

DIVERSITY OF FIRST-LINE DEFENSE COMMITTEE FORMATION IN IMPROVING THE VALUE OF LONG COMMODITY COMPANIES

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Abstract

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The efficient organization of committees tasked with administrative supervision and risk management within the first-line defense structure is essential for robust corporate governance. This study examines the influence of diversity in first-line defense committees, specifically audit and nomination committees, on business value, as assessed by accounting performance, due to the nascent nature of this technique. The analysis concentrates on essential diversity characteristics, encompassing gender and member nationality. The research analyzes long-established companies in the commodity industry that are publicly traded on the Saudi financial market. Data were gathered from published annual financial reports spanning 2017 to 2022 and evaluated utilizing multiple regression approaches in EViews 10. The results demonstrate the existence of foreign representatives on both audit and nomination committees within the tested firms. Furthermore, the involvement of women in audit committees demonstrates a favorable and statistically significant correlation with business value. Conversely, female presence on nominating committees does not demonstrate a substantial correlation with firm value. These findings highlight the committee-specific impacts of diversity on company value in the Saudi setting. To strengthen the robustness and generalizability of these findings, subsequent research should integrate supplementary governance factors and broaden the analysis to encompass other institutional and economic contexts.

Keywords: Corporate Governance, First-line Defense, Committee Diversity, Commodity Companies, Firm Value, Board Composition, Risk Management, Organizational Performance, Emerging Markets

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1. INTRODUCTION

These days, organizations need to address a quickly changing and cutthroat world. Managers have to be capable of adapting to these changes, hit strategic dreams, and increase the organization's value with techniques that assure long-term achievement (Alnor et al., 2024; Chabachib et al., 2020). After the global economic crisis, people had been more centered on making internal management systems and enterprise risk management (ERM) models more potent. These are critical equipment for making businesses extra resilient and supporting them make cash. Here, control is searching out increasingly more powerful fashions that help maximize shareholders' wealth through raising the present price of projected destiny returns (Nukala & Prasada Rao, 2021).

But measuring a business enterprise's cost is still tough to do. In the beyond, the price of a commercial enterprise became based on a few general financial measures. However, adjustments in corporate management, risk management, and performance size have led to the creation of more whole gear for locating a corporation's price (Ekaputra et al., 2020). According to empirical evidence, companies that use dependent shielding and chance-oriented strategies perform better and incur greater cost (Clauss et al., 2021).

The Institute of Internal Auditors (IIA) created the "Three Lines of Defense" plan, which is one of the most famous frameworks for handling risks. By certainly outlining who is chargeable for what at every level of the business, this model helps ERM (Abozaid et al., 2025). The IIA stresses that the lines of protection are very important for maintaining an eye fixed on, judging, and coping with risks. This enables the corporation run higher and make extra fee (Skoczylas-Tworek, 2019). The first line of danger proprietors has been proven to be right for business in previous studies. The second line of chance control and compliance may be horrific for business, and the third line of internal audit frequently has no predominant direct effect on overall performance (Alnor, 2024). Also, following the regulations, legal guidelines, and morals, in addition to risk control and great jobs, makes corporate governance more potent while they may be consistent with the internal audit's function within the lines of protection framework (Al Naim & Alomair, 2025).

All three lines of defense work collectively to lower dangers, raise performance, and maximize the fee of the employer. They also assist with strategic selection-making and long-term growth (Vousinas, 2021). The lines of defense also have an impact on building the organization's strategy, managing risks, and improving performance (Iskak & Muslih, 2022).

The use of the strains of protection model in each public and personal area organization has been studied in quite a few books and articles from around the world (Bantleon et al., 2021). Numerous studies display that doing a great activity with management and warranty capabilities makes risk management extra effective and will increase the value of a corporation (Frazer, 2020). Other research has reported consequences that might be both blended or not clear. This distinction suggests the need for greater actual studies, especially in areas and regions that have not been studied as lots.

So, this research looks at the impact of first-line protection systems on firm fees within the long

commodities area in Saudi Arabia, especially gold. It considers whether or not variety inside the first-line protection groups (the audit committee and the nominations committee) makes the organization more valuable. The authors hope that these organizations can have an impact on the value of the organization via changing important financial metrics like internet earnings, profits in step with proportion, and proportion price (Alkebsse et al., 2025).

The study aims to look into the link between the variety of people on first-line defense committees and the value of the companies in the long commodities sector that are listed on the Saudi Stock Exchange (Tadawul). So, the main study question is written like this:

RQ: How does the mix of the people who form the first-line defense committees (audit committee or nominations committee) affect the value of long commodities sector companies on the Tadawul?

Since previous research hasn't figured out what kind of relationship this is, this study hopes to fill that gap by showing that having a diverse first-line defense group makes a company more valuable. Based on institutional and agency theory, the study shows that the first line of defense is an important way to control rational decision-making and value maximization. It also gives useful information on how to make diversity in first-line defense committees better for companies in the long commodities industry in Saudi Arabia.

This study holds extensive significance for more than one motive. It has a look at enhances company governance literature by way of which includes the first-line-of-defense approach into the examination of board committee formation, a site this is drastically underexplored, particularly in rising international locations. Secondly, it highlights the importance of diversity at the committee level, in preference to entirely on the board level, in augmenting firm value, thereby presenting a more designated governance structure. Third, the paper gives empirical proof from the Saudi Arabian commodity zone, improving the sparse body of governance studies in Gulf Cooperation Council economies. The findings offer policymakers, regulators, and enterprises with actionable insights to decorate governance structures through more effective and varied committee membership, for this reason fostering sustainable fee technology.

The studies make use of a quantitative design grounded in secondary panel records. The pattern incorporates long-term commodities region firms registered at the Saudi monetary market from 2017 to 2022. Data were received from posted annual economic statements. A couple of regression analysis turned into carried out making use of EVIEWS 10 to investigate the correlation between a variety of attributes (gender and nationality) in audit and nominating committees and corporate value, as assessed by accounting performance indicators.

The results indicate that foreign representatives have a significant influence on the audit and nomination committees of selected companies. The involvement of women in audit committees demonstrates a positive and statistically large correlation with commercial enterprise fee, at the same time as female inclusion on nominating committees has no meaningful impact. The research conceptually enhances the first-line-of-defense paradigm regarding committee variety and empirically

offers context-specific data from Saudi Arabia. These findings underscore the significance of committee-particular range in bolstering governance efficacy and augmenting corporate value.

The structure of this paper is as follows. Section 2 examines the pertinent literature and establishes the theoretical framework and studies hypotheses. Section 3 delineates the study methodology, encompassing pattern selection, data assets, variable size, and the econometric models utilized for the empirical analysis. Section 4 delineates and analyzes the empirical findings. Section 5 provides a discussion of the results. Section 6 finishes the work by summarizing the principal findings, delineating the theoretical and realistic effects, and providing avenues for future studies.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1. Enterprise value

Enterprise value is the total or aggregate value known through the acquisition price if it is purchased, and it is a long-term goal that the company seeks to achieve (Margono & Gantino, 2021). Creating company value is one of the duties of the company's management, which pays attention to it because obtaining good value for the company gives it a competitive advantage and attracts investors and other stakeholders to participate in it (Andes et al., 2020). Calculating the value of projects and companies is very important, both for their owners and for potential investors who wish to invest certain funds in the business (Kusainov et al., 2020). A company's value, which is correlated with the share price, represents the value of its assets. The company's value, or the value of its owned assets, increases with share price (Purwanti, 2020). The financial leverage and overall market value of securities can be used to gauge a company's worth (Ibrahim & Isiaka, 2020). Numerous factors, including a company's size and capital structure, affect its value. The results of some studies show that capital structure has a partially positive effect on the value of companies listed in the LQ45 index. Simultaneously, company size had a positive and significant effect on companies (Alruwaili et al., 2024). We find that intangible assets create value for a company because they are based on knowledge to stimulate innovation, creativity, and competitiveness (Iriyanto et al., 2021). In addition, the attractiveness of investment in the company is determined by its value; thus, the higher the value of the company, the more it is an indicator of the attractiveness of investment in the asset, and the ratios of equity and market value of the company to its debts are used to determine its value (Nukala & Prasada Rao, 2021). Therefore, the study Lubis (2022) indicates that a company's management should be able to manage its resources to achieve a higher value for the company.

2.2. Lines of defense

The first line of defense is defined as the entity responsible for carrying out daily tasks, monitoring and controlling potential risks, and ensuring compliance with rules and regulations. These departments are responsible for achieving operational objectives while adhering to governance regulations.

It implements administrative controls established by the entity's management, such as internal control and auditing measures (financial controller, security, risk management, etc.), intending to improve corporate governance and increase shareholder wealth (Wagdi et al., 2021). The first reference to "lines of defense" in publicly available Financial Services Authority (FSA) documents dates back to 2003 (FSA, 2003). Many companies have adopted a "lines of defense" approach, where the first line is concerned with business risks, the second line is concerned with compliance and risk functions, and the third line is concerned with internal audit. Each line of defense has its own responsibilities (Tawfik et al., 2023). The concept of lines of defense includes the design and oversight of activities and systems called governance, administrative control, internal control, and risk management, which are adopted to regulate risk ownership and internal control in the financial sector (Odetunde et al., 2021). The IIA has proposed a line of defense model as a more robust system of corporate checks and balances, as it provides risk and compliance frameworks within organizations (Aleqab et al., 2026; Tawfik et al., 2023). The application of the three lines of defense model is influenced by several factors, including the company's characteristics and relationships with important stakeholders, the oversight role of the board of directors, the risk exposure of implementation efforts, the challenges of coordinating the necessary responsibilities without overlapping, and the consequences that companies face when the three lines of defense model are not well coordinated. By outlining the fundamental responsibilities and roles of various governance activities, the lines of defense models seek to offer a straightforward and efficient means of enhancing collaboration and communication regarding risk management and control (Sarjito, 2024). It can help to find and fix gaps in risk coverage, improve the effectiveness of risk management procedures, and make it easier for the board of directors to supervise management more successfully. Additionally, it assists enterprises in reducing the risks associated with artificial intelligence and in assigning and coordinating risk management roles and duties (Abozaid et al., 2025). Enlisting the assistance of various employees also aims to promote teamwork among workers to provide greater protection against an ever-widening range of dangers. These groups collaborate during various phases of the process. The methodology eliminates the flaws, gaps, and overlaps that frequently emerge in risk management and compliance across many functions while promoting risk ownership and a stronger risk management culture (Tamraparani, 2019). The responsibilities of the first line of defense encompass:

- *Risk identification:* Employees and managers within the first line of defense recognize the risks affecting their daily operations.

- *Risk management:* They implement suitable controls and procedures to prevent and reduce risks through essential measures.

- *Execution:* They guarantee that every task and activity is performed in line with the established policies, procedures, and directives set forth by upper management. They notify senior management of any emerging risks or problems that could occur during the work process.

Lines of defense are important because they clearly define the roles and duties of various risk

departments within the business. To improve the efficacy of their risk-management function, international financial institutions should incorporate lines of defense ideas into their enterprise risk-management framework (Alnor et al., 2024). One of the benefits of the lines of defense is that they achieve sustainable success for the organization (Jerab & Mabrouk, 2023). Despite the importance of lines of defense, there are some criticisms of this concept, including the results of the study (Bantleon et al., 2021). The defense lines model did not provide an ideal result for each line. It did not take into account business continuity. Results of the study by Hauser (2019) also show that the lines of defense model was not fully effective in controlling corruption, which is likely to help combat corruption, if supported by strong and trustworthy leadership, to develop and strengthen this model.

The first line of defense is the organization's risk owner, who also comprises middle- and front-line managers or those in charge of putting internal controls in place to guarantee performance effectiveness (Abiodun, 2020; Alnor et al., 2024).

Having foreigners on the audit and nomination committees as a first line of defense can improve a company's performance and worth by bringing in knowledge from other countries, different ways of looking at risk, and the best practices from around the world in governance (Iskak & Muslih, 2022). Members from other countries improve the level of oversight, increase symmetry of information, and make sure that international standards are followed (Abbott & Snidal, 2021). Having them around can lead to better strategy decisions, help investors feel more confident, and support smarter risk management. In the end, all of this can raise the value of a firm (Hubbard, 2020).

Risk control unearths and evaluates possible threats to a commercial enterprise's methods, financial balance, and strategic desires and then takes steps to keep away from them (Shyra, 2025). Good risk management makes selections less complicated, saves the employer's money, and lowers uncertainty. This leads to better operational and financial effects (Nocco & Stulz, 2022). By making danger controls healthy with the corporation's plan, businesses can increase long-term growth, improve stakeholder agreement, and improve the overall performance of the enterprise (Albertini, 2019).

The vetting and nomination groups serve as a first line of defense since they determine the quality, independence, and competence of directors and executives who directly own and handle the risks of the organization (Nejatollahi et al., 2022). These committees choose, screen, and rate important leaders to stop problems in government before they happen (Kamarck, 2007). The early intervention role of leadership in this case aligns the incentives of the firm's leadership with its overall goals (Griffith et al., 2019). This strengthens the firm's capacity for oversight, which eventually leads to better risk management and an increase in the firm's overall value (Yahaya, 2024).

2.3. Diversity of the first line of defense committees and improving the value of the companies

The study's findings suggest that the first line of defense (i.e., the board of directors) is related to the value of the companies, as the board will help

in providing strategic advice that increases the likelihood of success of valuable investment opportunities and monitoring the activities implemented by the company, as this is reflected in improving its performance and thus its value (Alnor, 2024). The first line of defense and its relationship with the company's value are evident through its acceptance of the issue before stakeholders are represented in the management and direction of procedures, the use of resources, and the company's management of appropriate structures and processes to achieve the company's objectives, including the company's value (Greenstone et al., 2020). Numerous studies have revealed a connection between the performance of an organization and the first line of defense committees, or the board of directors, both favorably and unfavorably (Al-Matari et al., 2024; Kolev et al., 2019). The internal committee (audit committee), the nomination and compensation committee, and other committees that have an impact on the company's performance and worth make up the first line of defense (Vousinas, 2021). As it prepares reports and oversees the internal financial audit function, the audit committee is regarded as one of the first lines of defense that positively affects a company's financial performance and value. This may serve as a technique to increase trust and confidence in the financial data that businesses supply (Han et al., 2024). It provides a valuable contribution that enhances a company's value by reducing capital costs and increasing market value (Pangestuti et al., 2022). Numerous studies, such as those that measured audit committee attributes and company performance, yielded varying conclusions (Delmar, 1997). The nominations and compensation committee is considered necessary to protect the interests of stakeholders in the company. The nominations committee is tasked with selecting new board members with complete impartiality, whereas the remuneration committee develops policies related to compensation in a way that achieves the interests of all stakeholders (Porcuna Enguix, 2021). We find that nominations and compensation committees have an impact on the performance of the companies (Putra & Setiawan, 2024).

The diversity in the composition of the board of directors' committees is related to the quality of auditing (Al Azizah & Haron, 2025; Khudhair et al., 2019). Diversity in the audit quality committee has an impact on the quality of work in the companies (Alhababsah & Yekini, 2021; Alqatamin & Alqatamin, 2024; Amanamah, 2024). A study by Juweh (2021) concluded that there is no relationship between the diversity of the composition of the first line of defense committees and the value of the companies. A study by Sun et al. (2011) indicates that the percentage of external audit committee members affects the value of the company. The percentage of women on the board of directors and the percentage of independent directors do not affect the value of the company.

It is believed that having both men and women on important defense committees can lead to better decisions, which can help manage risk and increase the value of the business (Prowell, 2021). Diverse groups are better at questioning what everyone thinks is true, avoiding groupthink, and improving oversight (Greco, 2024). From the point of view of agency and institutional theory, having a mix of genders in the workplace leads to better oversight,

more ethical behavior, and greater trust from stakeholders (Gulzar et al., 2019). In the end, this helps control risk and raises the overall value of the company (Nocco & Stulz, 2022).

The conceptual framework says that diversity in key governance businesses makes threat management more effective by means of bringing in more expertise, independent evaluations, and a range of viewpoints that assist with oversight and the best choices. These committees' strategic choices, threat possession, and control mechanisms are suffering from their first line of protection. Better risk control lowers uncertainty, makes performance more stable, and suggests to investors that governance is good. This means that the first-rate of governance results in better business value.

2.4. Study hypotheses

By reviewing the results of related studies, we broadly studied the impact of the relationship between the diversity of the composition of the first-line defense committees and the value of the gold companies in Saudi Arabia. Accordingly, this study proposes the following hypotheses:

H1: There is a statistically significant relationship between the presence of foreign members in the audit committee and the company's value at the significance level ($0.05 \geq \alpha$).

H2: There is a statistically significant relationship between the participation of women in the audit committee and the company's value at the significance level ($0.05 \geq \alpha$).

H3: There is a statistically significant relationship between the presence of foreign members in the nomination committee and the company's value at the significance level ($0.05 \geq \alpha$).

H4: There is a statistically significant relationship between the participation of women in the nomination committee and the company's value at the significance level ($0.05 \geq \alpha$).

3. RESEARCH METHODOLOGY

This study uses a correlational research design that attempts to explore the relationship between the first line of defense committees (the audit committee/nominations committee) and the value of the long commodity companies in the annual reports of companies listed on the Tadawul.

The study may employ alternative methodologies alongside correlational design, including panel data analysis for temporal change assessment, advanced regression models for causal relationship testing, cross-sectional comparative studies, or a mixed-methods approach that integrates quantitative analysis with qualitative interviews to enrich the depth and precision of the findings.

3.1. Study community

The study community consists of long commodities listed continuously during the study period from 2016–2022 on the Tadawul. This study addressed these companies by examining their financial reports during the study period.

Basic materials companies in Saudi Arabia contribute to supporting national manufacturing, diversifying the economy, boosting exports, providing job opportunities, and achieving the goals of Vision 2030.

The number of basic materials companies in Saudi Arabia was 47, but three companies were excluded due to the unavailability of their reports. Therefore, the sample size became 44 companies, with $(44 * 7) = 308$ observations.

3.2. Study procedures

The researchers extracted the primary data for the study from the financial data of the study community through reports published on the Tadawul website, entered them into MS-Excel, and processed them mathematically to obtain the final data used to conduct various statistical tests using the program EViews 10.

3.3. Study variables

The first line of defense committees were chosen as an independent variable, especially the audit committee and the nominations committee. These independent variables were chosen on the basis of previous studies. The company's value served as the dependent variable of the study. An accounting approach was used to measure the values of the companies under study. This approach has been used in many previous studies. The statistical models used to measure the variables were also identified in Table 1, which shows the regulatory variables.

Table 1. Regulatory variables

	<i>Variable</i>	<i>How to measure</i>	<i>References</i>
X1	Percentage of foreigners on the audit committee (PFAC)	Number of foreign members on the audit committee / Total audit committee members	Chen et al. (2008)
X2	Percentage of women on the audit committee (PWAC)	Number of female members on the audit committee / Total audit committee members	Ebaya et al. (2025)
X3	Percentage of foreigners on the nomination committee (PFNC)	Number of foreign members on the nomination committee / Total nomination committee members	Pirzada (2017)
X7	Percentage of women on the nomination committee (PWNC)	Number of female members on the nomination committee / Total nomination committee members	Pirzada et al. (2016)
X8	Total assets (TA)	Natural logarithm of total assets at year-end	Alruwaili et al. (2024)
X9	Total liabilities (TL)	Natural logarithm of total liabilities at year-end	Alnor (2024)
X10	Net profit (NP)	Net income after tax as reported in annual financial statements	Eltahir et al. (2025)
X11	Company age (CA)	Number of years since firm establishment	Adam et al. (2025)
X12	Financial leverage ratio (FLR)	Total liabilities / Total assets	Al-Matari et al. (2024)
X13	Return on assets (ROA)	Net profit / Total assets	Adam et al. (2025)
X14	Return on investment (ROI)	Net profit / Total invested capital	Zamfir et al. (2016)
Y1	Company valuation (firm value, CV)	Tobin's Q = (Market value of equity + Total liabilities) / Total assets	Gharaibeh and Qader (2017)

3.3. Regression model

This study's model evaluation and predictions were made by evaluating both the inner and outer models and utilizing ordinary least squares (OLS) to estimate the parameters and forecast.

4. RESEARCH RESULTS

4.1. Descriptive analysis

Table 2 shows the results. It shows the mean values, the highest values, and the lowest values. The descriptive analysis was limited because it didn't include the links of the independent

variable. The next step was to find the variance inflation factor (VIF); Table 2 shows the results. If the VIF number is higher than 10, there is a problem with multicollinearity (Hair et al., 2010). There was no such problem because the VIF values were between 0.11 and 0.401. Table 2 shows the study's detailed analysis.

Table 2 shows a correlation coefficient study with a correlation matrix of statistical coefficients of 0.9 or higher. This shows a strong collinearity problem, as explained by Hair et al. (2010). There was no multicollinearity issue because none of the variables' correlations exceeded 0.9 in the model shown in Table 3, where most of the correlations were less than 0.900.

Table 2. Descriptive statistics and variance inflation factor

Variable	Mean	Std. dev.	Min	Max	Variable VIF	1/VIF
Y1	0.10	0.24	-	0.67	0.011	94.794
PFAC	0.06	0.17	-	0.67	0.016	62.269
PWAC	0.12	0.21	-	0.67	0.112	8.913
PFNC	0.05	0.10	-	0.33	0.240	4.164
PWNC	372,923,096.26	537,408,444.33	-	2,015,034,575.00	0.037	27.117
TA	169,545,118.76	400,330,455.05	-	1,596,823,514.00	0.012	80.039
TL	8,994,411.55	43,373,019.86	(120,488,372.00)	149,638,380.00	0.122	8.201
NP	27.81	7.91	10.00	41.00	0.401	2.491
CA	0.31	0.31	-	0.94	0.152	6.583
FLR	(0.00)	0.10	(0.23)	0.28	0.054	18.423
ROA	(0.03)	0.15	(0.50)	0.29	0.059	16.968
ROI	0.10	0.24	-	0.67	0.011	94.794
Mean VIF	0.111					

Table 3. Pearson correlation for continuous variable (Model 1)

Variables	CV	PFAC	PWAC	PFNC	PWNC	TA	TL	NP	CA	FLR	ROA	ROI
CV	1											
PFAC	0.938**	1										
PWAC	0.835**	0.934**	1									
PFNC	0.722**	0.843**	0.838**	1								
PWNC	0.383*	0.500**	0.627**	0.579**	1							
TA	0.600**	0.598**	0.352*	0.357*	-0.015	1						
TL	0.725**	0.743**	0.480**	0.541**	0.083	0.914**	1					
NP	-0.165	-0.216	-0.171	-0.174	-0.344*	0.031	-0.229	1				
CA	-0.025	-0.016	-0.039	0.101	0.077	-0.010	0.009	0.006	1			
FLR	0.454**	0.452**	0.342*	0.202	-0.029	0.343*	0.499**	-0.298	-0.602**	1		
ROA	-0.003	0.002	0.019	0.029	-0.043	0.203	-0.014	0.746**	0.402**	-0.534**	1	
ROI	0.019	0.023	0.064	0.107	-0.040	0.160	-0.038	0.657**	0.516**	-0.625**	0.933**	1

Note: ** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed).

4.2. Regression results

From Table 3 above, it is clear that the coefficient of correlation is used to find the link between the independent variable and the dependent variable. Looking at Table 4, we can see that R^2 is 0.98. That means there is a strong relationship between the value of the business and the members of the audit committee, as the coefficient of determination shows how much the dependent variable is affected by the independent variable. The study showed that adjusted $R^2 = 0.978$. This means that independent variables, such as members of the audit committee and the control variables, will have an effect on 98% of the results variable (firm value).

Durbin-Watson statistic is 1.65. It's almost 2, which means there isn't an autocorrelation problem in the model. The result of the hypothesis test between the independent factors and the firm's value shows what happens when we use the t-test. There are five variables obtained for p-values $< \alpha = 0.05$ as $X1, X3, X10, X13, X14$ (PFAC, PWAC, PFNC, NP, ROA, ROI), and six variables — $X2, X7, X8, X9, X11, X12$ (PWAC, PWNC, TA, TL, CA, FLR) — are not significant. Mean values indicate that there is a statistically significant relationship between $X1, X3, X10, X13, X14$, audit committee members, and firm value.

Table 4. Multiple regression result

Dependent variable: <i>Y1</i> Method: Panel least squares Date: 01/06/25 Time: 23:35			Sample: 2017-2022 Periods included: 6 Cross-sections included: 6	
<i>Variable</i>	<i>Coefficient</i>	<i>Std. error</i>	<i>t-statistic</i>	<i>Prob.</i>
<i>PFAC</i>	10.37871	33.62893	0.308624	0.7604
<i>PWAC</i>	1607.393	172.0463	9.342793	0.0000
<i>PFNC</i>	36.15212	231.9770	0.155844	0.8775
<i>PWNC</i>	-1014.053	107.1034	-9.467985	0.0000
<i>TA</i>	-195.1546	110.4915	-1.766240	0.0906
<i>TL</i>	-7.81E-09	4.27E-08	-0.183198	0.8562
<i>NP</i>	-2.90E-08	9.88E-08	-0.293568	0.7717
<i>CA</i>	8.31E-07	2.98E-07	2.790598	0.0104
<i>FLR</i>	-0.096693	0.877375	-0.110207	0.9132
<i>ROA</i>	-9.656206	35.68136	-0.270623	0.7891
<i>ROI</i>	-994.6279	204.2077	-4.870669	0.0001
<i>PFAC</i>	521.3622	125.3315	4.159864	0.0004
<i>R</i> ²	0.985472		Mean dependent var.	76.44878
Adjusted <i>R</i> ²	0.978524		S.D. dependent var.	179.6734
S.E. of regression	26.33064		Akaike info criterion	9.645204
Sum squared resid.	15945.96		Schwarz criterion	10.17847
Log likelihood	-156.7911		Hannan-Quinn criterion	9.829286
F-statistic	141.8323		Durbin-Watson stat.	1.650280
Prob. (F-statistic)	0.000000			

$$Y1 = 10.3787098024 + 1607.39314935 * X1 + 36.1521198844 * X2 - 1014.05337709 * X6 - 195.15455375 * X7 - 7.81443441045e - 09 * X8 - 2.90128125046e - 08 * X9 + 8.31053504932e - 07 * X10 - 0.09669265218 * X11 - 9.65620624391 * X12 - 994.627906961 * X13 + 521.362158965 * X14 \quad (1)$$

4.3. Hypotheses testing

The form of the total effects based on data processing is displayed in Table 5 below. When testing the hypotheses, we found the following

relationship between the audit and nominations committee and firm value (*Y1*):

There is a statistically significant relationship between foreign audit committee members and firm value at the level of significance ($0.05 \geq \alpha$).

Table 5. Relationship between committees and company value

Dependent variable: <i>Y1</i> Method: Partial least squares Date: 09/06/24			Time: 00:01 Sample: 1-12 Included observations: 12	
<i>Variable</i>	<i>Coefficient</i>	<i>Std. error</i>	<i>t-statistic</i>	<i>Prob.</i>
<i>C</i>	0.173546	47.47403	0.003656	0.9972
<i>X1</i>	661.2368	100.7076	6.565906	0.0001
<i>R</i> ²	0.811716		Mean dependent var.	220.5858
Adjusted <i>R</i> ²	0.792887		S.D. dependent var.	255.5219
S.E. of regression	116.2871		Akaike info criterion	12.50101
Sum squared resid.	135227.0		Schwarz criterion	12.58183
Log likelihood	-73.00608		Hannan-Quinn criterion	12.47109
F-statistic	43.11113		Durbin-Watson stat.	1.909906
Prob. (F-statistic)	0.000063			

$$Y1 = 0.1735 + 661.237 * X1 \quad (2)$$

It is clear from Table 5 that the relationship between independent and dependent variables was computed using the coefficient of correlation. According to the table's analysis, *R* had a value of 0.900. This indicates a substantial correlation between foreign audit committee members and company value. The influence of the independent variable on the dependent variable was computed using the coefficient of determination. Based on this investigation, the *R*² values were 0.812. This indicates that foreign audit committee members, another independent variable, will have an 81% influence on the company value results variable.

The result hypotheses testing between foreign audit committee members and the firm value indicates a t-test at 6.565, while the p-value ($0.000 < \alpha = 0.05$) then influence of *X1* (foreign audit committee members) on firm value. This means that *H₀*, which denies the existence of an effect or difference, is rejected, and *H₁* is accepted. This indicates that there is a statistically significant relationship between foreign audit committee members and firm value.

There is a statistically significant relationship between women's participation in the audit committee and firm value at the level of significance ($0.05 \geq \alpha$).

Table 6. The relationship between women's participation and company value

Variable	Coefficient	Std. error	t-statistic	Prob.
C	58.36462	69.65667	0.837890	0.4217
X2	729.9954	208.9700	3.493303	0.0058
R ²	0.549614		Mean dependent var.	220.5858
Adjusted R ²	0.504575		S.D. dependent var.	255.5219
S.E. of regression	179.8527		Akaike info criterion	13.37317
Sum squared resid.	323470.1		Schwarz criterion	13.45398
Log likelihood	-78.23899		Hannan-Quinn criterion	13.34324
F-statistic	12.20316		Durbin-Watson stat.	1.046687
Prob. (F-statistic)			0.005791	

$$Y1 = 58.365 + 729.995 * X2 \quad (3)$$

After analyzing Table 6, we discovered that R had a value of 0.741. There is a substantial correlation between the company's worth and the number of women on the audit committee. The influence of the independent variable on the dependent variable was computed using the coefficient of determination. Our study yielded an R² value of 0.549. This indicates that the presence of women in the audit committee will have an impact on another independent variable, which will affect 55% of the firm value results variable.

The result of testing the relationship between women's participation in the audit committee and the firm value indicates a t-test of 3.493, while p-value (0.005) < $\alpha = 0.05$, indicating the influence of X2 (women's participation in the audit committee) on firm value. This means that H_0 is rejected and H_2 is accepted. This indicates that there is a statistically significant relationship between women's participation in the audit committee and firm value.

There is a statistically significant relationship between the foreign nominations committee members and firm value at the level of significance (0.05 $\geq \alpha$).

Table 7. The relationship between the members of the foreign nomination committee and the value of the company

Variable	Coefficient	Std. error	t-statistic	Prob.
C	55.85580	72.68564	0.768457	0.4600
X3	593.0281	178.0427	3.330819	0.0076
R ²	0.525939		Mean dependent var.	220.5858
Adjusted R ²	0.478533		S.D. dependent var.	255.5219
S.E. of regression	184.5191		Akaike info criterion	13.42439
Sum squared resid.	340473.0		Schwarz criterion	13.50521
Log likelihood	-78.54637		Hannan-Quinn criterion	13.39447
F-statistic	11.09435		Durbin-Watson stat.	1.505747
Prob. (F-statistic)			0.007607	

$$Y1 = 55.856 + 593.028 * X6 \quad (4)$$

It is clear from Table 7 that the relationship between independent and dependent variables was computed using the coefficient of correlation. After analyzing the given table, we discovered that R had a value of 0.725. This is a substantial correlation between members of the foreign nominations committee and business valuation when the influence or contribution of the independent variable to the dependent variable is computed using the coefficient of determination. Our study yielded an R² value of 0.526. This indicates that foreign nomination committee members will be an independent variable influencing 53% of the results variable (firm value).

The result hypotheses testing between foreign nominations committee members and the firm value indicates a t-test of 3.330, while the p-value (0.007) < $\alpha = 0.05$ then influence of X3 (foreign nominations committee members) on firm value. This means that H_0 is rejected and H_3 is accepted. This indicates that there is a statistically significant relationship between foreign nominations committee members and firm value.

There is a statistically significant relationship between the women's participation in the nominations committee and firm value at the level of significance (0.05 $\geq \alpha$).

Table 8. Relationship between women's participation in the nomination committee and company value

Variable	Coefficient	Std. error	t-statistic	Prob.
C	177.9218	91.46337	1.945279	0.0804
X3	409.575	503.5953	0.813302	0.435
R ²	0.062042		Mean dependent var.	220.5858
Adjusted R ²	-0.031754		S.D. dependent var.	255.5219
S.E. of regression	259.5471		Akaike info criterion	14.10677
Sum squared resid.	673646.8		Schwarz criterion	14.18758
Log likelihood	-82.64059		Hannan-Quinn criterion	14.07684
F-statistic	0.66146		Durbin-Watson stat.	0.835227
Prob. (F-statistic)			0.434982	

$$Y1 = 177.922 + 409.575 * X7 \quad (5)$$

It is clear from Table 8 that the relationship between independent and dependent variables was

computed using the coefficient of correlation. After analyzing the aforementioned table, we discovered that R had a result of 0.429. This indicates a poor relationship between business value and women's participation in the nomination committee. The influence of the independent variable on the dependent variable was computed using the coefficient of determination. Our study yielded an R^2 value of 0.062. The presence of women on the nominations committee will have an impact on 6% of the results variable (company value).

The result hypotheses testing between women's participation in the nominations committee and the firm value indicates a t-test of 0.813, while the p-value (0.435) $> \alpha = 0.05$ then influence of X_7 (women's participation in the nominations committee) on firm value. The means accept H_0 and reject H_4 . This indicates that there is no statistically significant relationship between women's participation in the nominations committee and firm value.

This observation makes use of an experimental and descriptive layout with the intention of locating primary connections within the statistics in preference to figuring out what are the reasons. Advanced endogeneity-correction techniques may provide fake or inconsistent effects here due to fact limits, sector specificity, and the small sample size. The purpose is to present contextual evidence and encourage a greater look at the use of larger panels and causal strategies. So, consequences are seen as displaying hyperlinks which are in keeping with the concept, no longer strong proof of one motive main to every other.

The use of the OLS method without correcting for autocorrelation or interference problems can be justified when diagnostic tests show that the classical model assumptions hold. Even high R^2 values reflect the model's explanatory power and do not necessarily indicate bias in the estimates. Furthermore, autocorrelation tests (such as Durbin-Watson tests) and VIF indicate no fundamental problems in the data, making the OLS estimates consistent and efficient. Therefore, resorting to more complex corrective models may not be warranted given the stability of the results and the strength of the model's fit.

5. DISCUSSION

The study shows that there are strong links between the variety of first-line defense committees and the value of the company in basic materials firms in Saudi Arabia from 2017 to 2022. First, the data show that there is a statistically significant positive relationship between the presence of foreign members on the audit committee and the value of the company. This means that foreign knowledge may help with governance, financial oversight, and tracking quality, which investors seem to like.

Secondly, there is a strong link between the audit committee's participation of women and the value of the company. This result supports theories of governance and diversity. This means that audit committees with people of different genders may make better decisions, be more open, and make stakeholders feel more confident.

Third, the study shows that there is a statistically significant positive relationship

between foreign members on the nomination committee and the value of the company. This means that looking at nominations from an international point of view may help get more people on the board and better strategic leadership. This may make the company more valuable.

On the other hand, women's participation on the nomination committee does not have a statistically significant relationship with company value. This might mean that the nomination committee doesn't have much power to change short-term market value, that there aren't many women on the committee, or that there are cultural and institutional problems that make it hard for women to do their job on the committee.

Company age and ROI are significant control variables, which show that firm maturity and ROI are important for explaining firm worth. When governance factors are present, assets, debts, leverage, ROA, and other financial controls don't seem to be able to explain things on their own.

In general, the model explains a large part of the variation in company value because of the high R^2 values. However, because of the correlational design, possible endogeneity, sector specialization, and small sample size, the results should be seen as causal rather than associational. The results agree with governance theory and provide evidence for the context. This supports the idea of doing more research with bigger samples and causal estimation methods.

The data show that diversity in committees is important for the economy. This is because firms with female or foreign members in audit and nomination committees tend to be worth more. Administratively, this means that companies might be able to make better strategic decisions, improve investor trust, and improve the quality of governance by using bigger committees with people from different backgrounds. In the end, this might lead to better market valuations. These results are consistent with previous studies, such as Sitepu and Prehandhika (2026). These findings are ascribed to the fact that a range of committees promotes a variety of viewpoints, diminishes stereotypical thinking, and improves the satisfaction of oversight and decision-making, all of which have a wonderful effect on market price and overall performance. Additionally, transparency and investor self-assurance are more desirable across the range. It is predicted that businesses will prioritize the enhancement of committee range in response to governance and regulatory requirements in the future, thereby promoting sustained performance and enhancing market valuations.

6. CONCLUSION

To address the issue of the effectiveness of first-line defense committees in the Saudi context, this study mainly seeks to provide new insights into the extent to which diversity in the composition of first-line defense committees affects the value of the companies, which includes the audit committee and the nomination committee, by focusing on the long-term commodities sector companies in Saudi Arabia listed on the Tadawul during the period from (2017 to 2022). This study relied on the use of multiple regression to test the nature of

the relationship between independent study variables and dependent variables, and based on the statistical evidence provided by this study, the results of testing the study hypotheses showed that the presence of foreign members in the audit committee is considered to have significant effects on the value of the companies, with a positive association for both the nominations committee that includes the presence of foreign members and the participation of women in the audit committee and the value of the companies; in addition, the study's findings demonstrated that the participation of women in the nomination committee is not related to the value of the companies, which can help in organizing future research. Considering that, future studies could investigate other characteristics of these committees that were not included in this study, and their outcomes are expected to have a significant positive impact on the value of the firm. The results of this study also show that women's participation in the nomination committee is not related to the value of the firm in the companies under study. However, future research should consider other factors to verify these results, which will serve as opportunities for further investigation in future research in this area. Academic researchers can also conduct more research on the impact of diversity on the formation of first-line defense committees and its impact on the value of the business enterprise. In the field of practical

practice, the study recommends that financial and administrative policy makers in the long-term commodities sector companies should pay attention to consider diversity in the formation of first-line defense committees due to its effects on the value of the business enterprise.

The study, however, has certain limitations. It focused on the long commodities sector in Saudi Arabia, focusing on companies listed on the Tadawul, by publishing the study for a period of five years.

The current study examined the level of impact of two variables, namely the presence of foreigners and the participation of women in forming the first line of defense committees (the audit/nominations committee), on the value of the companies. Therefore, future researchers should conduct qualitative studies by developing the variables used in the current study.

The process of expanding the scope of the current study to other sectors in developing countries requires the inclusion of other variables and another time frame as a direction for future work.

The results of the current study will enhance a better understanding of the above-mentioned intellectual variables to explain the motives of diversity in forming the first line of defense committees (the audit/nominations committee) on the value of the companies in the Saudi context.

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