

# How Poor Segregation of Duties in the Public Sector Impact Private-Sector Compliance with National Policies

Geeta Sewsankar  
Institution or Company

**Abstract:-** This study examines the critical role of the segregation of duties within the public sector and its impact on private-sector compliance with national policies. Segregation of duties, an internal control mechanism designed to prevent errors and fraud, is essential for ensuring accountability and transparency in public administration. The research highlights how inadequate segregation of duties in the public sector can lead to inefficiencies, errors, and misuse of resources, ultimately compromising financial integrity and governance. The failures of companies like Enron and Wells Fargo underscore the risks associated with poor public oversight. This study aims to raise awareness among public sector leaders about the importance of effective segregation of duties and its influence on the private sector. By implementing robust internal controls, clear policies, and leveraging technology, governments can enhance regulatory oversight, promote accountability, and create a more resilient and trustworthy governance system, benefiting both public and private stakeholders.

## I. INTRODUCTION

Small organizations typically require individuals to handle tasks across various fields, whereas large organizations often adopt a more specialized approach to roles. These differences may stem from cost, organizational size, or transaction volume. Corporate codes usually impose stricter compliance requirements on listed companies than smaller ones (Byrne, 2024). In the public sector, however, the segregation of tasks and roles depends on the adopted compliance standards and their appropriateness.

According to Awati (2024), the segregation of duties is an internal control mechanism designed to prevent errors or fraud. A "four eyes" policy ensures that at least two individuals are assigned to separate parts of each task. Even if a task is small enough for one person to complete, this policy divides it into multiple parts so that no single person has sole control (Kaufman, 2019).

While many studies have focused on segregation of duties, they often emphasize aspects such as gender segregation (Martin-Caughey, 2021), segregation by citizenship (Kaufman, 2019), process mining (Chiu & Jans, 2019), and segregation by ethnicity or religion (Zeedan, 2019). However, these studies do not address how poor

application of segregation of duties in the public sector can impact companies in the private sector.

The failures of companies like Enron and Wells Fargo suggest that inadequate public oversight may have played a role. This study investigates how the lack of effective segregation of duties in the public sector affects private sector compliance with national policies. The aim is to enlighten public sector leaders and managers about the critical importance of segregation of duties and its potential impact on the public and external stakeholders, including the private sector.

## II. LITERATURE REVIEW

Segregation of duties is a crucial principle in finance, accounting, and other fields that involve sensitive data or processes (Byrne, 2024; Singh & Best, 2016). This principle entails dividing critical tasks and responsibilities among different individuals or departments to prevent fraud, errors, and mismanagement. Its primary purpose is to establish a system of checks and balances within an organization, ensuring that no single person has control over all aspects of a critical process, thereby reducing the risk of abuse, collusion, or mistakes (ULCA, 2024).

For example, in an accounting department, segregation of duties might involve separating the roles of approving transactions, recording transactions, and reconciling accounts (Awati, 2024). Assigning these tasks to different people makes it more difficult for any one individual to manipulate financial records without detection. This principle is especially critical in information security departments, where it involves separating roles such as system administration, network administration, and database administration (Engdahl, 2013). This separation prevents any one person from having unchecked control over the entire I.T. infrastructure, thereby reducing the risk of unauthorized access or data breaches. Therefore, segregation of duties is essential for ensuring accountability, transparency, and integrity within organizations, helping to maintain trust and compliance with regulatory requirements (UoO, 2024).

Nonetheless, the implementation of segregation of duties extends beyond just internal processes; it also plays a significant role in complying with external regulatory requirements. Regulatory bodies often mandate segregation of duties to ensure organizations uphold high standards of

internal control and risk management. For instance, compliance with frameworks such as the Sarbanes-Oxley Act (SOX) in the United States or the General Data Protection Regulation (GDPR) in Europe necessitates the separation of duties to protect against financial misreporting and data breaches.

Moreover, effective segregation of duties can enhance organizational efficiency and morale (Kobelsky, 2014). By clearly delineating responsibilities, employees have a better understanding of their roles and the importance of their contributions to the organization's overall control environment. This clarity can lead to improved performance and accountability, fostering a culture of transparency and ethical behavior (Awati, 2024).

However, implementing segregation of duties can be challenging, especially for smaller organizations with limited resources (Awati, 2024). In such cases, compensating controls may be employed to mitigate risks. These controls might include increased oversight by management, regular internal audits, or automated systems that track and flag suspicious activities (Chiu & Jans, 2019).

Ultimately, the principle of segregation of duties is fundamental for safeguarding an organization's assets, ensuring the accuracy of its records, and maintaining the integrity of its operations (Awati, 2024). Organizations can better protect themselves against financial and reputational damage by preventing any single point of failure or misuse. As businesses and regulatory environments evolve, segregation of duties will remain a cornerstone of effective internal control and corporate governance (Benston, Bromwich, Litan, & Wagenhofer, 2003).

On the other hand, the lack of segregation of duties arises when critical tasks within a business or organization are not divided among different people or departments. This situation occurs when a single person or department controls multiple aspects of a process, creating opportunities for errors, fraud, or misuse of power (Snyder, Bohdan, & O'Neill, 2019). Therefore, segregation of duties is a crucial principle in internal controls and risk management. It ensures that no single individual has complete control over a process, reducing the risk of undetected errors or intentional misconduct (UoO, 2024). For example, in financial transactions, the person who approves a payment should never be the same person who processes it, as this could lead

to fraudulent activities like unauthorized payments (Awati, 2024). Organizations often implement controls such as dividing responsibilities among different individuals, establishing checks and balances, and regularly reviewing processes to identify potential weaknesses to address the lack of segregation of duties. These measures help to enhance transparency, accountability, and the overall integrity of operations within the organization (PennAuditCompliance, 2020).

In addition to dividing responsibilities and establishing checks and balances, organizations may also employ technological solutions, such as advanced technology, to strengthen their internal controls (Chiu & Jans, 2019). Automated systems can monitor transactions, flag unusual activities, and enforce access controls, ensuring that no single individual can override or bypass established procedures (Engdahl, 2013). These technologies can provide real-time oversight and create audit trails that are critical for promptly identifying and investigating any irregularities. Training and awareness programs are also vital in promoting the importance of segregation of duties within an organization (Awati, 2024). Employees should be educated on the risks associated with inadequate segregation and the measures in place to mitigate those risks. Regular training sessions can help reinforce the principles of internal controls and ensure that staff members understand their roles and responsibilities in maintaining a secure and compliant work environment (Schinzel, 2018).

Moreover, independent audits and reviews are essential to a robust internal control system. External auditors can objectively assess an organization's controls and practices, offering recommendations for improvements (PennAuditCompliance, 2020). Regular internal audits can also help identify gaps in the segregation of duties and ensure that controls function as intended (Kobelsky, 2014). Ultimately, the effective implementation of segregation of duties is crucial for safeguarding an organization against financial losses and reputational damage. By preventing any single point of failure, organizations can protect themselves from internal and external threats, maintain stakeholder trust, and comply with regulatory requirements. As businesses evolve and face new challenges, maintaining a solid framework for the segregation of duties will remain an essential element of sound governance and risk management practices (Awati, 2024; UoO, 2024).

Table 1 Laws Enacted to Protect Organizations from Corporate Unethical Practices

Name of Laws and Acts	Description
<i>Securities Exchange Act 1934</i>	This US law governs the trading of securities such as stocks and bonds. It established the Securities Exchange Commission to enforce securities laws and regulate the securities industry, including measures to prevent and penalize fraud.
<i>Bank Secrecy Act 1970</i>	Also known as the Currency and Foreign Transactions Reporting Act – this US law requires financial institutions to assist US government agencies in detecting and preventing money laundering. It includes provisions for record-keeping and reporting of transactions that might signify fraud or other illegal activities.
<i>Foreign Corrupt Practices Act 1977</i>	This US law prohibits companies and personnel from bribing foreign government officials to obtain or retain business. It also requires companies to maintain accurate books and records and have a system of internal control.

<i>Whistleblower Protection Act 1989</i>	This US federal law protects federal employees who disclose information about wrongdoing within their organization. Whistleblowers are protected from retaliation and can report fraud, waste, and abuse.
<i>Federal Sentencing Guidelines for Organizations 1991</i>	These guidelines provide a framework for sentencing organizations convicted of federal crimes, including corporate fraud. They incentivize organizations to develop and maintain effective compliance and ethics programs.
<i>Sarbanes-Oxley Act 2002</i>	This US federal law established comprehensive auditing and financial regulations for public companies. It aims to protect investors by improving the accuracy and reliability of corporate disclosures. Key provisions include: <ul style="list-style-type: none"> <li>• Section 302 – Corporate Responsibility for Financial Reports</li> <li>• Section 404 – Management Assessment of Internal Controls</li> <li>• Section 802 – Criminal Penalties for Altering Documents.</li> </ul>
<i>Corporate Fraud Accountability Act 2002</i>	This was enacted as part of the Sarbanes-Oxley Act to enhance criminal penalties for corporate fraud and tampering with financial records, and it includes measures to protect whistleblowers who report fraudulent activities.
<i>The Fraud Act 2006</i>	This UK legislation consolidates and clarifies existing laws relating to fraud. It defines various offenses of fraud, including false representation, failing to disclose information and abuse of position.
<i>UK Bribery Act 2010</i>	This law applies to UK companies and individuals and addresses domestic and international bribery. It includes provisions against offering, promising, or giving a bribe, and accepting a bribe.
<i>Dodd-Frank Wall Street Reform and Consumer Protection Act 2010</i>	This US law introduced significant financial regulatory reforms to prevent the recurrence of events that led to the 2008 financial crisis. It includes provisions to improve accountability and transparency in the financial system, protect consumers from abusive financial services practices, and end the ‘too big to fail’ bailout.

Table 1 above are ten laws enacted by the US and the UK to protect organizations against corporate fraud and unethical practices—these range from financial securities, bonds, money laundering, and whistleblowing among others.

#### ➤ *Segregation of Duties in the Public Sector*

The lack of segregation of duties in the public sector can significantly jeopardize accountability, transparency, and the proper use of public resources (Snyder, Bohdan, & O’Neill, 2019). For example, if a single individual is responsible for approving purchase orders, receiving goods, and authorizing payments, there is an increased risk of collusion or misuse of funds. Proper segregation of duties would require different individuals or departments to handle each step of the procurement process, thus providing necessary checks and

balances. Financial management within government finance departments is another area prone to risk without proper segregation (UoO, 2024). Tasks such as budgeting, accounting, and financial reporting should be divided among staff members to prevent errors or the manipulation of financial data. Without such segregation, the likelihood of inaccurate financial reporting or misuse of public funds increases (PennAuditCompliance, 2020). Regulatory compliance in public sector organizations is also subject to various regulations and compliance requirements. Segregation of duties ensures that different individuals or departments are responsible for monitoring and enforcing compliance, reducing the risk of regulatory violations or conflicts of interest (Awati, 2024).

Table 2 Showing an Example of Segregation of Duty in a Public Sector Entity

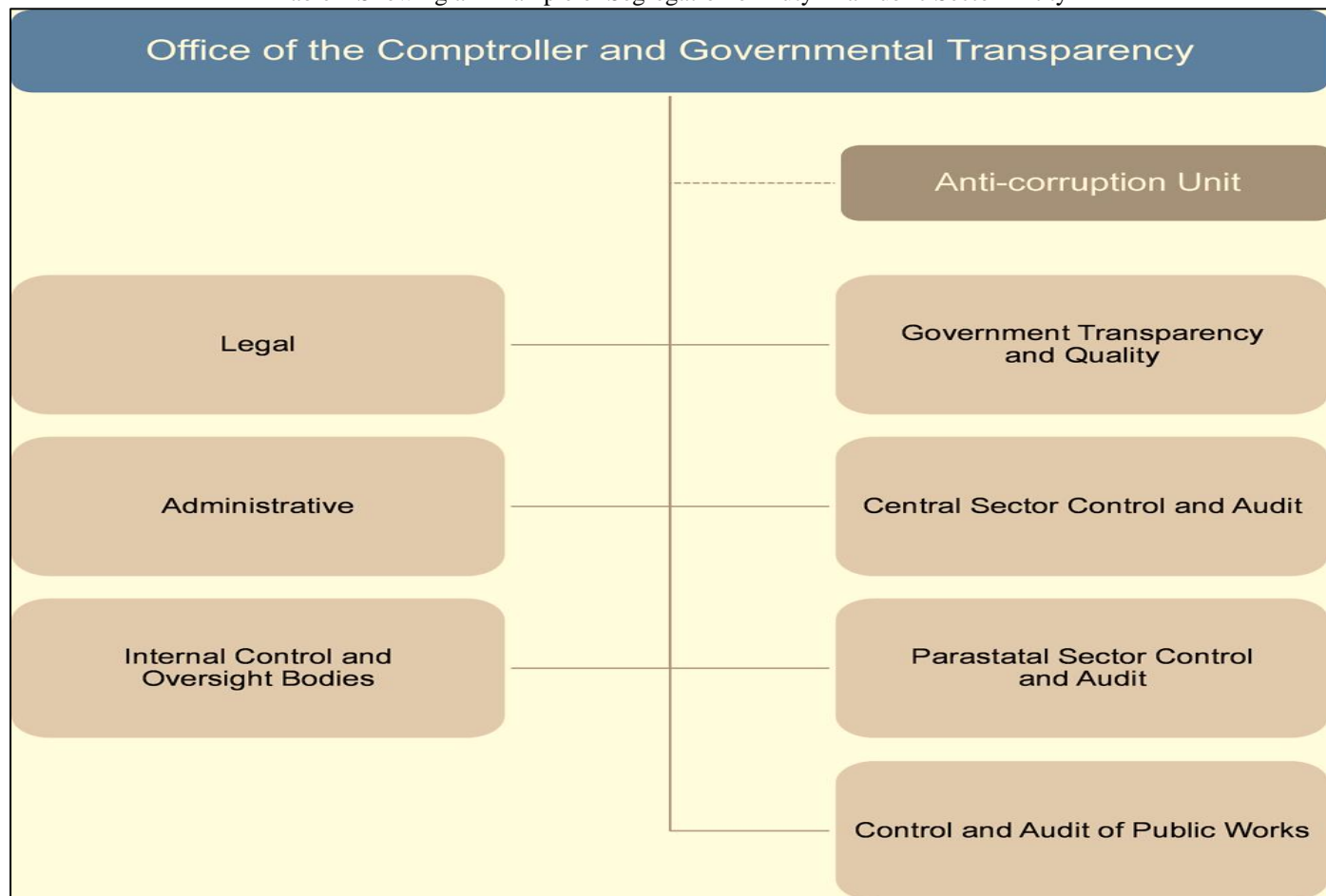


Table 2 above illustrate an example of segregation of duties in a public sector organization. Although there are many similarities to that of the private sector, it should be acknowledged that the public sector is mandated provide adequate service to the citizens and is not profit-driven like the private sector organizations. Therefore, the segregation of duties of the public sector focus on the proper allocation of resources.

In program administration, where agencies are responsible for administering public programs or services, the lack of segregation of duties can lead to inefficiencies, errors in service delivery, or even abuse of power (PennAuditCompliance, 2020). For instance, if the same

individual is responsible for determining eligibility and distributing benefits, there is a risk of favoritism or improper allocation of resources (Srinidhi, 1994). To address these issues, public sector organizations should establish clear policies and procedures for segregating duties, implement internal controls and oversight mechanisms, and train staff members on their roles and responsibilities (Awati, 2024). Additionally, regular audits and reviews can help identify any weaknesses in the segregation of duties and ensure compliance with best practices and regulatory requirements (Engdahl, 2013).

➤ *Public Organizations that Fail Due to Lack of Segregation of Duties*

Table 3 Public Organizations that Fail Due to the Lack of Segregation of Duties

Organizations	Country	Year	Issue	Impact
Detroit Public School	USA	2009	Lack of segregation in financial management	Misappropriation of funds, fraud totaling \$53 million
Société Générale	France	2008	Inadequate internal controls, single trader with excessive access	Trading losses amounting to €4.9 billion
Enron	USA	2001	Weak internal controls, improper segregation in accounting	Bankruptcy, \$74 billion in losses
Punjab National Bank	India	2018	Fraud due to inadequate segregation of duties	\$1.8 billion fraud, significant financial losses
New York City Housing Authority (NYCHA)	USA	2018	Poor segregation in project management and procurement	Widespread maintenance issues, federal investigation

Table 3 above illustrates five public organizations that fail due to the lack of adequate segregation of duties. The Detroit Public School suffered severe financial strain and loss of trust due to the lack of segregation in financial roles which allowed for extensive fraud and misappropriation of funds. The Société Générale, one of the most significant trading frauds in history, where a single trader manipulated trades due to weak internal controls and segregation of duties. Enron, while primarily a private sector scandal, it close ties with public sector entities and the resulting regulations highlight the impact of poor internal controls, including segregation of duties. Punjab National Bank, a notable case in the banking sector where poor segregation of duties allowed a significant fraud to occur that severely impacting the bank's finances. New York City Housing Authority (NYCHA): Lapses in segregation of duties in project management and procurement led to systemic issues in housing maintenance, prompting federal investigations and scrutiny. As such, these examples illustrate the critical importance of segregation of duties in preventing fraud, ensuring financial integrity, and maintaining public trust in public sector organizations.

➤ Segregation of Duties in the Private Sector

Private-sector compliance with national policies is essential for maintaining legal and ethical standards, ensuring fair competition, and promoting the public interest. National policies encompass various areas, including environmental protection, labor rights, consumer protection, taxation, and industry-specific regulations (Byrne, 2024; Engdahl, 2013). Private-sector organizations uphold social responsibility, sustainability, and accountability by adhering to these policies. This compliance is crucial for preventing legal liabilities, fostering a stable business environment, and contributing to societal well-being. Legal compliance requires private companies to adhere to all relevant laws and regulations established by national governments. This includes labor laws, environmental regulations, tax laws, antitrust laws, and industry-specific regulations. Compliance helps prevent legal liabilities, fines, or penalties, creating a predictable and stable business environment (Engdahl, 2013). Beyond legal obligations, companies are also expected to maintain high ethical standards, such as fair labor practices, workplace safety, human rights, and diversity and inclusion (ULCA, 2024). These ethical practices build trust with stakeholders and enhance corporate reputation.

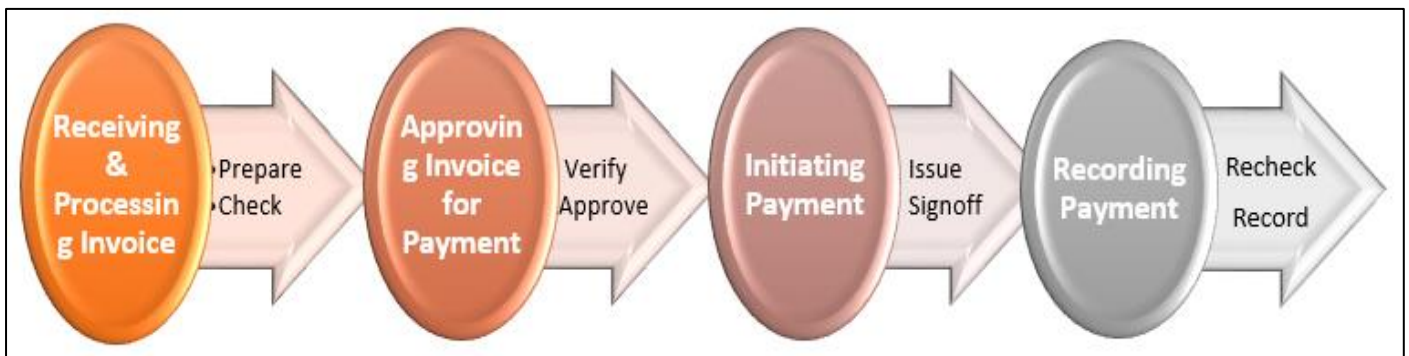


Fig 1 Segregation of Duties in a Purchasing Department

Fig 1 above illustrates an example of the segregation of duties in a typical purchasing department. Private-sector organizations must often report their compliance with national policies through regulatory filings, disclosures, and certifications (Awati, 2024). This involves submitting financial reports, environmental impact assessments, tax returns, and other relevant documentation to government authorities (PennAuditCompliance, 2020). Corporate governance structures ensure that companies comply with these requirements by establishing clear lines of accountability, implementing internal controls, conducting regular audits, and maintaining transparency in decision-making processes (ULCA, 2024). Engagement with various stakeholders, including government agencies, industry associations, civil society organizations, and local communities, is vital for effective compliance (Srinidhi, 1994). Communication and collaboration help address concerns, build consensus, and promote responsible business practices. Private companies must identify, assess, and mitigate risks related to non-compliance by conducting risk assessments, developing compliance programs, training employees, and implementing monitoring and enforcement mechanisms (Awati, 2024). Reviewing policies, procedures,

and practices ensures alignment with evolving legal and regulatory requirements (UoO, 2024).

The lack of segregation of duties in the public sector can significantly affect private-sector compliance with national policies. Government agencies are responsible for enforcing these policies, and a lack of proper segregation within these agencies can compromise their effectiveness (Srinidhi, 1994). Unchecked authority or susceptibility to undue influence can lead to inconsistent or biased enforcement actions. This increases the risk of regulatory capture, where regulatory bodies become overly influenced by the industries they regulate, leading to lax enforcement or policies favoring specific private-sector entities over public interests (Kobelsky, 2014). Proper segregation of duties within government agencies is crucial for promoting effective regulatory oversight, ensuring fair and consistent enforcement, and fostering a business environment that encourages private-sector compliance. Robust governance mechanisms, transparency measures, and accountability mechanisms are essential to mitigate these risks and promote public trust in regulatory institutions.

➤ *Private Companies Affected by Public Oversight*

Table 4 Notable Private Organizations' Failure Due to Poor Public Oversight

Year	Company	Details
1980	Penn Central	Declared bankruptcy due to financial mismanagement and regulatory scrutiny.
1985	ESM Government Securities	Collapsed due to fraud and regulatory intervention.
1990	Drexel Burnham Lambert	Filed for bankruptcy amid regulatory investigation and charges of insider trading.
1995	Barings Bank	Failed due to unauthorized trading by Nick Leeson, leading to regulatory intervention.
2000	Enron	Collapsed due to massive accounting fraud and regulatory action.
2005	Refco	Bankrupt due to financial fraud and subsequent regulatory oversight.
2010	Lehman Brothers	Filed for bankruptcy amid the subprime mortgage crisis and regulatory failures.
2015	Volkswagen	Involved in the emissions scandal, leading to significant regulatory fines and oversight actions.
2020	Wirecard	Insolvency due to accounting fraud and regulatory actions.
2024	Hypothetical Company XYZ	Example hypothetical company experiencing regulatory-induced failure in 2024.

Like the list of organizations in Table 4, many private companies have suffered due to the lack of segregation of duties within the public sector. This primarily results from government officials or agencies failing to effectively oversee or regulate private-sector activities due to governance failures, corruption, or regulatory issues (PennAuditCompliance, 2020). For instance, while Enron was not directly a victim of the lack of segregation of duties in the public sector, the Enron scandal exposed significant weaknesses in public regulatory oversight (Benston, Bromwich, Litan, & Wagenhofer, 2003). Enron, once one of the largest energy companies globally, collapsed in 2001 due to accounting fraud and corporate governance failures. Regulatory agencies, including the Securities and Exchange Commission (SEC), were criticized for inadequate oversight of Enron's financial reporting practices. The scandal led to the loss of \$74 billion in shareholder value, the dissolution of Arthur Andersen LLP, one of the five largest audit and accountancy partnerships in the world, and the imprisonment of several executives.

In 2015, Volkswagen admitted to installing illegal software to cheat on emissions tests for its diesel vehicles. Although Volkswagen is a private company, the scandal underscored regulatory failures in the United States and Europe. Regulators were criticized for inadequate testing procedures and vehicle emission oversight, revealing significant lapses in regulatory rigor (Poier, 2020). The scandal affected approximately 11 million vehicles worldwide, and Volkswagen was forced to pay over \$30 billion in fines, penalties, and buyback costs. The incident highlighted how regulatory bodies failed to detect the discrepancies in emissions testing, leading to severe environmental and economic consequences.

Similarly, in 2016, Wells Fargo faced a scandal involving the creation of millions of unauthorized accounts by its employees to meet aggressive sales targets (Madoff, 2023). This raised questions about regulatory oversight and whether government agencies, such as the Consumer Financial Protection Bureau (CFPB), were sufficiently vigilant in monitoring the bank's activities and holding it accountable for compliance failures. The scandal resulted in Wells Fargo paying \$3 billion in fines and penalties and

terminating over 5,300 employees. Despite these measures, the bank's reputation suffered significantly and faced ongoing scrutiny from regulators and the public.

Further cases in the pharmaceutical industry highlight regulatory challenges and failures in ensuring drug safety and efficacy. The opioid crisis in the United States, for instance, is partly attributed to regulatory lapses and inadequate oversight of pharmaceutical companies' marketing and distribution practices (Klobucista & Ferragamo, 2013). From 1999 to 2019, nearly 500,000 people died from opioid overdoses, with the crisis costing the U.S. economy over \$78 billion annually in healthcare costs, lost productivity, addiction treatment, and criminal justice involvement. Regulatory bodies, including the Food and Drug Administration (FDA), were criticized for their slow response to the aggressive marketing practices of pharmaceutical companies and the over-prescription of opioid medications.

These examples illustrate how weaknesses in public sector governance, including the lack of segregation of duties, can contribute to regulatory failures and harm private companies, consumers, and the public interest. Regulatory agencies often lack the resources, expertise, or independence to effectively oversee private-sector activities, leading to compliance failures, fraud, and other misconduct. Thus, strengthening public sector governance by ensuring proper segregation of duties, enhancing resource allocation, and improving regulatory frameworks is essential. This can help mitigate risks, provide effective oversight, and promote a business environment that encourages compliance and protects the public interest.

➤ *The Extent of Private Companies' Failure Due to Public Oversight*

The lack of segregation of duties in the public sector has significantly damaged various companies, resulting in financial losses, reputational damage, legal liabilities, and long-term consequences. For instance, the collapse of Enron stands as one of the largest corporate scandals in history. Enron's fraudulent accounting practices led to inflated financial statements, eventually unraveling, resulting in bankruptcy in 2001 (Benston, Bromwich, Litan, & Wagenhofer, 2003). This collapse caused shareholders to lose

billions of dollars, thousands of employees to lose their jobs and retirement savings, and the broader financial markets severely affected. The scandal increased scrutiny of corporate governance practices, accounting standards, and regulatory oversight (Benston, Bromwich, Litan, & Wagenhofer, 2003).

Similarly, the unauthorized account scandal at Wells Fargo severely damaged the bank's reputation and resulted in significant financial penalties and legal settlements. Wells Fargo faced fines from regulators, lawsuits from customers and shareholders, and scrutiny from Congress (Madoff, 2023). Beyond the monetary losses, Wells Fargo's brand suffered reputational damage, losing customer trust and market share. This scandal prompted reforms within the banking industry and increased scrutiny of sales practices and consumer protection.

The emissions cheating scandal had far-reaching consequences for Volkswagen. The company faced billions of dollars in fines, settlements, legal fees, and a significant drop in stock value. Volkswagen's reputation as an environmentally conscious and trustworthy brand was tarnished, leading to declining sales and market share (Poier, 2020). The scandal resulted in regulatory investigations, vehicle recalls and changes to emissions testing procedures. Volkswagen's management faced criticism for their role in the deception, and the company underwent significant restructuring and management changes.

In each of these cases, the lack of proper oversight and regulatory failures contributed to the damage suffered by the companies involved. The Sarbanes-Oxley Act of 2002 (SOX) was implemented to mitigate corporate unethical practices. Still, it has proven insufficient in addressing the evolving and complex methods of committing fraud, ultimately leading to corporate failures (Awati, 2024). Awati (2024) argued that skilled staff may be required for complex processes, increasing costs. Still, these areas—such as payroll, procurement, and computerized information systems—are the highest risk and must have segregation of duties. These incidents underscore the critical importance of strong corporate governance, regulatory compliance, and ethical and responsible leadership in preventing crises and safeguarding stakeholders' interests (Schinzel, 2018). Ensuring robust oversight mechanisms and maintaining a clear separation of duties within both public and private sectors is essential to prevent similar scandals and protect the integrity of financial and corporate systems.

### III. RECOMMENDATIONS FOR APPLICATION

Addressing the lack of segregation of duties in the public sector to enhance its effective functioning and promote private-sector compliance with national policies requires a comprehensive approach involving collaboration between public and private stakeholders. The public sector must adopt and implement the following recommendations to achieve this goal.

**Firstly**, the public sector should bolster its capacity for regulatory oversight by investing in resources, expertise, and technology. This entails establishing clearly defined roles and responsibilities within each department or unit to prevent any individual from having undue control over an entire process or transaction. Clear guidelines for segregating duties within regulatory bodies should be developed, ensuring independence and accountability in regulatory decision-making. Regular audits and inspections should also be conducted to detect and deter non-compliance. **Secondly**, implementing a rotation policy where employees are periodically reassigned to different tasks or roles can mitigate the risk of conspiracy and fraud by limiting individuals' familiarity with specific processes. **Thirdly**, the government can enhance segregation by separating authorization, recording, and custody of assets or information. For example, the individual approving a transaction should differ from the one recording it in the accounting system and handling the assets, thereby mitigating ethical risks. **Fourthly**, conducting regular reviews and audits of processes and transactions ensures compliance with policies regarding the segregation of duties. Independent audits identify weaknesses or gaps in controls, facilitating prompt corrective action. **Fifthly**, providing training and awareness programs to employees on the importance of segregation of duties and associated risks enhances compliance. Employees should be well-informed about their roles and responsibilities in maintaining adequate controls. **Sixthly**, automated controls and technology solutions should be deployed to enforce segregation of duties where feasible. Workflow systems requiring multiple approvals for specific transactions or access controls restricting conflicting tasks enhance control effectiveness. **Seventhly**, establishing mechanisms for employees to report concerns or suspected violations of segregation of duties policies without fear of retaliation fosters transparency. Whistleblower protection policies encourage early issue identification. **Eighthly**, senior management should actively oversee the segregation of duties, processes, and controls, setting the tone at the top by emphasizing ethical behavior and accountability. **Ninthly**, staying informed about relevant laws, regulations, and industry standards is crucial. Ensuring organizational policies align with legal requirements enhances compliance. **Lastly**, continuously monitoring and evaluating the segregation of duties, processes, and controls allows for identifying areas for improvement. Regular policy and procedure reviews in light of organizational changes promote effective control implementation. By implementing these recommendations, public sector organizations can fortify internal controls, mitigating the risk of fraud, errors, and misconduct associated with inadequate segregation of duties.

#### ➤ *Recommendations for Future Research*

Future research on the correlation between the absence of segregation of duties in the public sector and its repercussions on private-sector adherence to national policies could delve into various avenues to enrich comprehension and guide policy and practical implementations. Recommendations for forthcoming studies may encompass empirical investigations aimed at quantitatively scrutinizing the nexus between the absence of segregation of duties in

regulatory bodies and private-sector conformity to national policies. This could entail examining compliance rates across diverse industries and regions and evaluating the influence of regulatory oversight on compliance conduct.

Furthermore, conducting comprehensive case studies within specific sectors or regulatory frameworks could elucidate how the absence of segregation of duties in the public sector shapes compliance hurdles and outcomes for private enterprises. Analysis of regulatory breakdowns, enforcement measures, and compliance tactics in finance, healthcare, energy, and environmental protection sectors could offer valuable insights. Additionally, juxtaposing regulatory frameworks and enforcement methodologies across various countries or regions could pinpoint factors conducive to adequate regulatory supervision and bolstering private-sector compliance with national policies. This comparative analysis might entail scrutinizing discrepancies in regulatory structures, institutional setups, and governance mechanisms and their ramifications on compliance behaviors.

Qualitative research methodologies like interviews, surveys, and focus groups could be employed to delve into stakeholders' perspectives, attitudes, and experiences regarding regulatory compliance and the public sector's role. Such endeavors could shed light on the drivers of compliance behavior, impediments to compliance, and avenues for enhancing regulatory efficacy. Longitudinal studies tracking shifts in regulatory compliance over time and evaluating policy interventions to rectify the lack of segregation of duties in the public sector could offer valuable insights. Analyzing regulatory reforms, organizational adaptations, and compliance trends could unveil patterns and gauge outcomes.

Encouraging interdisciplinary collaboration among law, public policy, economics, sociology, and management researchers could unravel the intricate interplay between regulatory governance, organizational dynamics, and compliance outcomes. Such collaboration could foster innovative solutions to regulatory challenges and cultivate holistic perspectives. Moreover, assessing the efficacy of policy measures aimed at enhancing the segregation of duties in regulatory bodies and fostering private-sector compliance with national policies is paramount. Evaluating the impact of regulatory reforms, capacity-building initiatives, and enforcement strategies on compliance behavior and regulatory outcomes could offer critical insights.

By addressing these research lacunae and advancing comprehension of the relationship between the absence of segregation of duties in the public sector and private sector compliance with national policies, researchers can contribute to evidence-informed policymaking, fortify regulatory governance, and foster a more transparent, accountable, and compliant business environment. Identifying shortcomings in the segregation of duties within regulatory bodies could spotlight areas necessitating enhancement in regulatory governance and enforcement mechanisms.

#### IV. IMPLICATIONS

The research revealed the hurdles private-sector entities face in adhering to national policies, particularly in industries lacking regulatory oversight. These challenges may include obstacles to compliance, such as vague regulations, inconsistent enforcement, and a lack of transparency in regulatory procedures. By shedding light on these issues, the study can assist stakeholders, including government agencies, private companies, and investors, in comprehending the risks associated with non-compliance and regulatory shortcomings (Awati, 2024). By examining the potential repercussions of insufficient segregation of duties in the public sector, stakeholders can proactively address risks and bolster compliance initiatives.

Drawing from the study's findings, policymakers could formulate targeted policy recommendations to tackle the underlying causes of non-compliance and enhance regulatory efficacy. This might entail reforms designed to fortify the segregation of duties within regulatory bodies, bolster enforcement mechanisms, and foster transparency and accountability in regulatory processes (ULCA, 2024). Such measures could have significant implications for business operations and corporate governance, especially for firms operating in heavily regulated sectors.

By underlining the significance of compliance with national policies and illuminating the risks linked to regulatory non-compliance, the study could inform strategic decision-making and risk management practices within private-sector organizations. Moreover, the research could bolster public trust and confidence in regulatory institutions by advocating for greater transparency, accountability, and integrity in regulatory governance (UoO, 2024).

Furthermore, by pinpointing avenues for enhancing the segregation of duties and strengthening regulatory oversight, the study can improve the legitimacy and credibility of public sector entities. Ultimately, an examination of the ramifications of the lack of segregation of duties in the public sector for private-sector compliance with national policies could offer invaluable insights into the obstacles and opportunities for promoting regulatory adherence, improving governance, and cultivating a more transparent and accountable regulatory landscape (Snyder, Bohdan, & O'Neill, 2019; Schinzel, 2018).

#### V. CONCLUSIONS

In conclusion, Segregation of Duties in the Public Sector is a cornerstone of internal control, crucial for safeguarding against fraud, errors, and resource misuse. Distributing responsibilities across different individuals ensures that no single person holds undue influence over a transaction or process, thereby mitigating the risk of fraudulent activities such as embezzlement or misappropriation of funds. Without proper segregation, the concentration of duties in a few hands opens the door to potential mistakes or inaccuracies in financial reporting, budget management, and resource allocation, compromising



the reliability and integrity of financial information. Moreover, the absence of division in responsibilities can lead to inefficiencies, as tasks may not be executed optimally or with sufficient oversight, resulting in the inefficient use of resources and taxpayer money. Furthermore, the lack of clear segregation makes holding individuals accountable for their actions challenging, eroding trust in public institutions and impeding transparency in governance. Many regulatory frameworks mandate segregation of duties as a fundamental aspect of internal control, and failure to comply can lead to regulatory violations, legal repercussions, and reputational harm to the organization.

Addressing the deficiency in the segregation of duties within the public sector necessitates a multifaceted approach, encompassing the implementation of robust internal control mechanisms, establishing clear policies and procedures, providing adequate personnel training, and cultivating a culture of accountability and transparency. Additionally, leveraging technology solutions for automation and segregation of duties can aid in mitigating risks and enhancing efficiency in public sector operations. Therefore, before imposing compliance requirements on the private sector, government laws and policies governing private organizations must be sufficiently robust to withstand potential legal challenges. By prioritizing the enhancement of the segregation of duties within the public sector, governments can fortify regulatory oversight, promote accountability, and uphold the integrity of governance systems, thereby fostering a more resilient and trustworthy regulatory environment for all stakeholders.

## REFERENCES

- [1]. Awati, R. (2024). What is Segregation of Duties (SoD)? Massachusetts: TechTarget.
- [2]. Benston, G., Bromwich, M., Litan, R. E., & Wagenhofer, A. (2003). *Following the Money: Enron Failure and the State of Corporate Disclosure*. Washington, D. C.: AEI-Brookings Joint Center for Regulatory Studies.
- [3]. Byrne, D. (2024). What is a corporate governance code? U.K.: Corporate Governance Institute.
- [4]. Chiu, T., & Jans, M. (2019). Process Mining of Event Logs: A Case Study Evaluating Internal Control Effectiveness. *Accounting Horizons*, 33(3), 141-156.
- [5]. Engdahl, O. (2013). Ensuring regulatory compliance in banking and finance through effective controls: The principle of duality in the segregation of duties. *Regulation & Governance*, 8(3), 332-349.
- [6]. Kaufman, E. (2019). Segregation by Citizenship. *Harvard Law Review*, 132(5), 1379-1444.
- [7]. Klobucista, C., & Ferragamo, M. (2013). *Fentanyl and the U.S. Opioid Epidemic*. New York: Council on Foreign Relations.
- [8]. Kobelsky, K. W. (2014). A conceptual model for segregation of duties: Integrating theory and practice for manual and IT-supported processes. *International Journal for Accounting Information Systems*, 15(4), 304-322.
- [9]. Maccoby, M., & Cortina, M. (2017). *Leadership, Psychoanalysis, and Society*. U.K.: Routledge.
- [10]. Madoff, B. (2023). *The Wells Fargo Fake Accounts Scandal: A Comprehensive Overview*. Ireland: Learnsignal.
- [11]. Martin-Caughey, A. (2021). What's in an Occupation? Investigating Within-Occupation Variation and Gender Segregation Using Job Titles and Task Descriptions. *American Sociological Review*, 86(5), 960-999.
- [12]. PennAuditCompliance. (2020). *Office of Internal Audit*. Pennsylvania: University of Pennsylvania.
- [13]. Poier, S. (2020). Clean and Green – The Volkswagen Emissions Scandal: Failure of Corporate Governance? *PROBLEMS OF SUSTAINABLE DEVELOPMENT*, 15(2), 33-39.
- [14]. Schinzel, U. (2018). I am a Responsible Leader" Responsible Corporate Social Responsibility: The Example of Luxembourg. *Business Perspectives and Research*, 1-15.
- [15]. Singh, K., & Best, P. (2016). Interaction Visual Analysis of Anomalous Accounts Payable Transactions in SAP Enterprise Systems. *Managerial Auditing Journal*, 31(1), 35-63.
- [16]. Snyder, T., Bohdan, M., & O'Neill, B. (2019). What's at stake when organizations lack proper segregation of duties (plus three ways to fix it). Michigan: Plante Moran Audit Tax Consulting Wealth Management.
- [17]. Srinidhi, B. (1994). The Influence of Segregation of Duties on Internal Control Judgments. *Journal of Accounting, Auditing & Finance*, 9(3), 423-444.
- [18]. ULCA. (2024). *Segregation of Duties (Preventive & Detective)*. California: University of California.
- [19]. UoO. (2024). *Segregation of Duties*. U.K.: Finance Division, University of Oxford.
- [20]. Zeedan, R. (2019). The Role of Military Service in the Integration/Segregation of Muslims, Christians and Druze within Israel. *Societies*, 9(1).