# OWNERSHIP STRUCTURE AND AGENCY COSTS: EVIDENCE OF EMERGING ECONOMY

# Mohammed Nader Turshan<sup>\*</sup>, Naser Abdel Karim<sup>\*\*</sup>

 \* Corresponding author, Doctoral Program, Faculty of Administrative and Financial Sciences, Arab American University, Ramallah, Palestine Contact details: Arab American University, 13 Zababdeh, P. O. Box 240, Jenin, Palestine
 \*\* Faculty of Administrative and Financial Sciences, Arab American University, Ramallah, Palestine

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# Abstract

The core objective of this study is to investigate the effect of ownership structure components on agency costs for 26 firms listed on the Palestine Exchange (PEX) between 2010 and 2019. The fixed-effects model was used to analyze cross-sectional data over time (panel data), and the multiple linear regression analysis was used to test the study hypotheses. The study found a positive, statistically significant effect of both board ownership and ownership concentration on agency costs, this indicates that whenever the ownership of board members in the firms listed on the PEX increases, leads to an increase in agency costs in these firms, reducing the performance of the firm, motivating management to seek to secure its interest and not to maximize the value of the firm. Similarly, whenever ownership increases in the hands of a few investors in the firms listed on the PEX, this leads to an increase in agency costs in these firms, and this relationship may be due to the majority's ability to exploit the company's capabilities for their goals and interests. Another main result of the study was a negative, statistically significant effect of institutional ownership on agency costs in the firms listed on the PEX.

Keywords: Agency Costs, Ownership Structure, Palestine Exchange

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# **1. INTRODUCTION**

Starting from the seminal work of Jensen and Meckling (1976), the conflict of interests between principal and agent has attracted great attention from many dimensions. The core interest of the principal is to increase his wealth by maximizing the market value of the firm in the long term. On the other hand, the agent is interested in making decisions that seek to maximize the firm's profits in the short term without taking into consideration the impact of these decisions on the value of the firm in the long term.

This conflict between the principal and agent resulted in what is known as agency costs which include management rewards and incentives, and control costs represented by procedures that regulate the work of the management (agent) to ensure that the management (agent) does not deviate from the planned path to achieve self-interest, in addition to the costs spent by management (agent) in preparing reports and information for submission to the principal (Chakour, 2017).

The ownership structure has been widely discussed since the seminal work of Fama and Jensen (1983), because of its important role in determining firm goals, principal wealth, and agent commitment. Since the controversy began around the agency theory, researchers did not stop studying the factors affecting agency costs, and most of the literature indicates that the decision of the ownership structure reflects attempts to mitigate the agency problem among principals and agents (Mustapha & Che Ahmad, 2011).

The height severity of the agency problem, especially in developing markets, characterized by a low level of regulations and governance procedures that protect investors, made it important to put in place many mechanisms through which this problem can be addressed and its negative effects on the market value of the company and thus on the wealth of the principal, and among these mechanisms are board ownership, institutional ownership, the concentration of ownership, and foreign ownership, which represent components of the ownership structure.

Emerging economies adhere to the principles of governance and believe in their long-term success linked to their responsibility to shareholders and stakeholders. The institutional structure adheres to advanced standards in governance, and as one of the components of the national economy, it contributes to strengthening commitment to the rules of good governance in emerging economies and seeks to create a role model in this field. Through its management of a financial market that is regulated, legal in its structure, fair and transparent in its information, and therefore all relevant parties, including shareholders and stakeholders, are required to contribute to improving the quality of the stock exchange by exercising the principles of good governance (Ciftci, Tatoglu, Wood, Demirbag, & Zaim, 2019).

Despite the adoption of corporate governance rules in developing countries, companies still suffer from high agency costs. This research came to examine the impact of the ownership structure components (board ownership, ownership concentration, institutional ownership, and foreign ownership) on agency costs and to compare the differences between developed and developing countries. Palestine is not immune from its surrounding environment, so it was important to research this issue.

Most public shareholding companies in Palestine and developing countries, in general, face problems with high agency costs, which increase the burden placed on the company and threaten its continuity (Mustapha & Che Ahmad, 2011), there is a rise in agency costs in public shareholding companies listed on the Palestine Exchange (PEX). The rate of utilization of assets reached 32.8%, and the banking sector suffers from high agency costs compared to other sectors of the economy (Al-Najjar & Muhammad, 2018).

The findings of the study will contribute to exploring ways to reduce agency costs and knowing the impact of the components of the ownership structure as one of the agreed corporate governance mechanisms on those costs, the study will also contribute to providing a clear idea about many concepts related to the ownership structure and agency cost, which may benefit researchers, specialists and those interested in corporate finance.

The rest of the paper is organized as follows. Section 2 covers the related literature and hypotheses development. Section 3 covers the research design and methodology. Section 4 presents the result. Section 5 presents the discussion and finally, conclusions are presented in Section 6.

## **2. LITERATURE REVIEW**

The different composition of the ownership structure and its diversity has effects on various aspects of the performance of companies, and even the trends and desires of investors, as the ownership structure model has become one of the recognized mechanisms in governance, and an effective tool in the application of its rules (Hamdan, Al-Sari, Anasawa, 2016). Accordingly, the different components of the ownership structure may have an impact on management decisions and the performance of the firm, including its impact on agency costs (Chakour, 2017).

There is a difference in the impact of the ownership structure as one of the governance tools in the performance of companies between developing and developed countries, as previous studies conducted on developed countries agreed that the ownership structure is an effective tool in corporate governance, while the debate about its effectiveness continues in studies conducted in developed countries (Ciftci et al., 2019).

#### 2.1. Agency theory

The agency theory crystallizes in the contractual relationship between each of the agents, principals, and creditors in companies, which results in what is known as the agency problem resulting from the separation between principals and agents, which is known as the agency costs of ownership, and between each of the principals and creditors, which is known as the agency costs for debts. Many mechanisms are used to alleviate this conflict, such as increasing the use of debt in financing and increasing the ownership of managers in the company, in addition to incentives and administrative rewards, and other mechanisms (Jensen & Meckling, 1976).

Agency costs are defined as the additional costs incurred by companies, which are represented in the costs of control in addition to the costs of linkage, from the resources expended through the administration in the process of preparing reports and additional information that is provided to the owners, to ensure that they are working as best as possible to maximize their wealth (Zureikat, Ziyad, Gharibah, Rahman, & Al Haddad, 2016).

#### 2.2. Ownership structure

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Recently, researchers and those interested in public shareholding companies have increased their interest in studying the impact of the different components of the ownership structure and its diversity on various aspects of companies' performance and investors' behavior, as the composition of the ownership structure has become one of the effective mechanisms for corporate governance, which may affect the performance and value of companies (Tahir, Saleem, & Arshad, 2015). Several trends can be distinguished between them, to explain the components of ownership and the composition of its structure, which are: ownership concentration, institutional, foreign, and managerial ownership.

Understanding the structure of ownership of firms helps to understand the way they are managed, and to know the tools and methods that maintain the organization of relations and the balance of interests between the various parties in the firm. Especially in countries that lack an effective legislative and legal environment (Hamdan et al., 2016). The following is an explanation of the components of the ownership structure:

1. Board ownership: It means that agents own shares in the firm they manage, and it is called "internal ownership" (Choi, Lee, & Williams, 2011). Managerial ownership is an important mechanism to reduce conflict of interest between agents and principals. One of the proposed solutions to solve the agency problem is increasing the ownership of the agent to reconcile the interests between the principal and agent and reduce the conflict (Al-Najjar & Muhammad, 2018). Managerial ownership results in management's participation in ownership, which makes agents have an interest in the success continuity of the firm according and to the assumption of convergence of interests, which prompts them to make decisions that have a positive future impact on the firm (Dukhan, 2018). This is not true in all cases. A study by Nugraha, Nugraha, Fitria, Ayunitha, and Sulastri (2021) found that there is a negative effect of managerial ownership on agency costs.

2. Ownership concentration: Large owners can be defined as "the shareholders who own 5% or more of the firm's shares" (Thomsen, Pedersen, & Kvist, 2006, p. 251). The concentration of ownership leads to many benefits, the most important of which are: the positive effect on the performance of the firm according to the agency theory; where ownership concentration represents an important mechanism to reduce agency costs, put an end to the utilitarian behavior of top management, secure protection for the objectives and interests of principals, and help bridge the gap between conflicting interests between agent and principals (Alves, 2012). The concentration of ownership gives the major shareholders incentives to control the management, and the greater the ownership share of the major owners, the greater their incentives to improve the performance of the company and the management to control and reduce the risk (Fazlzadeh, Hendi, & Mahboubi, 2011). While Pandey and Sahu's (2020) study found a negative relationship between the concentration of ownership and agency cost.

3. *Institutional ownership:* It is the amount owned by institutions or bodies (such as banks, insurance firms, pensions, and investment funds) of the company's shares, which employ the money of others to generate income for them. Institutional ownership has a positive role in controlling the company, whereas, in companies in which there is a high percentage of institutional ownership, agency costs are low (Zureikat et al., 2016). This is supported by the results of a study by Nugraha et al. (2021) which found that there is a positive effect of institutional ownership on agency costs.

4. *Foreign ownership:* It refers to the ownership of foreign investors in the capital of companies, as well as through a set of relations and commercial activities, in addition to the fact that foreign partners provide local companies with advanced technology, management knowledge, and resources, adding to financial contributions. Studies have shown that foreign-owned companies are more innovative than local companies, therefore, strategies must be developed to attract and maintain these investments (Choi et al., 2011). Opinions differed about the impact of foreign ownership on agency costs: some see that foreign ownership reduces agency costs, and others think that foreign ownership increases agency costs (Hamdan et al., 2016).

# 2.3. Development of hypotheses

On the grounds of the former studies, study problems, and objectives, the following hypotheses were formulated:

H1: There is no statistically significant effect of the components of the ownership structure represented in the board ownership, on agency costs in companies listed on the PEX.

H2: There is no statistically significant effect of the components of the ownership structure represented in the concentration of ownership, on agency costs in companies listed on the PEX.

H3: There is no statistically significant effect of the components of the ownership structure represented in the institutional ownership on agency costs in companies listed on the PEX.

H4: There is no statistically significant effect of the components of the ownership structure represented in the foreign ownership on agency costs in companies listed on the PEX.

#### 3. RESEARCH DESIGN AND METHODOLOGY

#### 3.1. Sample chosen

Following Demsetz and Villalonga (2001), the study sample consists of all firms listed on the PEX with data available on all ownership structures from the years 2010 to 2019. The years 2020 and 2021 were excluded due to the impact of the COVID-19 pandemic on companies' performance and costs, which is one of the study variables. Also, the study excluded firms that have missed data, and this left the study with a final sample of 26 firms out of 47.

#### 3.2. Methodology and data collection methods

The study relied on the analytical descriptive approach, whereby cross-sectional data collected over time (panel data) was used, which represents the data of a group of firms listed on the PEX during a period of ten (10) years extending between 2010-2019, by reviewing the theoretical data sources represented by studies, books and relevant references in their paper and electronic disclosures, as well as referring to the audited and published annual reports of firms through the PEX website to collect data for the study.

#### 3.3. Variables and measurements

The dependent variable of the study is *agency costs* which were measured using the management incentives and rewards index used in the study by Mustapha and Che Ahmad (2011) which were equal to the sum of the remuneration of the non-executive members of the board of directors.

The Palestinian legislator specified in Law No. 6 of 2008 regarding the amendment of the Palestinian Companies Law No. 12 of 1964, the remuneration of the chairman and members of the board of directors in a public joint-stock company at a rate of 10% of the net profit distributable to shareholders after deducting all taxes and reserves and a maximum of

9,000 Jordanian dinars for each of them per year. And the reward is distributed to them in proportion to the number of sessions attended by each of them, and the incentives and rewards of the board of directors include all the amounts received by the chairman and members of the board of directors of the company during the fiscal year in terms of wages, fees, salaries, bonuses travel and transportation expenses inside and outside the Palestinian territories, and other benefits that they enjoy such as free housing, cars, and others (Edwards & Weichenrieder, 2004).

It expresses a set of variables that were selected based on a literature review of studies related to the subject of the study, which is expected to have an impact on agency costs (Chakour, 2017). It consists of four variables:

1. *Board ownership:* It is measured by calculating the total number of shares owned by board members to the total number of firm shares.

2. *Ownership concentration:* It is measured by calculating the total number of shares owned by the shareholders as 5% or more of the total number of firm shares.

3. *Institutional ownership:* It is measured by calculating the total number of shares owned by all non-individual investors to the total number of firm shares.

4. *Foreign ownership:* It is measured by calculating the total number of shares owned by foreigners to the total number of firm shares.

#### 3.4. Study model

The following model is between the four independent variables that represent the ownership structure for companies and the agency cost as a dependent variable:

$$\gamma_{it} = \alpha + \beta_1 BodOwn_{it} + \beta_2 ConOwn_{it} + \beta_3 InstitOwn_{it} + \beta_4 FroeOwn_{it} + \varepsilon_{it}$$
(1)

where,

 $\gamma_{it}$ : Agency costs for the firm *i* in time *t*;

 $\alpha$ : The intercept;

 $\beta$ : The regression coefficient;

*BodOwn:* Ownership percentage of the board of directors for the firm i in time t;

*ConOwn:* Percentage of ownership concentration for the firm *i* in time *t*;

*InstitOwn:* Percentage of institutional ownership for the firm *i* in time *t*;

*FroeOwn:* Percentage of foreign ownership for the firm *i* in time *t*;

 $\varepsilon_{it}$ : The error terms.

## 4. RESULTS

#### 4.1. Descriptive statistics

Table 1 shows the descriptive statistics of the study variables during the period between 2010 and 2019, where the board ownership (BodOwn) variable ranges between 0.75% and 93.14%, with 44.19% and 37.11% mean and standard deviation, respectively. This indicates that the board ownership rate in the companies listed on the PEX is low, as the board ownership rate reached 44% during the study period. The mean concentration ownership variable is 57.56% with a minimum of 0% and a maximum of 91.34%, the rate of concentration of ownership in companies listed on the PEX is an average rate in general, as the total ownership of investors who own 5% or more control, on average, nearly half of the number of shares. While the average of institutional ownership (*InstitOwn*) and foreign ownership (*FroeOwn*) are found to be 57.28% and 31.56%, respectively. Thus, this indicates that the rate of foreign ownership, whether institutions or individuals, in companies listed on the PEX is low. Perhaps, this is due to the environment that is not conducive to foreign investment, because of the instability of economic conditions.

 Table 1. Descriptive statistics

Variable	Min.	Max.	Mean	Std. deviation	Sig.
Agency cost	35,873.75	2,263,466.25	659,464	548,277	0.001
Log (Agency cost)	1.13	18.01	16.03	12.75	0.547
BodOwn	0.75	93.14	44.19	37.11	0.118
ConOwn	0.00	91.34	57.56	28.33	0.425
InstitOwn	1.75	88.85	57.28	33.34	0.075
FroeOwn	0.00	81.3	31.56	24.03	0.068

Source: Statistics output.

Agency costs variable ranged between \$35,873 to \$2,263,466, with an average of \$659,464 and a standard deviation of \$548,277. This rate is considered high from the point of view of the experts. It is also noted that the difference between the minimum value and the maximum value is high, and this variable did not follow a normal distribution, and the logarithm of the variable was used to become a normal distribution.

#### 4.2. Regression result and hypotheses testing

In this study, panel data models were used, and to decide on the fitting data models for the study, we will choose between the fixed-effects model and the random-effects model. Table 2 illustrates the results of the Hausman specification test and F-test. The fixed-effects model is better than the random-effects model in testing the hypothesis with Hausman value (34.82) and (0.000) of significance.

 Table 2. Hausman specification test and F-test results

Test	Test value	Sig.
F	11.51	0.0001
Hausman	34.82	0.0000

Source: Statistics output.

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Table 3 below shows the value of adjusted  $R^2$  (0.8269). This means that 82.69% of the change in agency costs can be explained by the four independent variables (*board ownership, ownership concentration, institutional ownership,* and *foreign ownership*). The remaining 17.31% is due to other

independent variables that are not present in the model.

To test the validity of the hypotheses, the multiple linear regression method was applied illustrated in Table 4 below.

Table 3. Results of the fixed-effects model of ownership structure variables on agency costs

Variable	Coefficient	Coefficient	Sig.
Agency costs	Dependent	15.4125	0.0000
BodOwn	Independent	0.029624	0.0127
ConOwn	Independent	0.018029	0.0204
InstitOwn	Independent	-0.025753	0.0189
FroeOwn	Independent	0.001710	0.5795
		R-squared	Adj. R-squared
		0.8621	0.8269

Source: Statistics output.

Table 4. Multiple linear regression analysis res	ults

Variable	Coefficient	T-statistic	Sig.
BodOwn	0.029624	2.338469	0.0127
ConOwn	0.018029	2.157830	0.0204
InstitOwn	-0.025753	-2.187527	0.0189
FroeOwn	0.001710	0.420131	0.5795
0			

Source: Statistics output.

Table 4 shows that the value of the regression coefficient is 0.029624 and the probabilistic value (significant) is 0.0127 which is less than 0.05, and this indicates a positive, statistically significant effect at level  $\alpha \le 0.05$  of the board ownership on agency costs in firms listed on the PEX. Hence, rejecting the null hypothesis ( $H_0$ ) and accepting the alternative hypothesis H1.

As well Table 4 shows that the value of the regression coefficient is 0.018029 and the probabilistic value (significant) is 0.0204 which is less than 0.05, and this indicates a positive, statistically significant effect at level  $\alpha \le 0.05$  of the ownership concentrations on agency costs in firms listed on the PEX. Hence, rejecting the  $H_0$  and accepting the alternative hypothesis H2.

In addition, Table 4 shows that the value of the regression coefficient is -0.025753 and the probabilistic value (significant) is 0.0189, which is less than 0.05, and this indicates a negative, statistically significant effect at the level  $\alpha \le 0.05$  of the institutional ownership on agency costs in firms listed on the PEX, rejecting the  $H_0$ , and accepting the alternative hypothesis H3.

Finally, Table 4 shows that the value of the regression coefficient is 0.001710 and the probabilistic value (significant) is 0.5795 which is more than 0.05. Therefore, the result is that there is no statistically significant effect at the level  $\alpha \le 0.05$  of the foreign ownership on agency costs in firms listed on the PEX, accepting the  $H_o$ , and rejecting the alternative hypothesis *H4*.

#### **5. DISCUSSION**

The board ownership variable is directly related to the variable of agency costs, and this indicates that whenever the ownership of board members increases in the firms listed on the PEX, this leads to an increase in agency costs in these firms and this is the same result reached by Nugraha et al. (2021) who found that there is a negative effect of managerial ownership on agency cost. Also, this result is inconsistent with the results of Ang, Cole, and Lin's (2000) study, whose results showed that management ownership has a statistically significant effect on reducing agency disputes and costs for American firms. While this finding contradicts the results of the study by Hamdan et al. (2016), which showed that there is a positive effect of the board of directors' ownership variable on agency costs for firms listed on the Bahrain Stock Exchange, and the study by Schäuble (2019) showed that managerial ownership contributes to reducing agency costs.

Moreover, the ownership concentration variable is directly related to the agency costs variable, and this indicates that whenever ownership increases in the hands of a few investors in firms listed on the PEX, this leads to an increase in agency costs in these firms. This result was consistent with the results of the study by Abu-Serdaneh, Zuriekat, and Al-Sheikh (2010), in terms of the presence of a negative impact of the concentration of ownership on the performance of firms listed on the Amman Stock Exchange, and with the study of Hamdan et al. (2016), which showed that there is an inverse effect of the concentration of ownership on the utilization ratio of the assets, in the sense that there is a direct effect of the concentration of ownership on the agency costs in the Bahraini environment. While this result is inconsistent with the results of Firth, Fung, and Rui's (2008) study, which showed an adverse effect of ownership concentration on agency costs.

While the institutional ownership variable is inversely related to the agency costs variable, this indicates that the greater the institutional ownership in the firms listed on the PEX, the more this leads to a decrease in the agency costs in those firms. Where this is the same result reached by Nugraha et al.'s (2021) study and Batayneh, Abed, and Suwaidan's (2019) study, which found a statistically effective positive impact of institutional ownership on the financial performance of Jordanian firms, and Owusu and Weir's (2018) study showed that significantly higher institutional ownership has an impact on agency costs. While this result is inconsistent with the results of Zureikat et al.'s (2016) study, which showed there is no relationship between institutional ownership and agency costs.

Finally, there is no effect of the foreign ownership variable on agency costs in the firms listed on the PEX. This result is inconsistent with the results of Hamdan et al.'s (2016) study, which showed that there is an effective effect of foreign ownership in increasing agency costs, as the higher, the percentage of foreign ownership, the higher the agency costs in Bahraini firms.

The findings of the current study agreed with the studies that were conducted in the developing economies and contradicted the studies that were conducted in the advanced economies, and this can be attributed to the weak governance legislation and regulation in these economies that support the governance process. in addition, these results can be explained to the few experiences of developing economies, including Palestine, in implementing and regulating governance standards on the markets of these economies.

Previous studies have identified that the most important features of weak corporate governance in developing economies, especially Palestine, are related to the composition of the board of directors, disclosure and transparency issues, control, and supervision, as well as weak legislation and laws that address the principles of governance in a manner consistent with international practices in this field.

One of the most important challenges facing Palestine in effectively implementing corporate governance standards is the presence of more than one supervisory authority on Palestinian public shareholding firms and the different requirements of these bodies. In addition to this, there are multiple laws regulating the work of Palestinian firms. It should be noted that the Code of Corporate Governance in Palestine was prepared in 2009 and it needs to be updated and developed to keep pace with market developments. Where it is possible to develop governance policies in Palestine by unifying the supervisory authorities on public shareholding firms and giving training on the importance of governance, and how to apply it to public shareholding firms in Palestine.

#### 6. CONCLUSION

The core objective of this study is to investigate the effect of ownership structure components (board ownership, ownership concentration, institutional ownership, and foreign ownership) on agency costs for 26 firms listed on the PEX between 2010 and 2019 using a panel regression analysis. Our findings are supported by the theories of Jensen and Meckling (1976) and Fama and Jensen (1983) about the alignment of agents' and principals' interests, and ownership structure. The study found a positive, statistically significant effect of both board ownership and ownership concentration on agency costs, and this indicates that an increase in board members' ownership, leads to an increase in agency costs in the firms. In addition, whenever ownership is concentrated in the hands of a few investors, this leads to an increase in agency costs in the firms. Another main result of the study was a negative, statistically significant effect of the institutional ownership on agency costs, this indicates that greater institutional ownership in the firms leads to a decrease in the agency costs in those firms. Study findings will contribute to exploring ways to reduce agency costs and identifying the impact of the components of the ownership structure as one of the agreed corporate governance mechanisms on firm agency costs. The main limitation of the study is that the study scope is limited to the PEX, whereas corporate governance differs from one market to another. Thus, the results of this study cannot be generalized to all countries, but rather limited to the PEX and for the study period. We recommend future studies focus on whether there is an impact of the different rules of governance between countries on the performance of these companies in them.

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