

“A Social Representation Model For Environmental Disclosures in Emerging Markets”

AUTHORS

Richard Tansey
Ray Carroll
Mark Neal
Colin Jones

ARTICLE INFO

Richard Tansey, Ray Carroll, Mark Neal and Colin Jones (2004). A Social Representation Model For Environmental Disclosures in Emerging Markets. *Problems and Perspectives in Management*, 2(3)

RELEASED ON

Friday, 12 November 2004

JOURNAL

"Problems and Perspectives in Management"

FOUNDER

LLC “Consulting Publishing Company “Business Perspectives”



NUMBER OF REFERENCES

0



NUMBER OF FIGURES

0



NUMBER OF TABLES

0

© The author(s) 2026. This publication is an open access article.

CHAPTER 2

MANAGEMENT IN FIRMS AND ORGANIZATIONS

A Social Representation Model For Environmental Disclosures in Emerging Markets

Richard Tansey¹, Ray Carroll², Mark Neal³, Colin Jones⁴

Abstract

A firm's corporate reputation is increasingly interwoven with external stakeholders' perceptions of the firm's environmental policies. Companies are thus using environmental disclosures as a means of convincing stakeholders of the propriety and legitimacy of their environmental policies. The success of this communication process depends not just upon the content or structure of the disclosure, but to a very large extent on how the firm and message are defined. This is particularly so in emerging markets, where there is a huge credibility gap between firms and external stakeholders, sustained by perceptions of widespread corruption and dishonesty. This article uses Social Representation Theory to develop a new model of environmental disclosure perception and effectiveness in emerging markets. The new model is tested by using a survey of investors in Shanghai in the People's Republic of China. Doing so supports the model, and provides new insight into the communication of environmental disclosures in emerging markets.

Key words: Environmental disclosure, social representation theory, environmental strategy, stakeholders, Chinese business, Chinese management, emerging markets.

External stakeholders and Environmental Disclosures

Environmental disclosures represent a key strategic option for firms operating in emerging markets (Solomon et al., 2000). They offer the opportunity to communicate with, and achieve legitimacy among external stakeholders, particularly under the circumstances where the impact of firm operations invites suspicion or controversy. In an era in which corporate reputation are increasingly dependent upon good environmental practice, stakeholders' definition and acceptance of corporate disclosures are a critical factor in corporate performance. Writ large, stakeholders' collective attitudes towards corporate disclosures in general, and environmental disclosures in particular, constitute a key variable in corporate-stakeholder relations.

This study uses social representation theory to develop a new model of how corporate environmental communications shape external stakeholders (ES) attitudes (Jovchelovitch, 1996; Moscovici, 1984). Social representation theory enables us to identify the communication mechanisms that corporate reporting uses to create stakeholder information codification in emerging markets; and it thereby offers a new model for testing environmental disclosure effects on stakeholders' evaluations of firms' organizational legitimacy. The model is tested in Shanghai, PRC, a key market within the huge emerging Chinese market. The results of the study contribute to knowledge about the contingent effectiveness of environmental disclosure policies in emerging markets.

¹ Ph.D., Department of Management, Marketing and International Business, Texas A&M International University, USA.

² Ph.D., Associate Professor, Faculty of Management, Dalhousie University, Canada.

³ Department of Management, College of Commerce & Economics, Sultan Qaboos University, Sultanate of Oman.

⁴ Department of Accounting, College of Commerce & Economics, Sultan Qaboos University, Sultanate of Oman

Limited Knowledge Diffusion in Emerging Economies

There is a pervasive lack of social capital in the emerging markets of the People's Republic of China (PRC), a feature of this economy that undermines the acceptance of corporate disclosures by external stakeholders. Social capital has been characterized as "the information, trust, and norms of reciprocity, inherent in one's social network" (Woolcock, 1998, p. 153). The scarcity of social capital in emerging markets, "where crime, corruption, and congestion (the 3 Cs of emerging markets) are everyday realities," distorts economic growth. In contrast, abundant social capital in developed Asian economies such as Singapore, produces a different set of 3 Cs – a "coherent, connected, and cohesive developed framework" which emerges as a result of strong state-society ties, especially linkages between firms and external stakeholders (ES) (Woolcock, 1998, p. 178).

The lack of social capital in emerging markets distorts information diffusion by encouraging information hoarding among small groups of corporate insiders. In contrast, developed countries experience an abundance of social capital, which encourages the broad transmission of corporate reporting, on the assumption that all stakeholders have a basic right to be informed (Brown, 2000). Voluntary corporate disclosures thus replace information hoarding by creating a high diffusion of codified knowledge among ES in developed market economies.

In the PRC, codified knowledge is a scarce resource, since few laws define property rights, and people "make out through interpersonal accommodation and negotiation that is specific to each relationship and to each situation, and in doing so, they continue to sustain the iron law of fiefs" (Boisot & Child, 1996, p. 605). This iron law of fiefs restricts knowledge diffusion to a small number of people in a personal network defined by power and familial considerations. Knowledge diffusion is thus extremely limited and haphazard compared to the codified knowledge in a developed mass market, which remains stable in its meaning, regardless of personal or situational influences.

Social consensus about ES rights is absent in these markets because of the lack of property rights, corporate governance and rules of exchange (Fligstein, 1996). Legal debates concerning equity and distribution issues can thus come to resemble social movements in which firms and their ES adopt adversarial positions (Meng, 2001; China Daily, 2001b). Firm-stakeholder relationships evolve into a state of anomie in this legal chaos, caused by rival egocentric equity interpretations. Such controversies inhibit dispute resolution because both firms and ES are "averse to settling for what they consider to be an unfair agreement" (Thompson & Loewenstein, 1992, p. 177).

However things are changing. Expanded political rights, stock market and environmental reforms, and economic prosperity in emerging markets have encouraged middle-class demand for corporate environmental disclosures (Xinhua, 2001a; Xinhua, 2001b). Indeed, the 1993 Health-of-Planet survey revealed that "remarkable attention is given to environmental problems by the general population in Third World countries" (Diekmann & Franzen, 1999, p. 541). As personal wealth has grown in the PRC and other Asian developing countries, there exists demand for environmental good practice.

Chinese and international stakeholders are thus pushing emerging market firms for increasing amounts of environmental information (Gilley, 1999; Solomon et al., 2000). Emerging market firms are thus caught in an "information trap" caused by a conflict between traditional limited disclosure practices, and growing stakeholder demand for widespread diffusion of environmental disclosures. Firms facing this marketplace dilemma may indeed respond positively with environmental reporting innovations for creating ES perceptions of organizational environmental legitimacy. True and fair disclosures serve "an educational function to encourage more responsible and rational (ES) attitudes (and) a motivational function to promote a greater sense of (ES) involvement in and commitment to the enterprise" (Brown, 2000, p. 50).

An Institutional Mediator Model of Legitimacy

Suchman (1995) distinguished two distinct paradigms for studying organizational legitimacy. Panel A in Figure 1 illustrates an impression management approach used by environmental accounting researchers (Patten, 1992; Neu et al., 1998). This paradigm enables researchers to ex-

developing economies (Mathews & Perera, 1996). Thus, environmental disclosures attempt to obtain ES approval (legitimacy) by fulfilling ES expectations of moral values (Richardson, 1987), thereby creating normative isomorphism.

A Social Representation Theory of Organizational Disclosure

Social representation theory can be used to explain how stakeholders such as investors respond to the diffusion of new environmental disclosures. Corporate environment disclosures represent a new way of transacting business in communist countries. Based on social representation theory regarding the diffusion of new ideas imported from a foreign country (Bauer & Gaskell, 1999), we would expect different segments in the PRC to react differently to environmental disclosures depending upon each segment's attitude towards capitalism. For instance, we would expect communist party members to perceive such disclosures as a form of capitalist propaganda, while we would expect ordinary citizens to perceive disclosures as containing elements of truth and falsity, and investors to endorse disclosures as informative.

European sociologists have used social representation theory to analyze the reactions of various social segments to new systems of thought. Moscovici (1961, 1976) for instance, analyzed how three segments – communists, Catholics, and urban liberals – reacted differently to the introduction of Freudian psychoanalysis in France. In response to new US psychoanalytical ideas, French communists represented these ideas as propaganda; the Catholic press represented these ideas as propagation, i.e. partially assimilating new ideas into traditional concepts, but rejecting the underlying sexual theory; and urban liberal media presented these new ideas simply as facts to be discussed and molded into French culture. Therefore, social representations can serve three communication purposes, namely, propaganda, propagation, and attitude diffusion.

Formally, a social representation is defined as a relationship between three elements – subjects or carriers of the representation, the object represented, and a project social group within which the representation makes sense (Bauer & Gaskell, 1999, pp. 167-168). In this study, social representation is defined as investors (subjects), corporate environmental disclosures (object), and the project is a firm's efforts to reduce investors' perceived firm environmental uncertainty by socially representing itself as a legitimate corporate citizen.

Social representation is a form of symbolic cultivation in which social milieus serve as communication systems embodied in one of four modes: habitual behavior, individual cognition, informal and formal communication. Physical environmental (PE) disclosures thus represent a formal external communication between two different stakeholders (S) mediated by an object of representation. For this study we use Bauer & Gaskell's (1999, p. 170) representational triad to model how PE disclosures by management (S1) directly and indirectly affect investors' perceptions (S2) of a firm's organizational uncertainty in its competitive environment. Figure 1 indicates how S2 attributions of organizational legitimacy mediate the relationship between these corporate disclosure guidelines and S2 perceptions of organizational environmental uncertainty.

Developing a Legitimacy Mediator Model

Path 1: SDG → PEU – The Role of Physical Environmental Reporting Guidelines for Shaping S2 Perceptions of Organizational Environmental Uncertainty

Solomon et al. (2000) developed a conceptual framework for representing investors' (S2) "ideal" disclosure guidelines (SDG) for determining the form and content of physical environmental (PE) reports. Technical innovations, i.e. equal reporting of various environmental risks, lead to transparent PE disclosures (Campbell, 1998), generating greater S2 cognitive clarity and consensus building, thereby reducing S2 perceptions of organizational environmental uncertainty (PEU).

Emerging market S2 expect transparent PE disclosures in return for limited liability and financial markets access (Wang, 1985). Although the absence of state reporting regulations gives firms broad discretion over their PE disclosures, they face the task of constructing new PE standards that S2 perceive as fair and true.

A firm's conception of control provides a cognitive structure for building S2 consensus about what is normatively appropriate for firms' PE disclosures (Fligstein, 1996). At the early stages of industry development, fluid economic conditions and multiple conceptions of control characterize emerging markets. Firms compete to establish SDG as dominant industry standards for reducing S2's PEU

Path 2: SDG → FLEG – New disclosure guidelines for building legitimacy

New PE guidelines represent disclosure innovations for enhancing S2's firm legitimacy attributions (FLEG). Chinese accounting firms develop new organizational design strategies to enhance such FLEG (China Daily, 2002e). Organizational design focuses on establishing disclosure guidelines (SDG) for achieving FLEG (Power, 1997).

SDG creates cognitive legitimacy through three processes (Aldrich and Fiol, 1994): first, reporting innovations (SDG) create a symbolic language for developing a rich S2 knowledge-base; second, SDG encourages the initial diversity of S2 attributions to converge quickly to one dominant design necessary for developing this knowledge base; third, FLEG is created when SDG is promoted through third-party actors (S2).

SDG depoliticizes the reporting process for increasing FLEG (China Daily, 2002b). The Chinese Communist Party (CCP) is thus put at arms-length, reducing its ability to contaminate SDG. De-coupling of the CCP's influence from disclosure practice is a strong form of depoliticization as opposed to replacing overt government controls with covert techniques (Covaleski, Dirs-mith, & Michelman, 1993).

SDG are flak-catching devices for creating sociopolitical legitimacy (FLEG). "People who gather and use information will try to convince others of its importance as a natural way of ensuring their own importance" (Feldman & March, 1981, p. 181). Disclosures are thus integral to S2 discourses of legitimization (Hertz, 1998). They "contrive to portray particular forms of social practices as worthy and legitimate" (Robson et al., 1994, p. 533). Such legitimating SDG are critical for China where cynicism is rife, and pollution effects and costs are spiraling out of control.

SDG absence creates distrust and illegitimacy in China, particularly among Shanghai S2, who have long denied information regarding firm PE activities (Hertz, 1998; Abdel-khalik, Wong, & Wu, 1999). Deng's 1992 Southern tour politically legitimated Shanghai's experiment to operate a capitalist market place. However, Deng promised to close stock markets if S2 denied adequate information for making informed investment decisions (Hertz, 1998, p. 92). Recent PRC accounting reforms have encouraged firms to voluntarily adopt SDG that serve as positive antecedents for enhancing information diffusion and FLEG.

Path 3: FLEG → PEU – Organizational Uses of Environmental Legitimacy for Reducing S2 Perceptions of Corporate Environmental Uncertainty

Emerging markets are replete with multiple conceptions of control proposed by various stakeholders (Fligstein, 1996). A single conception of control is required to achieve stability and reduce the inevitable uncertainties characterizing emerging markets. The domain of environmental reporting is focused on designing appropriate categories, presentation formats, and information content (Brunsson, 1990).

A conception of control is embodied in the form of narrative or quantitative disclosures (Fligstein, 1996). Disclosures provide PE information to shape stakeholder attitudes. Stable markets require "the construction of a conception of control to promote non-cutthroat ways to compete that all can live with and that state actors can accept" (Fligstein, 1996, p. 644). Once established, a conception of control represents "a market specific agreement" between the actors in firms and S2 on how firms fulfil their environmental responsibilities.

Firms use FLEG to create a dominant conception of control among S2 that PE disclosures are reliable and relevant. Legitimacy allows S2 to perceive order from a chaotic array of actions arising from PE accidents (Hopwood, 1987). FLEG provides a cognitive system of meaning through a combination of narrative and quantitative symbols about firms' PE commitments, expenditures, contingent liabilities, and potential social costs and benefits.

FLEG also creates agreement between firms and S2 about the validity of a firm's conception of control regarding relevant environmental disclosure information. Norms are not "true or false" but are "valid or invalid" (Gangolly & Hussein, 1996). Norms however become valid only after group consensus has been achieved by S2 endorsement (Berger et al., 1998). Legitimation mediates the mapping between organizational action and S2 values, requiring the acceptance of PE reporting claims that corporate actions "are congruent with the values of those with whom he or she must interact" (Richardson, 1987, p. 343).

Widespread corporate corruption has encouraged S2 to become cynical about endorsing reported PE information (Woolcock, 1998). This S2 cynicism is the result of repeated acts of corporate misconduct in emerging markets. This is important, as high levels of cynicism reduce firm opportunities for creating FLEG in S2 minds. If stakeholders perceive firms as environmentally illegitimate, they will reject or heavily discount the information value of firm disclosures. Thus, they will perceive higher levels of organizational environmental uncertainty (PEU) among emerging market firms.

Cynicism's negative effects are reversed when S2s view firms as environmentally "legitimate" actors. "Legitimate" firms are perceived as cognitively plausible and normatively acceptable (Suchman, 1995). These beliefs (FLEG) motivate S2s to process disclosure information and endorse PE disclosures as representationally faithful, thus reducing stakeholder PEU.

Research Propositions

Three hypotheses were developed from social representation and organizational legitimacy theories to construct a new mediation model. In this model, SDG directly and indirectly reduces investor (S2) PEU through FLEG. Each of the paths in the mediation model (see Figure 1.b) are represented by the following hypotheses:

H₁: A negative association exists between corporate disclosure guidelines (SDG) and investors' perceived organizational environmental uncertainty (PEU).

H₂: A positive association exists between corporate disclosure guidelines (SDG) and organizational legitimacy (FLEG).

H₃: A negative association exists between organizational legitimacy (FLEG) and investors' perceived organizational environmental uncertainty (PEU).

Research Methodology

The Shanghai EPSEM Sampling Plan

Shanghai is PRC's major financial center where over 7,000 foreign funded enterprises (FFE) operate with total capital exceeding USD 36.6 billion (Table 1). FFEs account for over 56% of Shanghai's exports. At least 8% of Shanghai residents invest in the local stock market (Hertz, 1998). Poor disclosure practices and the absence of any legal penalties for issuing false reports reduce investor confidence and lead to higher market volatility.

Two Shanghai brokerage house employees conducted verbal interviews with 240 retail stock investors. Interviews occurred each Saturday morning and afternoon for 10 weeks in the Lujiazui financial district. For each Saturday morning (9:30-12:30) and afternoon (2:30- 5:30) session, interviewers were each randomly assigned to 1 of the 115 trading exchanges in this financial district (China Economic News, 2001a). On the weekends "the trading crowds" regularly gather to discuss market events and news at these exchanges (Hertz, 1998). Interviewers randomly selected one of these trading crowds at a selected exchange, treating each discussion group as a cluster. From each cluster, one discussant was randomly selected for an interview of 20-30 minutes. For each sampling step we sampled elements without replacement.

Table 1

Shanghai Investment Community

Four Stakeholders	Key facts	Implications
1	2	3
1a. Shanghai investor type	F1. Dominated by small non-institutional investors with a per capita GDP = \$4,180, twice the PRC average (8). The business press generally estimates the number of small investors = 60 million, but FFE financial executives estimate the market = 6 million (13).	Large domestic savings pool – These investors have between \$720 and \$925 billion in personal savings to invest (7,12). Among 200 million urban PRC residents only 3% trade in the secondary market.
1b. Investor motivation	F2. Low interest rates – People's Bank of China reduced interest rates on deposits 7 times from May, 1996 to September 1999 by 6.93 % points (2). "Bank interest rates are kept artificially low, and given few other options for investment, a few people choose to invest in shares. But since less than one-half of China's listed companies have decent businesses, fewer pay dividends, and large investors commonly manipulate shares, it pays to invest for the short term"(13).	"Disregard whether the stock is good or not, if major players are trading it, it must be good"(11) – The pre-2000 investment regime encouraged small investors to engage in short-term trading by following the speculative bubbles created by large insider traders. Investors disregarded corporate financial reporting in favor of determining which parties were manipulating the market.
2a. FFE Shanghai Listings	F3. 66 listed companies account for 5% of the market value (1).	Diminished reliance on government regulation – Central government policy has recently removed barriers against FFE's listing on the Shanghai exchange. FFE's superior disclosure standards will pressure domestic firms to become transparent and abide by international reporting standards. Lack of disclosure standards has given domestic firms the opportunity to hide the fact that 70% of these firms have never been profitable(11).
2b. FFE growth in Pudong economic zone	F4. As of summer 2001 over 7,000 FFEs with total capital exceeding \$36.6 billion operated in Pudong (3).	Growth of service sector economy – Rapid FFE growth has generated boom in both the semiconductor and financial services sectors. The service sector led by financial services accounts for over 50% of Shanghai's GDP (10).
2c. FFE % of Shanghai exports	F5. FFEs accounted for 56% of Shanghai's exports in 2000 (4).	FFE's are in the public limelight and their progressive disclosure practices set a model for domestic enterprises.
3a. Central Government Policy to Promote a modern free market information environment	F6. Following the Tenth 5 year plan for National Economic and Social Development the CSRC encourages the listing of well-performing, strong growth companies to promote the spread of international disclosure standards (1).	Market confidence is increased by restricting the release of corporate disclosures only to qualified certificate holding financial analysts. Audit reform has reduced the over reporting of assets and income of 2000 listed firms by RMB 45.45 and RMB7.96 billion respectively (9).

Table 1 (continuous)

1	2	3
3b. FFE influence on CSRC	In 2001 the central government appointed Laura Cha Shih-lung, as vice chairperson of the China Securities Regulatory Commission (CSRC). She is the first non mainland person to be appointed to a senior PRC government position. She is a former Deputy Chairperson and Executive Director of the HK Securities and Futures Commission.	As a former San Francisco corporate lawyer specializing in commercial and cross-border transactions for FFE, she is expected to introduce reforms for improving corporate disclosures for listed firms in Shanghai and other PRC markets (14).
3c. Increased Shanghai municipal government transparency	F7. Government has issued a series of steps to open up its information processes to the press and public. For instance, public agencies now provide interactive, bilingual websites (5).	For the first time the Shanghai Stock Exchange delisted a manufacturing firm that had incurred losses for 4 consecutive years. Less than half of listed firms report net annual profits (15).
4. Increased media coverage	F8. Many poorly performing companies have refused reporters admission to shareholder meetings in contrast to permission granted for media coverage by well performing firms (6).	Media criticism of non reporting by poor performing firms has encouraged small investors to avoid buying their stock.

1. China Economic News, 2001. *Listing of Foreign companies*. 22, (46) 1096, p.8.
2. China Economic News, 2001. *Pressure increasing to lower interest rates*. 22, 49, 1099, 9-10.
3. China Economic News, 2001. *Pudong, Home to over 7,000 FFEs*. 22, (33), 1083, 4-5
4. China Economic News, 2001. *Shanghai speeds up improving foreign investment environment*. 22 (23), 1073, 4-5.
5. China Daily (2002). *Shanghai moving out into the open*. www.chinadaily.com.cn (2002-02-09).
6. China Daily (2002). *Window dressing buying strengthens markets*. www.chinadaily.com.cn (2002-02-08).
7. China Business Review (2001). *Zhongguancun: China's silicon valley*. 28 (3), 38-41.
8. China Daily (2001). *Shanghai stresses for general development*. www.chinadaily.com.cn (2001-02-15).
9. China Economic News (2001). *Mechanism of withdrawal for securities accountants and appraisers*. 22, (50), 1100, p. 6.
10. China Business Review (2001). *Apec in China: Shanghai Snapshot*. 28, (5) 42-45.
11. China Economic News (2001). *An end to the era of share price manipulation*. 22, (6) 1-2.
12. BBC News (2002). *China's stock markets to let in foreign firms*. www.bbc.co.uk (2002-02-12)
13. CFO.com (2002). *The truth about China's stock market*. www.cfo.com (2002-02-16).
14. FinanceAsia.com (2002). *Market seeks confirmation of Laura Cha's CSRC move*. www.financeasia.com. (2002-02-15).
15. BBC News (2001). *China's exchange gets tough* www.bbc.co.uk (2001-04-24).

Questionnaire Design

The initial survey instructions asked respondents to answer the following questions regarding the local operations of a foreign personal computer manufacturer which produced various products for the domestic and export markets. After an initial pilot test (N=35), a final survey included these constructs to measure SDG, FLEG, and PEU and six covariates:

1. A 12-item SDG scale (Solomon et al., 2000) was used to measure external investor attitudes towards corporate PE disclosures. This scale measures six facets of investor's "ideal" preferences regarding corporate disclosures of risk information. PRC listed companies are required to issue annual reports (China Daily, 2002d). Two of Solomon et al.'s six facets measure these regulatory issues regarding the voluntary nature and level of disclosure. The remaining four facets represent Western disclo-

- sure practices of FFEs. These Likert scale items were scored from 1 (strongly disagree) to 7 (strongly agree).
2. A 12-item FLEG scale (Elsbach, 1994) was used to measure investor attributions of organizational legitimacy towards FFE disclosure practices (see Figure 1). This scale was originally designed to measure 2 components of organizational legitimacy: organizational endorsement by S2, and organizational normativity, i.e. attributes that legitimate FFE firms should or do possess. Each of these items was scored from 1 (not at all important) to 7 (very important).
 3. An 11-item PEU scale was adapted from Gordon and Narayanan (1984) to measure external investor's perceptions of an organization's uncertainty in its external operating environment. It measured S2 perceptions of inter-firm price and manpower competition, economic and technological change, recent changes in consumer preferences, government regulations, and scientific discoveries. These Likert scale items were scored from 1 (very low uncertainty) to 7 (very high uncertainty).
 4. Six ordinal and nominal covariates measured age (<20, 21-30, 31-40, 41-50, 51-60, >60); gender (1 = males; 0 = females); business professional (1 = business professional; 0 = non-business professional); job experience (< 3 years, 3-6 years, 7-10 years, 11-15 years, 16-20 years, > 20 years); industry (1 = manufacturing; 0 = non-manufacturing); and firm ownership (1 = state owned; 0 = non-state owned).

Data Analysis

Testing for Construct Validity and Reliability

Fabrigar et al. (1999) recommend simultaneously extracting factor dimensions to test for convergent and discriminant validity among a study's constructs. Joint maximum likelihood (MLE) and principal axis factor procedures each produced similar results, indicating 3 divergent dimensions with 10 of 12 SDG items, 11 of the 12 FLEG items, and 9 of 11 PEU items correctly loading on 1 appropriate dimension with factor loadings > 0.40 and no cross-loadings. MLE eigenvalues collectively accounted for 51.62% of total sample variance – 27.26% (PEU), 13.05% (SDG), and 11.31% (FLEG).

MLE factor loadings for SDG had a median = 0.48 ranging between 0.41 and 0.68. FLEG factor loadings had a median = 0.54 ranging between 0.47 and 0.72. PEU factor loadings had a median = 0.65 ranging between 0.54 and 0.83. Cronbach alphas = 0.82 (SDG), 0.79 (FLEG), and 0.84 (PEU).

A Regression Format for Testing Mediator Hypotheses

To test if organizational legitimacy (FLEG) mediated the relationship between the role of environmental disclosure guidelines (SDG) and evaluations of the contents of environmental disclosure reports (PEU), panel B in Figure 1 specifies a set of three regression equations as recommended by Holmbeck (1997):

Equation 1: $PEU = b_1 SDG + \text{control variables}$

Equation 2: $FLEG = b_2 SDG + \text{control variables}$

Equation 3: $PEU = b_3 SDG + b_4 FLEG + \text{control variables}$

These equations must satisfy 4 conditions to show that FLEG is a significant mediator: 1) b_1 must be significant; 2) b_2 must be significant, 3) b_4 must be significant, and 4) b_3 must be insignificant or smaller than b_1 .

OLS Regression Results

Each OLS global F-test was significant (Table 2). None of the 6 control variables, except for one, was significant. The combined OLS results satisfied the mediator test criteria. Positive and significant ($p < .01$) unstandardized coefficients ($b_1 = -0.36$; $b_2 = 0.30$; and $b_4 = -0.27$) satisfied the first 3 criteria and are consistent with H_1 - H_3 . Criterion 4 is satisfied since $b_3 = -0.27$ when SDG and FLEG are jointly entered EQ.3 and absolute value of $b_3 <$ absolute value of b_1 .

Table 2

OLS Regression Results for 3 Mediator Equations

Independent Variable	EQ. 1 Dependent Variable – PEU	EQ. 2 Dependent Variable – FLEG	EQ. 3 Dependent Variable – PEU
SDG	- 0.36*** (0.09)	0.30*** (0.08)	-0.27*** (0.07)
FLEG			-0.27*** (0.08)
AGE	0.04 (0.07)	-0.33*** (0.08)	0.07 (0.06)
GENDER	0.08 (0.12)	0.16 (0.11)	0.04 (0.11)
BUSINESS PROFESSIONAL	-0.22 (0.15)	0.27 (0.20)	-0.14 (0.16)
JOB EXPERIENCE	-0.10 (0.06)	0.10 (0.07)	-0.13 (0.09)
INDUSTRY	0.06 (0.07)	0.01 (0.08)	0.10 (0.08)
OWNERSHIP	0.10 (0.08)	-0.05 (0.08)	0.12 (0.09)
R ²	0.33	0.38	0.40
R ² adjusted	0.26	0.31	0.37
Global F- test	3.56**	4.28***	4.15***
NO. OF OBSERVATIONS	232	232	232
* P < .10. ** P < .05. *** P < .01.			

Discussion and Conclusion

This study makes 4 contributions to the international business literature. Equation 1's results (see Panel B, Figure 1) are consistent with corporate reformer claims that increased levels and types of firm disclosures (SDG) will lower stakeholder PEU (Solomon et al., 2000). Secondly, reformers focus on the positive information effects of SDG as estimated by Equation 1. Corporate distrust leads them to overlook the normative mechanism via FLEG that simultaneously reduces investor PEU. Even controlling SDG, FLEG has a substantial negative effect for reducing investor PEU in Equation 3. Thus, SDG directly reduces PEU via an information effect and indirectly reduces PEU via a normative effect using organizational legitimacy.

Thirdly, this FLEG mediator model extends the focus of disclosure theory that has focused only on the information effects of SDG. By synthesizing recent sociological concepts (Berger et al., 1998; Snow et al., 1986) and organizational behavioral theories (Suchman, 1995; Fligstein, 1996), this study presents new theoretical reasons for hypothesizing the normative links between SDG → FLEG and FLEG → PEU. We used a social representation theory as an umbrella to explain how investors' legitimacy attributions are shaped by SDG.

Finally, CCP leaders acknowledge that it is cheaper and more efficient to rely on market mechanisms than on government regulations to improve stock investors' confidence. "Regulatory fatigue" (Harner, 2000) limits the ability of government agencies effectively to curb corruption in the PRC. Instead, CCP leaders are increasingly using the positive market effects of FFEs resulting from new business disclosure and managerial practices. Positive demonstration effects created by more transparent disclosure reporting will lead to a more salutary effect by reducing investor PEU than regulators' traditional policy of periodically punishing state owned enterprises (SOE) for corrupt practices.

References

1. Abdel-khalik, A. R./Wong K.A./Wu A., The Information Environment of China's A and B shares: Can We Make Sense of the Numbers?, *International Journal of Accounting*, 34, 1999, pp. 467-489.
2. Aldrich, H./Fiol, C., Fools rush in? The Institutional Context of Industry Creation, *Academy of Management Review*, 19, 1994, pp. 645-670.
3. Bauer, M. W./Gaskell, G., Towards a Paradigm for Research on Social Representations, *Journal for the Theory of Social Behaviour*, 29, 1999, pp.163-186.
4. Berger, J./Ridgeway C./Fisek, M./Norman, R., The Legitimation and Delegitimation of Power and Prestige Orders, *American Sociological Review*, 63, 1998, pp. 379-405.
5. Boisot, M./Child, J., From Fiefs to Clans and Network Capitalism: Explaining China's Emerging Economic Order, *Administrative Science Quarterly*, 41, 1996, pp. 600-628.
6. Boisot, M./Child, J., The Iron Law of Fiefs: Bureaucratic Failure and the Problem of Governance in the Chinese Economic Reforms, *Administrative Science Quarterly*, 33, 1998, pp. 507-527.
7. Brown, J.A., Competing Ideologies in the Accounting and Industrial Relations Environment, *British Accounting Review*, 32, 2000, pp. 43-75.
8. Brunsson, N., Deciding for Responsibility and Legitimation: Alternative Interpretations of Organizational Decision-Making, *Accounting, Organizations and Society*, 15, 1990, pp. 47-59.
9. Campbell, J., Institutional Analysis and the Role of Ideas in Political Economy, *Theory and society*, 27, 1998, pp.377-409.
10. China Daily, New Rule Backs Small Investors, (<http://www.chinadaily.com.cn/news/cb/>), 16, January 2002a.
11. China Daily, CSRC Must Move Carefully to Ensure Investor Confidence, (<http://www.chinadaily.com/cn/new/cb>), 23, January 2002b.
12. China Daily, Market Slide a Result of Three Factors, (<http://www.chinadaily.com.cn/news/cb>), 24, January 2002c.
13. China Daily, Rebound Terminates as Investors Take Profits, (<http://www.chinadaily.com.cn/news/cb>), 6, February 2002d.
14. China Daily, Accounting Sector Needs Administrative Intervention, (<http://www.chinadaily.com/cn/news/cb>) 21, February 2002e.
15. China Daily, Multinationals Becoming More Profitable in China, (<http://www.chinadaily.com.cn/news/cb>), 9, March 2002f.
16. China Daily, Tough Campaign Clears Air, (<http://www.chinadaily.com.cn/news/cb>), 26, September 2001.
17. China Economic News, 115 Domestic and Foreign Financial Institutions in Shanghai Pudong, 30, 2001 Dec. 24, pp. 5-6.
18. Clayton, S., Preference for Macrojustice versus Microjustice in Environmental Decisions, *Environment and Behavior*, 30, 1998, pp. 162-183.
19. Covalleski, M./Dirsmith, M./Michelman J., An Institutional Theory Perspective on the DRG Framework, Case-Mix Accounting Systems, and the Health-Care Organizations. 18, 1993, pp. 65-80.Diekmann A./Franzen, A., The Wealth of Nations and Environmental Concern, *Environment and Behaviour*, 31, 1999, pp. 540-549.
20. Elsbach, K. D., Managing Organizational Legitimacy in the California Cattle Industry: The Construction and Effectiveness of Verbal Accounts, *Administrative Science Quarterly*, 39, 1994, pp. 57-88.
21. Feldman, M./March, J., Information in Organizations as Signal and Symbol, *Administrative Science Quarterly*, 26, 1981, pp.171-186.
22. Fligstein, N., Markets as Politics: A Political-Cultural Approach to Market Institutions, *American Sociological Review*, 61 1996, pp. 656-673.

23. Frank, D./Hironaka, A./Schofer, E., The Nation-State and the Natural Environment over the Twentieth Century, *American Sociological Review*, 65, 2000, pp.96-160.
24. Gangolly, J./ Hussein, M., Generally Accepted Accounting Principles: Perspectives from Philosophy of Law, *Critical Perspectives in Accounting*, 7, 1996, pp. 383-407.
25. Gilley, B, Reforming Zeal, *Far Eastern Economic Review*, May 27, 162, 1999, pp. 50-51.
26. Gordon, L.A./Narayanan, V.K., Management Accounting Systems, Perceived Environmental Uncertainty and Organization Structure: An Empirical Investigation. *Accounting, Organizations and Society*, 9, 1984, pp. 33-47.
27. Gray, R., Accounting and Environmentalism: An Exploration of the Challenge of Gently Accounting for Accountability, Transparency and Sustainability, *Accounting, Organizations and Society*, 17, 1992, pp. 399-425.
28. Gregson, T., /Wendell, J./ Aono, J., Role Ambiguity, Role Conflict, and Perceived Environmental Uncertainty: Are the Scales Measuring Separate Constructs for Accountants, *Behavioral Research in Accounting*, 6, 1994, pp. 144-159.
29. Harner, S. M., Financial Services and WTO: Opportunities Knock, *The China Business Review*, 27, 2000, pp. 10-14.
30. Hart, S., A Natural-Resource-Based View of the Firm, *Academy of Management Review*, 20, 1995, pp. 986-1014.
31. Hertz, E., *The Trading Crowd: An Ethnology of the Shanghai Stock Market*, Cambridge Studies in Social and Cultural Anthropology: Cambridge University Press, U.K. 1998.
32. Holmbeck, G., Toward Terminological, Conceptual, and Statistical Clarity in the Study of Mediators and Moderators: Examples from the Child-Clinical and Pediatric Psychology Literatures, *Journal of Consulting and Clinical Psychology*, 65, 1997, pp. 599-610.
33. Jovchelovitch, S., In Defense of Representation, *Journal for the Theory of Social Behaviour*, 26, 1996, pp. 121-136.
34. Lev, B., Toward a Theory of Equitable and Efficient Accounting Policy. *The Accounting Review*, 63, 1988, pp.1-22.
35. Mathews, M./Perera, M, *Accounting Theory & Development, Third Edition*. Melbourne: Vic: Nelson 1996.
36. Meng Yan, Protecting Investors' Interests. *China Daily*, (<http://www.chinadaily.com.cn/news>) 29, November 2001.
37. Milliken, F.J., Three Types of Perceived Uncertainty About the Environment: State, Effect and Response Uncertainty, *Academy of Management Review*, 12, 1987, pp. 133-143.
38. Moscovici, S., The Phenomenon of Social Representations, in R.Farr/Moscovici, S. (eds.), *Social Representations*, Cambridge, U.K.: Cambridge University Press 1984, pp. 3-70.
39. Neu, D./Warsame, H./Pedwell, K, Managing Public Impressions: Environmental Disclosures in Annual Reports, *Accounting, Organizations and Society*, 23, 1998, 265-282.
40. Ouyang, K./Havercamp, S., China's Environmental Puzzle: Theory and Practice. *Journal of Developing Societies*, 10, 1994, pp. 29-45.
41. Patten, Dennis M., Intra-Industry Environmental Disclosures in Response to the Alaskan Oil Spill: A Note on Legitimacy Theory, *Accounting, Organizations and Society*, 17, 1992, pp. 471-475.
42. Perera, M., Accounting in Developing Countries: A Case for Localised Uniformity, *International Accounting Review*, 21, 1989, pp.141-158.
43. Power, M., Expertise and the Construction of Relevance: Accountants and Environmental Audit. *Accounting, Organizations & Society*, 22, 1997, pp. 123-146.
44. Richardson, A., Accounting as a Legitimizing Institution. *Accounting, Organizations and Society*, 12, 1987, pp. 341-355.
45. Robson, K./Willmott, H./Cooper, D./ Puxty, T. (1994). The Ideology of Professional Regulation and the Markets for Accounting Labour: Three Episodes in the Recent History of the U.K. Accountancy Profession. 19, 1994, pp.527-552.

46. Rossi, P./Berk, R., Varieties of Normative Consensus, *American Sociological Review*, 50, 1985, pp. 333-347.
47. Schmader, T./Major, B./Eccleston, C./McCoy S. (2001). Devaluing Domains in Response to Threatening Intergroup Comparisons: Perceived Legitimacy and the Status Value Asymmetry, *Journal of Personality and Social Psychology*, 80, 2001, pp.782-796.
48. Scott, W., The Adolescence of Institutional Theory, *Administrative Science Quarterly*, 32, 1987, pp. 493-511.
49. Skousen, C./Yang J., Western Management Accounting and the Economic Reforms of China, *Accounting, Organizations and Society*, 13, 1988, pp. 201-206.
50. Snow, D./Rochford, E./Worden, S./Benford, R., Frame Alignment Processes, Micromobilization, and Movement Participation, *American Sociological Review*, 51 1986, pp. 464-481.
51. Solomon, J.E./ Solomon, A./Norton, S. D./Joseph, N. L., A Conceptual Framework for Corporate Risk Disclosure Emerging from the Agenda for Corporate Governance Reform, *British Accounting Review*, 32, 2000, pp. 447-478.
52. Suchman, M., Managing Legitimacy: Strategic and Institutional Approaches. *Academy of Management Review*, 20, 1995, pp. 571-610.
53. Thompsom, L./Loewenstein G., Egocentric Interpretations of Fairness and Interpersonal Conflict. *Organizational Behavior and Human Decision Processes*, 51, 1992, pp.176-197.
54. Wang, N., Non-Financial Information in Annual Reports, in Choi F./Mueller, G. (eds.) *Frontiers of International Accounting: An Anthology*, Ann Arbor: UMI Research Press 1985, pp. 323-345.
55. Williams, P., The Legitimate Concern with Fairness, *Accounting, Organizations and Society*, 12, 1987, pp.169-189.
56. Woolcock, M., Social Capital and Economic Development: Toward a Theoretical Synthesis and Policy Framework, *Theory and Society*, 27, 1998, pp.151-208.
57. Xinhua News Agency, New Delisting System to Take Effect. (<http://www1.chinadaily.com/cn/news>), 5, December 2001a.
58. Xinhua News Agency, (2001b). Great Efforts Planned to Protect Natural Wetland Resources, (<http://www1.chinadaily.com/cn/news>), 26, September 2001b.
59. Zhang, Yu'an (2001). Efficient Use of Waste Urged to Safeguard Environment. *China Daily*, (<http://www.chinadaily.com.cn/news>), 8, October 2001.