

# Integrating Enterprise Risk Management and Balanced Scorecard for Reputation Risk Management

岩田 弘尚

Hironao Iwata

専修大学経営学部

School of Business Administration, Senshu University

## ■Key Words

reputation risk, reputation management, risk management, BSC (balanced scorecard), COSO ERM (enterprise risk management),

## ■Abstract

The objective of this paper was to propose a reputation risk management framework that integrates the Committee of Sponsoring Organizations of the Treadway Commission (COSO)'s enterprise risk management (ERM) and Balanced Scorecard (BSC). For this purpose, the first point to be discussed was the definition of reputation risk. Next, we considered conventional approaches that treat risks in BSC and then consider the compatibility between COSO ERM and BSC. The final question which we must consider was the method of applying a reputation risk management framework by integrating COSO ERM and BSC to the leading Japanese company as an example.

## ■キーワード

レピュテーション・リスク, レピュテーション・マネジメント, リスクマネジメント, BSC (バランスト・スコアカード), COSO ERM

## ■要約

本論文の目的は、レピュテーション・リスク・マネジメントのフレームワークを提示することである。その目的のために、まず、レピュテーション・リスクの概念を明らかにした。次に、BSC (バランスト・スコアカード)におけるリスクの取り扱いについて検討し、COSO ERM (全社リスクマネジメント)とBSCの相互補完性について考察した。最後に、先進的な日本企業の事例を用いて、レピュテーション・リスクをマネジメントするためのCOSO ERMとBSCの統合フレームワークを検討した。

受付日 2018年11月25日

受理日 2018年12月11日

Received 25 November 2018

Accepted 11 December 2018

## 1 | Introduction

In recent years, there has been a growing interest in “the stakeholder theory” (Freeman *et al.*, 2007). This refers to a management style that ensure a company’s survival, reputation and success through managing stakeholder relationships. One of the methods used to put “the stakeholder theory” into practice is reputation management, which aims at creating, maintaining, and improving the intangibles known as the “corporate reputation.”

The Conference Board, an US independent business membership and research association, released intriguing results of surveys they have conducted on reputation risk management. According to the reports titled *Reputation Risk* (Tonello, 2007) and *Managing Reputation Risk and Reward* (Bayer and Hexter, 2009), 82% of the executives at companies surveyed answered that they put a great deal of energy into reputation risk management, and 72% answered that their expenditures in this topic would increase for the next 3 years. As indicated in these reports, those in the business world in Europe and the US already recognize that reputation risk management is management topic that needs to be given its due attention.

In Japan, interest in corporate reputation has been increasing as a result of a high number of recent corporate scandals. Nevertheless, many companies now engage in a passive type of risk management in which they strive to limit the damage caused by a publicly exposed crisis. The concept of reputation risk is unfortunately still unfamiliar in Japan.

The objective of this paper is to propose a reputation risk management framework that inte-

grates the Committee of Sponsoring Organizations of the Treadway Commission (COSO) enterprise risk management (ERM) and balanced scorecard (BSC). For this purpose, the first point to be discussed is the definition of reputation risk. Next, we will consider conventional approaches that treat risks in BSC and then consider the compatibility between COSO ERM and BSC. The final question which we must consider is methods of applying a reputation risk management framework by integrating COSO ERM and BSC to the leading Japanese company as an example.

## 2 | Reputation Risk and Reputation Management

In Japan, the idea that corporate reputation can be a company’s intangible asset is gradually gaining popularity.<sup>1</sup> However, it is difficult to ascertain whether reputation risk is a concept widely accepted by the public. Therefore, it is first necessary to present all of the concepts that are related to reputation risk.

### 2.1 What is “corporate reputation”?

In this paper, the term “corporate reputation” does not refer to simple gossip or rumors. In contrast, it is defined as “a sustainable competitive advantage derived from various stakeholders of a company, based on the results of past and present activities as well as on future forecast of the business manager and employee (Sakurai, 2008, p.23).” Corporate reputation can be measured using reputation measurement such as RepTrak™ (Figure 1, right side), which includes the following 7 attributes: 1) Products and Service, 2) Innovation, 3) Performance, 4) Leadership, 5) Governance, 6) Citizenship, and 7) Workplace.<sup>2</sup> Management of corporate reputation is possible because these attributes can be measured.

If corporate reputation can be appropriately managed, it can be a driver that increases corporate value.<sup>3</sup> If, on the other hand, corporate reputation is damaged, there is a risk of losing corporate value. Thus, corporate reputation is an extremely important intangible asset that influences corporate value.

2.2 Two Attitudes toward Reputation Risk

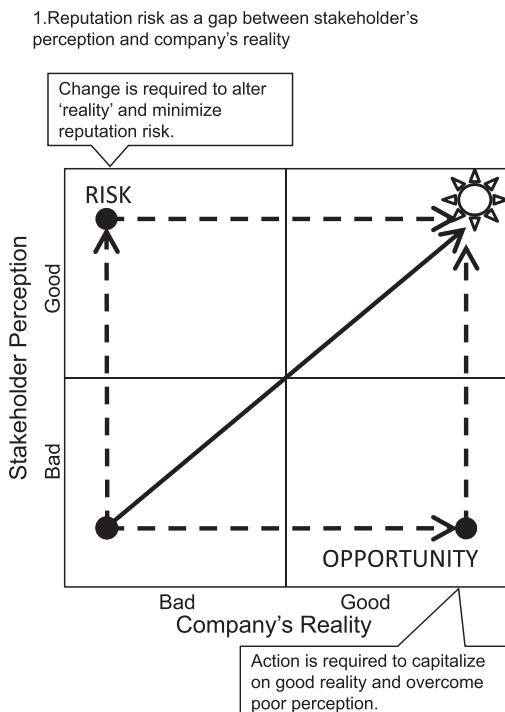
The following definition of “risk” that was proposed by COSO (2004) is becoming widely accepted: “Events with a negative impact represent risks, which can prevent value creation or erode existing value.” However, with regard to reputation risk, opinions are divided into two types.

A field study conducted by The Economist Intelligence Unit (2005), which is the research

organization of the UK magazine *The Economist*, asked the following question to those in charge of risk management: “Do you view threats to your company’s reputation as: a category of risk in its own right, or something that arises as a consequence of variety of other risks?” The percentage of the respondents who agreed with the former was 52% while the remaining 48% agreed with the latter. The presence of this survey question indicates the belief that there are two types of reputation risk.

One of these is the risk that arise from “reputation-reality gap (Eccles *et al.*, 2007)”. This is the position that there is a risk in its own right known as the reputation risk (See Figure 1, left side). Reputation is distinct from the actual character or behavior of the company. When the reputation of a company is more positive than its un-

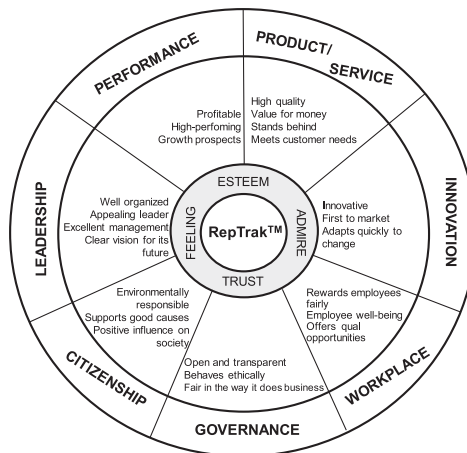
Figure 1 Two Attitudes toward Reputation Risk



Source : Fombrun and van Riel (2004), p.259.

2.Reputation risk as a risk of risks

Reputation risk arise from a consequence of failure to manage attributions of corporate reputation effectively.



Source : van Reil and Fombrun (2007), p.255.

derlying reality, this gap poses a substantial risk. The other is the risk that arises from “any action, events or circumstance that could adversely or beneficially impact an organisation’s reputation (Rayner, 2003).” There is this notion that reputation risk is the aggregation of a variety of risks or the risk of risks (See Figure 1, right side). From this point of view, reputation risk should be managed and overseen as a consequence of the failure to manage other risks effectively.

The difference between these two attitudes depends on which of the two aspects of reputation one attributes to the cause of reputation risk. Specifically, it arises based on whether one ascribes reputation risk to “the assessment of stakeholders” or to the “actions of managers and employees.” Therefore, depending on which risk concept one bases one’s judgment on, the method of managing reputation risks differs.

### 2.3 Reputation Risk Management

As Sakurai (2011) pointed out, there are two aspects to reputation management. One is an approach that is focused on communication with stakeholders, whereas the other is one that is focused on internal corporate management.

As shown on the left side of Figure 1, when reputation risk seems to take the form of a gap between the corporate reputation and its reality, a reputation risk management approach that attempts to narrow this gap through communication with stakeholders (with improvement of internal management when required) after quantitatively identifying the gap would be most useful. On the other hand, in cases where reputation risk is considered to be events that have a negative effect on the perception of stakeholders, then—as shown on the right side of Figure 1—the risk that may be the cause of a reputation risk (i.e., corporate strategy or corporate operations themselves)

must be managed.

These two approaches to reputation risk management are valid. The reality is that companies must manage all risks that may have a negative effect on the perception of stakeholders, including risks that take the form of a gap between the realities of the company and the stakeholders’ perception of those.

## 3 | Conventional Approach: Risks are Incorporated into BSC

Before examining the approach that integrates COSO ERM and BSC, let us first discuss the conventional risk management approach that utilizes BSC. Multiple attempts have been made to conduct risk management, including reputation risk management, within the framework of BSC. Shimura (2010) organized them into the following three approaches.

### 3.1 Incorporation as Strategic Themes and Strategic Objectives

An approach that incorporates risks as strategic themes and strategic objectives of BSC was effective when used in the case of the Mitsubishi UFJ Financial Group (MUFG). MUFG’s strategy map (see Figure 2(1)) reveals strategic objectives for “value protection,” or the strategic theme of society and environment within the internal business process. The strategic objectives are governance, compliance and ethics, internal control, information security management, and risk and crisis management.

However, as Nagumo (2006, p.50) pointed out, care is required when employing this approach because risks are not limited to the four perspectives of bottom-up BSC and because they do not neatly fit into each of strategic themes.

### 3.2 Management using Strategic Initiatives

As a result, Shimura (2010) proposed a solution in which risks are managed using strategic initiatives. For example, if an organization involved in philanthropic programs was to list “increased revenue” as one of its strategic objectives, the associated risk factor would be “donations were not collected as much as expected.” Under these circumstances, if the organization established one of its strategic initiatives as “holding a donation collection campaign,” the initiative itself already has a risk. This is because the strategic initiative is established for the purpose of narrowing the gap between the target value and the level of anticipation (Shimura, 2010, p.2).

scorecard” as the easiest risk management method. This method involves separating risk management from strategy and managing risks through the use of scorecard units without creating a strategy map. An example of this approach would be as follows :

Strategic objective	Measurement	Target	Initiative	Budget
stop producing defective product	defect rate	0%	employee education and training	¥XXX

This allows the organization to manage the risk of increasing quality-related costs.

The three abovementioned approaches are likely to be effective when used to manage specific risks. However, these approaches are “topic-specific” and therefore they are not likely to be effective in managing the characteristics of reputation risk aggregates that may have an effect on the entire organization.

### 3.3 Management Using a Risk Scoreboard

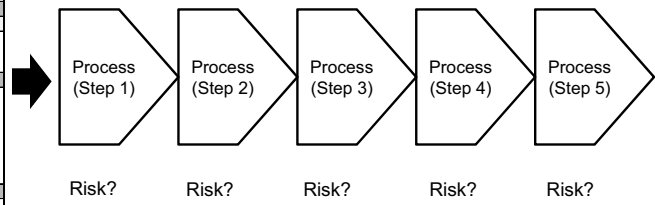
Shimura (2010) proposed the use of a “risk

Figure 2 Aligning ERM with Strategy through the BSC

#### (1)BSC : Objective Setting

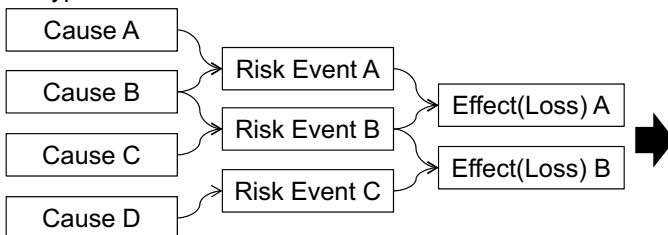
*GLOBAL TOP5* Position			
Grow Revenue		Improve B/S Structure	
Reduce Costs		Improve Capital Efficiency	
No.1 Service No.1 Reliability No.1 Global Coverage			
[CUSTOMER]		[SOCIETY]	
External Customer Satisfaction (Retail, Corp., Overseas)		Internal Customer Satisfaction (Mgmt, Business, Subs.)	Local Community Environment
Value Creation		Value Protection	
RM	PQ	OPERATION	Governance Framework
Marketins Strategy	IB Cross-Sell	Operational	Compliance & Ethics
Channel Strategy	Mkt Products	Quality	Internal Control
Crossborder Deal	Settle Products	&	Info. Security Mgmt
Business Model, etc.	IT Products, etc.	Productivity	Risk & Crisis Mgmt, etc.
Employees & Org. Culture		Mgmt Infrastructure & IT	
Employee Sat.	Communication	BIS III	Capital Allocation
Capability Building	Performance Mgmt	Strategic ALM	IT Governance
Work Environment	Carrier Design, etc.	HR System	CRM System, etc.

#### (2)Process Map : Business Process Analysis



#### (3)Risk Scenario:

Hypothesis of “cause-event-effect” chain



#### (4)Risk Assessment & Control

Likelihood	Almost certain				①	
	Likely		②	③		
	Moderate		③	④	⑤	
	Unlikely	②	③			
Rare		④	①		⑤	
		Insignificant	Minor	Moderate	Major	Catastrophic
		Consequences				

Source : Nagumo (2008), p.13.

## 4 | Relation between COSO ERM and BSC

Reputation risk management must be applied to the management of all risks that may have a negative effect on stakeholders' perception. What follows then is a discussion of the COSO ERM and the possibility of integrating it with BSC to form a novel strategic management system.

### 4.1 COSO ERM — Integrated Framework

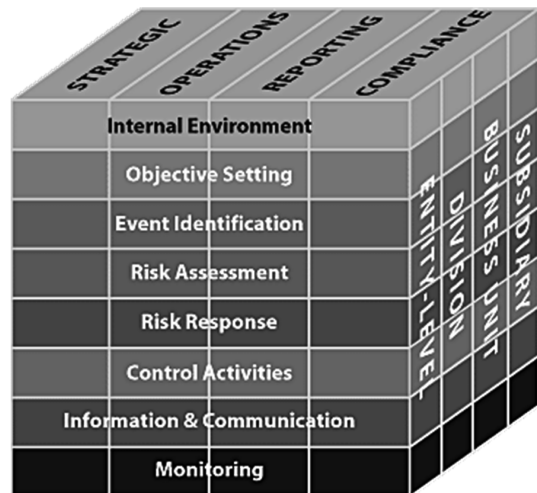
The US-based organization COSO (The Committee of Sponsoring Organizations of the Treadway Commission) created the “Enterprise Risk Management (ERM) — Integrated Framework” (COSO, 2004), which was an expanded version of the “Internal Control — Integrated Framework” that is also used by internal control systems in Japanese companies. The ERM was created in response to the increasing number of risks that companies directly face. ERM is a process, effected by an entity's board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives (COSO, 2004, p. 4).

As shown in Figure 3, COSO ERM is conceptualized as a cube composed of entity's objectives, eight interrelated components and entity's units. COSO ERM is distinctive for the fact that it adds “strategic” category to objectives. The “strategic” objective is high-level goal, aligned with and supporting an entity's mission. They allow managers to demonstrate to stakeholders how they are creating value. When formulating a strategy, risks associated with it can be identified and risks can be

assessed in accordance with the organization's risk appetite. Then, the “strategic” objective are implemented in each of the organizational levels, maintaining consistency with the remaining three objectives. Objectives are set by at every level and unit by considering the acceptable risk appetite level. In other words, it is necessary to build causal chains of the strategic objectives throughout the organization to manage risks effectively.

Based on the above description of COSO ERM, its compatibility with BSC, which can be used to implement strategies throughout the organization and described later, appears promising, and there appears a prospect of integrating the two frameworks.

Figure 3 COSO's ERM (Enterprise Risk Management) Framework



Source : COSO (2004), p.5.

### 4.2 Compatibility between COSO ERM and BSC

The Balanced Scorecard (BSC) is a useful strategic management system that can be used to ensure that the organization's vision and strategy are effectively formulated and implemented with a strategy map.<sup>4</sup> Killackey (2009) and others have discussed the compatibility of COSO ERM and BSC. However, the following was compiled based

on Nagumo (2006), who has actual experience integrating and introducing COSO ERM and BSC to Japanese bank.

First, if we turn our attention to the four objectives of COSO ERM, we see that they correspond to the visualization and cascading of strategy into operations, which are included in BSC. The strategy that is visualized by the strategy map is implemented in the “operation” level through the “product leadership,” the “customer intimacy,” and the “operational excellence,” which are strategic themes in BSC. They then become specific strategic objectives. In addition, the elements of “reporting” and “compliance” in COSO ERM correspond to “becoming a good corporate citizen,” which is a strategic theme that is part of the “customer perspective” and “internal business process perspective” of BSC.

Next, the component of COSO ERM known as “internal environment” indicates a position in which managers consider risk management to be an important aspect of their work. This is concordant with “mobilizing change through executive leadership,” which is the fifth principle of the BSC “Five Principles of a Strategy-Focused Organization” (Kaplan and Norton, 2004). “objective setting” can be considered the essential function of BSC. “Event identification,” “risk assessment,” “risk response,” and risk “control activities” cannot be performed using the typical BSC. Therefore, COSO ERM is used to compensate for BSC’s shortcomings. “Information and communication” can be understood to correspond to the “feedback and learning” that is part of BSC. In addition, “monitoring” can be thought of as corresponding to the hypothesis testing/verification and performance evaluation that is part of BSC.

Finally, both COSO ERM and BSC are intended to be developed in the organization as a whole. Thus, as Nagumo (2006) indicated, in or-

der to realize integration between strategy execution and COSO ERM, it is essential to apply BSC to the entire organization.

## 5 Reputation Risk Management through Integration of COSO ERM and BSC

How can COSO ERM and BSC be integrated and how can reputation risk be managed within that framework? What follows is a description of a case in which a leading Japanese company utilized a COSO ERM-BSC integrated approach that could be applied to reputation risk management.<sup>5</sup>

### 5.1 Relation between Reputation Risk and COSO ERM-BSC

As mentioned above, reputation risk does not include the reliability of financial reports alone. Rather, it is an amalgam of the risk that may arise as a result of all corporate risks that may have a negative effect on stakeholders’ perception. According to COSO ERM, it is possible to appropriately control all risks that may have a major impact on the future of a company and the ability to continue its business activities. As a result, COSO ERM framework helps ensure effective reporting and compliance with laws and regulations, and helps avoid damage to the company’s reputation and associated consequences (COSO, 2004, p.3). Fombrun and van Riel (2004, p.222) stated that “Reputation management really means risk management.” From the perspective of reputation risk management, this is a convincing argument.

As has been previously pointed out, COSO ERM and BSC are mutually compensatory. Therefore, an approach that integrates them inevitably handles reputation risks in the form of risk aggregates.

## 5.2 Reputation Risk Management using BSC : The Case of MUFG

Mitsubishi UFJ Financial Group (MUFG) was one of the first company to integrate COSO ERM and BSC, and it was the first Japanese company to be awarded the Hall of Fame Award in recognition of its status as an excellent BSC practice company. MUFG gains a comprehensive understanding of the wide variety of risks that it is exposed to through the use of uniform measures. It has a basic integrated risk management and operation policy that ensures the safety of its business while at the same time pursues maximum shareholder value. The company promotes risk management policies that are designed to realize a stable income that is commensurate with its risks, achieve the proper capital structure, and realize appropriate distribution of resources by identifying, measuring, controlling, and monitoring a variety of risks (MUFG, 2009).<sup>6</sup>

MUFG integrates COSO ERM and BSC through the four steps shown in Figure 2.<sup>7</sup> At Step 1, they establish BSC strategic themes and objectives in alignment with the four objective categories of COSO ERM. Then, over the course of Steps 2 through 4, they examine the risks that may arise when executing their strategic objectives, prioritize them, and determine methods of controlling those risks.

One of the characteristic features of BSC, as used by MUFG, is the addition of the sub-processes that can be seen in Steps 2 through 4, which do not appear in traditional BSC.<sup>8</sup> These sub-processes are techniques that were introduced in *Enterprise Risk Management - Integrated Framework : Application Techniques* (COSO, 2004). MUFG established it's the Corporate Risk Management Committee as its enterprise risk management organization. Under the auspices of this committee, the methods proposed by COSO

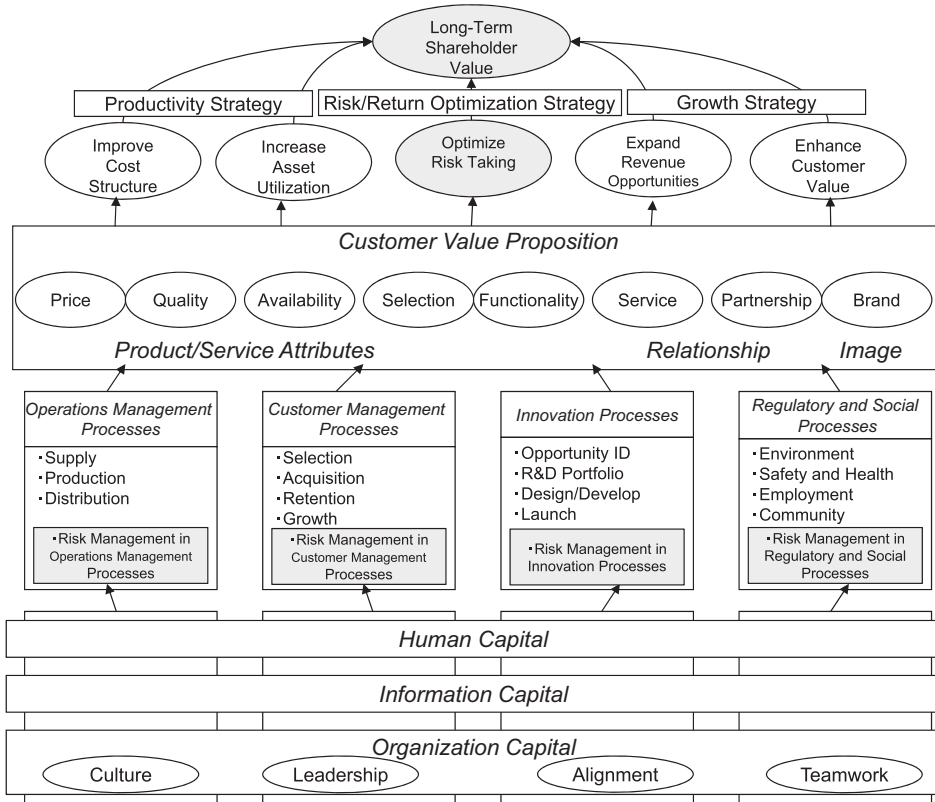
are faithfully applied. The risk management divisions that are independent from the operating divisions monitor the status of various risks and report the results of such monitoring on a regular basis to management.

Once risks are identified, it becomes necessary to integrate them into the BSC. As shown in Figure 4, the sub-processes that are set as the objectives of risk management activities under each strategic theme of the internal business process perspective are described in detail. Within this framework, the implementation of the control activities that are indicated by the sub-process listed above is then set as the strategic objectives. In the financial perspective, "risk/return optimization strategy" is the underlying theme for risk management. Thus, risk management activities listed under the internal business process perspective are mapped as having a cause-and-effect relationship to finances because they should ultimately lead to returns in the financial aspect of the company. In addition, a variety of measure that relate risk management are established in each perspective. Ultimately, the BSC template is implemented in a top-down fashion throughout the entire company, while at the same time the Corporate Risk Management Committee is tasked with the mission of comprehensive management of the risks in all categories (Nagumo, 2006). Thus, the company has created a system in which ERM is closely related to strategy.

Finally, there is one further characteristic of BSC in MUFG that should be mentioned. This is the fact that BSC and corporate social responsibility (CSR) are integrated and related to increases and the prevention of any decline in corporate value (Ito, 2009). The reason BSC and CSR were integrated was : as far as the company itself perceives it, "Through our business activities, we will leave a more sustainable society and environment



Figure 4 A Example of Strategy Map with ERM



Source : Nagumo (2006), p.49.

to the next generation...and this is the source of the satisfaction and trust of a wide variety of stakeholders, which is the very source of our corporate value” (MUFG, 2005). This approach is similar to the one that uses CSR to manage reputation risk, which is defined as the gap between the reality of the company and the perception of the stakeholders (Bebbington, 2008).

## 6 Conclusion

In the case of MUFG, we see that reputation risk, as an aggregate of risks that may have a negative effect on stakeholders’ perception, is managed by integrating COSO ERM and BSC. We were also able to see that MUFG manages

reputation risks that take the form of gaps between the realities of the company and the stakeholders’ perception through the inclusion of CSR in BSC. This can be seen as an exemplary case in which both of the reputation management approaches described by Sakurai (2011) –the approach focused on communication with stakeholders and the approach focused on internal management—are simultaneously executed on the same BSC platform.

The importance of reputation as intangibles is becoming increasingly recognized. Therefore, it is hoped that the approaches described in this paper can be used by many Japanese companies to help them implement effective reputation risk management.

Notes

This is a translated version with minor revisions of a paper in Japanese language. Original bibliographical information: Iwata, Hironao (2011), "Reputation Risk Management," *Business Research*, No.1037, pp.17-24.

- 1 See Sakurai (2005, 2008, 2011) and the Japan Accounting Association (2010).
- 2 For details, see van Riel and Fombrun (2007), Sakurai (2011) and Iwata (2018).
- 3 Benefits of effective reputation management is : (1) Reduce tensions between business, its shareholders and customers ; (2) Reduce barriers to competition and market development ; (3) Create a more conducive environment for investment and access to capital ; (4) Attract the best recruits, suppliers, and partners ; (5) Secure premium pricing for products and services ; (6) Reduce share price and market volatility ; (7) Minimize the threat of increased regulation or litigation ; (8) Reduce the potential for crises ; (9) Establish trust and credibility stakeholders (Larkin, 2003, p.2).
- 4 For details on BSC, see Kaplan and Norton (2004).
- 5 We proposed the way of strategic reputation management by using BSC (Iwata, 2017).
- 6 At MUFG, reputation risk is considered to be a part of operational risk. However, when considered from the standpoint that reputation risk is an aggregate of risks that may have a negative effect on stakeholders' perception, it can be interpreted that risk management at MUFG is a case of reputation risk management.
- 7 For details on the history behind MUFG's adoption of BSC, see Nagumo (2002), Kaplan and Norton (2004), Nagumo (2006), and Nagumo (2008).
- 8 For details, see Nagumo (2006) and COSO (2004).

References

Bayer, Daniel S. and Ellen S. Hexter (2009), *Managing Reputation Risk and Reward*, The Conference Board.

Bebbington, Jan, Carlos Larrinaga and Jose M. Moneva (2008), "Corporate social reporting and reputation risk management," *Accounting, Auditing & Accountability Journal*, Vol.21 Issue: 3, pp.337-361.

COSO (2004), *Enterprise Risk Management : Integrated Framework & Application Techniques*.

Eccles, Robert G. Jr., Scott C. Newquist and Roland Schatz (2007), "Reputation and Its Risks," *Harvard Business Review*, vol.85 no.2, pp.104-114.

The Economist Intelligence Unit (2005), *Reputation : Risk of Risks*, <http://www.eiu.com/as of 2011.1.10>.

Fombrun, Charles J. and Cees B. M Van Riel (2004), *Fame and Fortune : How Successful Companies Build Winning Reputations*, Pearson Education.

Freeman, R. Edward, Jeffrey S. Harrison and Andrew C. Wicks (2007), *Managing for Stakeholders : Survival, Reputation, and Success*, Yale University Press.

Ito, Kazunori (2009), "Case Studies on Corporate Strategy

and Alignments – Portfolio, Synergy and Anergy," in Ueda, Kazuo eds. *New Trends on Business Management and Risk Management*, Hakutoshobo, pp.33-61.

Iwata, Hironao (2017), "Chapter 13 Reputation Management," in Sakurai, Michiharu and Kazunori Ito ed. *Case Management Accounting*, Chuokeizai-sha, pp.169-182.

Iwata, Hironao (2018), "Relationship between Corporate Reputation and Stakeholder Loyalty - An Empirical Analysis," *Kaikeigaku Kenkyu (The Annual Bulletin of Accounting Study)*, vol.44, pp. 1-18.

Japan Accounting Association (2010), "Management Accounting for Intangibles : Focused on Corporate Reputation," *Report of the Study Group*, Japan Accounting Association.

Kaplan, Robert S. and David P. Norton (2004), *Strategy Maps*, Harvard Business School Press.

Killackey, Henry (2009), "Integrating Enterprise Risk Management with Organizational Strategy," *The RMA Journal*, May, pp.32-35.

Larkin, Judy (2003), *Strategic Reputation Risk Management*, Palgrave Macmillan.

MUFG (2005), *CSR Report*, <http://www.bk.mufg.jp/minasama/csr/ as of 2011.1.20>.

MUFG (2009), *Disclosure Report 2009*, <http://www.mufg.jp/ir/disclosure/2009mufg/ as of 2011.1.20>.

Nagumo, Takehiko (2002), "Building a Strategy-Based Culture at Bank of Tokyo-Mitsubishi," *Balanced Scorecard Report*, Nov.-Dec., pp.10-12.

Nagumo, Takehiko (2006), "An Approach Integrating Strategic Management and Enterprise Risk Management : The Integrated Framework for Balanced Scorecard and COSO ERM," *The Journal of Management Accounting, Japan*, vol.14 no.2, pp.41-53.

Nagumo, Takehiko (2008), "Across the Pacific Ocean : Building an Enterprise-wide Strategic Platform" , BSC North American Summit 2008.

Rayner, Jenny (2003), *Managing Reputational Risk*, John Wiley and Sons.

van Riel, Cees B. M. and Charles J. Fombrun (2007), *Essential of Corporate Communication, Implementing Practices for Effective Reputation Management*, Routledge.

Sakurai, Michiharu (2005), *Corporate Reputation - Managing Corporate Reputation -*, Chuokeizai-sha.

Sakurai, Michiharu (2008), *Reputation Management - Reputation Management through Internal Control, Management Accounting and Audit -*, Chuokeizai-sha.

Sakurai, Michiharu (2011), *Measuring and Managing Corporate Reputation - Theory and Case Studies of Corporate Reputation*, Doubunkan Shuppan.

Shimura, Tadashi (2010), "BSC and Risk Management," *IT Newsletter*, vol.6, no.2, pp.1-2.

Tonello, Matteo (2007), *Reputation Risk*, The Conference Board.