

## The Relationship between Fraud in Financial the Relationship between Fraud in Financial Reporting of Peer Firms in the Same Geographical Region and Fraud in Company Financial Reporting: The Moderating Role of Industry Competition<sup>1</sup>

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### INTRODUCTION

According to the definition provided by international auditing standards (Standard No. 240), fraud refers to "deliberate and intelligent manipulation of financial statements by one or more individuals among management, employees, or third parties to gain unfair or illegal advantage." The increase in fraud, distortions, and misrepresentations, all of which fall under unethical behavior and fraudulent reporting, imposes costs on companies and society. KPMG, one of the largest consulting and advisory service companies in the world, conducted a survey that showed that 60% of fraud cases are caused by employees. Ignoring fraud in financial reports not only harms the accounting and auditing profession but also erodes public trust and harms investors, ultimately leading to an economic crisis in society. In Iran, with the increase in the number of companies listed on the stock exchange and the privatization trend, the need for public disclosure of financial statements has increased. Given the importance of financial statements in making investment decisions, the possibility of fraud in financial information disclosure is of great

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importance to investors and stakeholders. Some companies, especially those active in the Iranian economy, have had a significant direct and indirect impact on domestic financial markets due to widespread corruption cases in recent years, and it is not unexpected that other companies will engage in such behavior. Limited research has been conducted on the impact of the external environment on a company's inclination to engage in fraud and embezzlement. These external conditions and motivators can include peer companies, especially neighboring companies (from the same geographical region). Based on this, this research aims to examine the relationship between fraud in the financial reporting of companies and fraud in the financial reporting of peer companies in a similar geographical region, focusing on competition in the industry.

### **HYPHOTESIS**

According to the literature, the research hypotheses include:

- 1: Fraud in the financial reporting of companies in a similar geographical region has a positive and significant relationship with fraud in the financial reporting of the company.
- 2: Competition in the industry has a positive and significant impact on the intensity of the relationship between fraud in the financial reporting of companies in a similar geographical region and fraud in the financial reporting of the company.

### **METHODS**

This research is applied in terms of purpose and descriptive correlation in terms of method and nature. The research method is quantitative and post-event. In this research, theoretical foundations were written using the library method. Also, the software of Rahavard Novin and Excel was used to collect the variables of the research and Eviuz was also used for data analysis and research.

The statistical population of this research is 11 companies active in the petrochemical industry in the Pars Energy Special Economic Zone. Also, for further investigations of the research hypotheses using the total information of (32) petrochemical companies active in the Tehran Stock Exchange and the results obtained from it, with the results of the hypothesis estimation using the data of 11 listed petrochemical companies active in the special economic zone Pars energy is compared. The period of this research is between 1390 and 1401 for 12 years.

Considering that the dependent variable of the research is two-valued (zero and one), logit regression was used to fit the regression models of the research. To mitigate the effect of possible variance heterogeneity, powerful regression capability has been used in fitting the models. Also, the methods of straightness ratio, McFadden coefficient of determination, and Hosmer-Lemshow test were used to check the goodness of fit of the research models.

## **FINDINGS**

According to the results of table (7), the probability level of the chi-square statistic is less than 0.05, indicating that at least one of the coefficients of the explanatory variables is non-zero and the model is significant at the 95% level. The coefficient of determination of the model also shows the number 0.162, which indicates that 16% of the changes in the dependent variable are formed by the independent and control variables in the model. Among other things to check the goodness of fit of probit regression models is the likelihood ratio. The value of this statistic is negative (-72/911) and to the extent that its absolute value is larger, it indicates the goodness of the model fit.

According to the results of table (9), the probability level of the chi-square statistic is less than 0.05 and it indicates that at least one of the coefficients of the explanatory variables is non-zero and the model is significant at the 95% level. The coefficient of determination of the model also shows the number 0.168, which indicates that 16% of the changes in the dependent variable are formed by the independent and control variables in the model. Among other things to check the goodness of fit of probit regression models is the likelihood ratio. The value of this statistic is negative (-72.362) and to the extent that its absolute value is larger, it indicates the goodness of the model fit.

The results of the first hypothesis showed fraud in the financial reporting of companies operating in a region. There is a significant and positive relationship between fraud in financial reporting and geographical proximity. Furthermore, the results of the second hypothesis indicated that competition in the industry intensifies the relationship between fraud in financial reporting and geographical proximity. However, it was noteworthy that further tests and examinations demonstrated that competition in the industry leads to an increase in the impact of fraud in financial reporting for companies operating in a similar geographical region.

## **CONCLUSION**

The research findings indicate unethical behavior and fraudulent financial reporting, which does not occur in isolation. Neighboring companies influence

and contribute to the inclination and commission of misconduct and fraud in financial reporting. Additionally, the results suggest that companies, after considering potential benefits and costs, adopt fraudulent reporting practices similar to their peers and neighbors. For example, despite tax exemptions for exports by petrochemical companies in the Arvand Free Economic Zone, they still engage in imports (sales) from other free economic zones within the country, subject to taxation. According to a report received by the Economic Offenses Fighting Fraction of the Parliament, petrochemical companies active in the Arvand Free Economic Zone avoid paying 9% value-added tax through collusion with a customs office in Ahvaz. This export is done in a way that goods are not physically exported from the customs office, and only documents and paperwork are sent, with the export process being recorded on paper. Afterward, these companies sell their products domestically, thus avoiding paying a 9% value-added tax (Tabnak News Agency, 2019). The findings of this hypothesis align with the findings of other researchers such as Parsons et al. (2014), Brown et al. (2022), and Ryand et al. (2022). Based on these findings, the interaction between managers of peer companies operating in a similar geographical region can lead to convergence and an increased likelihood of adopting harmful and fraudulent practices in financial reporting. Therefore, it is recommended that the Securities and Exchange Commission and other legislators propose deterrent laws to increase inspections and vigilance in similar geographical regions where at least two companies are active in the same industry, to limit destructive management behavior and take steps towards the interests of shareholders and investors.

**Keywords:** Fraud in Financial Reporting, Peer Firms, Industry Competition.

**JEL Classification:** M41.

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