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The Influence of IT Governance Implementation on Firm Performance in Manufacturing Companies

Titis Nadya Basuki[a], Nadia Anridho[b], and Yani Permatasari[c**]
[a]*Airlangga University, titisnadyabasuki-2019@feb.unair.ac.id, Indonesia*
[b]*Airlangga University, nadia.anridho@feb.unair.ac.id, Indonesia*
[c]*Airlangga University, yanipermatasari@feb.unair.ac.id, Indonesia*

Abstract. This study aims to examine the effect of IT Governance implementation on firm performance in manufacturing companies listed on the Indonesia Stock Exchange for the years 2019-2020. The method used is quantitative descriptive method. This research will use multiple linear regression analysis. The research sample consists of manufacturing companies listed on the Indonesia Stock Exchange during the years 2019-2020. The independent variable studied is IT Governance with control variables being sales growth, advertising expense, research and development expense, and capital expenditure. The dependent variable is firm performance. The results obtained indicate that IT Governance does not influence firm performance. Sales growth has a negative but not significant effect on firm performance, while advertising expense has an influence on firm performance. However, research and development expense and capital expenditure do not have an influence on firm performance.

Keywords: IT Governance, firm performance, sales growth, advertising expense; research and development expense, capital expenditure

* Corresponding author. E-mail: yanipermatasari@feb.unair.ac.id

Introduction

Every company certainly has specific objectives that must be achieved in order to fulfill the interests of its members in maintaining the organization's continuity. One of the objectives that a company must achieve is to maximize company performance. Company performance is a measure of success in terms of what has been achieved by company management. According to Moerdiyanto (2010), company performance is the result obtained from a series of business processes that are carried out with sacrifices from various resources, and the improvement of company performance is indicated by the intensity of company activities to generate the highest possible profit. Company performance is considered good if it has stable profits every year and avoids issues such as bankruptcy (Henry Osahon & Garba Hassan, 2021). To meet these demands, information technology (IT) is regarded as a key strategy for maintaining competitive advantage in the era of the industrial revolution 4.0 (Prasad et al., 2012).

This era is characterized by the integration of smart systems and industrial automation, using cyber technology, IoT, and the Internet of Systems. IT enables companies to improve production, work processes, and business relationships. IT governance plays an important role in supporting business processes and achieving goals aligned with the company's vision and mission. The purpose of implementing IT governance is to ensure effective information technology deployment and the realization of company objectives (Putra & Rahayu, 2020). IT governance aims to align IT resources with organizational strategies responsibly, allowing companies to exploit opportunities and manage risks effectively. The company's information technology capability is key to the successful implementation of good IT governance. Moreover, IT capability plays a crucial role in this context. According to Zhang (2016), IT governance is an important antecedent of IT capability, which in turn affects the company's performance level. Additionally, IT capability aids in creating a competitive advantage closely linked to company performance (Putra & Rahayu, 2020).

According to Selvam (2016), company performance is determined by financial performance and strategic performance. Financial performance includes profitability, growth, and market value performance. Strategic performance comprises social and environmental performance, employee and customer satisfaction, environmental audit performance, and corporate governance. Clear measurement of company performance is essential for management or investor decision-making. Financial performance is a key indicator for potential investors to assess investment decisions. It provides an overview of a company's financial condition over a certain period in terms of fund collection and distribution. Companies with good financial performance are better equipped to handle business processes and challenges. As per PSAK 1 on Financial Statement Presentation, financial performance can be assessed from financial reports that include balance sheets, income statements, statements of changes in equity, cash flow statements, and notes to financial statements (Jumingan, 2006). Accurate and relevant financial reports are crucial for evaluating financial performance.

Good IT Governance in a company can be identified through informative financial reports (Putra & Rahayu, 2020). There are two main methods to measure the contribution of information technology: accounting-based and financial market-based. The accounting-based method uses indicators like ROA, ROI, ROE, and revenue, while the financial market-based method employs PBE and Market Equity Value (Ong & Chen, 2014). This study focuses on using ROA, considered an effective measure of a company's condition. ROA is also recognized as an indicator depicting the financial performance of a company (Kurniasih et al., 2013) and a measure of net profit derived from asset utilization. ROA information is useful for stakeholders in making investment decisions. This research focuses on the impact of IT Governance on firm performance in manufacturing companies listed on the Indonesia Stock Exchange (BEI), considering that information technology has become a vital aspect in enhancing productivity in this sector (Maulidya et al., 2022).

This study contributes to both theoretical and practical perspectives. Theoretically, it enriches the literature on the impact of IT Governance on firm performance, particularly in the manufacturing sector in Indonesia, which has been relatively underexplored compared to other industries. It extends Zhang's (2016) framework by empirically examining IT Governance as an antecedent of IT Capability and its subsequent influence on firm performance, using ROA as a financial performance indicator. Additionally, it reinforces the findings of Putra & Rahayu (2020) by providing empirical evidence on how IT Governance enhances financial reporting quality and overall business efficiency. Practically, this study offers

valuable insights for corporate management, emphasizing the strategic importance of IT Governance in improving financial performance and maintaining competitiveness in the Industry 4.0 era. The findings can guide policymakers in promoting IT Governance regulations and help investors assess firm performance based on IT-driven financial efficiency. Ultimately, this research provides a comprehensive understanding of how IT Governance and IT Capability contribute to sustainable business success in the manufacturing sector.

Literatur Review

Stakeholders Theory

Stakeholders are groups or individuals that can influence or be influenced by the achievement of an organization's objectives (Freeman & Reed, 1983). They have high expectations of the company, both managerially and materially. Companies have responsibilities towards stakeholders, both directly and indirectly, as they influence the company's financial utilization. Stakeholders play a crucial role in financial reporting, necessitating effective management of their expectations.

According to Grimble & Wellard (1997), stakeholders hold significant influence within organizations. Mardikanto (2014) describes stakeholder theory as a strategic management concept that helps strengthen relationships with external groups and develop competitive value. The strength of the relationship with stakeholders impacts corporate business. Gray, Kouhy, & Adams (1996) state that the continuity of business processes depends on stakeholder support, with companies adapting to the strength of stakeholders exerting greater effort.

IT Governance

IT Governance, according to ITGI, is a shared responsibility between the board of directors and executive management, while Webb et al. (2006) define it as the alignment of strategic information technology with business to maximize business value through effective IT control and accountability. IT Governance is an integral part of corporate governance, focusing on leadership and organizational process structures to achieve organizational goals. Companies with good corporate governance (GCG) are attractive to stakeholders, with IT Governance being a key pillar of GCG (De Haes & Van Grembergen, 2009). IT Governance reflects the responsibility of the board and management in managing the company and provides a competitive advantage (Setiawan et al., 2021). Weill & Ross (Weill & Ross, 2004) found that IT Governance is associated with higher returns on IT investment and profit. The IT Governance Institute (2003) states the necessity of adequate IT infrastructure governance for a sustainable business model. Peterson (2004) describes IT Governance as a management system that outlines IT decision-making rights and responsibilities among different stakeholders and determines procedures for making and monitoring strategic IT decisions. The focus of IT Governance can assist management in handling IT effectively.

Firm performance

Firm performance is the ability of a company to achieve its objectives using resources efficiently and effectively. It is one of the most important indicators of the impact of capital structure as reviewed in literature (Kimathi et al, 2015). Firm performance is the result of a company's activities over a certain period based on established standards and should be measurable to depict the empirical condition of the company (Zarkasyi, 2008). The purpose of performance measurement is to obtain useful information about the effectiveness and efficiency of fund usage, which is vital for managers and investors in making decisions for the sustainability of the company.

ROA

Return on Assets (ROA) is one of the profitability ratios that measures a company's ability to generate profit from assets or assets that the company has used. The assets referred to are the total assets of the company, obtained from either equity or external capital that has been converted into company assets.

According to Pirmatua Sirait (2017), the Asset Return Ratio (Return on Assets/ROA), also known as the earning power ratio, describes a company's ability to generate profit from available resources (assets).

Sales Growth

Sales growth, which can also be defined as the increase in the amount of sales achieved by a company over a specific period, usually year to year, is an important indicator. According to Van Horne and Wachowicz (2013), sales growth is the increase in the

stability of the sales amount generated by the company in each fiscal year. It involves growth in both the quantity and productivity of the company in selling products compared to the previous year. Sales growth plays a crucial role in assisting companies in determining policies and decisions, making it an important indicator to be monitored.

Advertising Expense

Advertising expense is the cost incurred by a company to promote its products or services to the target market. These expenses typically cover various activities supporting the company's exposure, including advertising in media, content creation, and determining other promotional and marketing expenses. Advertising aims to inform, persuade, and remind customers about the product. Various media types used for advertising include television, mobile, digital, social media, newspapers, direct mail, magazines, radio, and outdoor advertising (Kotler, 2018).

Research and Development Expense

Research is the planned study that results in new updates and understanding in original knowledge and technical sciences. Development is the application of findings from research or knowledge to production designs, including raw materials, products, tools, systems, or services that are innovative or substantially repaired before commercial use. Research and Development (R&D) refers to creative efforts and knowledge used systematically to enhance technical and scientific knowledge (Buchdadi et al., 2018). R&D expenses are typically incurred by companies as an indicator to measure innovation and increase company profits.

Capital Expenditure

Capital expenditure, also known as capital spending or investment, refers to investments in long-term assets whose benefits are projected to be utilized for several years (Thomya et al., 2023). The function of capital expenditure is to fund and repair deteriorating assets, enhance asset productivity, maintain existing fixed assets, or acquire new technology to improve company operations. When a company incurs capital expenditure, it is recorded as a non-current asset, such as property, plant, equipment, or intangible assets. Capital expenditure is part of the company's investment policy, directed towards business development or expansion to ensure the company's continued existence in the competitive market.

Prior Research

The research conducted by Lunardi et al (2014) applied an event-study methodology to analyze 101 companies in Brazil from 2001-2007. The results of the analysis found that companies implementing IT governance experienced an improvement in performance, particularly in terms of profitability.

The quantitative research conducted by Zhang et al., (2016) found a positive relationship between IT capabilities and firms' market valuation, as well as sustainable accounting performance. A company with excellent IT capabilities can generate a competitive advantage, both in terms of market valuation and sustained accounting revenue.

The research by Hamdan et al., (2019), indicates that there is no influence of board size on company performance in Saudi Arabia, while board independence shows a positive impact on both financial and operational performance. Similarly, like board independence, the age of the company has a positive effect on the financial and operational performance of the company.

IT Governance affects firm performance

IT Governance, as a key element of corporate governance, plays a vital role in directing a company in line with stakeholders' desires, often leading to an overall enhancement in company performance (Fadhilah & Subriardi, 2019). Optimal implementation of IT Governance is known to strengthen financial performance, particularly when directors experienced in IT are involved in decision-making. Research by Hamdan (2019) and Zhang (2016) consistently shows a significant influence of IT leadership on financial performance, although its impact on operational performance may not be significant. This research is bolstered by evidence suggesting that sales growth, often linked to effective information disclosure by management to attract investors, correlates positively with financial performance, as shown in the study by Angelia, Kumalasari, & Christiawan (2021). Despite mixed evidence, such as findings by Goh, Henry, Erika, & Albert (2022) that do not find a significant relationship, the overall trend supports the idea that strong IT Governance can positively influence company performance.

Meanwhile, expenditures on advertising and R&D, although strategic cost components, have a more complex relationship with company performance. Investment in advertising, as found by Manala and Atienza (2020), can strengthen revenue and profit, indicating a positive relationship with company performance. However, R&D, while crucial for long-term innovation and competitiveness, does not always show immediate results on company performance, as indicated by Buchdadi et al. (2018) and Bouaziz (2016). Lastly, capital expenditure, which is an investment for future growth, shows a significant relationship with a company's financial performance according to Taipi and Ballkoci (2017), though the results vary as shown by Thomya et al. (2023). The overall evidence suggests that while there are some uncertainties in individual outcomes, strategic investment in IT Governance tends to contribute to stronger company performance, supporting hypothesis H1. However, a study by Anita and Francesca (2022) suggests that experienced IT directors do not significantly impact company performance.

H1: IT Governance affects firm performance

Research Methods

Research Approach

This study adopts a quantitative approach, following the methodology outlined by Creswell (2019), which is a way to test theoretical objectives by analyzing the relationships among measurable variables. According to Anshori and Iswati (2009), quantitative research is a structured assessment that quantifies data for generalization, representing a systematic and structured examination of hypotheses. Random sampling is employed, in line with the definition of quantitative methodology as described by Sugiyono (2020), rooted in positivism philosophy and involving statistical analysis of data collected using research instruments.

Empirical Model

The following is the empirical model that supports the research analysis:

$$CFROA = \alpha + \beta 1ITGOV + \beta 2SG + \beta 3ADV + \beta 4RD + \beta 5CAP + e \quad (1)$$

Where CFROA represents company performance. IT Governance (ITGOV) is represented by the results of the IT Governance Score calculation performed for each company. This study also employs control variables, including the sales growth rate (SG), advertising expenses (ADV), research and development expenses (RD), capital expenditure (CAP), and *e*, which represents the error term (residual error).

Operational Definition of Variables

Quoting from Sugiyono (2016), a research variable is anything that is determined by the researcher to be tested in order to obtain information about it and then draw conclusions.

Dependent Variable

Return on Assets (ROA)

Return on Assets (ROA) is a profitability measure used by companies to demonstrate profit results. ROA can measure a company's past ability to generate profit, which is then projected into the future. Therefore, ROA is also used as a ratio to measure a company's efficiency in generating income from the total assets of the company.

A ROA considered good is one with a percentage higher than 2%.

$$\text{ROA} = \frac{\text{Earning after taxes}}{\text{Total asset}} \times 100\%$$

Independent Variable

IT Governance Score

IT Governance Score (ITGOV-Score) is a measurement that can represent IT Governance both internally and externally (Zhang et al., 2016). The measurement is conducted by summing up the total IT GOV-Score as a summary of IT Governance measurement using 10 factors namely:

1. If the company's auditor is a big 4 auditor, it is counted as 1; 0 otherwise
2. Percentage of independent directors in the company
3. If the CEO or CFO of the company has experience in IT, it is counted as 1; 0 otherwise
4. Percentage of the board of commissioners with experience in IT
5. Percentage of the board of directors with experience in IT
6. Percentage of the audit committee with experience in IT
7. If the company has a CIO or CTO, it is counted as 1; 0 otherwise

8. Number of years the CIO or CTO has served in the company
9. Ratio of salary and bonus (remuneration) of the CIO or CTO to the salary and bonus of non-IT executives
10. If the company has an IT-Strategic Committee, it is counted as 1; 0 otherwise

Since all the above factors are coded as numbers between 0 and 1, the sum of the 10 factors above is calculated to obtain the combined ITGOV-Score figure. The score value of ITGOV-Score is between 0 and 1. This means, the closer the ITGOV-Score is to 1, the more effective the IT governance conducted by the company.

Control Variable

This study also incorporates control variables to mitigate potential endogeneity issues, ensuring that the observed relationships between the independent and dependent variables are not biased by omitted factors. By including these controls, the analysis aims to produce more reliable and robust results. Some of the control variables used in this study include:

Sales Growth

Investors are interested in a company when it is in a growth phase because this growth indicates the company's future existence status. If sales growth shows a positive figure, it means that the sales in the current period are higher than before. Conversely, if sales growth is negative, then sales in the current period are lower than in the previous period.

The calculation of the sales growth formula can be done as follows:

$$\text{Sales Growth} = \frac{\text{Net Sales t} - \text{Net Sales t} - 1}{\text{Net Sales t} - 1}$$

Advertising Expense

The indicator used to measure the advertising expense incurred by the company in 2019 and 2020, which will be applied in the research.

$$Advertising\ Expense\ (ADV) = \text{Ln (ADV in the year)t}$$

Research & Development Expense

The indicator used to measure R&D expense incurred by the company in 2019 and 2020, which will be applied in the research.

$$R\ \&\ D\ Expense\ (RD) = Ln\ (\ R\&D\ in\ the\ year)t$$

Capital Expenditure

The measurement of capital expenditure can use indicators like the ones below to measure the capital expenditure recorded by the company in 2019 and 2020.

$$Capital\ Expenditure\ (CAP) = Ln\ (\ CAP\ in\ the\ year)t$$

Type and Source of Data

This research utilizes both continuous and discrete data. The source of this research is secondary data, obtained from the annual financial reports published by manufacturing companies that are officially listed on the Indonesia Stock Exchange (IDX), particularly for the period of 2019-2020.

Population and Research Sample

The study's population consists of manufacturing companies listed on the Indonesia Stock Exchange (IDX) for 2019-2020. These manufacturing companies were chosen due to their significant presence on IDX, with a total of 180 companies (sourced from sahamok.net). As defined by Sugiyono (2020), a sample is a subset that reflects the number and characteristics of the overall population. Utilizing such a sample is advantageous for obtaining representative data, thereby ensuring more targeted and effective research.

Data Analysis Technique

This research will use multiple linear regression analysis techniques. The classical assumption tests employed include a normality test, multicollinearity test, Simple Correlation Test, and heteroskedasticity test. The researcher conducted hypothesis testing using Multiple Linear Regression Test, Hypothesis Test, Simultaneous Significance Test (F-test), Individual Parameter Significance Test (t-test), and Coefficient of Determination Test (R2).

Result and Discussions

Overview

The study aims to examine the influence of IT Governance on Firm performance. The subjects are manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the years 2019-2020, which meet the required criteria. The research objects include variables such as IT Governance, Sales Growth, Advertising Expense, Research and Development Expense, and Capital Expenditure. Manufacturing companies contribute 20% to the GDP and play a role in Making Indonesia 4.0, making this research essential. Data search for 2019 and 2020 revealed 248 companies with published annual and financial reports. Through purposive sampling, 30 companies were excluded due to unavailable annual reports for 2019 and 2020, and 14 were delisted. The sample size used is the companies with complete annual reports for both required years, resulting in a total of 204 companies.

Table 1
Number of Research Samples

No.	Sample Selection Criteria	2019	2020	Total
1.	Manufacturing companies listed on the IDX (Indonesia Stock Exchange) and releasing annual reports	124	124	248
2.	Companies whose annual reports cannot be found	15	15	(30)
3.	Companies that have been delisted	7	7	(14)
Number of Company Samples				204

Source: Indonesia Stock Exchange (IDX), Author's processing

Calculation of ITGOV-Score

From the sample of 124 companies, it was found that 54 companies have external auditors from the big 4 firms, namely Ernest & Young, PricewaterhouseCoopers (PwC), KPMG, and Deloitte. The remaining 48 companies do not use services from big 4 auditors. There are 39 companies with independent directors within their organizational structure. 49 companies have board members with IT experience or background, serving at least in each research year (2019 and 2020). Additionally, 32 companies have a board of commissioners with IT experience serving in both 2019 and 2020. There are 20 companies with audit committees experienced in IT for the years 2019-2020. Furthermore, 23 companies have a CEO or CFO with IT experience. There are 12 companies with a CIO or CTO in their organizational structure, with the longest tenure being around 15 years and the shortest or current tenure being one year. According to data collection, no companies in Indonesia have an IT Strategic Committee, resulting in a count of zero.

Descriptive Statistics of Variables

The descriptive statistics results show the number of samples (N), the minimum value (Min), maximum value (Max), average value (Mean), and standard deviation value (standard deviation) of each variable in the study.

Table 2
Descriptive Statistics

Variabel	N	Min	Max	Mean	Std. Deviation
ITGOV	204	0,00	0,48	0,1283	0,08048
ROA	204	-63,12	42,00	3,6138	9,60979
SG	204	-99,79	837,10	5,3004	78,82214
ADV	204	0	2649820	137516,55	472450,451
RD	204	0	286655	4740,94	28843,491
CAP	204	0	37733659	805142,59	3130446,261

Source: Processed Data Results from IBM SPSS Statistics 25

Estimation Results and Hypothesis Testing

Classical Assumption Test

The first step in data testing is to perform the classical assumption test. The purpose is to ensure that the data used in the study is free from bias. Below are the results of the classical assumption test at the initial stage of the research:

Normality Test

Based on the results of the normality test using the One Sample Kolmogorov Smirnov Test method, it can be inferred that the data used is normally distributed. This is indicated by the asymptotic significance value (2-tailed) showing a result greater than 0.05, specifically 0.2, as demonstrated in the table.

Table 3
Results of Normality Test
One-Sample Kolmogorov-Smirnov Test

	Unstandardized Residual
N	**204**

Normal Parameters[a]	Mean	**0,0000000**
B	Std. Deviation	**0,52599652**
Most Extreme Differences	Absolute	**0,180**
	Positive	**0,180**
	Negative	**-0,127**
Test Statistic		**0,180**

Source: Processed Data Results from IBM SPSS Statistics 25

Table 4
One-Sample Kolmogorov-Smirnov Test

	Unstandardized Residual
N	**204**
Asymp. Sig. (2-tailed)	**0,200**

Source: Processed Data Results from IBM SPSS Statistics 25

Multiple Linear Regression Analysis

Table 5
Results of Multiple Linear Regression Test

	Unstandardized Coefficients			
Variabel	**β**	**Std. Error**	**T**	**Sig.**
(Constant)	2,451	1,175	2,086	0,038
ITGOV	0,409	7,887	0,052	0,959
SG	-0,002	0,008	-0,208	0,836
ADV	0,000	0,000	5,971	0,000
RD	0,000	0,000	1,621	0,107
CAP	0,000	0,000	-1,318	0,189
R		0,417		
R Square		0,174		
R Adjusted R Square		0,153		
F		8,344		0,000[b]

Source: Processed Data Results from IBM SPSS Statistics 25

The table above presents the results of the multiple linear regression analysis testing for independent variables such as IT Governance and control variables mentioned, namely sales growth, advertising expense, R&D expense, and capital expenditure, in relation to the dependent variable, which is company performance projected with Return on Assets (ROA). The formulated multiple linear regression equation, referring to the table, is as follows:

CFROA = 2.451 + 0.409 ITGOV - 0.002 SG + 0.000 ADV + 0.000 RD + 0.000 CAP + e

T-test Analysis

From Table 4.5 below, it is evident that the variables IT Governance, sales growth, R&D expense, and capital expenditure do not have a significant partial effect on firm performance, with t-test significance values of 0.959 for IT Governance; 0.836 for sales growth; 0.107 for R&D expense; 0.189 for capital expenditure. However, for advertising expense, it is found that this variable significantly affects firm performance with a significance value of 0.000, which is below 0.05.

Table 6
Results of t-test
Source: Processed Data Results from IBM SPSS Statistics 25

Based on the results presented in Table 4.8, the regression analysis indicates that the IT Governance (ITGOV) variable does not significantly influence firm performance, as reflected in its coefficient (β = 0.409) and high p-value (Sig. = 0.959), which exceeds the conventional significance threshold of 0.05. This suggests that H1 is rejected, meaning there is no statistical evidence supporting a relationship between IT Governance and firm performance.

A possible explanation for this finding is that while IT Governance is designed to enhance decision-

	β	**t-value**	**Sig.**
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ITGOV	0,409	0,052	0,959
SG	-0,002	-0,208	0,836
ADV	0,000	5,971	0,000
RD	0,000	1,621	0,107
CAP	0,000	-1,318	0,189

making and resource allocation related to information technology, its direct impact on firm performance may be limited. One potential reason is that IT Governance frameworks primarily aim to ensure compliance, risk management, and process efficiency rather than directly driving financial outcomes. Additionally, the presence of directors with strong IT backgrounds might lead to an excessive focus on technological aspects at the expense of broader strategic considerations, resulting in imbalanced decision-making that does not necessarily enhance performance.

These findings are consistent with the study conducted by Francesca (2022), which also found no significant relationship between IT Governance and firm performance. This aligns with stakeholder theory, which emphasizes the importance of

considering a broad range of stakeholders, including employees, customers, and shareholders, in corporate governance. A governance structure that overly prioritizes IT-related concerns without integrating other strategic perspectives may fail to address the diverse interests of stakeholders, potentially limiting its impact on firm performance. Hamdan (2019) provides further nuance to this debate, suggesting that IT Governance may be significant for financial performance but not for operational performance, indicating that its effects may be context-dependent.

Beyond IT Governance, the results also highlight the role of control variables. Among them, advertising expenses (ADV) have a significant positive effect on firm performance ($\beta = 0.000$, Sig. = 0.000), suggesting that higher spending on advertising contributes to better financial outcomes. However, other control variables, including sales growth (SG), research and development expenses (RD), and capital expenditure (CAP), do not exhibit significant relationships with firm performance. These findings imply that while investment in marketing activities may directly enhance firm performance, expenditures related to R&D and capital investments may have a more long-term effect that is not immediately captured in the current analysis.

Conclusion

In summary, the regression analysis reveals that IT Governance (ITGOV) does not have a significant impact on firm performance, leading to the rejection of H1. The results suggest that while IT Governance plays a crucial role in ensuring compliance and risk management, it may not directly drive financial performance. Furthermore, stakeholder theory emphasizes the importance of a governance structure that integrates diverse expertise beyond IT, ensuring that decision-making processes remain balanced and aligned with broader organizational objectives.

From a practical perspective, these findings imply that firms should not rely solely on IT Governance improvements to enhance performance. Instead, corporate management should focus on fostering a well-rounded board composition that incorporates expertise in finance, strategy, and operations alongside IT-related knowledge. Additionally, given the significant impact of advertising expenses on firm performance, companies may benefit from strategic marketing investments to enhance financial outcomes.

From a theoretical standpoint, this study contributes to the growing body of literature on corporate governance and firm performance by providing empirical evidence that challenges the assumption that IT Governance universally benefits financial outcomes. It highlights the need for further research into the mechanisms through which governance structures influence firm performance and how IT-related decision-making interacts with other strategic priorities.

As with any study, this research has limitations. The analysis is based on a single dataset, which may limit the generalizability of the findings across different industries and institutional settings. Future research could explore how IT Governance influences firm performance in different sectors, particularly in technology-intensive industries where IT investments may have a more direct impact. Additionally, incorporating qualitative insights through case studies or interviews with board members could provide a deeper understanding of the decision-making processes underlying IT Governance. Expanding the scope of control variables, such as corporate culture, ownership structure, or board diversity, could further enhance the robustness of future analyses. By addressing these areas, future research can provide a more comprehensive understanding of the role of IT Governance in corporate performance and strategic decision-making.

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