



How Organizations can Enhance the Effectiveness of Internal Controls in Response to Changes in the Business Environment Since the Sarbanes-Oxley act: An analysis of the COSO Framework

Heping Zhang

Australian National University, Australia

1280538273@qq.com

Abstract. This research topic explores the evolution of the business environment since the enactment of the Sarbanes-Oxley Act, the impact of these changes on the effectiveness of internal controls, and how organizations can adapt their internal control systems to improve their quality. The study will use the COSO framework to analyze the factors that influence the effectiveness of internal controls and suggest ways to enhance them to meet the challenges of the current business landscape. The research will also examine the implications of the ineffective internal controls and explore new strategies and best practices to strengthen internal controls under the SOX Act.

Keywords: COSO, SOX Act, Internal Control, CEO characteristics, Internal control weakness.

1 Introduction

Since the release of the Sarbanes-Oxley Act of 2002 (SEC, 2002, 2004) management has been required to disclose if it finds material weaknesses in its controls (PCAOB, 2004). This paper examines the factors that determine the quality of internal controls by using COSO as a framework, the impact of ineffective internal controls, and ways to improve internal controls in the future under the SOX Act^[1].

1.1 COSO & Other Determinines

1.1.1 COSO.

Internal control and supervision are very important for all companies, as it can penetrate all economic processes of the company, so it becomes crucial for the internal control and supervision of the company^[2]. The main structure of COSO is divided into five:

Control environment

© The Author(s) 2024

F. Balli et al. (eds.), *Proceedings of the 2023 2nd International Conference on Economics, Smart Finance and Contemporary Trade (ESFCT 2023)*, Advances in Economics, Business and Management Research 261, https://doi.org/10.2991/978-94-6463-268-2_19

The control environment is the basis for all other components including integrity and ethical values, commitment to employee empowerment and professional development, and organizational structure.

Size & age of firms

The stage of development of the enterprise also has a greater objective impact on the internal environment. Start-ups are small and their own management lacks experience and standards making it difficult to set a clear long-term goal. Therefore, the financial situation is poor, management and regulations are not yet formed, resulting in the overall control consciousness and environmental atmosphere of the company is not very strong^[3].

On the contrary, large companies, that is, mature and stable enterprises have a stable scale, direction, and development, and the accumulation of years of experience has led to the perfection of internal control system standards^[4].

In summary, the larger and more mature the company, the higher the quality of internal control will be than the relatively small size of the initial enterprise internal control quality.

Undergoing restructuring.

On the other hand, companies undergoing restructuring can have relatively many ICW, such as Employee turnover. There are overlapping personnel and downsizing of departments after the M&A and restructuring of a company, resulting in the loss of many experienced employees. Confusing internal control systems, with some accruals, estimates and adjustments often becoming complex as companies reorganize. Upper management needs to spend more time to rebuild the internal control system^[5].

CEO characteristics.

CEO characteristics also provide substantial evidence of the impact of ICW, and status and age may also influence CEO behavior in response to SOX404 internal control requirements. The study demonstrates that entrenched and age largely drive CEO behavior in reducing the quality of internal controls^[6].

In addition to age, there is a significant positive correlation between CEO narcissism and ICW, where managers with narcissistic personality traits prioritize their own interest goals as well as status, which can contribute to the occurrence of ICW^[7].

1.2 Sarbanes-Oxley Act

1.2.1 Sarbanes-Oxley Act.

The Act is mainly aimed at the financial audit of listed companies. A simple understanding is that if a company cannot guarantee the reliability of its internal control (for example, there may be security risks in IT systems, etc.), then it is difficult for the financial reports provided by the company to have sufficient credibility.

1.2.2 Introduction of Sarbanes-Oxley Act.

The Act is considered to be the most sweeping regulation affecting publicly traded companies since the Securities Exchange Act of 1934. The Act requires organizations to use documented financial policies and processes to improve auditability and produce financial reports. In the Act, Section 404 has the greatest impact, which stipulates two essential contents: first, the company's management shall be responsible for the effectiveness and authenticity of the preparation of the company's internal control and financial accounting statements; second, it must hire external auditors to independently audit the company's internal control and financial statements and issue audit results. SOX presents a very direct challenge to the cost and quality of IT services.

In an effort to restore investor confidence in the financial reporting of publicly traded companies, Sarbanes-Oxley is holding company managers personally accountable for misrepresenting financial data. Company managers who knowingly sign false financial statements can be subject to financial penalties of up to \$1 million and could be sentenced to 10 years in prison. Although the Act was passed in 2002, it continues to expand as the U.S. Securities and Exchange Commission (SEC) sets conformance deadlines and publishes related requirements and conformance rules. According to AMR Research, about 85 percent of publicly traded companies plan to change their IT systems as part of their efforts to comply with the law. AMR also estimates that compliance with Sarbanes-Oxley cost companies \$2.5 billion in 2003.

1.2.3 Focused on Security.

Sarbanes-Oxley was originally used to solve special cases such as off-book transactions (grey trading). At the time, safety was not a primary concern. The Sarbanes-Oxley law includes a requirement that CEOs and CFOs must certify that their companies have appropriate internal controls. Legal experts point out that if the system for maintaining financial data is truly insecure, it is difficult for senior management to guarantee the validity of the data and the reliability of their internal controls. As a result, internal control is no longer in the realm of "best practice" but in the realm of legal requirements. Sarbanes-Oxley changed the nature of financial information in a number of important ways. Although there is debate about the degree to which the auditors who review compliance pay attention to security, as Mike Rasmussen of Forrester Research puts it, "without proper security controls, top management can't actually sign off on the accuracy of financial statements."

1.2.4 Main Clauses.

Clause 302." The "Corporate responsibility for Financial Statements" clause came into effect last year. The clause requires the CEO and CFO to personally confirm the company's financial results. Section 302 also outlines the criminal penalties for senior management if they knowingly or knowingly publish false financial statements. It is clear that most companies do not need to make significant changes to their underlying systems to become compliant with SEC Rule 302. (However, companies are also beginning to realize that they are not fully implementing a method that demonstrates the accuracy of their data and is subject to "Due Diligence."

Clause 404. As many commentators have stated, Clause 404, "Management of Internal Control assessments," presents the most serious consistency challenge. This provision requires auditors to verify the underlying controls and processes a company uses to report financial results. The declaration includes an assessment of the controls and a certification of the framework used for the assessment. As stated by Gartner, Section 302 requires that financial statements be complete and accurate, while Section 404 requires that the process used to generate the statements be accurate and comply with recognized industry standards. (One example is the Committee of Sponsoring Organizations of the Treadway Commission standards, which were created after the savings and borrowing crisis of the 1980s.) Section 404 also requires that actual process changes be reported quarterly.

Clause 409. The "publisher discloses information in real time" provision presents the greatest consistency challenge. This provision requires real-time reporting of significant events that affect the company's financial performance. Although the SEC does not define "real-time" (nor does it set a deadline for compliance with clause 409), many companies understand it to mean 48 hours. Industry analysts point out that important system integrations, as well as the implementation of real-time notifications and event-driven alerts, are required to comply with clause 409.

2 Information and Communication

Information and communication refer to the timely and correct collection and transmission of information relevant to internal control in order to guarantee that information is effectively conveyed inside the company as well as between the enterprise and external parties in order to assist the proper operation of internal control, which serves as the foundation for risk assessment, control activities, and the effective execution of internal oversight. Hollinger International, Inc. One of management's internal disclosures is that the lack of communication between executives and the establishment leads to inefficiencies in the company's disclosure controls and design operations^[8].

3 Risk Assessment

Risk Assessment, according to the Canadian criteria of control Board COCO, risk is "the likelihood of adverse consequences of an event or circumstance", so that when opportunities are seized and risks are managed, internal control is also implemented. (Glassandlweis (2004)) emphasizes that in most cases small businesses do not need overly complex internal control systems, but that they are necessary for large international companies that engage in a wide range of risk management techniques and financial instruments^[9].

4 Control Activities

Control activities are used by companies to control risks within tolerable limits by applying various control measures in conjunction with risk assessment results. In order to guarantee the safety and reliability of the data, a system such as authorization and approval and physical control management is established to ensure the information security and financial safety of the enterprise. And through the authorization and approval mechanism to reduce the error rate and the occurrence of financial fraud and misconduct.

5 Monitoring

Internal monitoring plays a role in guaranteeing the operation of internal control, monitoring and inspecting the establishment and implementation of internal control of enterprises, evaluating, and improving ICW after discovery. Liu by studying the survey data of Chinese listed companies found that internal control employees have a significant positive influence on the quality of internal control^[10]. Firms with more stringent monitoring environment have higher system ownership or pay more attention to internal control.

Financial health

The financial health of the organization and mistakes and losses in financial reporting are two additional major determinants of internal control in addition to the five COSO components. Even though financial statement disclosures often do not suggest that past errors were deliberate, they could have been motivated by the same economic factors that impacted managers' decisions on accrual project management or accounting systems^[11].

Operating environment

A company's complexity can also be a source of internal control issues.

We anticipate a greater demand for internal control as a firm engages in more complicated transactions and has a more varied business^[12]. is a nice illustration of business complexity.

Repaid growth

Another element that predicts inadequate internal controls is a company's quick expansion. Internal controls may be difficult to keep up with as a company grows, forcing the organization to continually construct new internal control systems to meet the company's growth, which typically needs a considerable level of human expertise and fluency^[13].

5.1 Impacts of ineffective internal control

Deficiencies in internal control can cause a range of losses for the company.

Rating being reduced

According to research by Myers & Majluf (1984) and Stiglitz & Weiss (1981), when a company discloses a material weakness in internal controls under Section 404 of the

Sarbanes Oxley Act of 2002 related to company-level controls, such as the control environment or financial reporting procedures, such material weaknesses can raise concerns about management's ability to control operations as well as the accuracy of financial reporting^[14]. It could lead to a drop in a firms' rating.

Credit rating is lowered

When a firm's credit rating is lowered, it increases the information risk for capital providers, making them more cautious about new investments and therefore affecting their capital pricing and allocation decisions^[14].

Financial reporting quality

Internal control shortcomings have an impact on how well internal control is implemented, which in turn has an impact on how accurate financial reporting is.

1. Inventory. Serious flaws in the company's internal environment and control procedures are primarily responsible for major weaknesses in internal control over inventory.

2. Asset loss and impairment. Defects in the internal environment of the organization, in risk assessment, and in control activities are the major causes of significant failures in internal control over asset impairment.

3. operating profit Significant failures in internal control over operating income are mostly related to deficiencies in the company's internal environment, control activities, and internal monitoring.

4. Information Dissemination Material shortcomings in internal control over information disclosure are primarily the result of deficiencies in the company's internal environment, information and communication issues, and internal supervision deficiencies.

As a result, major misstatements and uncertainty in financial reporting occurred.

5.2 Conclusion

After the Sarbanes-Oxley Act of 2002 was fully established, Enron, the largest US energy business, suffered from financial fraud owing to internal controls, and World-Com's difficulty with fraudulent accounting severely harmed the US economy. As a result, one of the key components of SOX is to define the management's role and to analyze the company's internal control^[15].

Section 404 requires firm management to execute the following tasks to guarantee that ICW are minimized: first, the company should design an internal control framework. To begin, the corporation should create an inventory of internal controls to assess their sufficiency, and then compare those controls to those of internal control bodies such as the COSO Committee.

Second, the firm was expected to describe how controls were reviewed as well as the policies and processes that will be utilized to correct control shortcomings in the future; finally, the company was obliged to provide a report.

The firm must next verify the efficacy of its internal controls to ensure that the controls and remedies are functioning properly, and the external auditor must examine the internal controls.

The firm must then examine the efficacy of internal controls to ensure that controls and remedies are operating as intended and that external auditors are testing and making independent assessments of the company's internal controls.

Reference

1. Ashbaugh-Skaife, H. et al. (2009) The Effect of SOX Internal Control Deficiencies on Firm Risk and Cost of Equity. *Journal of accounting research*. [Online] 47 (1), 1–43.
2. Chan, K. C. et al. (2008) Earnings Management of Firms Reporting Material Internal Control Weaknesses under Section 404 of the Sarbanes-Oxley Act. *Auditing: a journal of practice and theory*. [Online] 27 (2), 161–179.
3. Doyle, J. et al. (2007) Determinants of weaknesses in internal control over financial reporting. *Journal of accounting & economics*. [Online] 44 (1), 193–223.
4. Doyle, J. T. et al. (2007) Accruals Quality and Internal Control over Financial Reporting. *The Accounting review*. [Online] 82 (5), 1141–1170.
5. Ge, W., McVay, S., 2005. The disclosure of material weaknesses in internal control after the Sarbanes-Oxley Act. 2005.
6. Ettredge, M. L. et al. (2006) The impact of SOX section 404 internal control quality assessment on audit delay in the SOX era. *Auditing : a journal of practice and theory*. [Online] 25 (2), 1–23.
7. Goh (2013) The Disciplining Effect of the Internal Control Provisions of the Sarbanes-Oxley Act on the Governance Structures of Firms. *The International journal of accounting education and research*. [Online] 48 (2), 248–278.
8. Jacqueline A. Burke, C., Ralph S. Polimeni, C. and Anthony Basile, C., 2020. *Mandatory Examinations or Audits of Quality Control Assurance Systems - The CPA Journal*. [online] The CPA Journal. Available at: <https://www.cpajournal.com/2020/04/08/mandatory-examinations-or-audits-of-quality-control-assurance-systems/> [Accessed 1 September 2022].
9. Jonas, G., Rosenberg, A. and Gale, M., 2006. The second year of section 404 reporting on internal control. *Available at SSRN 959025*.
10. Krishnan, J., 2005. Audit committee quality and internal control: an empirical analysis. *The Accounting Review* 80, 649–675.2005.
11. Kinney Jr, W. R. (2000) Research opportunities in internal control quality and quality assurance. *Auditing : a journal of practice and theory*. [Online] 19 (Supplement), 82–90.
12. Lin, Y.-C. et al. (2014) CEO Characteristics and Internal Control Quality. *Corporate governance : an international review*. [Online] 22 (1), 24–42.
13. Liu, C. et al. (2017) Employee quality, monitoring environment and internal control. *China journal of accounting research*. [Online] 10 (1), 51–70.
14. Littan, s., 2019. *ICYMI | The COSO Internal Control Framework and Sustainability Reporting - The CPA Journal*. [online] The CPA Journal. Available at: <https://www.cpajournal.com/2020/09/03/icymi-the-coso-internal-control-framework-and-sustainability-reporting/> [Accessed 1 September 2022].
15. Myers, S.C. and Majluf, N.S., 1984. Corporate financing and investment decisions when firms have information that investors do not have. *Journal of financial economics*, 13(2), pp.187-221.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

