.[32] Third, this measure derives straight from the theoretical tradition of social constructionism. Social constructionism's[33] main insight was that people create their social reality through interaction. One branch of the foundational philosophy has evolved into institution theory,[34] which looks at the ways people create, maintain, and change social institutions through social interaction. From this perspective, the firm-stakeholder relationship is an ongoing social interaction that is central to the social construction of a firm's CSP. Therefore, strategically, a manager would want to know about a stakeholder's satisfaction with its relationship with the firm because this would predict whether overall CSP, by the full array of measure, would be positive or negative. Applying social construct theory, this measure

of CSP has a powerful causal impact on the development, application, and interpretation of other measures and therefore naturally predicts the net impact of other measures.

The specific question that was used to assess stakeholder satisfaction in this study was simply a rating of relationship satisfaction on a 5-point scale with scale points labeled as "very unsatisfied", "slightly unsatisfied", "equally satisfied and unsatisfied", "slightly satisfied", and "very satisfied".

RESULTS

By combining the data from both studies, it is possible to shed some light on the three main measurement issues addressed in this study. First, is there any support for the idea that there are three primary dimensions to the social capital in firm-stakeholder relationships? Second, do the questions we have used to measure the dimensions of social capital in firm-stakeholder relationships travel well? More specifically, do they maintain consistent patterns of correlation with one another in vastly different cultures? Third, do any or all of the dimensions of social capital correlated with indirect and partial indicators of CSP? If so, which correlate best and are there any cross-cultural exceptions?

Are All Dimensions Aspects of Social Capital? Are they Dimensions Distinct?

The idea that social capital has three dimensions implies that the dimensions are correlated with one another but not too much. They have to be distinct enough to justify being measured separately but similar enough to justify all being grouped together under the umbrella concept of social capital. Correlations that would support the three dimensional view of social capital would have to be not too high and not too low. Economists describe an economy that grows not to quickly and not too slowly as a Goldilocks economy. If we borrow the same

metaphor, we can say that the three dimensional view of social capital requires Goldilocks correlations among the dimensions.

In both studies, two or more questions were used to assess the relational dimension of the firm-stakeholder relationships. If these questions all measure trust in the relationships, then their correlations with one another would be substantially higher than those between dimensions. If we were to perform a principal components analysis on all the social capital questions, we would expect the trust questions to form one component on their own. The data from the Misima study did contain measures of all three dimensions simultaneously. Therefore, the Misima data were submitted to a principal components analysis to see if the Goldilocks pattern appeared.

The bilateral data were used because they were based on rating scales, which have more appropriate psychometric properties for multidimensional statistical analyses.[35] Only the stakeholders' ratings were used, not the employees' ratings. The data from all the Misima waves of interviewing were combined by including each stakeholder representative's ratings only once. Some stakeholder representatives were interviewed in all four waves, but the most recent set ratings given by any stakeholder representative were used. This yielded a total of 83 cases.

Insert Figure 1 about here

Figure 1 shows a plot of the Misima components in rotated space. For the theoretical reasons described above, three principal components were extracted. Their eigenvalues were 2.3, 1.1, and 0.9. Together they explained 73 percent of the variance in the data. Under a varimax rotation, the three components matched the three theoretically predicted dimensions of social capital. Table 1 shows the factor loadings. All of the trust questions loaded together on the first,

strongest principal component. The second component had heavy positive loadings from the cognitive question (i.e., agree on plans for the future) and the question on the importance of the relationship (i.e., need other party's cooperation to reach own goals). It had a strong negative loading on trust as concern for the other's interests. The third component had a heavy loading from the structural dimension score that was derived from reports of frequency of communication with company employees. It also had a moderately negative loading from the importance question. The third place ranking of this dimension may have been attributable to the the fact that the measure had the lowest variance. It was skewed in the direction of frequent interaction with the company.

Insert Table 1 about here

Does This Dimensional Structure Travel Across Cultures?

Evidence from Principal Component and Factor Analyses

The factor structure observed in the Misima data was exactly what the three dimensional view of source social capital predicts. The three dimensional notion was put to a further test using the data from the international study. The international study only collected data on the relational and cognitive dimensions. The three dimensional view of social capital would predict that most of the variance would be attributable to the first two factors and that these would correspond to the questions on trust and shared plans respectively. As Table 1 shows, this is exactly what was found. The first three principal components had eigenvalues of 2.2, 0.8, and 0.6 and explained 92 percent of the cumulative variance. The relational and cognitive dimensions were found to be distinct from one another. However, because the third factor was quite weak, an

analysis was also conducted specifying the extraction of only two principal components. The three dimensional view of social capital would predict that the cognitive dimension question (plans for future) would load with the relational dimension questions (trust as listening, trust as promise keeping) because they are all related to one another as aspects of social capital. That would leave the relationship importance question to account for the residual variance as the second principal component. As Figure 2 shows, this is exactly what was observed. The first two components accounted for 76 percent of the cumulative variance. Even in vastly differing cultures and economies, the data again supported the three dimensional view of social capital.

Evidence from Patterns of Correlations

Because the number of measures involved is quite few, it is possible to inspect correlation matrices for the pattern expected under the three dimensional view of social capital. This is essentially a more fine-grained, variable-by-variable look at the same data that produced the principal components and rotated factors. The first feature of the expected pattern is that the highest correlations would be among measures of the same dimension. In these data, only the relational dimension has multiple measures. It has three questions measuring trust in the Misima data and two in the international data. These trust measures should be most highly correlated measures in both studies. The second feature is that the second highest set of correlations should be among measures of different dimensions. The third feature is that the lowest correlations should be with measures not considered part of social capital. In these data, that is the measure of the importance of the relationship.

Table 2 shows the relevant correlations for the Misima data (top panel) and the international data at both the individual level of analysis (middle panel) and the mining community level (bottom panel). The mining community level was created by taking the means

for each of the 14 mining communities and letting the communities be the cases. In all three sets

of correlations, the trust questions did indeed correlate more highly with each other than with

other social capital questions. In the Misima data, the "promise keeping" question correlated

significantly with "sharing information" (r = 0.492; p < .001) and with "concern for the other's

interests" (r = 0.503; p < .001). These were the two highest correlations in the Misima data. In

the international data, there were only two trust questions, promise keeping and listening. The

correlation coefficients between them were the highest of all at both the individual and

community levels of analysis. Therefore, the within-dimension correlations were consistently the

highest.

The second pattern feature was also observed in both studies, but there was an exception

in the Misima study. In the international data, at both levels of analysis, the correlations between

dimension measures were lower than the within dimension correlations but higher than the

correlations between social capital measures and the measure of relationship importance. In the

Misima data, the non-social capital measure correlated more highly with the cognitive dimension

question and the "promise keeping" relational dimension question than did the structural

dimension measure. It appeared that the "relationship importance" measure was part of the

cognitive dimension. This might have been a result of the history on Misima. The company made

a concerted effort to help selected stakeholders plan for their future and to collaborate with them

towards those goals. This was deliberate behavior undertaken to apply social capital, in the form

of agreement on goals, to the task of collaborating towards those goals. The company intended to

have effects that would incidentally raise the level of the correlation. This is the kind of outcome

that creates confusion in the definition of social capital. When social capital has been

successfully created and used, its sources correlate with its consequences. Therefore, while the

Misima data shows only partial support for the three dimensional structure of social capital, it does support the connection between social capital and proxy measures of CSP. That connection is discussed further in the next section.[36]

Which the Dimensions Predict CSP Best?

Having found support for the idea that there are three prominent dimensions of social capital in firm-stakeholder relationships and that the shape of the interrelationships among these dimensions remains the same for stakeholders from diverse cultures and economies, we can return to the original reason for wanting for find this kind of measure. How well does it predict CSP?

Only the international study included a quantitative measure that could be used to link social capital measures to CSP. It was the measure of stakeholder satisfaction with the relationship. Relationship satisfaction correlated significantly a) with the cognitive dimension question on planning for the future ($r = 0.85$, $p < 0.002$), b) with the relational dimension trust question about keeping promises ($r = 0.88$, $p < .001$), and c) with the relational dimension trust question about listening ($r = 0.82$, $p < .001$).[37] These correlation coefficients are extremely high. They are even higher than the within dimension correlations among the items measuring a single same dimension of social capital. Unfortunately, there was no measure of the structural dimension in the international data to complete the linkage between this CSP proxy and social capital. Even so, the strength of the correlations allow us to conclude that the cognitive and relational dimensions of social capital, as measured here, can predict the quite strategic measure of CSP used here.

DISCUSSION

The analyses presented here are not conclusive. They can be viewed, however, as encouraging further investigation along these lines of thought. The idea that there might exist a universally applicable way to measure the drivers of CSP received support. Further, the idea that the place to look for such a measure is in firm-stakeholder relationships was also supported. Further, there was support for the more specific idea that at least some of the aspects of firm-stakeholder relationships that would be useful to measure for anyone interested in CSP would be the three dimensions of source social capital, namely, the structural related to network ties, the relational related to trust, and the cognitive related to future plans and goals. Future research may discover that there are yet other aspects of firm-stakeholder relationships, or of the social capital in those relationships, that are even more strategic to measure. For now, however, the three dimensional view of social capital appears to have enough support to warrant more development.

Possible Dynamics Accounting for the Universality

The findings of these studies raise the question of why we can look at the same aspects of firm-stakeholder relationships in any culture or economy and still predict relationship satisfaction. The root answer probably lies in our common humanity. Even interorganizational relationships are fundamentally human relationships. Some developmental psychologists argue that the universality in human relationships arises from an innate "genetic epistemology" that comes with being a social animal.[38] That is not to say that cultural differences can be ignored. The pilot testing for the Misima study revealed a cultural difference in the concept of trust. However, having taken that into account, we have now identified measures that seem to focus on the universal human core of the trust concept. Keeping promises and listening seem to be basic to building trust in all relationships. As for the cognitive dimension, it assesses a readiness to engage in exchange transactions contributing towards common goals. Co-operative exchange is

also a universal part of human interaction, whether the interaction takes places interpersonally or through the mental filters of interorganizational frameworks. The structural dimension, of course, is as fundamental and universal as human speech.

Limitations

The analyses presented here were purely correlational. None of them allows drawing any conclusions about how an increase on one dimension of social capital might cause an increase in stakeholder satisfaction. Although the Misima study was longitudinal, its data were treated in a correlational manner in these analyses. The lack of evidence for linear causal relationships, however, is not really an issue. It is more likely that there are multidirectional causal loops operating among all of measures taken in this study and many more not taken. For example, it is likely that more CSP causes more social capital as well as vice versa. Therefore, a deeper analysis of the dynamics among these variables would require more complex, overdetermined, multi-directional causal modeling of the firm-stakeholder relationship in the broader corporate and community context. The current studies made a contribution towards the development of such a model by identifying critical variables that should be included in it and by suggesting efficient, cross-culturally valid ways of measuring them.

Another limitation of this approach applies to all uses of social network analysis. There are practical limits on the size of the networks that can be investigated and analyzed. Applied in urban settings, or across all the stakeholder interactions of a whole large corporation, the social network approach used here would become unwieldy without more preliminary iterations of stakeholder identification in order to narrow the list of most important stakeholders down to the most affected, involved, and influential few.

Practical Applications

What practical use is a universal measure of the social capital in firm-stakeholder relationships? The cross-cultural applicability of the measures piloted in these studies allow for comparisons of geographically and culturally diverse locations. An ethical investor or social activist might want to compare firm-stakeholder relationships across diverse locations in order to evaluate a company's CSP. The international study reported here was undertaken in part to provide just such information to those audiences. A corporate executive might want comparisons of social capital across diverse locations in order to compare socio-political risk levels at potential sites for future investment. Community relations or environmental managers might want to track their own progress towards creating the optimum social conditions for collaboration towards CSP, however it might be more specifically defined locally. The Misima study was undertaken to provide just such information.

Any application of these measures of source social capital can fail to meet their objectives if the individuals representing the organizations in the relationship are either illegitimate or inauthentic. The notion of the firm-stakeholder relationship is predicated upon a prior notion of representatives accurately reflecting their organizations' positions and interests. This assumption can be violated in several ways. For example, a stakeholder group leader might not have the support of group members for any number of reasons. Sometimes the leader is a "lame duck" about to ousted. Sometimes the leader lies to the membership in order to stay in power. Sometimes the leader abrogates the group's interests in order to get benefits from the company (i.e., "sells out") or is convinced by the company to not press the group's interests as vigorously (i.e., is "co-opted"). These are all examples of inadequate representative legitimacy.[39] In such cases, the social capital measures might indicate positive firm-stakeholder relationships but a change in leadership could then produce a sudden unexpected reversal.

Because this approach relies on authenticity in the firm-stakeholder relationship, it is also prone to producing misleading measurements when the stakeholder group or the firm deliberately wants to exploit, or take unfair advantage of, the other party in the relationship. For example, if a company wants to dump toxic waste for free it might invite the local environmentalists to do monitoring of toxic emissions but use its knowledge of monitoring schedule to slip past the testing. The firm-stakeholder relationship might be very high in social capital but that would not reflect the true level of socio-political risk borne by the company. It would also not reflect the company's true CSP. Similarly, a stakeholder group bent on extracting as much wealth as possible from a company might promise that it would be satisfied with just one more concession, only to invent yet another demand after that concession was met. In such cases, the company's CSP would be rated quite high by non-relationship measures while the relationship-based predictor of CSP would be chronically depressed.

Any use of these measures by a company should also take account of the differing ranges of social capital that exist among stakeholders. Some stakeholders could shift their efforts all the way from trying to drive the company out of town to trying to help it make more profit. Others can only vary their evaluations of the relationship through a more restricted range. For example, government regulators are legally required to avoid trusting, beyond a certain point, those whom they regulate. Regulatory bodies must impartially verify the claims of, and monitor the performances of, all the companies under their jurisdiction. They do not want to be seen as being too "cozy" with any company they must regulate. Similarly, some social advocacy groups make a commitment to their members and supporters to do everything in their power to embarrass, criticize, and castigate companies. For example, many advocacy groups act as watchdogs on a particular industry. They define an adversarial relationship as their duty. Measures taken of the

social capital in these relationships have to be calibrated to a smaller permissible range of variation.

Measures of social capital can also be useful in efforts to reduce poverty and promote sustainable development.[40] Corporations have a role in promoting these goals,[41] and the multilateral measures described here could also be used directly with community stakeholders themselves, whether a corporation operated in the area or not.[42] By measuring the social capital among stakeholders, one can pinpoint which relationships need to be created or strengthened in order to promote the community collaboration that reduces poverty and promote sustainable development.

Future Research

Future research aimed at refining these measures should experiment with metrics for assessing the structural dimension that are more sensitive to variance in the more frequent interaction ranges and that are more similar to the other measure in their methods. Also, it would be valuable to include a broader selection of CSP measures to be predicted. In terms of developing a general model for the interplay between social capital and CSP, the measures would ideally be taken at two or more points in time with observations throughout the whole duration of levels of core social capital elements like information sharing, socio-political solidarity, norm development, and norm adherence. Quite often it is specific events that change a relationship. Current theorizing[43] suggests that events exemplifying the core elements of social capital embody the translation of source social capital into social capital's outcomes, which include CSP. Because of the need for legitimacy and authenticity, these events cannot be scripted into the design of a study. However, a study could monitor relationships for their occurrence in the hope of catching that fleeting social capital transaction in a recordable social interaction. This

is the type of theory testing in which retrospective studies could provide valuable evidence despite their other limitations related to memory lapses and distortions.

Though CSP measurement remains an eclectic potpourri of concrete counts of items, statements of values and intentions, and ratings of perceptions held by an array of social actors, it might be still possible for managers to measure their progress towards it. The measures of source social capital developed in the two studies reported here promise to predict CSP as viewed through the eyes of any stakeholder, anywhere in the world, providing both parties to that firm-stakeholder relationship are legitimate and authentic.

Table 1: Component loadings for Misima and international data

Misima Study Data	Principal Components			Rotated Components		
Three components extracted	1	2	3	1	2	3
Relational: trust as promise keeping	.811	-.163	.149	.768	.249	.235
Relational: trust as sharing information	.724	-.302	-.052	.752	.229	-.023
Relational: trust as concern for interests	.654	-.527	.116	.847	-.044	-.023
Cognitive: agree on plan for futures	.559	.530	-.255	.112	.776	.209
Importance of relationship	.548	.399	-.489	.149	.821	-.053
Structural: communication frequency	.338	.537	.745	.060	.095	.972

International Study Data	Principal Components			Rotated Components		
Three components extracted	1	2	3	1	2	3
Relational: trust as promise keeping	.859	-.142	-.274	.871	.225	.151
Relational: trust as listening	.844	-.180	-.321	.895	.188	.107
Cognitive: agree on plans for future	.711	-.233	.664	.267	.959	.090
Importance of relationship	.515	.855	.067	.153	.085	.984
Two components extracted	1	2		1	2	
Relational: trust as promise keeping	.859	-.142		.849	.194	
Relational: trust as listening	.844	-.180		.849	.154	
Cognitive: agree on plans for future	.711	-.233		.746	.054	
Importance of relationship	.515	.855		.152	.986	

Table 2: Correlations among Relationship Importance and Social Capital Measures

Misima - Individual Stakeholders[a]	1	2	3	4	5
1. Importance of relationship					
2. Structural: communication frequency	.122				
3. Cognitive: agree on plans for future	.344**	.200			
4. Relational: trust as sharing information	.238*	.082	.240*		
5. Relational: trust as promise keeping	.280*	.224	.305*	.492***	
6. Relational: trust as concern for interests	.153	.050	.107	.424***	.503***

International - Individual Stakeholders[b]	1	2	3
1. Importance of relationship			
2. Cognitive: agree on plans for future	.212**		
3. Relational: trust as promise keeping	.294***	.454***	
4. Relational: trust as listening	.266***	.436***	.679***

International – Mining Communities[c]	1	2	3
1. Importance of relationship			
2. Cognitive: agree on plans for future	.395		
3.Relational: trust as promise keeping	.622*	.732**	
4. Relational: trust as listening	.542	.779**	.816***

[a] $n = 82$ * $p < .05$

[b] $n = 212$ ** $p < .01$

[c] $n = 12$ *** $p < .001$

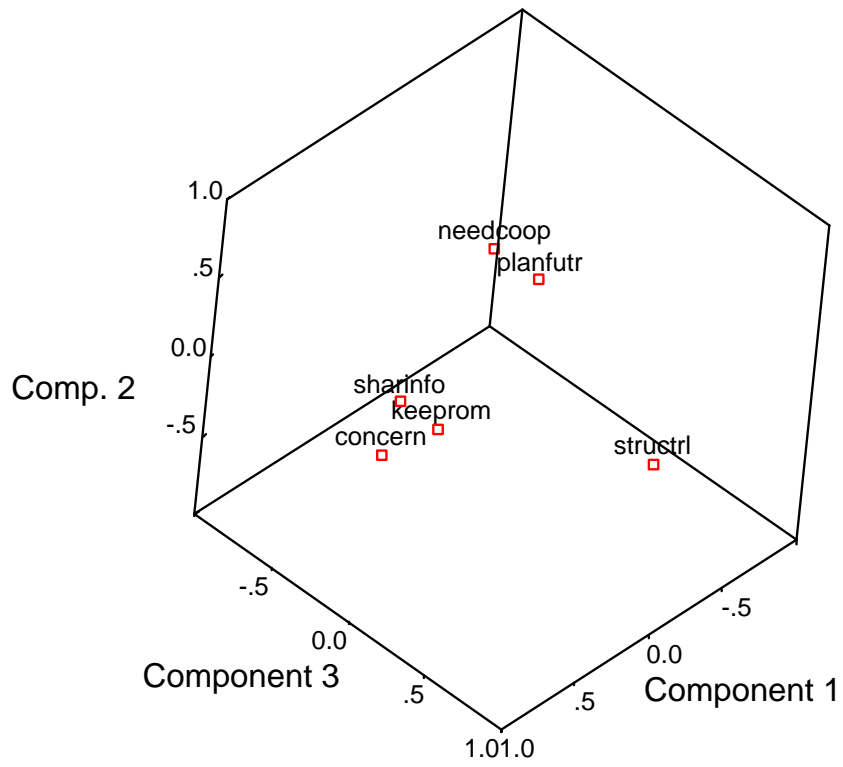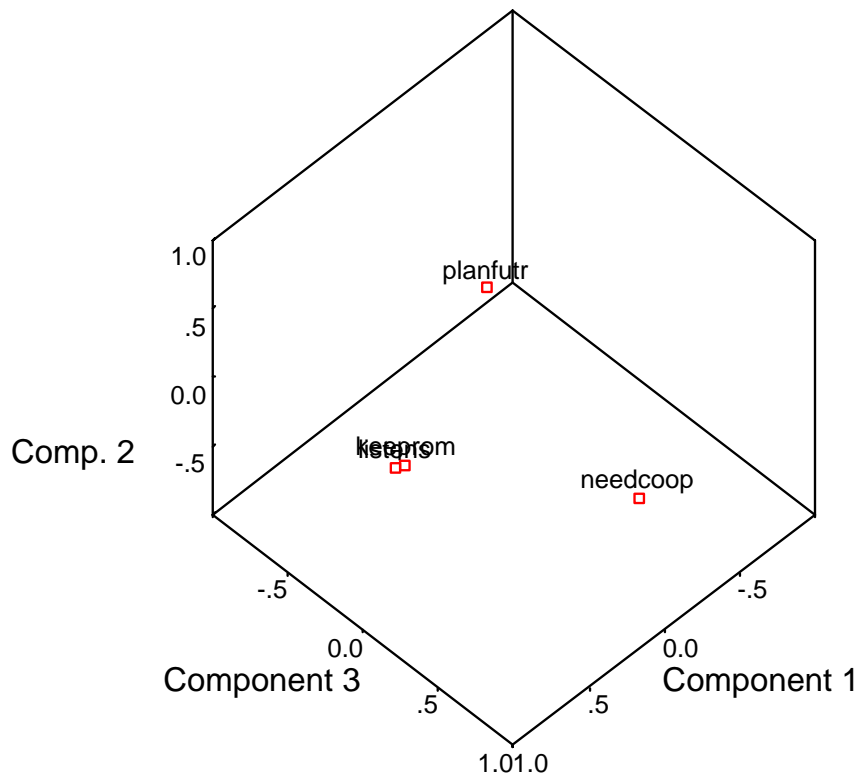Figure 1: Misima components in rotated space

Figure 2: International components in rotated space

[1] Rowley, Timothy J. and Shawn L. Berman. A Brand New Brand of Corporate Social Performance. *Business & Society*, 39/4 (2000): 397-418; for a compendium of CSP measures used by academics, see Margolis, Joshua Daniel and James Patrick Walsh, *People and Profits? The Search for a Link Between a Company's Social and Financial Performance* (Mahwah, NJ: Erlbaum 2001); for a similar compendium of measures, codes, standards, and principles designed for corporate use, see Leipziger, Deborah, *The Corporate Responsibility Code Book* (Sheffield, UK: Greenleaf 2003).

[2] Freeman, R. Edward, *Strategic Management: A Stakeholder Approach* (Boston: Pitman 1984)

[3] Some would argue that non-human entities can be stakeholders. Examples would include endangered species or or a specific rock or tree that might be sacred to a local indigenous community. However, these can be accommodated within this view of stakeholder by simply noting that their status as stakeholders does not emerge until some human group takes up the cause of the non-human stakeholder. By this view, the human group would be the stakeholder and it would declare the impact upon the non-human entity to be the aspect of CSP that defines its relationship to the company.

[4] Preston, Lee E. and Thomas Donaldson. Stakeholder Management and Organizational Wealth. *Academy of Management Review*, 24/4 (1999): 519-625; Waddock, S. A. & Smith, N. 2000. Relationships: The Real Challenge of Corporate Global Citizenship. *Business and Society Review*, 105: 147-62.; the same case for Corporate Social Responsibility (CSR) is made in Welcomer, Stephanie A., Philip L. Cochran, Gordon Rands, and Mark Haggerty. Constructing a Web: Effects of Power and Social Responsiveness on Firm-Stakeholder Relationships. *Business & Society*, 42/1 (2003): 43-82.

[5] Concrete measures like PPMs are examples of what Mitnick called revelation metrics (M2) while measures of qualities of relationships would exemplify Mitnick's belief metrics (M3). In Mitnick's analysis, revelation metrics are concerned with what firms do and belief metrics are concerned with whether what firms claim to do can be

believed. Mitnick, Barry. Commitment, Revelation, and the Testaments of Belief: The Metrics of Measurement of Corporate Social Performance. *Business & Society*, 39/4 (2000): 419-465.

[6] The validity of the scientific worldview itself depends on social perception, but that is beyond the scope of this paper.

[7] For example, Di Blas, Lisa. A Validation Study of the Interpersonal Circumplex Scales in the Italian Language. *European Journal of Psychological Assessment*, 16/3 (2000): 177-189; For a discussion of the merits of viewing the universalities in terms of dimensions, categories, or rules, see Haslam, Nick. Mental Representation of Social Relationships: Dimensions, Laws, or Categories? *Journal of Personality and Social Psychology*, 67/4 (October 1994): 575-584.

[8] Guisinger, Shan and Sidney J. Blatt. Individuality and Relatedness: Evolution of a Fundamental Dialectic. *American Psychologist*, 49/2 (February 1994): 104-111; Fletcher, Garth J. O., Jeffry A. Simpson, Geoff Thomas, and Louise Giles. Ideals in Intimate Relationships. *Journal of Personality and Social Psychology*, 76/1 (January 1999): 72-89.

[9] Cohen, Don and Lawrence Prusak, *In Good Company: How Social Capital Makes Organizations Work* (Boston, MA: Harvard Business School Press, 2000), 3-4.

[10] Jacobs, Jane, *The Death and Life of Great American Cities* (London: Penguin Books, 1965)

[11] For social performance, the Dow Jones Sustainability Index puts the heaviest weighting on "stakeholder involvement". The Kinder Lydenberg Domini (KLD) investment screening system includes relationships with various stakeholders as social criteria in several areas (e.g., relations with indigenous peoples, union relations).

[12] Welcomer, Stephanie A., Philip L. Cochran, Gordon Rands, and Mark Haggerty. Constructing a Web: Effects of Power and Social Responsiveness on Firm-Stakeholder Relationships. *Business & Society*, 42/1 (2003): 43-82.

[13] Svendsen, Ann C. and Anne T. Lawrence, *The Clayoquot Case* (Vancouver, BC: CoRelation Consulting, 2002).

[14] Adler, Paul S. and Seok-Woo Kwon. Social Capital: Prospects for a New Concept. *Academy of Management Review*, 27/1 (2002): 17-40.

[15] Nahapiet, Janine and Sumatra Ghoshal. Social Capital, Intellectual Capital, and the Organizational Advantage. *Academy of Management Review*, 23/2 (1998): 242-266.

[16] Burt, Ronald S., *Toward a Structural Theory of Action : Network Models of Social Structure, Perception, and Action* (New York: Academic Press, 1982).

[17] Tsai, Wenpin and S Ghoshal. Social Capital and Value Creation: The Role of Intrafirm Networks. *Academy of Management Review*, 41/4 (1998): 464-476.

[18] Schuller, Tom, Stephen Baron, and John Field. 2000. Social capital: A review and critique. In *Social Capital: Critical Perspectives*, eds. Baron, Stephen, John Field, and Tom Schuller, 1-38. (Oxford: Oxford University Press).

[19] Fukuyama, Francis, *Trust: The Social Virtues and the Creation of Prosperity* (New York: The Free Press, 1995)

[20] Cohen, Stephen S. and Gary Fields. Social Capital and Capital Gains in Silicon Valley. *California Management Review*, 41/2 (1999): 108-130; Inkpen, Andrew C. and Eric W. K. Tsang. Social Capital, Networks, and Knowledge Transfer. *Academy of Management Review*, 30/1 (2005): 146-165.

[21] Dyer, Jeffrey H. and Kentaro Mobeoka. Creating and Managing a High Performance Knowledge-Sharing Network: The Toyota Case. *Strategic Management Journal*, 21 (2000): 345-367.

[22] Tsai, Wenpin and S Ghoshal. Social Capital and Value Creation: The Role of Intrafirm Networks. *Academy of Management Review*, 41/4 (1998): 464-476.

[23] We experimented with five, six, and seven point scales during pilot testing of the questionnaire in May of 2000 and April of 2001. Misimans tended to be confused by mid-points (e.g., point 3 on a 5-point scale and point 4 on a 7-point scale) and intermediate levels of ratings (e.g., points 2 and 6 on a 7-point scale). This was consistent with advice we were given by Dr. Martha McIntyre, a University of Melbourne anthropoligist who spent the better part of a decade on Misima studying the culture and learning the language.

[24] Barney, Jay B. and M. H. Hansen. Trustworthiness As a Source of Competitive Advantage. *Strategic Management Journal*, 15/Special Issue (Winter) (1994): 175-190; Fukuyama, *op cit*.; Adler, Paul S. Market, Hierarchy, and Trust: The Knowledge Economy and the Future of Capitalism. *Organization Science*, 12/2 (2001): 215-234.

[25] Again, is this consistent with Dr. McIntyre's observation that trust is a much more situation specific concept in Misiman culture. Trust related behaviors differentiate situations more than people.

[26] Mayer, R. C., J. H. Davis, and F. D. Schoorman. An Integrative Model of Organizational Trust. *Academy of Management Review*, 20/3 (1995): 709-734; McAllister, D. J. Affect- and Cognition-Based Trust As Foundations for Interpersonal Cooperation Organizations. *Academy of Management Journal*, 38/1 (1995): 24-59.

[27] Logsdon, Jeanne M. Interests and Interdependence in the Formation of Social Problem-Solving Collaborations. *Journal of Applied Behavioral Science*, 27 (1991): 23-37.

[28] Bachrach, Bill. 12 Principles of Trust. *Executive Excellence*, 14/9 (September 1997): 10; Currall, Steven C. and Andrew C. Inkpen. A Multilevel Approach to Trust in Joint Ventures. *Journal of International Business Studies*, 33/3 (2002): 479-494; Calton, Jerry M. and Stephen L. Payne. Coping With Paradox: Multistakeholder Learning Dialogue As a Pluralist Sensemaking Process for Addressing Messy Problems. *Business & Society*, 42/1 (2003): 7-42.

[29] Isaacs, William N., *Dialogue: The Art of Thinking Together* (New York: Doubleday, 1999); Orlitzky, Marc and Diane L. Swanson. Value Attunement: Toward a Theory of Socially Responsible Executive Decision-Making. *Australian Journal of Management*, 27/Special Issue 2002 (2002): 119-128.

[30] For examples, see the Dow Jones Sustainability Index, the Kinder Lydenberg, Domini database, the AA 1000 Standard.

[31] Griffin, Jennifer J. Corporate Social Performance: Research Directions for the 21st Century. *Business & Society*, 39/4 (2000): 479-491; Payne, Adrian and Sue Holt. Diagnosing Customer Value: Integrating the Value Process and Relationship Marketing. *British Journal of Management*, 12/2 (June 2001): 159-182; Sirgy, M. Joseph. Measuring Corporate Performance by Building on the Stakeholders Model of Business Ethics. *Journal of Business Ethics*, 35 (2002): 143-162; Waddock, Sandra and Charles Bodwell. Managing Responsibility: What Can Be Learned From the Quality Movement? *California Management Review*, 47/1 (2004): 25-37.

[32] Piercy, Nigel F. Barriers to Implementing Relationship Marketing: Analysing the Internal Market-Place. *Journal of Strategic Management*, 6/3 (September 1998): 209-222; Dervitsiotis, Kostas. Beyond Stakeholder Satisfaction: Aiming for a New Frontier of Sustainable Stakeholder Trust. *Total Quality Management & Business Excellence*, 14/5 (July 2003): 515-528.

[33] Berger, Peter L. and Thomas Luckmann, *Social Construction of Reality* (New York: Doubleday Anchor, 1967)

[34] Maitlis, Sally. The Social Processes of Organizational Sensemaking. *Academy of Management Journal*, 48/1 (February 2005): 21-49.

[35] The standard deviations ranged from 1.03 to 1.26.

[36] Another exception in the Misima data was that the most stringent trust measure, "concern for interests", was essentially uncorrelated with the other social capital dimensions, even though it was correlated with the other relational dimension measures of trust. This was one reason why the concern for interests question was not carried forward to the international study. It appeared more peripheral to social social capital *per se*.

[37] Also, relationship satisfaction correlated just less than significantly with the question about the need for cooperation in the relationship for achieving important goals (r = 0.53, p < .08).

[38] Bullock, Daniel. 1981. On the current and potential scope of theories of cognitive development. In *Cognitive Development*, ed. Fischer, Kurt W., 93-109. (San Francisco: Jossey-Bass).

[39] Suchman, Mark C. Managing Legitimacy: Strategic and Institutional Approaches. *Academy of Management Review*, 20/3 (1995): 571-610.

[40] Brown, L. David and Darcy Ashman. Participation, Social Capital, and Intersectoral Problem Solving: African and Asian Cases. *World Development*, 24/9 (1996): 1467-1479; Gittell, R. and A. Vidal, *Community Organizing: Building Social Capital As a Development Strategy* (Thousand Oaks, CA: Sage, 1998); Woolcock, Michael and Deepa Narayan. Social Capital: Implications for Development Theory, Research, and Policy. *The World Bank Research Observer*, 15/2 (2000): 225-249; Krishna, Anirudh. Moving From the Stock of Social Capital to the Flow of Benefits: The Role of Agency. *World Development*, 29/3 (2001): 925-943.

[41] Bansal, Pratima. The Corporate Challenges of Sustainable Development. *Academy of Management Executive*, 16/2 (2002): 122-131; Fossgard-Moser, Titus. Promoting Sustainable Development Through the Enhancement of Local Employment and Supply Chain Opportunities Generated by Energy Companies: The Case of the Shell Group. *Greener Management International*, 43 (2004).

[42] Crowley, Kathleen M., Ping Yu, and Shakeh J. Kaftarian. Prevention Actions and Activities Make a Difference: A Structural Equation Model of Coalition Building. *Evaluation and Program Planning*, 23/3 (2000): 318-388.

[43] Adler and Kwon, *op cit*.