From Discount to Premium: An Integrative Transparency System for Corporate Sustainability

Hun-Joon Park

Yonsei School of Business
134 Shinchon-dong Seodaemoon-ku Seoul Korea 120-749
Tel: +82 2 2123-2521
hjpark@yonsei.ac.kr

Sang-Joon Kim

Yonsei School of Business
134 Shinchon-dong Seodaemoon-ku Seoul Korea 120-749
Tel: +82 2 2123-2521
sjkim@yonsei.ac.kr

Najung Kim

Yonsei School of Business
134 Shinchon-dong Seodaemoon-ku Seoul Korea 120-749
Tel: +82 2 2123-2521
moelleuse@hotmail.com

Abstract

This paper examines a new approach to understanding *corporate transparency* (or, in reverse, *opacity*) system, which is used to recognize interconnections existing among firm-related agents – how they sanction and monitor each other's behaviors, ultimately tuning the activity of a firm in a systematic context. Firm-related agents include internal stakeholders (especially board of directors) and external stakeholders. While former approach individually can only examine corporate transparency/opacity in a one-sided way, we attempted to take on a more holistic and dynamic view using system dynamics. With our new integrative model, we propose a systematic solution to corporate transparency/opacity problems and provide a new means of studying corporate value more transparently than ever before, thus offering a better chance of corporate sustainability and also enhancing corporate value.

Emerging criteria for investment is corporate sustainability. Whether a firm is sustainable is an important question in measuring firm's value. When sustainability is high, corporate could have a premium, and when low, corporate has a discount. Corporate sustainability is generally defined as ''the activities, demonstrating the inclusion of social and environmental aspects in the normal business operations of a company and in its interaction with its stakeholders'' (European corporate sustainability framework (ECSF) research project, Caldelli & Parmigiani, 2004). Corporate sustainability places an emphasis on environmental, social, and economic performance, and the public reporting on this performance. A review of the literature suggests that corporate sustainability borrows elements from four other concepts. *Sustainable development* sets out the performance areas that companies should focus on, and also contributes the vision and societal goals that the corporation should work toward, namely environmental protection, social justice and equity, and economic development. *Corporate social responsibility* contributes ethical arguments and *stakeholder theory* provides business arguments as to why corporations should work towards these goals. *Corporate accountability* provides the rationale as to why companies should report to society on their performance in these areas (Wilson, 2003). This fourth concept, corporate accountability gives the ground for our study on corporate transparency. Here, we examine corporate transparency which has a direct influence on corporate sustainability, and accordingly on corporate premium.

Oxford English dictionary defines transparency as "3. the quality of something, such as an excuse or a lie, that allows somebody to see the truth easily; 4. the quality of something, such as a situation or an argument, that makes it easy to understand." Bushman, Piotroski, and Smith (2004) define corporate transparency as the availability of firm-specific information to those outside of publicly traded firms. This definition is somewhat in accordance with our view of corporate transparency, but there are some limitations because it lacks a systematic view. Balkin (1999) defined transparency as not only the availability of knowledge, but also the variety of participation and accountability. This definition emphasizes the importance of looking at the corporate transparency in a social, systematic way. Hence, we adapt Balkin's definition of corporate transparency. Corporate transparency is the low level of difference between the original state of corporation – true value – and superficial state of corporation based on the information shown to public, that is, shown value. Conversely, if the difference is great, the level of corporate transparency is low.

Corporate transparency is related to a variety of agents, or stakeholders, surrounding a firm. Institutions, shareholders, and principal-agent in a firm all influence the level of transparency in a corporation. Thus, we adapt system dynamics to examine corporate transparency system. System dynamics gives us a chance to adjust various variables affecting corporate transparency at a time and come up with some transparency system archetypes.

Our effort of viewing corporate transparency in a systemic, integrative way through system dynamics also gives the idea of corporate value. Firms troubled with accounting scandals or environmental problems such as Enron and Worldcom, suffered from corporate discount. If a firm provides true corporate value to their observers, hence its shown corporate value is the same as true corporate value, the firm could enhance its corporate value. In this case, corporate transparency functions as the corporate premium. Though the idea of corporate transparency concerns *showing* transparently and *looking at* transparently, the discrepancies of corporate transparency degree among firms give some firms more valuable than others. Contrary to the situation above, firms with relatively low level of corporate transparency would suffer a corporate discount, because corporate opacity operates as the corporate discount.

THEORETICAL BACKGROUNDS

Efforts in a firm which tries to deepen the difference between *shown value* and *true value* are revealed in the form of unethical behavior. The likelihood of unethical behavior is high when corporate tries to hide many things, and the likelihood is low when it tries to hide few things. That is why many scholars have been trying to figure out the reason for unethical behavior and the likelihood of unethical behavior is related to the level of corporate transparency.

One way to categorize the causes of unethical organizational behavior is a framework that considers the individual, organizational, and environmental level causes (Nielsen, 2003; Nielsen, 1996; Nielsen & Bartunek, 1996). A group of researchers that focus on individual level causes of unethical behavior found the reason for corporate opacity in personal, ethical problems – or, "bad apples" (Tenbrunsel & Messick, 2004; Wathne & Heide, 2000; Wisemen & Gomez-Mejia, 1998; Tenbrunsel, 1998; Trevino, 1986; 1992; Trevino & Victor, 1992). This group of researchers who developed their views on agent-based theory focused on decision-making process of an individual agent, particularly a CEO, and presented personal remedy for corruption. Another group of scholars focused on institutional factors that either inhibit or promote moral imagination in organizational problem solving (Williamson, 1996, 1981; Allinson, 2004; Langenberg, 2004; Crane, Matton, & Moon, 2004; Tenbrunsel & Messick, 1999; Shleifer & Vishny, 1986), that is, at the organizational level. Last group insisted that the cause of unethical behavior lies in environmental factors, or "bad barrels", surrounding a firm. This group of researchers (Noonan, 1984; Klitgaard, 1988) viewed corruption, the accumulated, systemic form of unethical behavior, in an environmental context and emphasized the adjustment of environment in curing the problem. Some other researchers' approaches cannot be categorized into these three approaches mentioned above. Trevino and Youngblood (1990)'s pioneering work, for example, developed a multiple-influences causal model of ethical decision-making behavior with the idea of "bad apples in bad barrels". Nielsen (2003) suggested the idea of systematic corruption based on network theory.

This corporate transparency problem is even more spotlighted in these days. Every academic arena has been focusing on corporate transparency problem since the recent onslaught of corporate scandals rocking such giants as Enron, Arthur Anderson, and WorldCom. Unfortunately, quality couldn't follow quantity. Most studies involving corporate ethics problems viewed transparency in their own fragmentary approaches, and those researches couldn't go beyond their academic fields. However, just as a firm needs to be seen from various aspects, so does a corporate transparency problem. This on-going study focuses not on the event-oriented, cross-sectional analysis but, for the first time, on the systematic, dynamic analysis on corporate transparency.

INTEGRATIVE TRANSPARENCY SYSTEM DYNAMICS MODEL

Looking at True Corporate Value

Firm-related agents, who try to *look at* true corporate value, other than principal agents can be divided into two groups: internal stakeholders, which include board of directors, and external stakeholders. These stakeholders have different level of *involvement or embeddedness* to a firm. Internal stakeholders are situated more closely than their external counterparts to a firm, making them more powerful in sanctioning and monitoring the behavior of a firm (Granovetter, 1985). We assume the degree of involvement, or embeddedness, as a constant factor. The sanctioning and monitoring of stakeholders, which we can also call observers, is also affected by their degree of *self-interest seeking*. The more one seeks his self-interest, the less the possibility of monitoring becomes. Institutions and people either inspire confidence or attract distrust and suspicion (Dawson, 2004) and the level of self-interest seeking determines on which side stakeholders reside. In this paper, the level of self-interest seeking is dealt as an independent variable and we saw the change in corporate transparency system as the level of self-interest seeking changes.

We considered the heterogeneity among firm-related agents, that is, stakeholders, and divided them into four groups under two criteria. (see Table 1)

TABLE 1

Types of Stakeholders – Heterogeneity among Stakeholders

	External	Internal
Sanctioning	Creditors, government	Board of Directors, Shareholders
Monitoring	NGOs, customers	Employees, labor unions

The board of directors, which is included in internal stakeholders, has significant power to control the activities of a firm and the degree of transparency is severely affected by the coalition between board of directors and managers (Beresford, 2003; Kim, 2003; Powers, 2002; Schwarcz, 2002). The recent onslaught of corporate scandals rocking such giants as Enron, Arthur Anderson, and WorldCom has proven the importance of independent board of directors, away from managers. That is why we sought to consider *the independency of board of directors* as an independent variable.

Showing True Corporate Value

The behavior of principal agent, who has an obligation to *show* true corporate value, is decided by ethical will of the agent and competency of agent. Ethical will is intrinsic characteristic of an agent and this can vary among all agents. Competency is defined as a perception of performance pressure. When an agent's ethical will is low, agent is reluctant to show a firm's true information and accordingly, observers from the outside can only see the opaque corporate value. When an agent's competency is high, he or she perceives the level of stress higher than real, becomes obsessed with performance of a firm, and consequently behaves unethically, muddying true corporate value (Schwepker and Ingram, 1996).

Institutional Regulations – Managing the *Showing* and *Looking at*

Behavior is affected by the structure (DiMaggio & Powell, 1991) and examining how institutions which control the behaviors have an influence on the behaviors of members in a structure, or society. In corporate transparency system, members are principal agents, *the show-ers*, and other firm-related agents,, *the look-ers*, and institutional regulations manage the behaviors of both show-ers and look-ers. Institutional regulations include social regulations as well as formal control.

Official Route of Information – Media

Media works as an information bridge between a firm and firm-related agents. It is an artificial route acting as a high-way, carrying information or knowledge from one side to the other. Here, we not only include the conventional media, which is mass media, but also other official route of information: the audit system. Mass media links principal agent and observers, other firm-related agents. Audit system links agent and owner, operating as another form of media. Bushman, Piotroski, and Smith (2004) used financial transparency in measuring corporate transparency, and captured the intensity and timeliness of financial disclosure, and their interpretation and dissemination by analysts and the media. In our framework, forms of information included in audit system media can be annual reports, report of investigation, financial statements, and other form of disclosure. Media sometimes produce and use information to divert attention from important matters, to change or confuse the meanings of events, to turn public concerns into matters of entertainment. Far from focusing on matters of public interest in a way that respects that public interest, they increasingly blur the public-private line (Balkin, 1999). In this situation, mass media seems to form alliance with a firm. Accordingly, the independency of mass media from a firm becomes important and we consider the level of independency of media as a significant factor affecting corporate transparency.

TABLE 2

Applying Independent Variables to Model

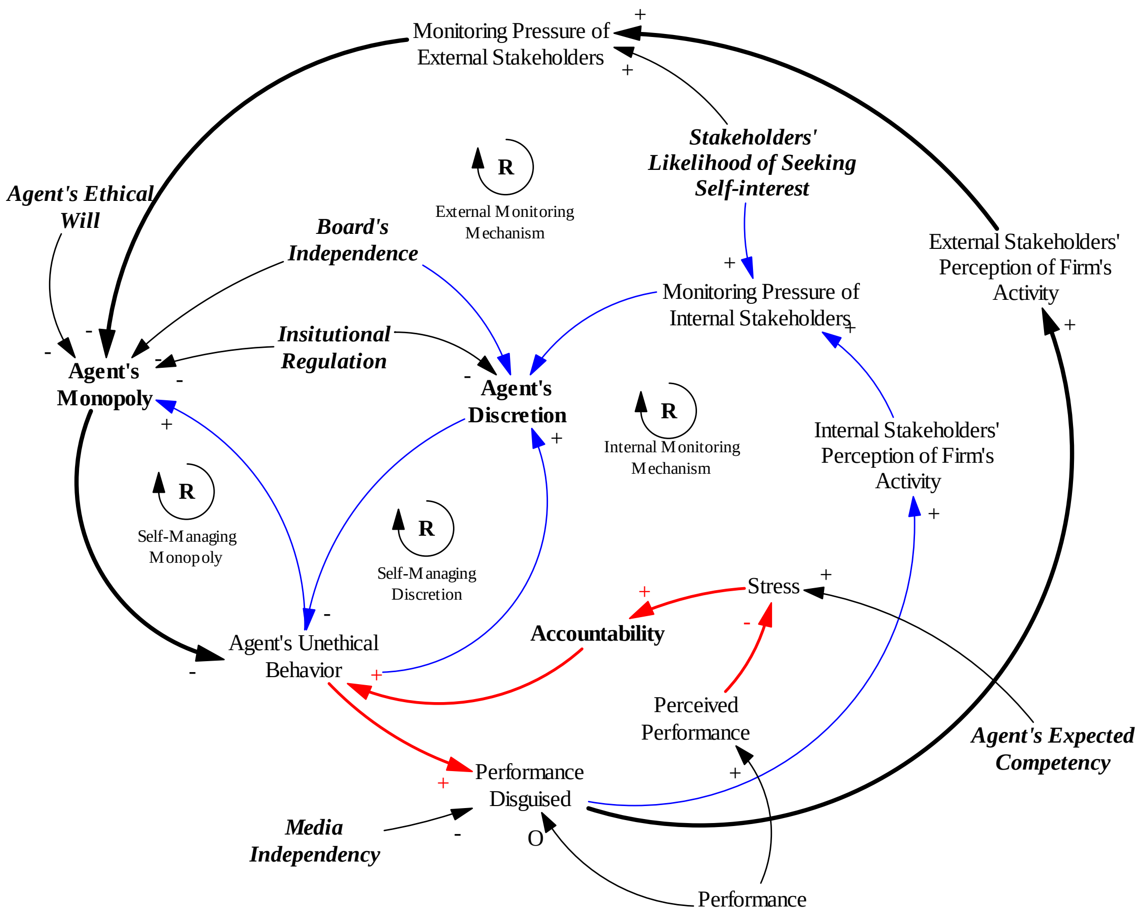
Variable	Range	0(Low)	1(High)
Ethical Will	0<Will<1	Low intrinsic tendency toward ethical behavior – Low likelihood of unethical behavior	High intrinsic tendency toward ethical behavior – High likelihood of unethical behavior
Competency	0<Comp<1	Low pressure of performance – Low likelihood of unethical behavior	High pressure of performance – High likelihood of unethical behavior
Independency of Board of Directors	0<Board<1	Coalition between board of directors and managers – High likelihood of unethical behavior	Separation of board of directors and managers – Low likelihood of unethical behavior
Independency of Media	0<Media<1	Coalition between media and managers – High likelihood of unethical behavior	Separation of media and managers – Low likelihood of unethical behavior
Self-Interest Seeking	0<SIS<1	Low intrinsic motivation to self-interest – Low likelihood of unethical behavior	High intrinsic motivation to self-interest – High likelihood of unethical behavior
Institutional Regulations	0<IR<1	Degree of Institutional Regulations (both social and formal controls) – Low	Degree of Institutional Regulations (both social and formal controls) – High

Under One Framework, One Model

According to Balkin (1999), transparency is not just a matter of the availability of knowledge, but also of various kinds of participation and accountability and this emphasizes the importance of looking at the corporate transparency in a systematic way. An understanding of transparency seems, then, to require acceptance of several premises. First, transparency is a process, not a kind of knowledge or understanding, and still less a matter of 'the truth' about some matter or other. Secondly, the transparency process is potentially unending because there are always new accounts or revelations that can be sought, another side of the story to tell (Cotterrell, 1999). These premises support our effort to view corporate transparency under one framework, connecting the looking and showing of corporate value.

FIGURE 1

Causal Loop Diagram of Corporate Transparency System



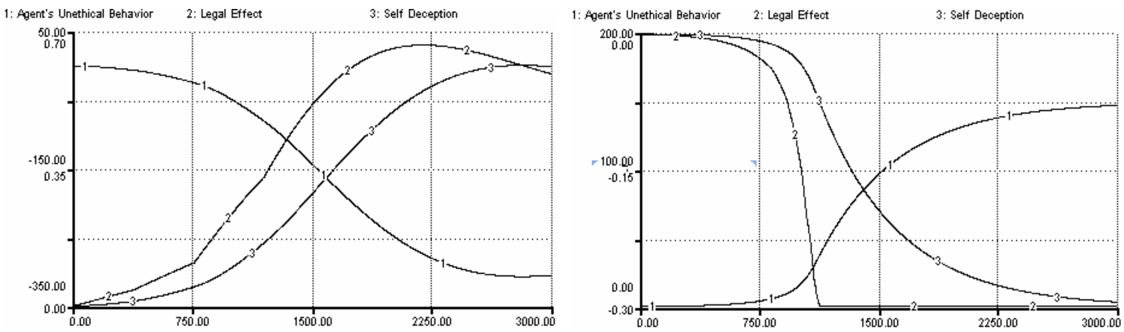
Once we've clarified this paper's importance in its integrative approach, we developed a model that shows how seven factors listed above are connected in one framework, using system dynamics. (see Figure 1) (see Appendix 1) System dynamics methodology gives diagnoses about problems through recursive feedback process based on system thinking, feedback thinking, and dynamic thinking (Richardson, 1998). In pursuit of analyzing corporate transparency under dynamic complexity, we adopt system dynamics, which could provide fundamental resolutions in a holistic view (Senge, 1990; Sterman, 2000).

Best and Worst Configuration for Corporate Transparency System

With the corporate transparency system model developed, we first figured out the best and worst type for corporate transparency system. The best type for corporate transparency would be resulted from the configuration of high ethical will, low competency, high level of independency of both media and board of directors, low degree of self-interest seeking of stakeholders, and high institutional regulations. On the contrary, the worst type would be derived from the configuration of low ethical will, high competency, low level of independency of both media and board of directors, high degree of self-interest seeking of stakeholders, and low institutional regulations. These two types are shown below. (see Figure 2)

FIGURE 2

Best Case & Worst Case



(a) Best case **(b) Worst case**

Figure 2 is the result of practicing system dynamics model for 3000 periods. Figure 4a shows the outcome with corporate transparency system working ideally and Figure 4b shows the outcome with corporate transparency system working ineffectively. Graph 1 in Figure 2 shows principal agent's unethical behavior, the portion above y=0 stands for possibility of unethical behaviors and the portion below y=0 for possibility of ethical behaviors. Graph 2 shows combined effect of institutional regulations on unethical behavior and graph 3 shows change in self-deception in unethical behavior (Tenbrunsel & Messick, 2004).

As it can be seen from the figure above, in the case of corporate transparency system working effectively, the possibility of unethical behavior decreases and consequently settles in ethical behavior.

However, in the case of corporate transparency system working ineffectively, the possibility of unethical behavior increases constantly, resulting in the fixation of unethical behavior phase. In conclusion, when system operates in a certain fixed direction, an agent in a system adapts himself or herself to the behavior of the system, and this phenomenon can be explained as cognitive institutionalization (Hoffman, 1999). In other words, system not only affects the behaviors of members in a short-term, but also affects them in a long-term, changing the cognition of members and fixing that change (Lu, 2004). Undoubtedly, the outcomes shown in Figure 4 are deduced by ideal configurations and these outcomes could not reflect the reality. The situation and circumstances surrounding a firm have to be considered to see corporate transparency in a realistic way. As we've stated before, this paper's significance derives from the integrative perspective of corporate transparency and elements which make the lens more curved ought to be analyzed in a holistic way and also to be solved in a systematically.

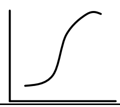
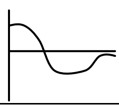
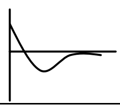
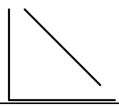
Therefore, the results of our corporate transparency system model under the following two premises. First, factors affecting the level of corporate opacity, or the curvedness of an opacity lens, are correlated and need to be measured in the form of configurations. Factors are not divided into the state of existent / absence, but are classified as dominant / subservient in a relative approach. Our main purpose, the integrating of two perspectives, showing and looking true corporate value, can be achieved under these premises. Secondly, our model presumes the equifinality. Katz & Kahn (1978) suggested that "a system can reach the same final state (for instance, the same level of organizational effectiveness) from differing initial conditions and by a variety of paths". In essence, "a feasible set of equally effective, internally consistent patterns (Van de Ven & Drazin, 1985)" or equifinality (Gresov & Drazin, 1997) may exist. (e.g. Bansal & Roth, 2000). Accordingly, the focus of this paper is on analyzing the configuration patterns of corporate transparency system and with these patterns we tried to present the integrative solution for lowering the level of curvedness, corporate opacity.

Four Archetypes of Corporate Transparency System

After developing the model for corporate transparency system, we practiced the system dynamics program adjusting the likelihood of each factor. We put 0.99 for high, and 0.01 for low, and made 64 configurations of factors related to unethical behavior. The outcome of the simulation seems thought-provoking. 64 results can be categorized into four archetypes. (see Figure 3)

FIGURE 3

Archetypes of Corporate Transparency System

		Self-Interest Seeking	
		H	L
Institutional Regulations	H		
	L		

The first archetype is the configuration pattern which shows the increase in unethical behaviors of agent in the course of time. (see Table 3) As you can see in the Table 3, agent's unethical behaviors increase with the configuration of high self interest seeking of stakeholders and high institutional regulation.

TABLE 3

Increasing UB Type - Increasing Unethical Behavior

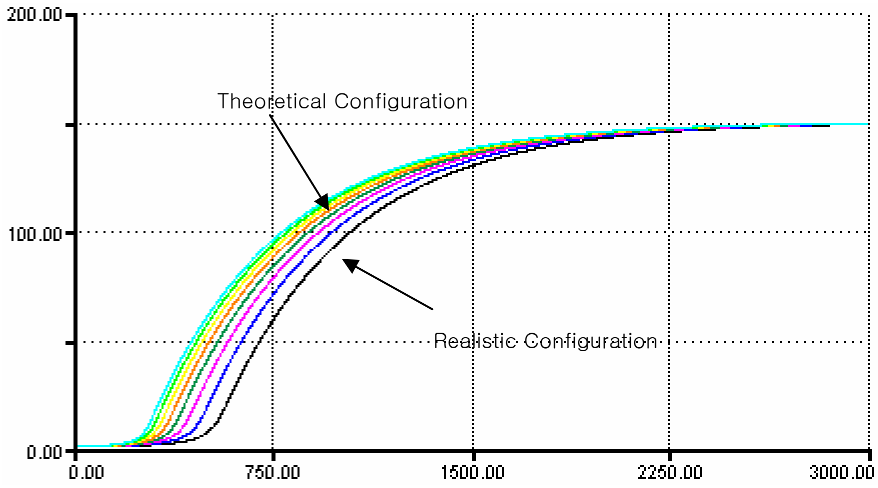
Type	Will	Comp	Board	Media	SIS	IR
T201	L	L	L	L	**H**	**H**

T218	H	H	L	L	**H**	**H**
T316	L	H	L	L	**H**	**H**
T318	H	L	L	L	**H**	**H**
T110	H	H	L	H	**H**	**H**
T219	H	L	L	H	**H**	**H**
T224	L	H	L	H	**H**	**H**
T301	L	L	L	H	**H**	**H**
T109	H	H	H	L	**H**	**H**
T223	H	L	H	L	**H**	**H**
T227	L	H	H	L	**H**	**H**
T313	L	L	H	L	**H**	**H**
T002	H	H	H	H	**H**	**H**
T111	H	L	H	H	**H**	**H**
T112	L	H	H	H	**H**	**H**
T220	L	L	H	H	**H**	**H**

This configuration can be interpreted in two perspectives. First, high level of self-interest seeking means that firms' behaviors are closely related to the stakeholders' interests. Therefore, the amount of control activities toward the unethical behavior of the principal agent would decrease when that behavior is connected to their own interests and the agent acts more unethically with little level of sanctioning or monitoring, that is, *looking at*. Secondly, when stakeholders use institutions, especially formal control, to enhance their interests, the conflict intensifies (Brockner, 1986) and stakeholders tend to oppose to the regulations, rather than following the regulations (Park & Kim, 2003). Figure 4 demonstrates this type of configurations in a graph. To view the system in more realistic way, we adjusted the level of dominance more densely. Theoretical configuration represents the configuration which the difference of levels of dominance of factors is definite and realistic configuration represents the one which the difference is less definite, obscure. As it is shown in Figure 4, the possibility of agent's unethical behavior converges. This convergence occurs because our corporate transparency system assumes two types of institutions: formal control and social control.

FIGURE 4

Increasing UB Type – Theoretical & Realistic Configurations



The second archetype is the configuration pattern which shows the gradual decrease in unethical behaviors of agent in the course of time. (see Table 3)

TABLE 4

Decreasing UB Type I – Gradually, but Slowly

Type	Will	Comp	Board	Media	SIS	IR
T001	L	L	L	L	**L**	**L**
T105	L	H	L	L	**L**	**L**
T106	H	L	L	L	**L**	**L**
T205	H	H	L	L	**L**	**L**
T103	L	L	L	H	**L**	**L**

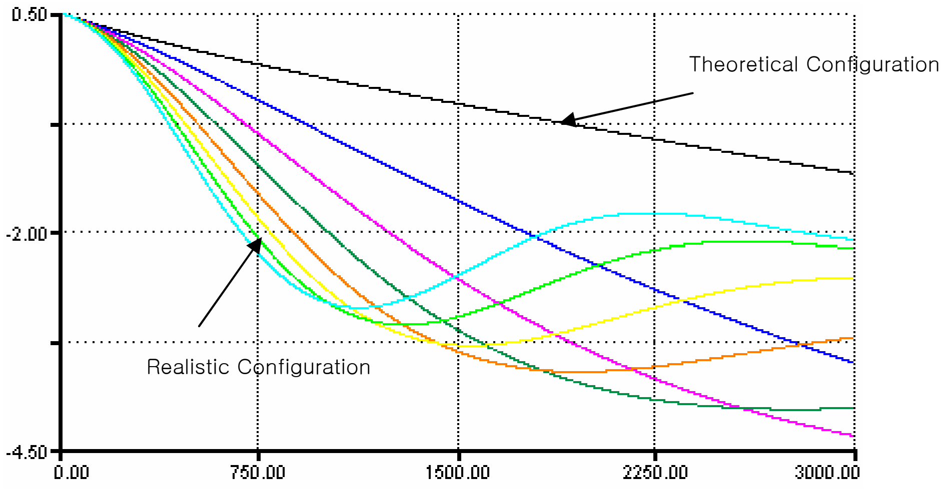
T208	L	H	L	H	**L**	**L**
T212	H	L	L	H	**L**	**L**
T307	H	H	L	H	**L**	**L**
T104	L	L	H	L	**L**	**L**
T204	L	H	H	L	**L**	**L**
T209	H	L	H	L	**L**	**L**
T304	H	H	H	L	**L**	**L**
T203	L	L	H	H	**L**	**L**
T216	H	H	H	H	**L**	**L**
T303	L	H	H	H	**L**	**L**
T315	H	L	H	H	**L**	**L**

The configurations shown in Table 4 have a common denominator: low self-interest seeking and low institutional regulations. This archetype of configurations is in contrast to Increasing Type shown in Table 3. Although the intensity of institutional regulations is low, stakeholders, firm-related agents, perform their role substantially, side-effects of formal control does not occur (e.g. Sitkin & Roth, 1993; Malhotra & Murnighan, 2002), and consequently agent's behavior resides in an ethical way. In the end, this result support the idea that behavior of an agent is affected by the embeddedness (Granovetter, 1985) and formal control does not have a significant effect on enhancing corporate transparency.

FIGURE 5

Decreasing UB Type I – Gradually, but Slowly:

Theoretical & Realistic Configurations



Let's look at Figure 5. In the case of theoretical configuration, unethical behavior decrease linearly. However, in the case of realistic configuration, the intensity of regulations becomes higher, but the principal agent's behavior is influenced by the opportunism. This fluctuation affected by opportunism does not seem to influence the general form of this archetype because in general, it moves toward the ethical state.

The third archetype consists of low self-interest seeking and high institutional regulations configuration. (see Table 5)

TABLE 5

Decreasing UB Type II – Dramatically, but Instantly

Type	Will	Comp	Board	Media	SIS	IR
T101	L	L	L	L	**L**	**H**
T213	L	H	L	L	**L**	**H**
T215	H	L	L	L	**L**	**H**
T310	H	H	L	L	**L**	**H**
T206	L	L	L	H	**L**	**H**
T222	H	H	L	H	**L**	**H**

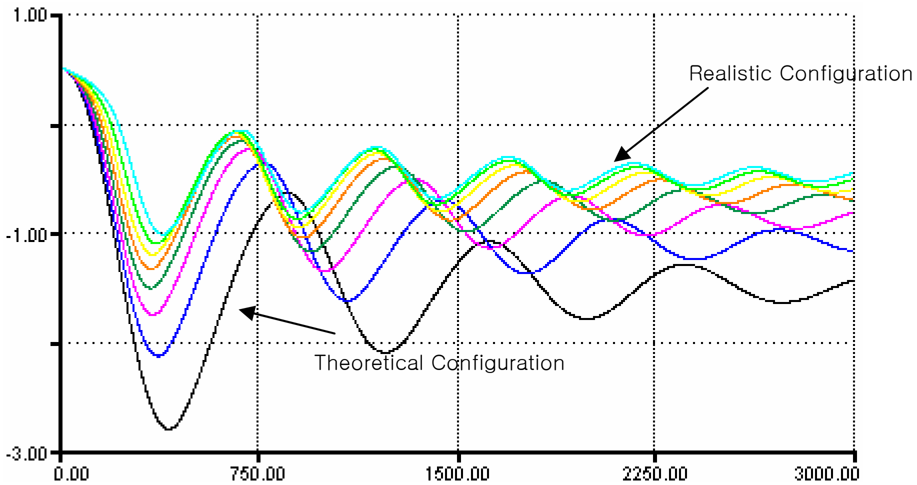
T311	L	H	L	H	**L**	**H**
T319	H	L	L	H	**L**	**H**
T210	L	L	H	L	**L**	**H**
T217	H	H	H	L	**L**	**H**
T308	L	H	H	L	**L**	**H**
T320	H	L	H	L	**L**	**H**
T108	H	H	H	H	**L**	**H**
T226	H	L	H	H	**L**	**H**
T229	L	H	H	H	**L**	**H**
T305	L	L	H	H	**L**	**H**

In this configuration pattern, a force which derives not-showing behavior of principal agent and not-looking behavior of other firm-related agents and a control mechanism of institutional regulations compete against each other. This competition makes the graph to fluctuate and finally converge. (see Figure 6)

FIGURE 6

Decreasing UB Type II – Dramatically, but Instantly:

Theoretical & Realistic Configurations



Finally, the Unpredictable Type:

TABLE 6

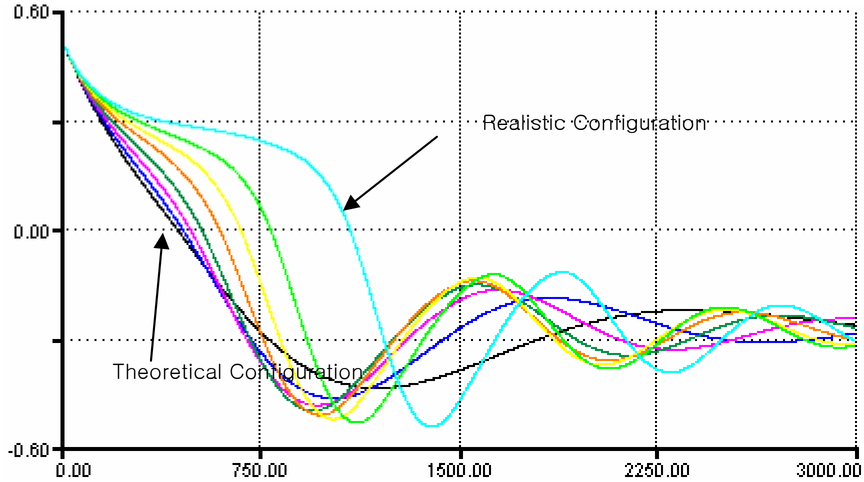
Unpredictable Type

Type	**Will**	**Comp**	**Board**	**Media**	**SIS**	**IR**
T102	L	L	L	L	**H**	**L**
T211	L	H	L	L	**H**	**L**
T214	H	L	L	L	**H**	**L**
T309	H	H	L	L	**H**	**L**
T107	H	H	H	H	**H**	**L**
T228	H	L	H	H	**H**	**L**
T230	L	H	H	H	**H**	**L**
T302	L	L	H	H	**H**	**L**
T202	L	L	L	H	**H**	**L**
T225	H	H	L	H	**H**	**L**
T314	L	H	L	H	**H**	**L**
T317	H	L	L	H	**H**	**L**
T207	L	L	H	L	**H**	**L**
T221	H	H	H	L	**H**	**L**
T306	L	H	H	L	**H**	**L**
T312	H	L	H	L	**H**	**L**

As Figure 7 shows, this type is also a fluctuation type as Decreasing UB Type II, but the configuration of high self-interest seeking and low institutional regulations. This fourth type, in the course of time, can become harmful. Because the intensity of regulations is low, factors controlling the behavior of agent cannot perform fully and as a result, unethical behavior of agent can increase much more sharply.

Figure 7

Unpredictable Type – Theoretical & Realistic Configurations



More time is needed to enter the ethical level and as the amplitude of realistic configuration is narrower than that of theoretical configuration, opportunistic behavior takes place more abruptly. This result is extremely different from Decreasing UB Type II, because this fourth type aggravates the conditions for unethical behavior.

Criteria Determining the Archetype: Self-interest Seeking, Institutional Regulations, and the Independency of both Media and Board of Directors

Four archetypes mentioned above are determined by some factors. According to the result of our system dynamics model, factors other than self-interest seeking, institutional regulations, independency of media, and that of board of directors, are not significant factors influencing the degree of corporate transparency. Principal agent's ethical will and his or her level of competency caused by the stress of performance do not play significant roles as criteria. This result implies two facts: one fact that problems on show-er side are susceptible to environment and the other fact that regulating agent's behavior by emphasizing the importance of self-control is not a well-supported solution for corporate opacity problem.

The degree of self-interest seeking and the intensity of institutional regulations are the main factors which determine the form of archetype: Increasing Type (H, H), Decreasing Type I – Gradually, but Slowly (L, H), Decreasing Type II – Dramatically, but Instantly (L, L), and Unpredictable Type (H, L). Well-working corporate transparency types could be Decreasing Type I – Gradually, but Slowly (L, H) and Decreasing Type II – Dramatically, but Instantly (L, L). These two archetypes reduce the likelihood of unethical behavior, making corporate more transparent. Two types have a thing in common; they both have a low level of self-interest seeking and their likelihoods of unethical behavior decline. When we look at these types more closely, we can find out that the difference between two are resulted from institutional regulations. Forceful regulations can lower the likelihood of unethical behavior dramatically, but the effect seems to be instant. The level of agent's unethical behavior fluctuates.

As we've seen from above, the independency of media, including mass media and audit system media and that of board of directors determine the slope within the same archetype. High level of independency is required to develop a sound corporate transparency system.

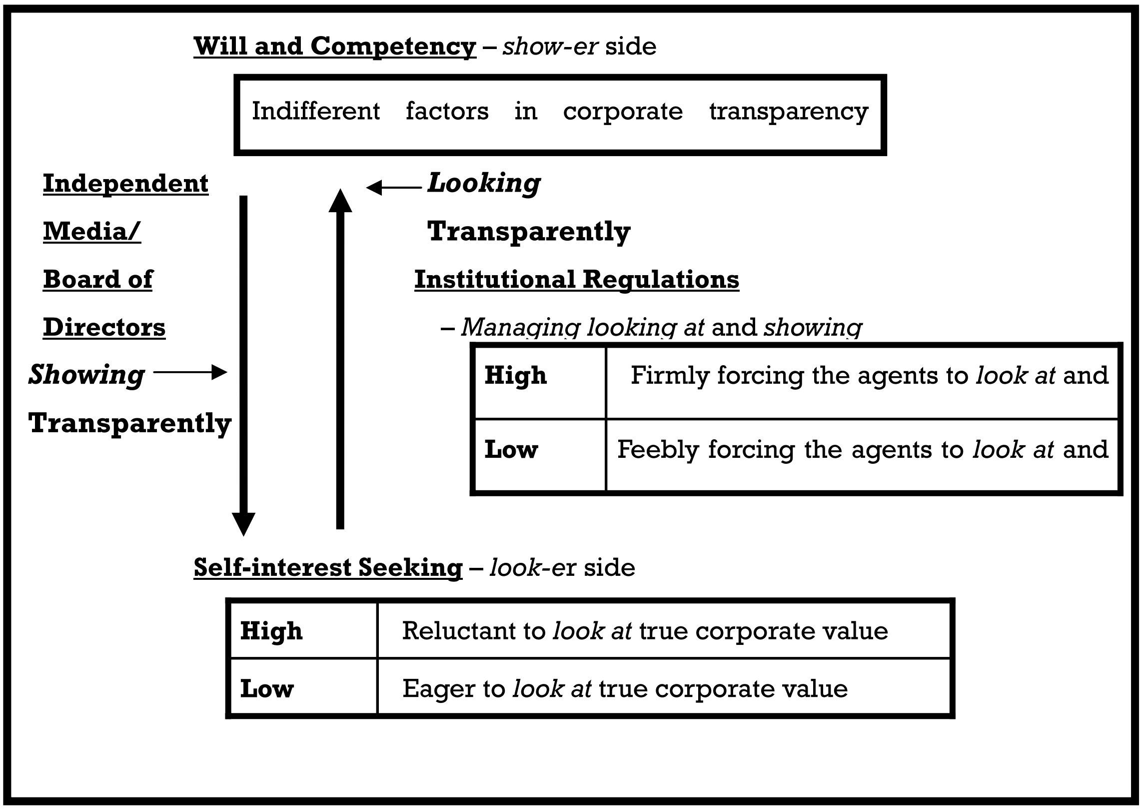
TRANSPARENCY SYSTEM FOR CORPORATE SUSTAINABILITY

We started this paper with the idea of corporate sustainability and corporate value. Corporate with high sustainability could be evaluated higher than that with low sustainability, and transparency, which could be explained in concept of corporate accountability, helps a firm to enhance its sustainability. Among our four archetypes, Decreasing Type I – Gradually, but Slowly (L, H) and Decreasing Type II – Dramatically, but Instantly (L, L) are more likely to be transparent and to survive than Increasing Type (H, H) and Unpredictable Type (H, L). However, as all four types have a likelihood of unethical behavior, we additionally suggest the remedies for corporate opacity problem with our four archetypes of corporate transparency system.

First above all, we must deal crucial factors that determine which archetype the types belong to together. In other words, if a certain firm and its surrounding factors, including media and institutions, seek to find a way to improve corporate transparency, the strategy must be organized in the form of configuration. For instance, the independency of media, the independency of board of directors, the level of intensity of institutional regulations, and the tendency of self-interest seeking of stakeholders must all be considered in a one systematic approach. (see Figure 8) These important elements of corporate transparency system need to form a certain kind of configuration.

FIGURE 8

The Integrative Solution for Corporate Transparency System



Secondly, we can develop remedies for each level of factors: show-er level, look-er level, manager of showing and looking, independency of board of directors, and that of media as official route of information. Show-er's behavior is unpredictable, therefore hard to control and this characteristic of show-er side problem is shown through our integrative model of system dynamics. No one could tell who has the same level of conscience as Bebbers' or Fastow's. However, on the look-ers' side, low level of self-interest seeking is needed and this seemingly impossible to control elements must be managed. Worldcom's formal executives who knew the unethical conduct of Bebber acted as if they did not know the situation because of their own interests. The intensity of institutional regulations, which is determined by relativity of formal control over social control, can be adjusted according to the state of a firm. When a firm is in truly risky situation with a desperate need of quick medicine, high level of formal control can be useful. However, if a certain firm in a stable situation tries to improve its corporate transparency, low level of formal control would help it to become transparent gradually, though it takes time to become so. In Worldcom's accounting fraud case, the problem became more difficult because of deficient control of financial system. (Beresford, Katzenbach, & Rogers, Jr., 2003) The independency of media and that of board of directors must also be secured in order to enhance the degree of corporate transparency, resulting in viewing true corporate value. In Enron's case, Arthur Anderson who received 2700 million dollars (UD) for consulting work did not blow the whistle. The auditors who operate as official media dealing financial information of a firm need to be independent of interests offered by managers.

Finally, a firm that provides true corporate value to their observers, or a firm of which observed corporate value is same as true corporate value, could enhance its corporate value. In this case, corporate transparency functions as the *corporate premium*. Though the idea of corporate transparency concerns *showing* transparently and *looking at* transparently, the discrepancies of corporate transparency degree among firms give some firms more valuable than others. Contrary to the situation above, firms with relatively low level of corporate transparency would suffer a *corporate discount*, because corporate opacity operates as the corporate discount.

With these implications mentioned above in mind, a firm, other firm-related agents, lawmakers and other regulation-related agents, and media could help raising the level of corporate transparency, removing an obstacle existing between principal agent and other agents.

DISCUSSION

This paper has many implications regarding various factors concerning the corporate transparency system. Based on the mechanism of looking at and showing, this study seeks to look at agents in the corporate transparency system in an integrative, holistic manner. In spite of these significances, this paper has its limits, which may cause some misunderstandings to arise.

Firstly, in what way must a firm behave in order to avoid the problems of corporate opacity? Does a firm always have to *show*? Does showing always lead to an increase in corporate value? The notion of transparency partly resides in the domain of subjectivity, since levels of transparency could be affected by different interpretations of observers who view the figure through a concave lens. Every organization has its own particularistic and universalistic norms (Schweitzer, 2005), and the two are not congruent all the time. Accordingly, a subjective yardstick of an agent measuring the degree of corporate transparency alters as the organization changes. For instance, unethical conduct or trading of a firm is not always caused by corporate opacity problems. The result would differ as the interpretation of the observer varies. Moreover, if we consider the dynamics of particularistic norms, we must keep in mind that today's transparency could be tomorrow's opacity.

This uncertain aspect of situation could lead a firm to ask the following question: why does a firm have to show *all* the information, including unnecessary ones, to all firm-related agents (Tenbrunsel & Messick, 2004)? If one were to follow the particularistic norms within a firm, is choosing to reveal only necessary information to stakeholders an unethical act? Self-deception and art of omission that look unclean on the outside seem difficult to judge by a standard measuring stick—of corporate transparency. The judgment is within the boundaries of the observers' interpretations.

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APPENDIX 1

System Dynamics Model for Corporate Transparency System