



## Forensic Accounting and Ethical Governance in Subsidised Energy Distribution: Evidence from Indonesia

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### Abstract

This study examines how forensic accounting mechanisms, when complemented by maqāṣid al-sharī'ah-based ethical principles, can strengthen accountability, transparency, and fairness in Indonesia's subsidised LPG distribution system. Specifically, it explores governance challenges—including weak internal controls, information asymmetry, ethical dilemmas, and limited public accountability literacy—and develops an integrative accountability framework to support ethical public governance. This study adopts an interpretive qualitative approach using in-depth interviews, limited field observations, and document analysis. Participants include government regulators, distribution agents, and public auditors involved in subsidy supervision. Data were analysed through thematic coding guided by forensic accounting indicators and maqāṣid-informed ethical considerations, with credibility ensured through triangulation and reflexive analysis. The findings indicate that governance inefficiencies largely arise from inadequate alignment between forensic control mechanisms and ethical accountability practices. While forensic accounting enhances transparency through evidence-based oversight, maqāṣid al-sharī'ah contributes an ethical foundation for distributive justice and public trust. Based on these findings, the study proposes an integrative accountability framework that connects technical control with ethical reasoning in public sector governance. The study suggests that policymakers strengthen fraud mitigation and governance quality by reinforcing forensic oversight alongside ethics-oriented capacity building grounded in principles of justice ('adl), moral responsibility (amānah), and public welfare (maṣlahah). This study offers an integrative perspective on forensic accounting and maqāṣid al-sharī'ah in public sector governance, contributing to the literature on ethical accountability and value-based governance in subsidy management contexts.

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## Introduction

The distribution of subsidised Liquefied Petroleum Gas (LPG) for low-income households in Indonesia is intended to enhance social welfare and reduce economic inequality. However, persistent distribution imbalances, supply shortages, and regional price disparities indicate structural weaknesses in public governance and accountability mechanisms. These challenges reflect not only administrative inefficiencies but also limitations in ensuring equitable management of public resources. Within Islamic economic thought, the principles of *amānah* (trustworthiness) and *‘adl* (justice) emphasise ethical responsibility in managing public wealth (*māl al-‘āmmah*). Accounting, therefore, plays a crucial role beyond technical reporting, as it contributes to maintaining public trust and distributive fairness in public sector governance (Napier, 2009).

Field observations indicate persistent irregularities in LPG subsidy allocation, including hoarding practices, quota manipulation, and regulatory capture by local elites. Such conditions reflect key elements of financial misconduct commonly discussed in the fraud triangle framework: pressure, opportunity, and rationalisation (Albrecht et al., 2008). Prior studies emphasise that weak internal control systems and the absence of a strong ethical culture are significant enablers of fraud within the public sector (Rezaee, 2005). In this context, forensic accounting functions not merely as an investigative mechanism but also as an analytical approach to identify mismanagement risks and strengthen transparency and accountability. Accordingly, the integration of forensic accounting principles becomes increasingly relevant in reinforcing the integrity of subsidy distribution within broader public and Sharia governance arrangements.

Recurrent inefficiencies in subsidy distribution are also driven by information asymmetry among regulators, distributors, and intended beneficiaries. Limited data transparency and weak public oversight increase the likelihood of opportunistic and unethical practices. In forensic accounting literature, this condition is commonly described as information opacity, in which unequal access to financial information enables manipulation and weakens accountability mechanisms (Jack Bologna and Robert Lindquist, 1995). From an Islamic ethical perspective, principles such as *kashf al-ḥaḳīqah* (truthful disclosure) and *muḥāsabah* (accountability) emphasise the importance of transparency and responsibility in safeguarding public wealth (*ḥifẓ al-māl*). Therefore, addressing information asymmetry requires not only administrative improvements but also aligning forensic auditing practices with ethical accountability frameworks within Sharia-based governance.

*Maqāṣid al-Sharī‘ah* offers an ethical framework that guides economic and governance practices towards justice, social welfare, and integrity. Conceptualises *maqāṣid* as a dynamic system that integrates values, context, and objectives, enabling Islamic principles to engage with contemporary challenges in governance and accountability (Auda, 2008). Core values such as *ḥifẓ al-māl* (protection of wealth), *al-‘adl* (justice), *al-amānah* (trust), and *al-maṣlaḥah* (public benefit) underscore the shared responsibility of the state and individuals in ensuring fairness and transparency in managing public resources. Integrating these ethical principles into forensic accounting broadens its role beyond technical fraud detection, positioning it as an instrument of ethical assurance that supports accountability within Sharia-based governance frameworks.

Although research on Sharia governance and public accountability has expanded in recent years, limited attention has been given to integrating forensic accounting with the ethical objectives of *maqāṣid al-sharī‘ah*. Existing studies often address technical dimensions such as forensic analysis, auditing, and control systems separately from ethical considerations rooted in Islamic values, resulting in fragmented approaches to accountability in practice. Prior literature has highlighted the need for Islamic accounting to move beyond compliance-oriented frameworks toward forms of accountability grounded in ethical and social values (Carnegie, G.D. and Napier, C.J., 1996). Responding to this gap, the present study proposes an integrative framework that aligns the analytical rigour of forensic accounting with *maqāṣid*-informed ethical principles. By bridging rule-based compliance and value-oriented governance, this framework seeks to contribute to more coherent and sustainable public resource management.

This study aims to develop an integrative Sharia governance framework by combining forensic accounting principles with the ethical objectives of *maqāṣid al-sharī'ah* in the context of subsidised energy distribution in Indonesia. By synthesising empirical findings with Islamic ethical perspectives, the research proposes a Forensic–Maqāṣid Governance Model to support transparency, accountability, and distributive fairness in public resource management. Academically, the study contributes to the literature on Islamic accounting and governance by highlighting the relevance of integrating forensic rationality with ethical accountability, drawing on insights from (Napier, 2009; Auda, 2008). In practice, the findings offer policy-relevant insights to strengthen the integrity of public sector governance and enhance the effectiveness of subsidy management in line with widely recognised ethical values.

## Literature Review

### Forensic Accounting and Public Accountability

Forensic accounting is a multidisciplinary field that integrates accounting, auditing, law, and behavioural analysis to detect, investigate, and prevent financial misconduct. Rezaee (2009) defines forensic accounting as the application of accounting knowledge and investigative skills to resolve disputes and identify fraud, particularly in contexts involving legal and regulatory scrutiny. Beyond litigation support, forensic accounting also functions as a governance and management control tool that enhances financial transparency and strengthens institutional integrity (Jack Bologna and Robert Lindquist, 1995).

In the public sector, forensic accounting plays a critical role as an early warning mechanism for identifying potential irregularities and transactional anomalies within complex administrative systems by Tommie W. Singleton (2010), Classical explanations of fraud behaviour, such as the fraud triangle by Cressey (1954) and the fraud diamond by Wolfe and Hermanson (2004) emphasise pressure, opportunity, rationalisation, and capability as key drivers of fraudulent conduct. Empirical studies consistently show that weak internal controls and the absence of an ethical culture are among the primary factors enabling corruption and regulatory capture in public institutions (Albrecht, W. Steve, 2013).

Moreover, forensic accounting contributes to public accountability by safeguarding the reliability of financial reporting and reinforcing the effectiveness of oversight mechanisms. Wells argues that effective forensic investigation relies on integrating audit evidence, behavioural analysis, and documentary data to reveal patterns of mismanagement and fraud (Wells, 2008). Within an Islamic governance context, these functions align with ethical principles such as *amānah* (trust), *ṣidq* (truthfulness), and *muḥāsabah* (accountability), which emphasise responsibility and transparency in the management of public resources (Button, M., Johnston, L., & Frimpong, 2015). Consequently, forensic accounting within Sharia-based governance extends beyond fraud prevention to support the preservation of public trust and distributive fairness.

### Sharia Governance and Maqāṣid al-Sharī'ah

Maqāṣid al-Sharī'ah, or the higher objectives of Islamic law, constitute the ethical and teleological foundation of Sharia-based governance. Classical scholarship, as articulated by Al-Ghazālī in *al-Mustaṣfā*, identifies the preservation of five essentials: religion (*al-dīn*), life (*al-nafs*), intellect (*al-'aql*), progeny (*al-nasl*), and property (*al-māl*) as the core purposes of the law. Building on this foundation, Auda advances a systems-based approach to *maqāṣid*, framing it as a dynamic and contextual methodology that integrates moral intent, social realities, and practical outcomes in contemporary governance (Auda, 2008).

Within governance contexts, *maqāṣid* functions as an ethical compass that guides institutions beyond procedural compliance toward substantive moral responsibility. In the Islamic worldview, accounting operates as a moral practice that connects material reporting with broader accountability obligations (*taklīf*). Similarly, Napier (2009) Notes That Principles such as *al-'adl* (justice) and *al-amānah* (trustworthiness) form the normative basis of ethical Sharia governance and public accountability (Haniffa, R., and Hudaib, 2007).

Viewed from this perspective, *maqāṣid* can be understood as an ethical internal control framework that shapes decision-making toward the realisation of public benefit (*maṣlaḥah*) and the prevention of harm

(fasād). The principle of ḥifẓ al-māl underscores the ethical protection and use of public wealth, while al-maṣlaḥah prioritises socio-economic outcomes that enhance collective welfare (Dusuki, A. W., & Abdullah, 2007). Integrating maqāṣid into forensic accounting, therefore, broadens auditing beyond compliance-driven verification, positioning it as a value-oriented evaluation that supports ethical accountability within Sharia-based governance.

### **Integrative Theoretical Framework: The Forensic Maqāṣid Model**

Drawing on the preceding literature, this study proposes an Integrative Forensic Maqāṣid Model to explain how forensic accounting principles and maqāṣid al-sharī'ah-based ethics can jointly reinforce Sharia governance. The model is structured around three interrelated layers that operate systemically.

1. The Forensic Layer focuses on detection, investigation, and transparency through evidence-based analytical tools, including audit trails, anomaly identification, and fraud risk assessment. This layer emphasises technical rigour and supports accountability through verifiable information.
2. The Maqāṣid Layer provides the ethical foundation that guides decision-making through core values such as amānah (trustworthiness), 'adl (justice), ḥifẓ al-māl (protection of wealth), and maṣlaḥah (public welfare). These values orient governance processes toward fairness, responsibility, and social benefit.

The interaction of these layers occurs within the Governance Layer, where analytical precision and ethical orientation are translated into institutional policies, performance evaluation, and public reporting mechanisms. This tri-layered integration reflects Auda's (2008) conception of systemic integration and aligns with Napier's (2009) view of Islamic accounting as a practice that supports social accountability and ethical responsibility. By integrating forensic rationality with maqāṣid-informed ethics, the proposed model reframes accounting from a predominantly detective function toward a value-oriented governance function. In the context of public policy, particularly subsidised energy distribution, the model offers a foundation for ethical resilience by strengthening governance structures that are empirically robust and ethically grounded, thereby enhancing public accountability (Button et al., 2014).

## **Method**

### **Research Design and Context**

This study adopts a qualitative interpretivist approach to explore how forensic accounting and maqāṣid al-sharī'ah values are understood and practiced within the governance of subsidised LPG distribution in Indonesia. An interpretive design is appropriate when research seeks to understand meaning, ethical reasoning, and social practices rather than to measure variables quantitatively (Denzin, NK, & Lincoln, 2018). The research context focuses on the LPG subsidy governance chain involving regulators, distribution agents, and oversight institutions, a sector frequently associated with accountability challenges and distributional irregularities documented in national audit reports.

### **Data Sources and Participants**

This study was conducted in selected urban and semi-urban areas where subsidised LPG distribution constitutes a critical component of daily household energy consumption. The complexity informed the choice of research locations of subsidy governance arrangements involving regulators, distribution agents, and end-users. In qualitative research, the scope and location of inquiry are integral to meaning construction, as variations in social and institutional contexts shape participants' experiences and interpretations (Miles, M. B., & Huberman, 1994). Accordingly, the data generated in this study reflect context-specific governance dynamics rather than generalisable patterns.

### **Data Collection Procedures**

Data collection included in-depth interviews, limited field observations, and document analysis. Semi-structured interviews enabled participants to articulate their experiences, interpretations, and ethical reflections on transparency, accountability, and fraud mitigation, consistent with interpretive qualitative inquiry (Miles & Huberman, 1994). Limited observations at selected distribution and monitoring sites

provided contextual insights into organisational routines and control practices, while documentary analysis supported the triangulation of participants' narratives and institutional documents (Creswell & Poth, 2018).

### **Data Analysis and Trustworthiness**

Data were analysed using thematic analysis to identify recurring patterns and meanings across interviews, observations, and documents. The analysis was guided by forensic accounting concepts such as transparency, control mechanisms, and fraud indicators by Rezaee (2005), alongside maqāsid-based ethical values including justice ('adl), trust (amānah), and public welfare (maṣlahah) (Auda, 2008). Analytical rigour was enhanced through data triangulation and reflexive note-taking, ensuring that interpretations remained grounded in empirical data while aligned with the study's conceptual framework (Egon G. Guba; Yvonna S. Lincoln, 1989).

## **Result and Discussion**

### **Governance Weaknesses and Forensic Control Limitations**

The findings indicate that inefficiencies in Indonesia's subsidised LPG distribution are closely linked to weaknesses in internal control and monitoring systems. At the operational level, many distribution agents rely predominantly on administrative reporting to fulfil regulatory requirements, often without adequate supporting documentation, such as verified transaction records, inventory reconciliations, or cross-checks against supply data. As a result, reported figures are frequently insufficiently robust, limiting their usefulness for effective oversight.

From a forensic accounting perspective, this reporting practice reflects a compliance-oriented governance approach rather than substantive assurance. Controls primarily function as formal obligations rather than as mechanisms to detect anomalies or prevent irregularities. Prior studies in public sector fraud highlight that weak internal controls significantly increase exposure to manipulation, misallocation, and opportunistic behaviour, especially in subsidy programmes involving complex distribution chains (Rezaee et al., 2002).

These weaknesses have broader governance implications. When control systems fail to provide reliable and verifiable information, accountability becomes procedural rather than outcome-oriented. In such contexts, forensic accounting loses its preventive capacity and is reduced to post-event verification. This finding underscores the need to reposition forensic controls within subsidy governance, not merely as administrative tools, but as instruments of ongoing assurance capable of safeguarding public resources.

### **Information Asymmetry and Accountability Gaps**

Another key finding concerns persistent information asymmetry among regulators, distributors, and beneficiaries within the subsidised LPG system. Discrepancies between official quota allocations and actual distribution volumes weaken transparency and hinder regulators' ability to assess whether subsidies reach their intended targets. Distribution agents often have limited access to real-time quota data, while beneficiaries generally lack information on entitlement criteria and allocation mechanisms.

From a forensic accounting standpoint, such information opacity creates structural conditions conducive to manipulation and moral hazard. Unequal access to information allows intermediaries to exploit gaps between policy formulation and implementation. This condition is a critical vulnerability in governance systems, where the absence of transparent data flows undermines accountability and enables concealment of irregular practices (Jack Bologna and Robert Lindquist, 1995).

This dynamic is consistent with the principal-agent problem, in which agents with superior information act in ways that may diverge from public-interest objectives when oversight is weak (Jensen & Meckling, 1976). In the context of LPG subsidy governance, information asymmetry diminishes both institutional control and public trust, reinforcing the need for forensic transparency mechanisms that promote open, accessible, and verifiable information across all stakeholder groups.

### **Ethical Dilemmas in Subsidy Distribution Practices**

The study further reveals that distributors frequently face ethical dilemmas arising from economic pressures and weak supervisory enforcement. Participants described tensions between regulatory compliance and operational realities, such as fluctuating supply, rising logistics costs, and competition with non-subsidised markets. In response, some actors rationalise deviations from subsidy regulations as pragmatic adjustments necessary to sustain business operations.

These rationalisations reflect classic elements of the fraud triangle—pressure, opportunity, and rationalisation (Cressey, 1954). Economic constraints generate pressure, deficiencies in control systems create opportunity, and socially normalised justifications allow unethical conduct to be perceived as acceptable. This finding aligns with prior research emphasising that ethical violations in subsidy governance often emerge gradually through routine practices rather than deliberate criminal intent.

Within Islamic governance principles, such practices contradict the values of *amānah* (trustworthiness) and *ʿadl* (justice), which require responsible stewardship of public resources (Napier, 2009). The findings suggest that ethical breaches in subsidy distribution are not solely individual failures, but manifestations of institutional environments that fail to reinforce moral responsibility alongside technical regulation.

### **Integrating Forensic Oversight and Maqāṣid-Based Ethics**

The analysis indicates that governance weaknesses in the subsidised LPG system are not merely technical in nature, but also reflect an absence of value-based accountability. Existing oversight mechanisms tend to emphasise procedural compliance, focusing on whether rules are formally followed rather than on whether outcomes align with broader objectives of fairness, transparency, and public welfare.

By integrating forensic accounting mechanisms with *maqāṣid al-sharīʿah* principles, governance practices can be reoriented toward more substantive accountability. Forensic accounting provides empirical tools for detecting irregularities and strengthening transparency, while *maqāṣid*-based ethics offer normative guidance grounded in justice, trust, and social benefit (Auda, 2008). This integration enables governance systems to address both the technical and ethical dimensions of subsidy management.

This study does not aim to justify or validate a predefined theoretical framework. Instead, the Forensic–Maqāṣid Accountability Framework is constructed from the data and used as an interpretive tool to explore how accountability practices are shaped by evidentiary mechanisms and ethical reasoning within Sharia-based public administration.

## **Conclusions and Recommendations**

### **Conclusion**

This study examines governance challenges in Indonesia's subsidised LPG distribution system by integrating forensic accounting with *maqāṣid al-sharīʿah*-based ethics. The findings demonstrate that governance weaknesses are shaped by inadequate forensic controls, persistent information asymmetry, ethical dilemmas among distribution actors, and limited public accountability literacy. These issues indicate that existing accountability mechanisms remain largely procedural and compliance-oriented, limiting their effectiveness in ensuring equitable and transparent subsidy delivery.

By integrating forensic accounting mechanisms with *maqāṣid* principles such as justice, trust, and public welfare, this study proposes the Forensic–Maqāṣid Accountability Framework as a value-oriented approach to public governance. The framework highlights that effective accountability in subsidy management requires not only technical accuracy and evidentiary verification but also an ethical orientation that aligns governance practices with social objectives. This integrative perspective reframes forensic accounting from a purely detective function into a governance instrument that supports distributive fairness and public trust.

## Implications

From a policy perspective, the findings suggest strengthening forensic control systems by improving transaction verification, integrating data across distribution channels, and ensuring transparent reporting accessible to both regulators and the public. Embedding ethical principles derived from maqāṣid alsharī'ah into governance guidelines and institutional training can further reinforce integrity and accountability within subsidy administration.

Practically, public sector institutions may benefit from incorporating ethical accountability indicators alongside forensic audit procedures to address not only regulatory compliance but also the moral dimensions of public resource management. For future research, this study encourages further empirical testing of the Forensic–Maqāṣid Accountability Framework in other subsidy programmes and public sector contexts, as well as comparative studies across different governance systems to enrich understanding of value-based accountability in practice.

## References

- Albrecht, W. Steve, and C. O. A. (2013). Fraud examination and prevention: A comprehensive framework. *Journal of Accounting, Auditing & Finance*, 28, no. 4, 431-455.
- Albrecht, C., Kranacher, M., & Albrecht, S. (2008). *Asset Misappropriation Research White Paper for the Institute for Fraud Prevention*.
- Auda, J. (2008). *Maqasid Al-shariah as Philosophy of Islamic Law A Systems Approach*. International Institute of Islamic Thought.
- Button, M., Johnston, L., & Frimpong, K. (2015). Fighting Fraud: The Case for a National Fraud Strategy. *Criminal Justice Matters*, 101(1).
- Button, M., Lewis, C., & Tapley, J. (2014). Not a victimless crime: The impact of fraud on individual victims and their families. *Security Journal*, 27(1), 36–54. <https://doi.org/10.1057/sj.2012.11>
- Carnegie, G.D. and Napier, C.J. (1996). Critical and Interpretive Histories: Insights into Accounting's Present and Future Through its Past. *Accounting, Auditing & Accountability Journal*, Vol.9, No.
- Cressey, D. (1954). Other people's money: a study in the social psychology of embezzlement. <https://doi.org/10.2307/1140029>
- Creswell, J. W. ., & Poth, C. N. (2018). *Qualitative Inquiry and Research Design Choosing Among Five Approaches*. Sage Publication.
- Denzin, NK, & Lincoln, Y. (2018). *Buku Pegangan Penelitian Kualitatif SAGE (edisi ke-5)*. Sage.
- Dusuki, A. W., & Abdullah, N. I. (2007). Maqasid al-Shari'ah, Maslahah, and Corporate Social Responsibility. *American Journal of Islam and Society*, 24(1), 25–45.
- Egon G. Guba ; Yvonna S. Lincoln. (1989). *Fourth Generation Evaluation*. Sage Publication.
- Haniffa, R. and Hudaib, M. (2007). Exploring the Ethical Identity of Islamic Banks via Communication in Annual Reports. *Journal of Business Ethics*, 76, 97–116.
- Jack Bologna and Robert Lindquist. (1995). *Fraud Auditing and Forensic Accounting*. John Wiley & Sons, Inc.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360. [https://doi.org/https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/https://doi.org/10.1016/0304-405X(76)90026-X)
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. SAGE Publications Inc.
- Napier, C. (2009). Defining Islamic accounting: Current issues, past roots. *Accounting History - Account Hist*, 14, 121–144. <https://doi.org/10.1177/1032373208098555>
- Rezaee, Z. (2005). Causes, consequences, and deterrence of financial statement fraud. *Critical Perspectives on Accounting*.
- Rezaee, Z., Sharbatoghlie, A., Elam, R., & McMickle, P. L. (2002). Continuous Auditing: Building Automated Auditing Capability. *AUDITING: A Journal of Practice & Theory*, 21(1), 147–163. <https://doi.org/10.2308/aud.2002.21.1.147>
- Tommie W. Singleton, A. J. S. (2010). *Fraud Auditing and Forensic Accounting, 4th Edition (4th Editio)*. WILEY.
- Wells, J. T. (2008). *Principles of Fraud Examination*. John Wiley,.
- Wolfe, D. T., & Hermanson, D. (2004). *The Fraud Diamond: Considering the Four Elements of Fraud*. <https://www.semanticscholar.org/paper/de93d85ebfbbde5fa75d9f66eeec6156cce22b48eb>