

# INTERNAL GOVERNANCE AND FRAUD PREVENTION SYSTEM: THE POTENTIALITY OF THE SPIRITUAL QUOTIENT

Muhammad Wahyuddin Abdullah<sup>\*</sup>, Hadriana Hanafie<sup>\*\*</sup>,  
Andi Yustika Manrimawagau Bayan<sup>\*\*\*</sup>

<sup>\*</sup> Corresponding author, Fakultas Ekonomi dan Bisnis Islam, Universitas Islam Negeri Alauddin Makassar, Makassar, Indonesia  
Contact details: Fakultas Ekonomi dan Bisnis Islam, Universitas Islam Negeri Alauddin Makassar, Jl. H.M. Yasin Limpo, No. 36 Samata, Gowa, Sulawesi Selatan 92113, Indonesia

<sup>\*\*</sup> Fakultas Ekonomi, STIE Wira Bhakti Makassar, Makassar, Indonesia

<sup>\*\*\*</sup> Fakultas Ekonomi dan Bisnis Islam, Universitas Islam Negeri Alauddin Makassar, Makassar, Indonesia



## Abstract

**How to cite this paper:** Abdullah, M. W., Hanafie, H., & Bayan, A. Y. M. (2023). Internal governance and fraud prevention system: The potentiality of the spiritual quotient. *Journal of Governance & Regulation*, 12(4), 50–59. <https://doi.org/10.22495/jgrv12i4art5>

Copyright © 2023 The Authors

This work is licensed under a Creative Commons Attribution 4.0 International License (CC BY 4.0).  
<https://creativecommons.org/licenses/by/4.0/>

**ISSN Online:** 2306-6784

**ISSN Print:** 2220-9352

**Received:** 15.12.2022

**Accepted:** 13.10.2023

**JEL Classification:** H83, M41, P43

**DOI:** 10.22495/jgrv12i4art5

Cases of financial fraud by local governments in Indonesia are on the rise, causing significant losses to the state. The weak internal control system and the apparatus's low integrity are some well-known culprits, thus confirming the fraud diamond theory of Wolfe and Hermanson (2004). As a religious country, the potentiality of spirituality seeks to increase governmental internal control systems and regional management information systems that are still underrepresented in previous studies despite Nguyen and Crossan (2022) arguments that the infusion of virtue ethics into fraud management systems can greatly benefit from it. This article provides an empirical investigation as to whether implementing the government's internal control system and regional management information systems might prevent fraud in Indonesian local governments, with the spiritual quotient (SQ) as the moderating factor in these relationships. This study employs a quantitative approach by collecting response data from the financial division apparatus in Indonesia. The sample was determined by the purposive sampling method and sent to the head of budget planning and treasury in Indonesia, resulting in 221 return questionnaires. The partial least squares structural equation modeling is used to analyze the direct and moderating relationships. This study reports that the implementation of the government's internal control system and regional management information system has successfully prevented fraud in the financial reporting of local governments. The spiritual quotient strengthens the implementation of the government's internal control system in avoiding fraud. However, the same does not occur with the regional management information system. The article concludes with discussions and implications.

**Keywords:** Internal Control, Information System, Spiritual Quotient, Fraud, Financial Reporting, Local Government

**Authors' individual contribution:** Conceptualization — M.W.A.; Methodology — M.W.A.; Formal Analysis — M.W.A.; Investigation — M.W.A. and H.H.; Data Curation — A.Y.M.B.; Writing — Original Draft — M.W.A.; Writing — Review & Editing — M.W.A. and H.H.; Visualization — H.H.; Supervision — M.W.A. and H.H.; Project Administration — A.Y.M.B.

**Declaration of conflicting interests:** The Authors declare that there is no conflict of interest.

## 1. INTRODUCTION

Being the fourth most populous country in the world, Indonesia undeniably has a significant track record related to fraud cases. Based on survey data released in the 2019 edition of the Association of Certified Fraud Examiners (ACFE) Indonesia, 239 cases of fraud caused losses of 873.43 billion Indonesian rupiah (IDR) 2019. Cases of fraud exist not only in the private sector but are also predominantly prevalent in the public sector. Following the demise of the New Order regime in Indonesia from 1997 to 1998, centralistic governance was criticized for being the fundamental reason behind corruption, collusion, and nepotism creeping into the country. The transitional government thus issued Bill No. 22 in 1999, providing autonomy to the regions by partially transferring authority and responsibility from the central government to local governments. According to Suhakim and Arisudhana (2012), this prerequisite condition led the Indonesian local governments to have great control in regulating and managing their agenda, along with the potential to foster economic growth.

To improve citizens' trust, employing good governance principles in the public sector is crucial (Bednar, 2012; Ausat et al., 2023). Despite efforts to improve service delivery, criticisms and complaints against public services remain evident (Nofsinger, 2001). Public sector organizations have a reasonably complex bureaucratic structure, low team member integrity, and weak control (Battaglio et al., 2019). Nowadays, the performance of local governments is increasingly under the spotlight from the community following their autonomy blessings (Bartlet et al., 2020; Qian et al., 2011). They are obliged to call the meeting and present a report on their activities; they are also faced with a perceived need for accountability of performance. Thus, supervision is essentially a function inherent in planning and implementing this agenda (Ghosh, 2015), as it can support the implementation of financial controls and the proper administration of assets and inventories.

Previous theories have regulated the best practices for the structural problems in developing countries regarding their administrations. Some well-known theories are the rent-seeking theory by Gordon Tullock (1967, as cited in Buchanan et al., 1980) and the principal-agent theory by Jensen and Meckling in 1976 (Jensen & Meckling, 1976). How people (principals) entrust their public administration agendas is subject to potential mismanagement by the government (agent). This misalignment of reality and expectation stems from the innate rational behavior that actively seeks the maximum capacity of personal utility (Kahneman & Tversky, 1979; Kalayci & Basdas, 2010). Furthermore, the fraud diamond theory states that there are three dimensions to explain the reasons for a person to commit fraud: pressure, opportunity, and justification (Wolfe & Hermanson, 2004).

This study aims to quantitatively investigate the relationships between government internal control systems and regional management with respect to the potential fraud prevention (FP) in

Indonesian local government. We apply the spiritual quotient (SQ) as a potential moderator to enhance these two independent variables. The reason for selecting this spiritual agenda is simply because the fact that Indonesia is the most populous Muslim country; thus, religion cannot be demarcated from its citizens. Throughout 2018-2019, state losses in corruption cases amounted to IDR81 billion (Anwar, 2019), and the alleged bribery of a DAK (Special Allocation Fund) project in one of the districts in South Sulawesi was around IDR49 billion (Hakim, 2019). While fraud in public administration causes intangible damage, such as reputational and social damage to the organization, whose costs are not easy to estimate or mitigate (Avortri & Agbanyo, 2020), academic conversations may get further advancement from the appreciation of this internal value of the nation. As fraud is caused due to moral disengagement (Bandura, 1999; Bandura, 2002), the spirituality of religion may serve as the braking mechanism for this fraudulent behavior as it emphasizes moral safeguarding and advancement (Geigle, 2012; King, 2007). However, how spirituality presents the actual impact is still in need of further definitions, which is what this study tries to approach. Furthermore, the appreciation of religious factors will add extended knowledge related to the nature of the emerging economies that still emphasize the role of religion in their activities. Thus, this study extends the fraud diamond theory of (Wolfe & Hermanson, 2004), and the extension of virtue ethics, as suggested by (Nguyen & Crossan, 2022) with spirituality as the main driver.

Spiritual experiences can be defined as transpersonal events featuring perceptual and conscious phenomena that diverge from ordinary everyday experiences, such as heightened emotions and sensory abilities, expanded states of consciousness, or feelings of connectedness to a higher power (Sheep, 2006). The spiritual quotient becomes the control of one's behavior and self-fencing. Thus, controlling impulses and emotions can influence individuals' decision-making (Rzeczynski & Fridson, 2000). According to Dorminey et al. (2012), pressure generally would be more likely to act in the full context of social tendency and financial needs following the actual situation of an individual. Note that the classic fraud diamond theory focuses mainly on the setting and not on the person who may commit fraud.

This article will be organized into six sections. Firstly, we discuss the structural need to assess the role of spirituality in strengthening the impacts of government internal control systems and regional management toward fraud prevention. Section 2 reviews the relevant literature. Here, the theoretical discourse that can serve this elusive topic in the literature review is evaluated. This theoretical conversation is foundational to the construction of the research method in Section 3. We then present the resulting analysis by placing the descriptions of the data in Section 4 followed by the outer model of quality assessment; finally, the inner model of causal effects is presented. Section 5 provides a discussion of the results. Section 6 concludes the paper and suggests several topics for future investigation.

## 2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

### 2.1. The fraud theory

Cressey (1953) first introduced the fraud theory with the fraud triangle theory, which explains the three main factors for someone to commit fraud: namely pressure, opportunity, and rationalization. The theory was then redeveloped into the fraud diamond theory by adding capability as a factor that also explains fraud. Furthermore, Marks (2012) expanded the fraud pentagon theory with SCORE elements: 1) stimulus, 2) capability, 3) opportunity, 4) rationalization, and 5) ego. This theory then developed into a renewed fraud theory, commonly called the fraud hexagon theory, with SCCORE elements which include: 1) stimulus/pressure, 2) capability, 3) collusion, 4) opportunity, 5) rationalization, and 6) ego (Vousinas, 2019).

The above theories of fraud explain the various factors or elements that encourage and pressure someone to commit fraud. Accordingly, workers and supervisors are subject to pressure and incentives to commit fraud. This impulse arises from several constraints, including those imposed by the work environment, financial situation, and a person's bad habits. Problems related to fraud require analytical and problem-solving skills to prevent and detect them (Farber, 2005; Magnanelli et al., 2017). Furthermore, it recommends focusing on internal control and ethical values (including spirituality) (Walker et al., 2012). Financial needs or problems are usually a source of pressure, including lifestyle and gaming the system at work (Grebe, 2015). This pressure is stimulated when the entity's condition is unstable due to the non-optimization of its assets and investments effectively (Skousen et al., 2009). The complementary element of the fraud hexagon theory is the ego or greed superiority attitude of someone who believes that the organization's internal control does not apply on a personal level. This theory builds an internal control system or information system as a pillar of accountability and transparency to minimize fraud in government financial management.

The fraud diamond theory points to specific drivers of fraud. Furthermore, morality and ethics emerge as key factors and the most recommended solutions. The case of the Islamic Bank in Malaysia supports the idea of religious interference in the managerial system to accommodate better governance (Alaudin et al., 2015). The spiritual aspect, as the basic morality of Islamic believers, is also promoted when it comes to accountants (El-Halaby & Hussainey, 2015). Otherwise, another study discovers the absence of difference between Islamic-based organizations and conventional ones (Al-Tamimi & Charif, 2013). However, the theory of moral virtue in applied fraud conversation recommends the establishment of honesty, integrity, and trustworthiness for organizations to help prevent fraud and create a culture of ethical behavior. Religious teachings can serve as an untapped capacity of moral virtue that is innate in believers. For example, in Christianity, the cardinal virtues of prudence, justice, temperance, and fortitude are seen as essential for leading a virtuous life. Similarly, in Islam, the concept of Ihsan, or

excellence, is closely tied to the cultivation of virtuous character traits (Jabbar et al., 2018; Rae, 2018; Moad, 2007; Said et al., 2019). Hence, the application of fraud theory in emerging nations with strong religious traits should effectively consider the potential benefits of incorporating spiritual values into managerial discretion.

### 2.2. The hypotheses development

Budgetary supervision is considered essential as the regional budget is used to determine the amount of income and expenditure, assist in decision-making and development planning, authorize future spending, provide sources of growth for standard measures for performance evaluation, tools to motivate employees and coordinate tools for all activities of various work units (Brownell, 1981). These findings reinforce the notion that behavioral methods should be applied in a responsive and gradually escalating manner, and regulators need to adopt a multi-layered strategy to encourage compliance and implement regulation (Eagly & Chaiken, 1993). This study investigates how budgetary management in public administration, like the Government Internal Control System (GICS) and the Regional Management Information System (RMIS), may serve as the devised solutions to prevent fraudulent accounting in public organizations.

The GICS is designed based on the framework of supervision to achieve the organization's goals and objectives and realize good governance (Saerang et al., 2019). The GICS is also a supporting part of President Instruction No. 7 of 1999, which pertains to the accountability for the performance of government agencies. Additionally, every government agency must compile and report on the strategy scheme comprising the main programs to be achieved. Agency leaders must implement GICS and take shared responsibility (Woods, 2009). The current internal control system does not appear to have such a direct effect on every organization (Perry & Zenner, 2001). Therefore, it is imperative to ensure that the local government sector as a whole and every municipality are not treated as an isolated and rigid phenomenon that is always in balance, regardless of time, but are treated on a philosophical basis proceeding from the paradigm of self-organization (Ma, 2020).

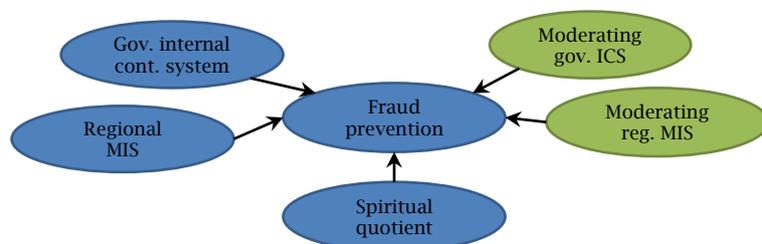
One of the elements in the GICS is the Government Internal Control Apparatus, one of which is the internal auditor at the Financial and Development Supervisory Agency and Inspectorate. Consequently, internal auditing work focuses on areas that identify fraud or material weaknesses and improve performance, risk management, controls, and governance processes (Carmeli & Tishler, 2004). This proposition supports previous research, which suggests that conducting ongoing audits, particularly those performed by internal auditors, is an essential factor in preventing fraud (Abbott et al., 2004; Beasley, 1996; Farber, 2005). Internal control weaknesses have been defined by problems associated with incorrect recognition of revenue, lack of segregation of duties, timing problems surrounding end-of-period reporting, and accounting non-compliances (Dechow et al., 1996; Wintoki et al., 2012).

A management information system model based on data mining technology enables the data warehouse and data mining technology to play a role in not only supporting decisions but also enabling the financial and non-financial information of enterprises to be fully utilized (Gray et al., 1996). Furthermore, application control is expected to prevent, detect, and correct errors due to fraud. The RMIS is a scheme mandated by laws and regulations to expand efforts to control regional finances and assets. Research has supported the role of RMIS in fraud prevention and its effect on financial quality (Muharremi et al., 2014; Smith & Clark, 2005). Both studies agree that the concept of the system is essentially very supportive of the quality of financial statements and control.

One factor that may influence professionalism is the spiritual quotient (Suryaningsih & Wahyudin, 2019; Walker et al., 2012). Spiritual experiences can be defined as transpersonal events featuring perceptual and conscious phenomena that diverge

from ordinary everyday experiences, such as heightened emotions and sensory abilities, expanded states of consciousness, or feelings of connectedness to a higher power (Koenig et al., 2015). The spiritual quotient becomes the controller of one's behavior and self-fencing, thus controlling impulses and emotions in individuals' decision-making (Kashif et al., 2017). A person who brings spirituality into the work environment can improve themselves, which has implications for the resulting performance improvement as compared to someone without a spiritual quotient (Said et al., 2019; Sheep, 2006). A person with a high spiritual quotient is expected to be able to control his emotions to optimize his work functions, not only in the scope of internal control but also in the use of RMIS by local government employees (Alwi et al., 2021; Kashif et al., 2017; Stanke, 2004). The research hypotheses are as follows, with the causal inferences of variables in Figure 1.

Figure 1. Theoretical framework



Source: Authors' formulation.

H1: Implementing the GICS may serve as fraud prevention in the local government.

H2: Implementing the RMIS may prevent fraud in their management.

H3: The spiritual quotient strengthens the implementation of the GICS to prevent fraud.

H4: The spiritual quotient strengthens the implementation of the RMIS to prevent fraud.

### 3. RESEARCH METHODOLOGY

#### 3.1. Design

This quantitative research emphasizes theoretical testing through variable measurement and analysis using statistical figures to formulate hypotheses. We have selected this approach to make a specific generalization of the findings in the context of governmental decision-makers. Furthermore, this study uses a causality approach to measure the strength or direction of exogenous variables to endogenous variables and the power of moderating variables across all independent variables. We opted for the use of variance-based structural-equation modeling (or partial-least-square structural-equation modeling) as the data is not normally distributed. Furthermore, the amount of data is not large enough for the use of covariance-based structural equation modeling. This study maximizes the SmartPLS 3 software to analyze the obtained data. This method will create two subsequent results; firstly, the outer model measurement, and secondly, the inner model descriptions. The outer model will ensure the quality of the data in the form of outer loading, convergent

validity, discriminant validity, and collinearity tests (Fong & Law, 2014). Having passed these tests, the inner model test will assess the inferential statistics by executing the path coefficient and the bootstrap results. The inner model will also construct the moderating test for the inner model analysis (see Figure 2 for the model result).

#### 3.2. Sample and measurement

This study's population consists of civil servants in the Regional Financial and Asset Management Agency and the Regional Revenue Agency (Bapenda) in 24 regencies/cities in South Sulawesi, Indonesia. We purposefully selected responses based on specific criteria or traits, including 1) those in the budget planning field; 2) the treasury field; 3) the accounting and financial reporting field; and 4) work experience in the field of at least three years. This selection process targets responsible actors related to our investigation who are mostly located in this specific agency and have job titles as listed in Table 1.

Table 1. Respondent profile

No.	Respondent/sample	Amount
1	Head of sector/sub-sector of regional net income	53
2	Head of sector/sub-sector of budget planning	49
3	Head of sector/sub-sector of treasury	58
4	Head of sector/sub-sector of financial reporting	61
	Total	221

The respondents then fill out the surveys, following the researcher's requests to the upper echelons. Five hundred questionnaires were distributed, with 454 respondents agreeing to participate. We screened for responses that did not meet the inclusion criteria or were incomplete, resulting in 221 usable data points (a response rate of 48.67%). This sample size satisfied the cut-off value of a minimum of 200 data for structural equation modeling (Kline, 1998). Fong and Law (2014) recommended that the sample size be at least 10 times as many observations as the number of structural paths or latent variables in the model. Thus, as Figure 2 reveals, the number of paths toward the last independent variable is 16, requiring a minimum of 160 observations for this research. These two sample rules are consistent with our data collection and are suitable for statistical analysis purposes..

This study investigates four constructs: the Government Internal Control System (*GICS*), the Regional Management Information System (*RMIS*), spiritual quotients (*SQ*), and fraud prevention (*FP*). Variable measurements use a Likert scale of: 1) strongly disagree, 2) disagree, 3) neutral, 4) agree, and 5) strongly agree. *FP* measures the risk management indicators, fraud reporting facilities/procedures, and organizational commitment by following the indicator design of Todorovic et al. (2020). The *SQ* includes expertise, codes of ethics, non-deviant behavior, self-competence, self-control, and professional attitudes with item measurement by Zohar and Marshall (2007). The *GICS* measures environmental control, control activities, information and communication, and internal control monitoring with the recommendation from the Committee of Sponsoring Organizations of the Treadway Commission (COSO) (KPMG, 2013) organization. Finally, *RMIS* assesses the information quality, implementation, and usage of systems, as well as the management and supervision of systems, using indicators extracted from the study by Fahrurrozi (2019).

The data testing technique employs variance-based structural equation modeling or partial least squares. The reason for selecting this tool is that it does not assume the data's normality and it is suitable for the exploratory nature of the study (Amar et al., 2021; Becker et al., 2012; Henseler et al., 2015; Kock, 2015). This statistical test is conducted in three stages: an outer model for the data quality

specifications, an internal model analysis for linear analysis, and a moderating clarification. The examination is presented sequentially in the results section.

#### 4. RESULTS

This study examined the quality of variable reliability or construct using Cronbach's alpha ( $\alpha$ ) and composite reliability (*CR*) statistical tests (*Rho\_A*), and average variance extracted (*AVE*). The reliability and validity of the constructs or variables are shown in Table 2.

**Table 2.** Reliability and discriminant validity

No.	Variable	Cronbach's alpha	Rho_A	CR	AVE
1	Government Internal Control System ( <i>GICS</i> )	0.863	0.866	0.907	0.709
2	Regional Management Information System ( <i>RMIS</i> )	0.841	0.847	0.904	0.759
3	Fraud prevention ( <i>FP</i> )	0.705	0.705	0.836	0.629
4	Spiritual quotients ( <i>SQ</i> )	0.826	0.841	0.871	0.530

Source: Adapted SmartPLS 3 output.

Table 2 shows Cronbach's alpha ( $\alpha$ ) for the *GICS* variable of 0.863, the *RMIS* of 0.841, the *FP* of 0.705, and the *SQ* of 0.826. The overall variables in the study showed that the value of Cronbach's alpha was more remarkable than 0.600. Constructs or variables are declared reliable and acceptable if the value of Cronbach's alpha  $\geq 0.70$ . In addition, the reliability of the construct or latent variable is measured by the value of composite reliability. Other complementary measures, such as *CR* and *Rho\_A*, also showed results that supported the data quality in this study. The validity quality in this model's reliability frame is also confirmed by the *AVE* size, which is stricter than the alpha size, where the entire construct is above 0.50. Therefore, the existing data can be continued in the following data quality test: the convergent validity and collinearity test.

The loading factor presented the convergent validity for each indicator, and the multicollinearity of each hand was tested with the variance inflation factor (*VIF*), as evident in Table 3. Convergent validity aims to determine the item's validity (validity indicator) based on the value of the loading factor. This loading value is expected to be greater than 0.7.

**Table 3.** Loading factor and collinearity test

No.	Construct	Item	Loading factor	VIF
1	Government Internal Control System ( <i>GICS</i> )	GICS1	0.833	2.131
		GICS2	0.840	1.968
		GICS3	0.831	1.946
		GICS4	0.864	2.271
2	Regional Management Information System ( <i>RMIS</i> )	RMIS1	0.895	2.271
		RMIS2	0.829	1.694
		RMIS3	0.887	2.345
3	Fraud prevention ( <i>FP</i> )	FP1	0.782	1.325
		FP2	0.799	1.429
		FP3	0.798	1.392
4	Spiritual quotients ( <i>SQ</i> )	SQ1	0.785	1.892
		SQ2	0.706	1.689
		SQ3	0.734	1.613
		SQ4	0.733	1.775
		SQ5	0.705	1.885
		SQ6	0.703	1.775

The statistical tests reveal that the overall variable indicators for FP and SQ range from 0.703 to 0.782. The loading factor values for the overall GICS and RMIS variable indicators offer a range of values of 0.829 to 0.895, supporting the valid convergent indicators. Multicollinearity testing for the full scale showed a VIF value of 1.325 to 2.271, indicating the absence of problems and common-method-bias issues. These quality tests support the research data for hypotheses testing in the proposed model path, as listed in Table 4.

This study developed four research hypotheses, two of which (H1 and H2) directly test the implementation of GICS and RMIS in fraud prevention, while the other two (H3 and H4) test

the moderation or strengthening of SQ against the performance of GICS and RMIS in FP. The test results of the four hypotheses are presented in the following table.

Before discussing the results of the hypotheses testing, the model's ability to provide accurate predictions should be assessed. Table 4 shows an R<sup>2</sup> value of 0.348 (34.8%), indicating the magnitude of the varying ability of the GICS, RMIS, and SQ variables to predict the FP variable. The R<sup>2</sup> value ranges from 0.000 to 1.000, with values closer to 1 indicating a better predictive ability (Fong & Law, 2014).

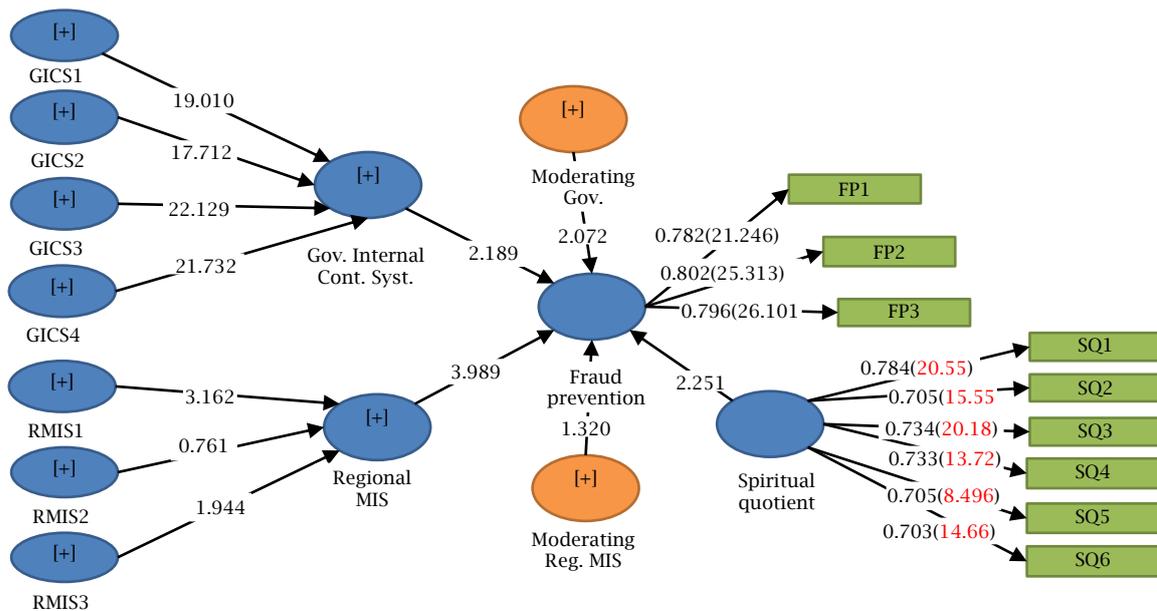
The final model of this study, after hypotheses testing, is described in Figure 2.

Table 4. Summary of hypotheses testing

Path	Effect	t-value	p-value	Hypotheses
GICS -> FP	0.224	2.189	0.026	Accepted
RMIS -> FP	0.280	3.989	0.001	Accepted
SQ -> FP	0.166	2.251	0.027	Accepted
Mod: GICS -> FP	0.176	2.072	0.045	Accepted
Mod: RMIS -> FP	-0.119	1.320	0.137	Declined
R <sup>2</sup> to FP			0,348	

Source: Adapted SmartPLS 3 output.

Figure 2. Bootstrap result



Source Authors' compilation.

Based on Table 4, the implementation of GICS for FP shows an effect size of 0.224 with a t-value of 2.226 and a p-value of 0.026 (2.6%), which is smaller than  $\alpha = 0.050$  (5%). The test results showed that H1 was accepted and that implementing GICS could significantly prevent fraud. The implementation of RMIS on FP showed an effect size of 0.228 with a t-value of 3.399 and a p-value of 0.001 (0.1%), which is smaller than  $\alpha = 0.050$  (5%). The test results show that H2 is accepted and that implementing RMIS can significantly prevent fraud.

Table 4 also provides the results of the moderating variable. The case of strengthening the SQ of the apparatus on the implementation of GICS in FP showed an effect size of 0.176 with a t-value of 2.013 and a p-value of 0.045 (4.5%), smaller than  $\alpha = 0.050$  (5%), confirming H3. However,

it cannot moderate the implementation of RMIS in FP, as revealed by the effect size of -0.119 with a t-value of 1.489, thus rejecting H4. The discussion and its implications will be further elaborated upon.

5. DISCUSSION

The GICS is the application of government regulations aimed at achieving organizational goals and has been effective in preventing fraud. The GICS, which includes the control environment, control activities, information and communication, and internal control monitoring, can create a work environment that supports avoiding fraudulent behavior in local governments in South Sulawesi. The existence of GICS can prevent fraudulent behavior that harms the organization, which is

usually carried out by government officials deliberately confirming *H1*. This finding is consistent with the fraud diamond theory as explained by the dimensions of opportunity and the ability to commit fraud (Avorri & Agbanyo, 2021), which can be prevented or lowered by the maximal implementation of GICS. Internal control minimizes the risk of fraud and is part of fraud control in the public sector, which is also evidenced in Malaysia as weak internal control is positively related to actual manipulation activities (Zakaria et al., 2016). GICS establishes an effective control environment that ensures that the system is not interfered with or misused to commit fraud (Saerang et al., 2019; Woods, 2009).

The implementation of RMIS serves as the e-Government anchor and as an auxiliary instrument for preparing local government financial reports. This study reports a confirmation of *H2* that RMIS is effective in preventing the potentiality of fraud in the government. The RMIS measures the quality of information, the implementation and use of reporting systems, and the management and supervision of the financial reporting system to avoid fraudulent behavior by local officials deliberately. The window of opportunities and abilities to commit fraud based on the fraud diamond theory can be prevented or anticipated by the adequate implementation of RMIS (Fang et al., 2014; Smith & Clark, 2005). The program monitoring system has become a successful patron in Malaysia (Zakaria et al., 2016). Likewise, the experience in the Slovak Republic supports the systematic tax information system to create efficiency and transparency in increasing revenues (Buliková et al., 2021).

The spiritual quotient is measured as the character of the government apparatus that may promote better implementation of GICS in preventing fraud. The moderating measurement supports this proposition as in *H3*. Thus, spirituality and knowledge are related to both hypotheses, further strengthening the thesis that spiritual presence in Indonesian local government is evident in fostering knowledge management (Nawas et al., 2022). This finding also supports the importance of another quotient, namely emotional intelligence, especially when performing tasks that require extensive cooperation and interpersonal trust, to promote efficiency among workers (Dudovitz et al., 2017; Kuzmina, 2010).

Unlike the previous relationship, the spiritual quotient is not statistically significant in moderating the implementation of RMIS in fraud prevention activities. This condition reveals that the financial reporting system's performance, uses, management, and supervision are so comprehensive and systematic that the influence of other behavioral conduct can be put aside. The implementation of RMIS has been integrated with all reporting data per the government's needs. Furthermore, it is mostly generated automatically in the system with minimal personal interference. Therefore, unique character traits such as the spiritual quotient may only be relevant in maintaining integrity and work ethics in contexts beyond the specific investigation of this study.

This study integrates the seemingly different worlds of affairs, the managerial world of public

administration, and the otherworldly aspect of religion. Specifically, the study explores how GICS and RMIS, supported by the spiritual quotient, can prevent potential fraud among public workers. The study contributes to the fraud diamond theory (Wolfe & Hermanson, 2004), as auditors can identify specific factors that may contribute to fraud risks and develop appropriate audit procedures to address those risks. For example, they may conduct more detailed testing of transactions in areas with a higher risk of fraud, or they may recommend changes to internal controls or policies to reduce opportunities for fraud. While the fraud diamond theory specifies causes of fraud as an opportunity, rationalization, pressure, and capability, the individual moral dilemma should emerge from the presence of fraud. Furthermore, conventional public administration in developed countries is somewhat independent of individual beliefs, such as religion, race, and other demographic markers. Developing countries, on the other hand, are often characterized by their heavy dependency on otherworldly affairs. Thus, strengthening the efforts to prevent fraud must strategically consider religion as a moral and ethical engagement factor for auditors, an area that has not received much academic attention (Abdullah et al., 2020; Lakasse et al., 2021; Nursiania & Fanggidaeb, 2019). This work, thus, reconciles the fraud perspective with the spirituality context from evidence in Indonesian public administration.

## 6. CONCLUSION

The implementation of GICS and RMIS is effective in preventing fraud in financial reporting. These systems have been integrated into local governments with maximum internal control measures to ensure that both systems can create a proper work environment to prevent and eliminate intentional fraudulent behavior. This system constrains local government officials while also mitigating potential losses. The spiritual quotient can strengthen GICS in preventing financial reporting fraud in local governments. This finding is consistent with the religious nature of the Indonesian people. The religious agenda may become the foundational supporting system inherent to the private individual identity and further benefit the whole system. However, the spiritual quotient does not strengthen the implementation of RMIS in fraud prevention. This is partly because information management has been automated to mitigate potential unethical behavior.

Our study confirms that the management information system is a steady and self-sufficient function with clear steps and directions, and something abstract like "spirituality" cannot play a further role in this regard. However, when it comes to organizational management of public administration in the form of internal control, spirituality serves as a positive driver to enhance the effectiveness of local governance. The strictly adaptable spiritual teaching should be developed in the context of public administration, but further research is needed to clarify the specific integration of spirituality that will not add additional administrative burdens.

This study is still limited to the application in global accounting practices as some nations consider religions as private issues, not meddling with organizational matters. The intrinsic value is different across religions, cultures, and geographics. Thus, it is hard to generalize the uses of spiritual value following these uniquenesses. This study's approach has to be taken within this methodological restrictions for further researches.

Current theoretical debates in financial accounting of public firms have placed

the perspective of inherent 'values' like religion in the conversation. How they applied to daily policies and practices still become heated discourses from the free-value and the value-laden academics. Thus, applying this concept in conventional financial reports is still an object of interest for academic investigations.

Further study can also explore whether an autonomous financial reporting system has been successfully integrated into public agencies and is completely free of behavioral misconduct.

## REFERENCES

1. Abbott, L. J., Parker, S., & Peters, G. F. (2004). Audit committee characteristics and restatements. *AUDITING: A Journal of Practice & Theory*, 23(1), 69-87. <https://doi.org/10.2308/aud.2004.23.1.69>
2. Abdullah, A., Mohamed, N., Yaacob, N. M., & Ahmad, S. (2020). Malaysian public sector ethical stimulants. *International Journal of Financial Research*, 11(3), 100-105. <https://doi.org/10.5430/ijfr.v11n3p100>
3. Alaudin, A., Shantapriyan, P., & Adler, R. (2015). Beliefs and accountability in an Islamic bank. *Corporate Ownership & Control*, 12(4), 80-90. <https://doi.org/10.22495/cocv12i4p6>
4. Al-Tamimi, H. A. H., & Charif, H. A. (2013). Corporate governance practices and the role of the board of directors: Evidence from UAE conventional and Islamic banks. *Corporate Ownership & Control*, 10(2-1), 207-213. <https://doi.org/10.22495/cocv10i2c1art6>
5. Alwi, Z., Parmitasari, R. D. A., Syariati, A., & Sidik, R. binti. (2021). Hadith corresponding thoughts on the ethical interacting behavior of young entrepreneurs in Indonesia. *Journal of Asian Finance, Economics and Business*, 8(3), 331-339. <https://doi.org/10.13106/jafeb.2021.vol8.no3.0331>
6. Amar, M. Y., Syariati, A., Ridwan, R., & Parmitasari, R. D. A. (2021). Indonesian hotels' dynamic capability under the risks of COVID-19. *Risks*, 9(11), Article 194. <https://doi.org/10.3390/RISKS9110194>
7. Anwar, H. (2019, December 30). *Throughout 2019, there were 132 corruption cases in South Sulawesi stalled*. <https://sulsel.inews.id/berita/sepanjang-2019-ada-132-kasus-tipikor-di-sulawesi-selatan-mandek>
8. Ausat, A. M. A., Al Bana, T., & Gadzali, S. S. (2023). Basic capital of creative economy: The role of intellectual, social, cultural, and institutional capital. *Apollo: Journal of Tourism and Business*, 1(2), 42-54. <https://doi.org/10.58905/APOLLO.V1I2.21>
9. Avortri, C., & Agbanyo, R. (2020). Determinants of management fraud in the banking sector of Ghana: The perspective of the diamond fraud theory. *Journal of Financial Crime*, 28(1), 142-155. <https://doi.org/10.1108/JFC-06-2020-0102>
10. Bandura, A. (1999). Moral disengagement in the perpetration of inhumanities. *Personality and Social Psychology Review*, 3(3), 193-209. [https://doi.org/10.1207/s15327957pspr0303\\_3](https://doi.org/10.1207/s15327957pspr0303_3)
11. Bandura, A. (2002). Selective moral disengagement in the exercise of moral agency. *Journal of Moral Education*, 31(2), 101-119. <https://doi.org/10.1080/0305724022014322>
12. Battaglio, R. P., Belardinelli, P., Bellé, N., & Cantarelli, P. (2019). Behavioral public administration ad fontes: A synthesis of research on bounded rationality, cognitive biases, and nudging in public organizations. *Public Administration Review*, 79(3), 304-320. <https://doi.org/10.1111/puar.12994>
13. Beasley, M. S. (1996). An empirical analysis of the relation between the board of director composition and financial statement fraud. *The Accounting Review*, 71(4), 443-465. <https://www.jstor.org/stable/248566>
14. Becker, J.-M., Klein, K., & Wetzels, M. (2012). Hierarchical latent variable models in PLS-SEM: Guidelines for using reflective-formative type models. *Long Range Planning*, 45(5-6), 359-394. <https://doi.org/10.1016/j.lrp.2012.10.001>
15. Bednar, M. K. (2012). Watchdog or lapdog? A behavioral view of the media as a corporate governance mechanism. *Academy of Management Journal*, 55(1), 131-150. <https://doi.org/10.5465/amj.2009.0862>
16. Brownell, P. (1981). Budgeting, locus of control and organizational effectiveness. *The Accounting Review*, 56(4), 844-860. <https://www.jstor.org/stable/247205>
17. Buchanan, J. M., Tollison, R. D., & Tullock, G. (1980). *Toward a theory of the rent-seeking society*. Texas A & M University.
18. Buliková, M., Bielik, P., & Belinska, S. (2021). Impact of tax policy on the business economy. *Visegrad Journal on Bioeconomy and Sustainable Development*, 10(1), 19-23. <https://doi.org/10.2478/vjbsd-2021-0005>
19. Carmeli, A., & Tishler, A. (2004). The relationships between intangible organizational elements and organizational performance. *Strategic Management Journal*, 25(13), 1257-1278. <https://doi.org/10.1002/smj.428>
20. Cressey, D. (1953). *Other people's money: A study in the social psychology of embezzlement*. Free Press.
21. Dechow, P. M., Sloan, R. G., & Sweeney, A. P. (1996). Causes and consequences of earnings manipulation: An analysis of firms subject to enforcement actions by the SEC. *Contemporary Accounting Research*, 13(1), 1-36. <https://doi.org/10.1111/j.1911-3846.1996.tb00489.x>
22. Dorminey, J., Fleming, A. S., Kranacher, M.-J., & Riley, R. A. (2012). The evolution of fraud theory. *Issues in Accounting Education*, 27(2), 555-579. <https://doi.org/10.2308/iace-50131>
23. Dudovitz, R. N., Chung, P. J., Nelson, B. B., & Wong, M. D. (2017). What do you want to be when you grow up? Career aspirations as a marker for adolescent well-being. *Academic Pediatrics*, 17(2), 153-160. <https://doi.org/10.1016/j.acap.2016.08.006>
24. Eagly, A. H., & Chaiken, S. (1993). *Psychology of attitudes*. Harcourt Brace Jovanovich College Publishers.
25. El-Halaby, S., & Hussainey, K. (2015). A holistic model for Islamic accountants and its value added. *Corporate Ownership & Control*, 12(3-1), 164-184. <https://doi.org/10.22495/cocv12i3c1p5>

26. Fahrurrozi, H. (2019). Pengaruh penggunaan SIMDA terhadap kualitas laporan keuangan dan dampaknya terhadap pencegahan fraud pengelolaan barang milik daerah. *Akurasi: Journal of Accounting and Finance Studies*, 2(2), 124-138. <https://doi.org/10.29303/akurasi.v2i2.20>
27. Fang, S., Xu, L. D., Zhu, Y., Ahati, J., Pei, H., Yan, J., & Liu, Z. (2014). An integrated system for regional environmental monitoring and management based on Internet of things. *IEEE Transactions on Industrial Informatics*, 10(2), 1596-1605. <https://doi.org/10.1109/TII.2014.2302638>
28. Farber, D. B. (2005). Restoring trust after fraud: Does corporate governance matter? *The Accounting Review*, 80(2), 539-561. <https://doi.org/10.2308/accr.2005.80.2.539>
29. Fong, H. N., & Law, R. (2014). [Review of the book *A primer on partial least squares structural equation modeling (PLS-SEM)*, by J. F. Hair, G. T. M. Hult, C. M. Ringle, & M. Sarstedt]. *European Journal of Tourism Research*, 6(2), pp. 211-213. <https://doi.org/10.54055/ejtr.v6i2.134>
30. Geigle, D. (2012). Workplace spirituality empirical research: A literature review. *Business and Management Review*, 2(10), 14-27. <http://surl.li/igbpc>
31. Ghosh, K. (2015). Developing organizational creativity and innovation: Toward a model of self-leadership, employee creativity, creativity climate and workplace innovative orientation. *Management Research Review*, 38(11), 1126-1148. <https://doi.org/10.1108/MRR-01-2014-0017>
32. Gray, R., Owen, D., & Adams, C. (1996). *Accounting & accountability: Changes and challenges in corporate social and environmental*. Prentice Hall.
33. Grebe, G. P. M. (2015). Fraud risk management in private healthcare in South Africa. *Corporate Ownership & Control*, 13(1-8), 868-878. <https://doi.org/10.22495/cocv13i1c8p6>
34. Hakim, E. (2019, December 4). Kaleidoskop 2019: Rentetan kasus korupsi yang jerat para tokoh di Sulsel [Kaleidoscope 2019: A series of corruption cases that snared figures in South Sulawesi]. *Liputan6*. <https://www.liputan6.com/regional/read/4125363/kaleidoskop-2019-rentetan-kasus-korupsi-yang-jerat-para-tokoh-di-sulsel>
35. Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43, 115-135. <https://doi.org/10.1007/s11747-014-0403-8>
36. Jabbar, S. F. A., Ali, H. M., Mohamed, Z. M., & Jalil, F. (2018). Business ethics: Theory and practice in an Islamic context. In J. Bian & K. T. Çalyurt (Eds.), *Regulations and applications of ethics in business practice* (pp. 257-271). Springer. [https://doi.org/10.1007/978-981-10-8062-3\\_14](https://doi.org/10.1007/978-981-10-8062-3_14)
37. 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. <http://surl.li/ihpne>
38. Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *The Econometric Society*, 47(2), 263-292. <https://doi.org/10.2307/1914185>
39. Kalayci, E., & Basdas, U. (2010). Does the prospect theory also hold for power traders? Empirical evidence from a Swiss energy company. *Review of Financial Economics*, 19(1), 38-45. <https://doi.org/10.1016/j.rfe.2009.11.001>
40. Kashif, M., Zarkada, A., & Thurasamy, R. (2017). The moderating effect of religiosity on ethical behavioural intentions: An application of the extended theory of planned behaviour to Pakistani bank employees. *Personnel Review*, 46(2), 429-448. <https://doi.org/10.1108/PR-10-2015-0256>
41. King, S. M. (2007). Religion, spirituality, and the workplace: Challenges for public administration. *Public Administration Review*, 67(1), 103-114. <https://doi.org/10.1111/j.1540-6210.2006.00700.x>
42. Kline, R. B. (1998). Software reviews: Software programs for structural equation modeling: Amos, EQS, and LISREL. *Journal of Psychoeducational Assessment*, 16(4), 343-364. <https://doi.org/10.1177/073428299801600407>
43. Kmezić, S., Bartlet, W., & Đulić, K. (2020). The impact of fiscal decentralisation on local economic development in Serbia. *Lex Localis*, 18(1), 143-163. [https://doi.org/10.4335/18.1.143-163\(2020\)](https://doi.org/10.4335/18.1.143-163(2020))
44. Kock, N. (2015). Common method bias in PLS-SEM: A full collinearity assessment approach. *International Journal of E-Collaboration*, 11(4), 1-10. <http://surl.li/ijqqp>
45. Koenig, H. G., Al Zaben, F., Khalifa, D. A., & Al Shohaib, S. (2015). Measures of religiosity. In G. J. Boyle, D. H. Saklofske, & G. Matthews (Eds.), *Measures of personality and social psychological constructs* (pp. 530-561). Academic Press. <https://doi.org/10.1016/B978-0-12-386915-9.00019-X>
46. KPMG. (2013). *COSO internal control — Integrated framework (2013)*. <https://assets.kpmg.com/content/dam/kpmg/pdf/2016/05/2750-New-COSO-2013-Framework-WHITEPAPER-V4.pdf>
47. Kuzmina, J. (2010). Emotion's component of expectations in financial decision making. *Baltic Journal of Management*, 5(3), 295-306. <https://doi.org/10.1108/17465261011079721>
48. Lakasse, S., Hamzah, M. N., Abdullah, M. W., & Syahrudin, S. (2021). Mitigation of budgetary slack behavior through Islamic religiosity and budget control: An empirical study of Indonesian local companies. *Journal of Asian Finance, Economics and Business*, 8(8), 355-363. <https://doi.org/10.13106/jafeb.2021.vol8.no8.0355>
49. Ma, C. (2020). Self-regulation versus government regulation: An externality view. *Journal of Regulatory Economics*, 58, 166-183. <https://doi.org/10.1007/s11149-020-09415-y>
50. Magnanelli, B. S., Pirolo, L., & Nasta, L. (2017). Preventing financial statement frauds through better corporate governance. *Corporate Ownership & Control*, 14(3), 271-285. <https://doi.org/10.22495/cocv14i3c2art1>
51. Marks, J. (2012). *The mind behind the fraudsters crime: Key behavioral and environmental elements*. Crowe Horwath LLP. <http://surl.li/ighpf>
52. Moad, E. O. (2007). A path to the Oasis: Shari'ah and reason in Islamic moral epistemology. *International Journal for Philosophy of Religion*, 62, 135-148. <https://doi.org/10.1007/s11153-007-9145-6>
53. Muharremi, O., Madani, F., & Pelari, E. (2014). Tax evasion and set backs of the shadow economy in Albania. *Mediterranean Journal of Social Sciences*, 5(13), 398-408. <https://doi.org/10.5901/mjss.2014.v5n13p398>
54. Nawas, K. A., Masri, A. R., & Syariati, A. (2022). Indonesian Islamic students' fear of demographic changes: The nexus of Arabic education, religiosity, and political preferences. *Religions*, 13(4), Article 320. <https://doi.org/10.3390/rel13040320>
55. Nguyen, B., & Crossan, M. (2022). Character-infused ethical decision making. *Journal of Business Ethics*, 178, 171-191. <https://doi.org/10.1007/s10551-021-04790-8>

56. Nofsinger, J. R. (2001). The impact of public information on investors. *Journal of Banking & Finance*, 25(7), 1339-1366. [https://doi.org/10.1016/S0378-4266\(00\)00133-3](https://doi.org/10.1016/S0378-4266(00)00133-3)
57. Nursiana, N. P., & Fanggidaeb, R. E. (2019). Fraud prevention: Relevance to spirituality workplace and religion. *Opcion*, 35(19), 2337-2365. <http://surl.li/igqcl>
58. Perry, T., & Zenner, M. (2001). Pay for performance? Government regulation and the structure of compensation contracts. *Journal of Financial Economics*, 62(3), 453-488. [https://doi.org/10.1016/S0304-405X\(01\)00083-6](https://doi.org/10.1016/S0304-405X(01)00083-6)
59. Qian, W., Burritt, R., & Monroe, G. (2011). Environmental management accounting in local government: A case of waste management. *Accounting, Auditing & Accountability Journal*, 24(1), 93-128. <https://doi.org/10.1108/09513571111098072>
60. Rae, S. (2018). *Moral choices: An introduction to ethics* (4th ed.). Zondervan Academic. <http://surl.li/igpr>
61. Rzepczynski, M. S., & Fridson, M. S. (2000). [Review of the book *Beyond greed and fear: Understanding behavioral finance and the psychology of investing*, by H. Shefrin]. *Financial Analysts Journal*, 56(6), 112-113. <https://doi.org/10.2469/faj.v56.n6.2407>
62. Saerang, D. P. E., Wokas, H. R. N., Kumaat, R. J., & Datu, C. (2019). Effect of understanding financial management, regional financial accounting systems, effectiveness of internal control, and commitment towards financial performance of North Sulawesi province. *Accountability*, 8(1), 51-59. <https://doi.org/10.32400/ja.23360.8.1.2019.51-59>
63. Said, S., Amiruddin, A. M. A., Asad, A., Rustan, C., & Sofyan, A. S. (2019). Managing with Sharia: Strengthening Sharia banking spiritual literacy. *Jurnal Minds: Manajemen Ide Dan Inspirasi*, 6(2), 161-180. <https://doi.org/10.24252/minds.v6i2.10297>
64. Sheep, M. L. (2006). Nurturing the whole person: The ethics of workplace spirituality in a society of organizations. *Journal of Business Ethics*, 66(1), 357-375. <https://doi.org/10.1007/s10551-006-0014-5>
65. Skousen, C. J., Smith, K. R., & Wright, C. J. (2009). Detecting and predicting financial statement fraud: The effectiveness of the fraud triangle and SAS No. 99. In M. Hirschey, K. John, & A. K. Makhija (Eds.), *Corporate governance and firm performance* (Advances in Financial Economics, Vol. 13, pp. 53-81). Emerald Group Publishing Limited. [https://doi.org/10.1108/S1569-3732\(2009\)0000013005](https://doi.org/10.1108/S1569-3732(2009)0000013005)
66. Smith, A. D., & Clark, J. S. (2005). Revolutionising the voting process through online strategies. *Online Information Review*, 29(5), 513-530. <https://doi.org/10.1108/14684520510628909>
67. Stanke, A. (2004). Religiosity, locus of control, and superstitious belief. *UW-L Journal of Undergraduate Research*, 7, 1-5. <http://surl.li/ijron>
68. Suhakim, I. A., & Arisudhana, D. (2012). Pengaruh gender, locas of control, komitmen profesi, dan kesadaran etis terhadap perilaku auditor dalam situasi konflik. *Journal Akuntansi dan Keuangan*, 1(1), 38-57. <https://journal.budiluhur.ac.id/index.php/akeu/article/view/359/304>
69. Suryaningsih, D., & Wahyudin, A. (2019). Pengaruh tiga dimensi kecerdasan dan locus of control terhadap perilaku. *Economic Education Analysis Journal*, 8(3), 967-982. <http://surl.li/ihbje>
70. Todorovic, Z., Tomaš, D., & Todorović, B. (2020). Anti-fraud strategy. *Economics*, 8(2), 69-78. <https://doi.org/10.2478/eoik-2020-0010>
71. Vousinas, G. L. (2019). Advancing theory of fraud: The S.C.O.R.E. model. *Journal of Financial Crime*, 26(1), 372-381. <https://doi.org/10.1108/JFC-12-2017-0128>
72. Walker, A. G., Smither, J. W., & DeBode, J. (2012). The effects of religiosity on ethical judgments. *Journal of Business Ethics*, 106, 437-452. <https://doi.org/10.1007/s10551-011-1009-4>
73. Wintoki, M. B., Linck, J. S., & Netter, J. M. (2012). Endogeneity and the dynamics of internal corporate governance. *Journal of Financial Economics*, 105(3), 581-606. <https://doi.org/10.1016/j.jfineco.2012.03.005>
74. Wolfe, D. T., & Hermanson, D. R. (2004). The fraud diamond: Considering the four elements of fraud. *The CPA Journal*, 74(12), 38-42. <http://surl.li/ihcra>
75. Woods, M. (2009). A contingency theory perspective on the risk management control system within Birmingham City Council. *Management Accounting Research*, 20(1), 69-81. <https://doi.org/10.1016/j.mar.2008.10.003>
76. Zakaria, K. M., Nawawi, A., & Puteh Salin, A. S. A. (2016). Internal controls and fraud — Empirical evidence from oil and gas company. *Journal of Financial Crime*, 23(4), 1154-1168. <https://doi.org/10.1108/JFC-04-2016-0021>
77. Zohar, D., & Marshall, I. (2007). *SQ: Kecerdasan spiritual*. Penerbit Mizan.