THE IMPACT OF OWNERSHIP STRUCTURES ON THE QUALITY OF SUSTAINABILITY REPORTS FOR IRAQI COMMERCIAL BANKS

Nedhal Aziz Mahdi

Department of Business College of Administration and Economics, Gilgamesh Ahliya University, Baghdad, Iraq
Email: nedhalazizmahdi@gau.edu.iq
https://orcid.org/0009-0007-7151-8826

Khadija Jomaa Muter

Department of Accounting College of Administration and Economics, Mustansiriya University, Baghdad, Iraq
Email: khdija_j_m79@uomustansiriya.edu.iq
https://orcid.org/0000-0003-2081-9198

Majid Hameed Nawaf Sakhry

Ministry of Education, Department of Financial Affairs, Directorate of Education of Karkh II. Baghdad, Iraq
Email: majedh735@gmail.com
https://orcid.org/0009-0009-4392-4821

—Abstract—

The quality of sustainability reporting has become a global necessity, and the reliability of the ownership structure could affect this. This aspect necessitates the attention of modern studies and authorities. Thus, this study explores the impact of managerial, institutional, government, family, and foreign ownership on the quality of sustainability reporting in the Iraqi banking sector. The secondary data were taken from the databases of thirty commercial banks between 2011 and 2021. The researchers also utilized the Method of Moments Quantile Regression (MMQR) to examine the relationships between variables under investigation. The results demonstrated that the management ownership structure, institutional ownership structure, government ownership structure, family ownership structure, and foreign ownership structure have favorable relationships with the quality of sustainability reporting in the Iraqi banking sector. The study assists

policymakers in formulating regulations about the production of a high-quality report on sustainability utilizing an appropriate ownership structure.

**Keywords:** Managerial ownership, institutional ownership, government ownership, family ownership, foreign ownership structure, quality of sustainability reporting

1. INTRODUCTION

Since globalization has taken place, global commerce has become more interconnected. It is the era of trade without borders. The transaction occurs with a single click. This shift has intensified the firms' competition. Hence, companies are exerting their greatest efforts to surpass the competition. To achieve sustainability, businesses pay special attention to the quality components of every activity in this context. Even though the economy of any nation is a combination of several sectors, some sectors, such as the financial sector, have particular significance throughout the nation. Every area of the economy is dependent on the country's financial industry. In the case of the financial sector, the banking sector is the backbone, as it is connected to all business activity in the nation. According to the literature, the rapid economic changes in the financial markets have contributed to the proliferation and diversity of ownership structures in financial firms. The Ownership Structure was chosen as the determinant of the allocation of influence at the level of the economic entity and the quality of sustainable development disclosure (Park et al., 2020). Several studies have characterized a sustainability report as a tool used by an economic entity to provide quantitative and qualitative information to stakeholders regarding the company's economic, social, and environmental performance (Abughniem et al., 2021; Alzeaideen & Al, 2018).

Disclosure of sustainable development practices is a method for providing quantitative, descriptive, financial, and non-financial information to stakeholders for them to assess the economic, social, and environmental significance as well as the governance impact of an economic entity's activities to make rational decisions (Schalock et al., 2018; Ali et al., 2023). The purpose of reporting sustainable development practices is to provide a reasonable and balanced picture of the economic entity's performance in terms of economic, environmental, and social considerations (Aidi et al., 2023). Literature also suggests that the quality of the sustainability report refers to the complete disclosure of the required information and indicators that demonstrate all the consequences to enable the relevant parties to make suitable decisions. Also, the quality of the sustainability report depends on how the information is given (Leitoniene & Sapkauskiene, 2015).

The Iraqi banking system is not yet at its height but is achieving the same goals as the worldwide banking system. There are 74 financial institutions in the country, including banks. There are 904 branches of various financial institutions operating throughout the United States. The sector is implementing international reporting standards to promote transparency and excellence (Abed et al., 2022; Al-janabi et al., 2021). Most banks are public limited companies, making ownership a crucial aspect of the financial system.
Thus, ownership is crucial to an organization's success or failure (Moses et al., 2020). Considering the significance of ownership structure, the current investigation intends to investigate it. Figure 1 emphasizes the contribution of the Iraqi banking system to the nation's gross domestic product.

![Figure 1: GDP (%) from Banking System in Iraq](source: Statista)

There is a lot of literature exists on the sustainability reporting in terms of quality in Iraq but still, there are a number of gaps that exist in the literature and the present investigation are addressing are 1) although the sustainability reporting in terms of quality has been researched a lot from different perspectives in different times in different economies but still not reached its peak as there numerous of its aspects particular in the context of ownership structure i.e., managerial ownership, institutional ownership, government ownership, family ownership and foreign ownership, 2) the model based on the factors like ownership structure like managerial ownership, institutional ownership, government ownership, family ownership, foreign ownership, and sustainability reporting particularly in Iraq is not tested before in recent time, 3) Aulia Indy et al. (2022) and Novitaningrum and Amboningtyas (2017), investigated whether there is any kind of nexus between managerial ownership and sustainability reporting in terms of quality, however, the present investigation will also work on it along with other variables like institutional ownership, government ownership, family ownership, foreign ownership in Iraq with fresh sample set, 4) Nulla (2015) and Pucheta-Martinez and Chiva-Ortells (2018), investigated whether there is any kind of nexus between institutional ownership and sustainability reporting in terms of quality, however, the present investigation will also work on it along with other variables like institutional ownership, government ownership, family ownership, foreign ownership in Iraq with fresh sample set, 5) Amidjaya and Widagdo (2020) and Chang et al. (2019), investigated whether there is any kind of nexus between government ownership and sustainability reporting in terms of quality, however, the present investigation will also
work on it along with other variables like managerial ownership, institutional ownership, family ownership, foreign ownership in Iraq with fresh sample set, 6) Rudyanto and Veronica Siregar (2018) and Gavana et al. (2016), investigated whether there is any kind of nexus between family ownership and sustainability reporting in terms of quality, however, the present investigation will also work on it along with other variables like managerial ownership, institutional ownership, government ownership, foreign ownership in Iraq with fresh sample set, 6) Haladu and Salim (2016) and Correa-Garcia et al. (2020), investigated whether there is any kind of nexus between foreign ownership and sustainability reporting in terms of quality, however, the present investigation will also work on it along with other variables like managerial ownership, institutional ownership, government ownership and family ownership in Saudi Arabia with fresh sample set (Talab & Flayyih, 2023).

The present investigation pertaining a noticeable significance like 1) being one of the most important topics of the modern era i.e., sustainability reporting in terms of quality the present investigation will highlight the need to explore it, particularly in the context of managerial ownership, institutional ownership, government ownership, family ownership and foreign ownership, 2) although there is lot of material regarding sustainability reporting is available but the present study will result in add the literature on the topic of sustainability reporting particularly in terms of quality, 3) provide a guideline as well as help to the reporting quality related professionals to review and upgrading the policies pertaining with the aim to provide more logical solutions regarding betterment of sustainability reporting quality particularly in Iraq, 4) although there are numerous aspects of sustainability reporting quality have been explored till now, despite that there still numerous remained hidden, therefore, the present investigation will also provide the help to scholars to explore new aspects.

2. LITERATURE REVIEW

The quantity or proportion of the management's ownership stake in the organization. This ownership style is regarded as one of the most effective approaches to agency problems because of the compatibility or homogeneity of interests between managers and other shareholders (Juhmani, 2013). In the same context, there are two perspectives on the extent to which this type of ownership influences managers' motivations: 1) the compatibility or homogeneity of interests between owners and managers results in limiting the opportunistic behavior of managers and motivating them to increase profits and maximize the value of the economic entity, and 2) this type of ownership results in managers having greater control over the economic entity and a broader scope for achieving their goals. Likewise, Aulia Indie et al. (2022) examined whether there is a correlation between managerial ownership and the quality of sustainability reporting. The research was performed in Indonesia. The research is empirical. The study utilized four-year-old data. The selected data span the years 2015 through 2019. The study uses the SPSS2 analysis method for analysis purposes. The investigation results indicate that
managerial ownership has a considerable impact on the reporting quality of a company. Since the manager is also an internal stakeholder of the organization, they have a closer relationship with and a greater impact on the reporting channel of the organization. In a similar vein, Novitaningrum and Amboningtyas (2017) investigated whether or not there is a correlation between managerial ownership and sustainability reporting. The research was performed in Indonesia. The research is empirical.

The study sampled information from the past five years. The selected information spans the years 2011 to 2015. Multiple regression analysis was utilized for analysis in this study. According to the results of the investigation, the form of managerial ownership has a significant impact on the quality of the reports. In addition, Raimo et al. (2020) examined if a correlation exists between managerial ownership and sustainability reporting. The research was performed on a global scale. The study's methodology is empirical. The sample for the study consisted of 200 international corporations. The selected data span a period of twelve months, from January 2017 to December 2017. The study utilized regression analysis for analysis. According to the results of the investigation, the form of managerial ownership has a significant impact on the quality of the reports. The hypotheses obtained from the preceding discussion are as follows.

**H1:** The managerial ownership significantly sustains reporting quality in Iraq.

Institutional ownership indicates that financial institutions (banks, insurance firms, investment funds, etc.) possess most of an organization's shares (Kathy Rao et al., 2012). In this context, various studies have demonstrated that institutional ownership can oversee management, limit managers' opportunistic behavior, and increase the economic entity's value by lowering the information asymmetry between management and owners (Saona et al., 2020). According to the literature, institutional ownership substantially correlates with a company's reporting quality. In this regard, Nulla (2015) investigated the relationship between institutional ownership and sustainability reporting. It was conducted in the United States. The research is empirical. The research sampled data from two years. The selected data span the years 2012 through 2014. The study uses multiple regression analysis for analysis. Positively, the investigation results suggest that institutional ownership influences the reporting quality of companies. In addition, PuchetaMartnez and ChivaOrtells (2018) analyzed the relationship between institutional ownership and sustainability reporting. The research was performed in Spain. The research is empirical. The study sampled data from seven years.

The selected data span the years 2007 to 2014. The study uses multiple regression analysis for analysis. The results of the investigation suggested that institutional ownership had a positive effect on the reporting quality of companies. Similarly, Masud et al. (2018) investigated whether institutional ownership is associated with sustainability reporting. The study focused on South Asian economies: Bangladesh, India, and Pakistan. The research is empirical. The study sampled data over the past
seven years. The selected data span the years 2009 through 2016. For analysis, the study utilized OLS regression analysis. The results of the investigation suggested that institutional ownership had a positive effect on the reporting quality of companies. Consequently, the hypotheses drawn from the preceding discussion are as follows.

**H2:** The institutional ownership significantly sustains reporting quality in Iraq.

In literature, government ownership refers to the government's ownership of a considerable proportion of the economic entity's shares. This results in a homogeneity of interests, more transparency, and a reduction in information asymmetry due to the government's desire to pursue political goals and advance the welfare of society through ownership (Aboudahr, 2022). On the other hand, studies indicate that the government's focus on achieving political goals and the ineffectiveness of monitoring can lead to a focus on achieving the state's interests at the expense of the economic and commercial interests associated with the interests of other contributing Parties (Profitability, for example), and this creates pressure on economic entities regarding the disclosure of additional information (Al Farooque et al., 2020). In this regard, Amidjaya and Widagdo (2020) investigated whether there is any form of relationship between government ownership and sustainability reporting. The literature suggests a strong relationship between government ownership and the quality of sustainability reporting. The research was performed in Indonesia. The research is empirical.

The study sampled information over the past four years. The selected data span the years 2012 through 2016. The study uses panel data regression analysis for analysis. The investigation results suggest that government ownership influences the reporting quality of companies. In addition, Rudyanto (2017) investigated whether a correlation exists between government ownership and sustainability reporting. The research was performed in Indonesia. The research is empirical. The study sampled information over the past four years. The selected data span the years 2010 through 2014. For analysis, the study utilized regression analysis. The investigation results suggest that government ownership influences the reporting quality of companies. In addition, Chang et al. (2019) examined if a correlation exists between government ownership and sustainability reporting. The financial institutions were the subject of the investigation. The research is empirical. The study utilized 12-month data. The selected data spans January through December of 2016. The study uses multiple regression analysis for analysis. The investigation results suggest that government ownership influences the reporting quality of companies. Consequently, the hypotheses drawn from the preceding discussion are as follows.

**H3:** Government ownership significantly sustains reporting quality in Iraq.

Family ownership is characterized by one family controlling the majority of shares and managing a certain economic unit. The ability of family members to supervise the performance of the management and the presence of incentives for the owners to protect
their wealth and to monitor the actions of the economic unit constitute the most positive points for this type of ownership. As for the negative points, they are represented in the lack of diversification of the investment portfolio to avoid risks that harm the interests of small investors in the economic entity, focusing on achieving the interests of the family instead of maximizing the value of the economic entity, as well as the asymmetry of information between major shareholders and the minority (Anwar & Malik, 2020). According to the literature, there is a correlation between family ownership and sustainability reporting quality. Rudyanto and Veronica Siregar (2018) examined the possibility of a relationship between family ownership and sustainability reporting in this setting. The research was performed in Indonesia. The research is empirical. The study sampled information over the past four years. The selected data span the years 2010 through 2014. The study uses multiple regression analysis for analysis. The investigation results suggest that family ownership influences the reporting quality of businesses. Similarly, Gavana et al. (2016) investigated if a relationship exists between family ownership and sustainability reporting. The study was conducted in Italy. The research is empirical. As a sample, the study utilized data from the past nine years. The selected data span the years 2009 through 2013. For analysis, the study utilized OLS regression analysis. The investigation results suggested that family ownership influences the reporting quality of businesses. In addition, Rudyanto (2017) investigated the possibility of a relationship between family ownership and sustainability reporting. The research was performed in Indonesia. The research is empirical. The study sampled four years of data. The selected data span the years 2010 through 2014. For analysis, the study utilized regression analysis. The investigation results suggested that family ownership influences the reporting quality of businesses. Hence, the theory resulting from the preceding debate is as under.

H4: Family ownership significantly sustains reporting quality in Iraq.

Foreign ownership refers to the presence of a foreign investor who holds a significant proportion of the shares of a specific economic concern. This way of managing ownership is more efficient because the foreign investor exercises direct and indirect control over the local economic organization. The use of voting to influence management choices is direct control, while the threat to withdraw investment from a local economic unit constitutes indirect control (Moses et al., 2020). Research demonstrates a significant relationship between foreign ownership and the quality of sustainability reporting. In this context, Haladu et al. (2016) examined the relationship between foreign ownership and sustainability reporting. The research was performed in Nigeria. The research is empirical. The study sampled information from the past five years. The selected data span the years 2009 through 2014. Simple regression analysis was employed for analysis in this study. The investigation results suggest that foreign ownership affects the reporting quality of companies. Similarly, Correa-Garcia et al. (2020) investigated if a correlation exists
between foreign ownership and sustainability reporting. The research was performed in Latin America. The research is empirical. The study sampled information over the past four years. The selected data span the years 2011 through 2015. The study uses logistic regression analysis for analysis. The investigation results suggest that foreign ownership affects the reporting quality of companies. In addition, Hasan et al. (2022) investigated the possibility of a relationship between foreign ownership and sustainability reporting. The research was performed in Pakistan. The research is empirical. The study sampled information from nine years. The selected data span the years 2009 through 2018. For analysis, the study utilized regression analysis. The investigation results suggest that foreign ownership influences the reporting quality of companies. So, the hypothesis drawn from the preceding discussion is as follows.

**H5:** Foreign ownership significantly sustains reporting quality in Iraq.

**Research Methods**

This study examines the impact of managerial, institutional, government, family, and foreign ownership on the quality of sustainability reporting in the Iraqi banking sector. The secondary data were taken from the databases of thirty commercial banks between 2011 and 2021. The investigation yielded the following equation:

\[
QSR_{it} = \alpha_0 + \beta_1 MNO_{it} + \beta_2 INO_{it} + \beta_3 GVO_{it} + \beta_4 FMO_{it} + \beta_5 FRO_{it} + e_{it} \quad (1)
\]

Where;

- QSR = Quality of Sustainability Reports
- \(t\) = Period
- \(i\) = Countries
- MNO = Managerial Ownership
- INO = Institutional Ownership
- GVO = Government Ownership
- FMO = Family Ownership
- FRO = Foreign Ownership

The primary variable of the study was the quality of sustainability reports, which was measured as zero for non-quality reporting and one for quality reporting. In addition, the study employed five predictors, including managerial ownership proxies as the ratio of shares owned by managers to total shares, institutional ownership proxies as the ratio of shares owned by institutions to total shares, government ownership proxies as the ratio of share owned by the government to total shares, family ownership proxies as the ratio of share owned by family members to total shares, and foreign ownership proxies as the ratio of share owned by foreign investors to total investors. These proxy servers are listed in Table 1.
Table 1. Measurements of Variables

<table>
<thead>
<tr>
<th>S#</th>
<th>Variables</th>
<th>Measurement</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Quality of Sustainability</td>
<td>Zero for not quality reporting and one for quality reporting</td>
<td>Banks Financial Statements</td>
</tr>
<tr>
<td></td>
<td>Reports</td>
<td></td>
<td></td>
</tr>
<tr>
<td>02</td>
<td>Managerial Ownership</td>
<td>The ratio of shares owned by managers and total shares.</td>
<td>Banks Financial Statements</td>
</tr>
<tr>
<td>03</td>
<td>Institutional Ownership</td>
<td>The ratio of shares owned by institutions and total shares.</td>
<td>Banks Financial Statements</td>
</tr>
<tr>
<td>04</td>
<td>Government Ownership</td>
<td>The ratio of shares owned by the government and total shares.</td>
<td>Banks Financial Statements</td>
</tr>
<tr>
<td>05</td>
<td>Family Ownership</td>
<td>The ratio of shares owned by family members and total shares.</td>
<td>Banks Financial Statements</td>
</tr>
<tr>
<td>06</td>
<td>Foreign Ownership</td>
<td>The ratio of shares owned by foreigners and total shares.</td>
<td>Banks Financial Statements</td>
</tr>
</tbody>
</table>

Using descriptive statistics, the study investigates the factors in depth. In addition, the correlation matrix is used to examine the correlation between variables. In addition, the study examines multicollinearity utilizing the variance inflation factor (VIF). The following are the equations:

\[ R^2_Y \rightarrow Y_{it} = \alpha_0 + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \beta_5 X_{5it} + e_{it} \quad (2) \]

\[ j = R^2_Y, R^2_X, R^2_{X1}, R^2_{X2}, R^2_{X3}, R^2_{X4}, R^2_{X5} \quad (3) \]

\[ Tolerance = 1 - R^2_j \quad VIF = \frac{1}{Tolerance} \quad (4) \]

The researchers also utilized the MMQR to examine the relationships between variables under investigation. This method is appropriate for the panel studies by Machado and Silva (2019). This method has the property of being "resistant to outliers." Additionally, this method examines the heterogeneity between panel cross-sections (Aziz et al., 2020). In addition, this method is better appropriate when endogenous explanatory constructs are utilized and panel data with definite individual effects are studied (Ike et al., 2020). Moreover, it addresses endogeneity and heterogeneity (An et al., 2021). Thus, the conditional quantile estimate is \( Q(X) \) for the locational-scale alternative model.

\[ Y_{it} = \alpha_i + X_{it}\beta + (\delta_i + Z_{it}\lambda)U_{it} \quad (5) \]
In equation (5), \( P\{\delta_i + Z_{it}\lambda > 0\} = 1 \) exposed the probability while \( \alpha, \beta, \lambda \) and \( \delta \) exposed the parameters, \( \alpha_i, \delta_i \), \( i = 1, \ldots, n \) exposed the individual fixed-effect, and \( z \) exposed the \( k \)-vector of component \( X \). In addition, the components are transformed with element \( l \) is mentioned below:

\[
Z_l = Zl (X), l = 1, \ldots, k
\]  

(6)

Furthermore, \( U_{it} \) exposed the orthogonal to \( X_{it} \) and dependable for instant conditions that do not include severe heterogeneity. So, using equation (5), the conditional quantile of \( Y \) is given below:

\[
Q(\tau/X_{it}) = (\alpha_i + \delta_i q(\tau)) + X_{it}\beta + Z_{it}\lambda q(\tau)
\]  

(7)

In equation (7), \( X_{it} \) exposed the predictive constructs like MNO, INO, GVO, FMO, and FRO and \( Y_{it} \) is the dependent construct like QSR, which is conditional as \( X_{it} \). While standard least-square fixed-effect, the distinct effects could not establish intercept shift. Hence, \( Q(\tau) \) is given below:

\[
\text{Min}_q = \sum_t \sum_i p(\tau) (R_{it} - (\delta_i + Z_{it}\lambda)q)
\]  

(8)

3. FINDINGS OF THE STUDY

Using descriptive statistics, the study investigates the factors in depth. According to the research findings, the mean value of GSR was 0.891%, MNO was 23.199%, and INO was 54.91%. In addition, the study’s results revealed that the average GGVO was 11.092 percent, FMO was 2.101 percent, and FRO was 9.001 percent. Table 2 contains the values in question.

**Table 2. Descriptive Statistics**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>QSR</td>
<td>330</td>
<td>0.891</td>
<td>0.211</td>
<td>0.000</td>
<td>1.000</td>
</tr>
<tr>
<td>MNO</td>
<td>330</td>
<td>23.019</td>
<td>1.028</td>
<td>21.920</td>
<td>29.009</td>
</tr>
<tr>
<td>INO</td>
<td>330</td>
<td>54.901</td>
<td>1.974</td>
<td>42.011</td>
<td>58.092</td>
</tr>
<tr>
<td>GVO</td>
<td>330</td>
<td>11.092</td>
<td>0.342</td>
<td>9.025</td>
<td>12.926</td>
</tr>
<tr>
<td>FMO</td>
<td>330</td>
<td>2.101</td>
<td>1.004</td>
<td>1.243</td>
<td>3.291</td>
</tr>
<tr>
<td>FRO</td>
<td>330</td>
<td>9.001</td>
<td>0.321</td>
<td>8.120</td>
<td>13.206</td>
</tr>
</tbody>
</table>

In addition, the correlation matrix is used to examine the correlation between variables. The results demonstrated that the management ownership structure, institutional ownership structure, government ownership structure, family ownership structure, and foreign ownership structure have favorable relationships with the quality of sustainability reporting in the Iraqi banking sector. Table 3 contains these values.
Table 3. Matrix of Correlations

<table>
<thead>
<tr>
<th>Variables</th>
<th>QSR</th>
<th>MNO</th>
<th>INO</th>
<th>GVO</th>
<th>FMO</th>
<th>FRO</th>
</tr>
</thead>
<tbody>
<tr>
<td>QSR</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MNO</td>
<td>0.543</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INO</td>
<td>0.512</td>
<td>0.674</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GVO</td>
<td>0.493</td>
<td>0.392</td>
<td>0.211</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FMO</td>
<td>0.543</td>
<td>0.211</td>
<td>-0.328</td>
<td>-0.673</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>FRO</td>
<td>0.322</td>
<td>0.102</td>
<td>0.382</td>
<td>-0.209</td>
<td>-0.774</td>
<td>1.000</td>
</tr>
</tbody>
</table>

In addition, the study used VIF to examine multicollinearity. The results of the investigation suggested that the VIF is less than five. Our results demonstrated that there is no multicollinearity concern. Table 4 contains these values.

Table 4. Variance Inflation Factor

<table>
<thead>
<tr>
<th>Variables</th>
<th>VIF</th>
<th>1/VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>MNO</td>
<td>3.674</td>
<td>0.272</td>
</tr>
<tr>
<td>INO</td>
<td>2.631</td>
<td>0.380</td>
</tr>
<tr>
<td>GVO</td>
<td>2.563</td>
<td>0.390</td>
</tr>
<tr>
<td>FMO</td>
<td>2.392</td>
<td>0.418</td>
</tr>
<tr>
<td>FRO</td>
<td>2.216</td>
<td>0.451</td>
</tr>
<tr>
<td>Mean VIF</td>
<td>2.695</td>
<td>.</td>
</tr>
</tbody>
</table>

The researchers also utilized the MMQR to examine the relationships between variables under investigation. The results demonstrated that the management ownership structure, institutional ownership structure, government ownership structure, family ownership structure, and foreign ownership structure have favorable relationships with the quality of sustainability reporting in the Iraqi banking sector. These relationships are shown in Table 5.

4. DISCUSSIONS

The results demonstrated a positive correlation between management ownership and sustainability reporting quality. These results are consistent with Tauringana (2021), which indicates that the management of a firm in which a considerable number of shares are held has a sense of responsibility for the company's well-being. They attempt to preserve the quality of sustainability reporting. These findings concur with Christensen et al. (2021)'s assertion that with corporate ownership, managers take a higher interest in the morality of their employees. The accounting and auditing department's attentive performance produces high-quality sustainability reports.
Table 5. Panel Quartile Estimation (MMQR)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Location</th>
<th>Scale</th>
<th>Method of Moments Quantile Regression (MMQR)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Grid of Quartiles</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.10</td>
</tr>
<tr>
<td>MNO</td>
<td>0.673**</td>
<td>0.546*</td>
<td>0.564**</td>
</tr>
<tr>
<td>INO</td>
<td>0.543**</td>
<td>0.383*</td>
<td>0.102*</td>
</tr>
<tr>
<td>GVO</td>
<td>0.786**</td>
<td>0.292*</td>
<td>0.120*</td>
</tr>
<tr>
<td>FMO</td>
<td>0.654**</td>
<td>0.193*</td>
<td>0.464*</td>
</tr>
<tr>
<td>FRO</td>
<td>0.339*</td>
<td>0.465**</td>
<td>0.646*</td>
</tr>
</tbody>
</table>

***, **, and * represent significant level at 1%, 5%, and 10%, respectively
The results demonstrated a correlation between institutional ownership and sustainability reporting quality. These findings are consistent with Yanez et al. (2019)'s assertion that institutional ownership fosters the exchange of ideas, tactics, and resources. It builds a sustainable company model and accurately reports its results. These results concur with Buallay and Al-Ajmi's assertion that when a firm transfers ownership to other institutions, those institutions are also attentive to the company. When the institution governs the company, there is high-quality sustainability reporting.

The results demonstrated a positive correlation between family ownership and sustainability reporting quality. These findings are consistent with Amidjaya and Widagdo's (2020) contention that family ownership of a firm is associated with family well-being and reputation. In this instance, the owners are involved in the company's operations, paperwork, and reporting. Hence, unbiased, honest, and responsible reporting on sustainability is possible. These results are consistent with Correa-Garcia et al. (2020) Meca's assertion that family ownership lowers the gap between owner ambitions and company mission. This increases the sustainability of businesses and the quality of sustainability reporting.

The results demonstrated a favorable correlation between government ownership and sustainability reporting quality. These findings are consistent with Dissanayake et al. (2019)'s findings. This past study demonstrates that when the government owns a corporation, it regulates its operations and departmental performance. This company's sustainability reporting is transparent and effective. These findings are consistent with Aggarwal and Singh's (2019) assertion that a government-owned corporation will conduct corporate sustainability practices and accurately report sustainability programs.

The results demonstrated a favorable correlation between foreign ownership and sustainability reporting quality. These findings are consistent with Rustam et al. (2019)'s findings, which suggest that foreign ownership attracts the attention of foreign companies or individuals and increases their participation in business sustainability measures. This enhances both sustainable performance and reporting. These findings are consistent with Girón et al. (2021)'s conclusion that enterprises with foreign ownership typically adopt international accounting and reporting standards. Companies can disclose their sustainability activities with accuracy, fairness, accountability, and transparency if they adhere to international accounting and reporting standards. Hence, foreign ownership is associated with high-quality sustainability reporting.

5. IMPLICATION

This study provides researchers with writing recommendations for business reporting. This study investigates the effects of firm ownership types such as management, institutional, family, government, and foreign ownership on the quality of sustainability reporting. Government and management ownership has always been favored by scholars when discussing their impact on the quality of sustainability reporting. Therefore, the
present work contributes to the body of knowledge. The article also differentiates the literature by analyzing the influence of management, institutions, families, governments, and foreign ownership in sustainability reporting quality in the Iraqi banking sector.

The article also guides company management or economists on improving the quality of sustainability reporting, which is a prerequisite for achieving sustainable business performance. For improved sustainability reporting, the study indicates that company managers must also own the company's assets. In addition, the study recommends that institutions be permitted to own firm resources for quality sustainability reporting. To improve the quality of sustainability reporting, the study also suggests adopting a policy that grants corporate ownership to well-known business families. The study assists policymakers in formulating regulations about the production of a high-quality report on sustainability utilizing an appropriate ownership structure. In addition, the study recommends that a piece of a corporation should be owned by a government authority to ensure high-quality sustainability reporting. The report also suggests that businesses must recruit foreigners for ownership participation. It would increase the quality of sustainability reporting.

6. CONCLUSION

The study aimed to assess the impact of firm ownership on sustainability reporting quality, including management, institutional, family, government, and foreign ownership. From the banking sector of Iraq, longitudinal data and panel data on managerial, institutional, family, government, and foreign firm ownership and sustainability reporting quality were collected. According to the study, there is a correlation between managerial, institutional, family, government, and foreign ownership and the quality of sustainability reporting. The results indicated that when managerial personnel owns a portion of the company, their involvement in administering its operations improves. It is more probable that sustainability reporting quality would increase. The results demonstrated that institutions could gain access to business strategy when corporations give ownership so that they can report sustainability better.

Similarly, if a family owns a company, business administration is conducted properly, and there is excellent sustainability reporting due to the linked family reputation. According to the research, government ownership serves as a legal check on the performance of businesses and ensures high-quality sustainability reporting. The survey also indicated that foreign ownership of businesses enables them to maintain vigilant administration and accounting practices. Thus, sustainability reporting is of higher quality.

7. LIMITATIONS

Many constraints remain linked with the study, limiting its practical application. Future researchers must eliminate these restrictions and improve their applicability. This study
focuses on the influence of firm ownership, including management, institutional, family, government, and foreign ownership, on the quality of sustainability reporting. It disregards firm legislation, accounting and reporting standards, audit team performance, etc., which are crucial to the quality of sustainability reporting. Future researchers must broaden the reach of their studies by including explanatory variables. In addition, the authors examine the relationship between firm ownership, such as management, institutional, family, government, and foreign ownership, and the quality of sustainability reporting using only evidence from the banking sector of Iraq. Future authors must acquire data from various companies in nations around the globe to ensure the validity of their studies on a global scale.

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