

The Role of Management Control System in Mitigating Corruption: The Levers of Control Perspective

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Abstract: A Management Control System (MCS) is a comprehensive mechanism organizations can use to ensure that their strategies and plans are effectively implemented to achieve their objectives. This concept paper explores the application of Management Control Systems (MCS), specifically concerning levers of control (LOC), for behavioral control. Based on the comprehensive literature review, it is expected that LOC will be able to provide a pathway to mitigate corruption not only from the perspective of fraud diamond theory but also from the perspective of agency theory. Agency theory highlights the inherent conflict of interest between agents, who have more information about their actions and intentions, and principals, who rely on agents to act in their best interest. This information asymmetry creates opportunities for agents to engage in corrupt practices, such as embezzlement, bribery, or fraud, including unethical behavior that may undermine organizational goals and trust. Effective control mechanisms are essential to mitigate these risks and ensure alignment between agents' actions and principals' objectives. Furthermore, organizations can apply the principles of fraud diamond theory when creating an effective control framework to deter corruption.

Keywords: *Management Control System, Levers of Control, Agency Theory, Corruption.*

1. Introduction

Corruption continues to be a major worldwide problem, hampering economic progress, eroding public confidence, and worsening socioeconomic disparities. The necessity to examine corruption emerged in the 1990s due to several causes, including state failure, deregulation, privatization of the market, and rapid access to information technology, which enhanced individuals' capacity to engage in economic activities (Alhekail, 2019). Corruption can happen in a democratic country and a non-democratic country (Tanzi, 1998). There is no comprehensive, universally accepted definition of corruption (Langseth, 2006). Corrupt behaviors such as nepotism, misuse of power, and bribery are challenges in establishing transparent and accountable governance in an organization. Curbing corruption and establishing ethical governance is not an easy task and requires an effective wide range of strategies (Aktan, 2015). To address the problems, numerous governments and authorities have implemented anti-corruption measures to promote ethical behavior and discourage individuals from participating in corrupt practices.

Despite the initiatives taken to combat corruption, the Corruption Perceptions Index (CPI) 2023 reveals that out of the 180 nations assessed, only 28 countries have experienced an improvement in their corruption levels in the past twelve years, while 34 countries have notably deteriorated. Although efforts have been made worldwide to criminalize corruption and establish dedicated agencies to combat it, corruption levels have not shown any significant improvement on a global scale. Denmark holds the top position in the ranking for the sixth consecutive year up until 2023, with a score of 90. Finland and New Zealand have scores of 87 and 85, respectively, which are very close, followed by Norway (84), Singapore (83), Sweden (82), Switzerland (82), the Netherlands (79), Germany (78), and Luxembourg (78). Regardless, the effectiveness of anti-corruption measures is sometimes questionable due to the number of corrupt cases discovered and emerging throughout the years. For instance, the 1 Malaysia Development Fund Bhd scandal is widely regarded as one of history's most severe corruption scandals (Jones, 2020). It involved the misappropriation and illegal transfer of billions of US dollars from the fund's accounts, as well as the illicit profits obtained through bribery and manipulation of bond prices (Jones, 2020). In addition, sophisticated networks and collusion at high levels pose difficulties in encouraging whistle-blowers and subsequently bringing the case to the prosecution. This widespread problem not only hinders economic advancement but also reduces the efficiency of organizations and undermines individuals' trust in their leaders and processes. One of the primary reasons is the presence of weak governance, as well as inadequate internal controls (Jones, 2020).

Management Control Systems (MCS) help businesses create and sustain sustainable behavioral patterns and help managers do their duties more effectively (Langevin & Mendoza, 2013; Oatley, 1999). Goal incongruence, or goal compatibility among employees and how it can achieve cooperation among the members of an organization, is often one of the issues in management control areas of research (Ouchi, 1979). Management control systems designed to address such behaviors can be perceived to be largely ineffective in identifying, managing, eliminating, or even mitigating the consequences (Tucker et al., 2024).

This concept paper will bring to light the importance of the utilization of Management Control Systems (MCS) for behavioral regulation, specifically based on the four control mechanisms proposed by Simon (1994). However, certain studies have explored the potential development of organizational control mechanisms (Martínez et al., 2003). It is indisputable that these control mechanisms can be simultaneously implemented in the organization to achieve a state of balanced control in a dynamic environment where creativity and innovation are necessary to navigate uncertainties and deviations. The purpose of behavioral control in this study is to examine methods for regulating the extent of corruption inside an organization. This study explores how LOC can effectively mitigate corrupt practices by reducing pressure and eliminating opportunities, capabilities, and rationalizations. It will also examine how LOC can help lower agency costs, drawing on the perspective of agency theory. The next section will discuss MCS, the illusion of control, and the interaction between levers of control and corruption based on the agency theory perspective and fraud diamond theory.

2. Management Control System (MCS)

Control can be defined as establishing the conditions that drive an organization to achieve predefined outcomes (Fisher, 1995). Control can also be seen as a process of monitoring and regulating activities through hierarchical authority (Challagalla & Shervani, 1997). Control can be implemented at many levels within an organization; consequently, the criteria for effective control may vary across different levels of the business (Fisher, 1995). Management control is defined as the process by which managers ensure that resources are obtained and used effectively and efficiently in the accomplishment of the organization's objectives (Anthony, 1965). The system can be seen as a complex unit of many diverse parts subject to a common plan or purpose (Anthony, 1965). As such, a management control system can be designed to ensure that resources are acquired and utilized effectively and efficiently to achieve the organization's goals (Anthony, 1965).

MCS can contribute to balancing the conflicting goals (Kober et al., 2007) (Bukh & Svanholt, 2020). MCS design may eventually affect the influence and decisions the top management makes (Bukh & Svanholt, 2020), and therefore, it should be effectively established. MCS can also be used to establish clear accountability through appropriate segregation of duties and reporting structure. The existence of and adherence to formal written policies and procedures were seen to be important for reducing risk, especially exposure to legal liability (Tucker et al., 2024). The interactive involvement, for instance, from human resource employees in supporting managers throughout the professional advice allows them to distinguish between what is appropriate and what is not appropriate (Tucker et al., 2024). Authorization established would also allow the managers to mitigate any risks that could prevent the achievement of organizational activities. Utilization of scarce resources is more effectively distributed across the organizations through a proper design of MCS.

MCS was defined by Snell (1992) as a three-component model comprising behavior controls, output controls, and input controls. Input controls are control systems that oversee the knowledge and abilities of employees and other acquired resources of the organization (Snell, 1992). It is implemented to ensure the right resources are available to achieve the desired output or outcomes. The resources could comprise financial resources, human resources, and material resources. As these resources are limited, appropriate policies and procedures must be implemented as guidelines for utilizing them. Guidelines can also be made on the quality of input that meets the specification to contribute to high-quality output, and the selection process involves an effective information system to collect and analyze data related to the input (Snell, 1992). For instance, an effective recruitment process is needed to ensure that the best candidates are selected for the organization and that effective procurement management is in place for reliable suppliers. Not only that, there is a need to ensure contracts are managed and drawn on the best favorable terms to reduce the risk of disruption in achieving the outputs by ensuring that resources are available and meet the quality standard that supports long-term performance (Snell, 1992).

Output control focuses on the results of work and what is being accomplished by the employees. Many organizations fit the requirement of output control (Ouchi, 1979). Output control measurement provides an objective basis by providing the desirable performance (Snell, 1992), reducing bias and subjectivity. It usually involves quantitative information based on financial and non-financial data. Financial data include sales performance, revenue, profit, cost reduction, financial goals, and budget adherence. Examples of non-financial data are customer satisfaction scores, number of complaints, product defect rates, innovation rates, and employee engagement levels. The output control process involves gathering relevant information to set targets to assess performance. Output performance is measured, feedback is provided, and corrective actions are taken if performance deviates from the standard (Challagalla & Shervani, 1997).

Meanwhile, behavioral control is much more focused on the actions, attitudes, and behaviors shaping how the work is done in the organization. Behavior control regulates subordinates' actions on the job (Snell, 1992). Focus must be placed on the problem of achieving cooperation among individuals who hold partially divergent objectives (Ouchi, 1979). Behavioral control often uses qualitative assessments to assess adherence to procedures and compliance with behavioral standards. The advantage of this control is that it is direct (Snell, 1992). Behavioral control involves setting rules to achieve the target, supervising activities to monitor results, and ensuring adherence to standards before rewarding the employees' achievement. Monitoring and feedback are made based on the observed behaviors and procedure adherence. The rewards are then linked to compliance with behavioral standards and following proper procedures. Despite this, behavioral control may be an inefficient way to regulate performance if the monitoring costs exceed the marginal gain from control (Snell, 1992). Regardless, establishing a well-designed system of rewards is crucial for efficiently managing behavior, as individuals tend to concentrate their efforts on rewarded behaviors. The reward can be a tool for motivation in directing the behavior towards the intended direction. Difficulties may occur when individuals are incentivized for actions that appear beneficial at first glance but might hinder the achievement of organizational objectives in certain situations (Snell, 1992).

Despite the variations, organizations can do employee screening at the entrance, which may result in significant expenses for screening and staffing, and then rely on the best mechanism to achieve output controls (Challagalla & Shervani, 1997). Alternatively, organizations can adopt a less stringent approach to staff selection and instead depend on behavior controls (Challagalla & Shervani, 1997). Alternatively, through substantial investments in recruiting, monitoring, and training systems, organizations might prioritize and emphasize input, output, and behavior control concurrently (Challagalla & Shervani, 1997).

3. The Illusion of Control

An employee's perception of control can vary from that of supervisors and co-workers due to personal realities such as past experiences, age, education, or tenure, notwithstanding the potential benefits (Lopez-Valeiras et al., 2022). The Board of Directors exercises control over the actions of top executives on behalf of the firm, while top executives exercise control over middle management, and this control cascades down through the organization (Rosanas & Velila, 2004). It is crucial to contemplate the inherent characteristics of human beings inside the framework of organizations (Rosanas & Velila, 2004). The variations in the impression of control might lead to unintentional adverse outcomes.

An illustration of this can be seen in the Enron corruption controversy, which demonstrated that neither internal nor external auditors can detect problems before it is too late. External auditors may not provide reliable assurance of correct financial statements, questioning their effectiveness in guaranteeing accurate financial reporting (Rosanas & Velila, 2004). It is within the Board of Directors' authority to ensure ethical conduct within the company, suggesting that they have a crucial role in establishing and maintaining ethical standards (Rosanas & Velila, 2004). Despite this, there is concern about whether a corporation can be effectively administered by the Board without the risk of misusing resources, implying potential challenges in governance and oversight (Rosanas & Velila, 2004). The controversy is discussed in the surrounding of Enron's management control system (Free et al., 2007). Affected by unforeseen changes, the sophisticated management control system could be compromised, ultimately contributing to Enron's demise (Free et al., 2007).

Besides, the complexity and volume of financial data make it difficult for individuals, even those with extensive experience and training, to fully understand and uncover indications of misconduct, highlighting the need for robust systems and controls to manage such information (Rosanas & Velila, 2004). Given that even highly respected professionals can be deceived by complex corruption schemes like Enron's, it is particularly challenging for those without technical training to determine the accuracy of a company's accounts, emphasizing the importance of having multiple layers of scrutiny and effective management controls (Rosanas & Velila, 2004).

4. Levers of Control (LOC) and Corruption

MCS sets specific performance objectives, defines unambiguous expectations, outlines the related consequences in the workplace, and can be utilized to attain desired behavioral results. The significance of MCS has been emphasized since as early as 1965 and remains important today. The control elements can be discussed in the various behavioral context such as corruption (Srirejeki, 2023), unethical behavior (Laguecir et al., B. 2022; Klein et al., 2019; Sherif et al., 2016; Langevin & Mendoza, 2013), dysfunctional behavior (Tucker et al., 2024; Fagbemi, 2012; Soobaroyen, 2005) and fraud (Haron et al., 2023). Although there are other management control systems (MCS) methods, this paper specifically highlights the significance of MCS in behavioral control, particularly in encouraging ethical behavior and mitigating corruption.

Simons (1995) presents a critical analysis of how upper management could prevent control failure through LOC should employees possess the authority or freedom to choose their activities or their conduct. The framework of levers of control has been extensively utilized in the literature on MCS in the past 25 years (Martyn et al., 2016). Pletsch and Lavada, 2016 introduced the importance of monitoring, rewards, activity limits, behavioral limits, management involvement, organizational learning, values, and purposes of the levers of control. The significance of control mechanisms is indisputable, as academics are becoming increasingly concerned with how they can address behavior-related issues such as corruption, fraud, and unethical behavior. For instance, using the Fraud Diamond Theory, Haron et al. (2023) can provide the mechanism for how LOC can prevent fraud in an organization. This conceptual paper will utilize the proposed argument by Haron et al. (2023) by incorporating another perspective based on agency theory and how it can help mitigate organizational corruption.

Agency theory examines the connection between principals (owners or shareholders) and agents (managers or employees), specifically focusing on conflicts resulting from divergent objectives and unequal access to information. The principal is the individual who possesses ownership or shares in a business and grants authorization to an agent to act on their behalf. The agent, on the other hand, is the manager or employee who is entrusted with the power to make decisions and assume responsibility. The conflict of roles can lead to agents following their interests, which may not always correspond with the aims of the principals. *Information asymmetry* and *moral hazards* are among the reasons why the issues have arisen. Four levers of control were introduced to prioritize the management of business strategy via a harmonious interplay of four levers: *diagnostic control* (involving surveillance), *boundary control* (representing behavioral limits), *interactive control* (requiring management participation), and *belief control* (representing fundamental values). The employment of LOC is valuable because it can effectively address corrupt-related matters within the agency theory framework. Figure 1 below summarises how these levers of control can mitigate corruption through the lens of fraud diamond theory and agency theory.

Figure 1: Interaction between levers of control

Levers of Control*	Diagnostic	Boundary	Interactive	Belief
Sub Categories**	-Plan & Monitor -Reward	-Activity and Behavioural Limit	-Manager involvement & Organizational Learning	-Values & Purpose
Fraud Diamond Theory & Agency Theory	<ul style="list-style-type: none"> - Set reasonable goals to reduce <i>pressure</i> - Monitor the performance to reduce the <i>opportunity</i> - Encourage transparency and provide clarity and basis for the goals setting to reduce <i>information asymmetry</i> - Align the interest of agents and principle and ensure agents act in the best interest of principal to reduce the <i>moral hazard</i> 	<ul style="list-style-type: none"> - Established explicit rules and limits the <i>opportunity for corrupt act</i> - Minimise knowledge gap (acceptable and unacceptable activity/behaviour) between principal and agent to reduce <i>information asymmetry</i> - Reduce the <i>moral hazard</i> as agents are held accountable for their activity and behaviour 	<ul style="list-style-type: none"> - Encourage involvement and foster frequent continuous communication to reduce <i>information asymmetry</i> - Ongoing dialogue prohibit <i>moral hazard</i> as agents have less <i>capabilities</i> to engage in corrupt activities without detection 	<ul style="list-style-type: none"> - Shared understanding diminish <i>information asymmetry</i> and preventing rationalisation of corrupt activities as justifiable

Figure 1: The interaction between four levers of control, fraud diamond theory and agency theory. (Source: *Simon, 1995, **Pletsch & Lavarda, 2016)

Diagnostic Controls are feedback systems monitoring organizational outcomes and correcting deviations from preset standards or plans (Simon, 1994). This system may include rewarding the employees as a motivation to achieve the desired standard (Haron et al., 2023; Pletsch & Lavarda, 2016). Corruption occurs when individuals prioritize their personal goals over organizational goals, often driven by personal gain, such as financial benefits, power, or status. This misalignment arises from various factors, including when organizational systems and controls are insufficient, individuals find opportunities to exploit their positions for personal advantage, undermining the integrity and effectiveness of the organization. This can particularly happen when information asymmetry exists. Information asymmetry arises when agents possess greater knowledge about their activities and the organization's operations than principals. This imbalance can result in opportunistic behavior that diverges from the owners' interests. Consequently, agents may engage in behaviors that favor their interests while disregarding the interests of the principals (*moral hazard*)

To avoid this problem and induce performance that fulfills superiors' intentions, elaborate information systems are used that explicitly attach appraisal (Ouchi, 1977) and rewards (Kerr, 1985) to results achieved. A prevalent example is "management by objectives" (Lawler & Rhode, 1976). Organizations need to set explicit reasonable goals and performance standards to ensure that agents understand what is expected of them. This can help to reduce the *pressure* to achieve the goals (Haron et al., 2023). This clarity helps in aligning agents' actions with the organizational objectives. The *information asymmetry* may also be reduced through an effective diagnostic control system emphasizing comprehensive reporting and monitoring systems that provide the principals with accurate and timely information about the agents' performance and reduce the *opportunity* for corrupt activity. This transparency reduces information asymmetry and allows principals to monitor activities more effectively. Organizations should also consider implementing appropriate incentives (Srirejeki, 2023) or rewards to assist in making informed decisions about promotions or terminations.

Boundary control systems are formal systems used to establish explicit limits and rules that must be respected by the organization's members (Simon, 1994). Boundary control can be used through the codes of business conduct and take into consideration the risk to be avoided when designing the boundary control (Simon, 1994). A code of conduct is beneficial as it clearly defines what behavior is considered acceptable and unacceptable. It also helps identify potential risks that should be avoided when performing jobs independently, while the identifiable risks are the specific boundaries that require careful attention to avoid crossing, minimizing the potential risks and ensuring a positive outcome.

By clearly defining acceptable and unacceptable behaviors within an organization. Establishing explicit rules, policies, and limits on actions ensures that agents (employees or managers) act in the best interest of principals (owners or shareholders). This transparency minimizes the knowledge gap between agents and principals, reducing opportunities for agents to engage in self-serving actions that principals cannot easily monitor. The system can be used to promote ethical conduct through compliance with the code of conduct (Srirejeki, 2023). These controls can include segregation of duties, approval hierarchies, and audit trails to ensure accountability and reduce the *opportunity* for corrupt activities. It curtails moral hazard by holding agents accountable for their actions and aligning their behavior more closely to ethical standards. The system may also provide room for penalties in the event of a violation (Srirejeki, 2023), which can serve as a mechanism to deter corruption.

Interactive control systems are used to regularly and personally involve the principal in the activities to stimulate the learning or decision-making of agents or subordinates. This system involves regular and active engagement with critical performance data, strategic discussions, and feedback loops. In the absence of close supervision, focusing on mere output may result in information asymmetry, as some information withheld by superiors may result in loss of control (Snell, 1992; Williamson, 1975). To ensure that agents or subordinates adhere to the procedure, superiors closely monitor and evaluate agents or subordinates' actions over time (Ouchi, 1977), and this can be done interactively. By fostering continuous and dynamic communication between agents (employees or managers) and principals (owners or shareholders), the *information asymmetry* problem can be reduced and limit the *capability* for corrupt activities. By keeping principals well-informed and involved in the decision-making process, it minimizes the knowledge gap and ensures that agents' actions are closely aligned with organizational goals. The ongoing dialogue and mutual monitoring inherent in interactive control systems make it difficult for agents to act in their self-interest without detection, thereby mitigating *moral hazard* and promoting transparency and accountability.

Belief Control Systems are used to define and communicate basic values, purpose, and direction for the organization (Simon, 1994). This can be achieved through formal documents such as a mission statement (Simon, 1994) or an organization's established culture (Haron et al., 2023) that fosters intrinsic motivation to act in the organization's best interest and not for personal benefit. Cultural control is crucial but cannot serve as a standalone principle, as employees must embrace ethical values (Srirejeki, 2023) as part of their belief system. The ethical culture may serve to prevent employees from *rationalizing* the corrupt act as justifiable (Haron et al., 2023) in any circumstances. When employees internalize these values, their actions are more predictable and aligned with organizational objectives, reducing the need for constant oversight. This shared understanding diminishes the *information gap* between principals and agents and mitigates the risk of self-serving behavior that *rationalizes* corrupt acts as acceptable. Employees are guided by a common ethical framework that discourages actions harmful to the organization, be it corrupt-related activities.

5. Conclusion

A Management Control System (MCS) is crucial for achieving desired behavioral outcomes in an organization. By setting clear goals, establishing performance metrics, and monitoring and reward, MCS aligns employees' conduct with the organization's objectives. It provides structure and accountability, guiding employees toward productive and ethical behavior by establishing an effective *boundary control system* that promotes ethical standards. The *interactive* discussion and feedback enhance efficiency and effectiveness and foster a culture of transparency and responsibility, ensuring that everyone works towards common organizational goals. The ethical *belief control system* encourages employees to adhere to established norms and values.

This paper contributes to the management control system field, particularly on the levers of control in mitigating corruption, and explains from the agency theory perspective. In the context of implementing levers of control, agency theory provides valuable insights into designing controls that align the interests of agents with those of the principals. Arguments are discussed and presented, circulating in the context of information asymmetry and moral hazard that may encourage the *agents (subordinates/managers/individuals)* to pursue their interest at the expense of the *principal (owners/shareholders/organization)*.

For instance, a *diagnostic control system* provides clarity and expectation of what should be conducted by the agents. The mechanism helps alignment of the goals between *agents (subordinates/managers/individuals)* and

principals (owners/shareholders/organization). A *boundary control system* is intended to provide limits and guide individuals as they pursue their goals. Without the appropriate boundary control system, clueless *agents (subordinates/managers/individuals)* may need adequate knowledge. In that case, naive individuals might not understand the limitations of pursuing the goals so they might cross certain boundaries for their benefit at the expense of the *organization (principals)*. This pursuit of self-interest at the expense of collective objectives ultimately disrupts organizational coherence, trust, and performance, particularly when they may carry out these actions without facing detection or punishment. While this is happening, the *agents (subordinates/managers/individuals)* probably are not too worried about it because there is no limitation on what the *agents (subordinates/managers/individuals)* can do as long as they can achieve their goals. Despite the greatest efforts of principals to mitigate moral hazard, they may still struggle to appropriately evaluate the talents or intentions of agents throughout the hiring or delegating process.

The conceptual view of this study can be used to strengthen the company's policy. It is suggested that boundary control may be used to enhance compliance policies by establishing explicit protocols on compliance, ethics, and conduct, effectively mitigating behaviors that may threaten the company. The risk policies may also improve by establishing policies that clearly outline acceptable levels of risk, and decision-making procedures can effectively mitigate the tendency to engage in excessive risk-taking while simultaneously fostering responsible innovation. The diagnostic control can enhance performance measurement policies by ensuring that all performances are monitored and aligned with strategic goals. Interactive control and belief control may assist in the process of policy development that can encourage feedback loops through a healthy, ethical culture to ensure the organization can respond to strategic uncertainties.

By comprehending the agency theory and its impact on control systems, organizations are expected to prioritize the development of an efficient control system. The organization must establish effective control measures to enhance its vigilance and safeguard itself from corrupt activities.

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