# THE IMPACT OF FOREIGN OWNERSHIP AND MANAGERIAL OWNERSHIP ON TAX AVOIDANCE: EMPIRICAL EVIDENCE FROM EGYPT

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## ABSTRACT

*This research aims to explore the impact of managerial ownership and foreign ownership on the level of tax avoidance. This study was tested on 69 of the 100 non-financial firms (EGX 100) listed on the Egyptian Stock Exchange using purposive sampling techniques with an 2015-2019 observation year. The sample was selected using purposive sampling technique to get sample about 69 firms. The results indicate that the managerial ownership has significant and positive effect on tax avoidance. Meanwhile, foreign ownership does not affect tax avoidance.*

**Keywords:** Managerial Ownership, Foreign Ownership, Effective Tax Rate, Tax Avoidance.

## INTRODUCTION

Tax is the contribution of society to the state that can accomplish two occupations. That is the administrative function and the economic function. Administrative function means that tax is used to achieve government policies in social and economic choices. The tax as an economic function is used to funding the governmental schemes that will also be helpful for the society (Sonia, 2018). Tax avoidance shows management’s awareness. It is done by manipulating the firm’s profits, which leads to the information from the financial reports not showing the real condition and creating the viewpoint for information asymmetry between the management and the stakeholders (Surnasih & Kartika, 2016).

Taxes have been considered a material cost for firms and minimize the cash flow available for their owners (Suranta et al., 2019). Therefore, it is a stimulant for firms to reduce taxes expense through tax avoidance strategies (Chen et al., 2010). Tax avoidance is a taxpayer effort to reduce the tax encumbrance that are considered to be legal (Suranta et al., 2019; Surnasih & Kartika, 2016). Tax avoidance is the effort of taxpayers avoiding taxes in a secure and legitimate way, this is because it is not obverse to the taxation law (Napitupulu et al., 2019). As stated by, Finnerty et al. (2007), tax avoidance can be accomplished in different ways. First, it can be done by moving the topic of taxes and/or tax objects to the countries that provide discriminatory tax treatment or tax exemption on a type of income. Second, tax avoidance is done to preserve the economic root of the transaction through an official selection that provides the lowest tax expense. Third, the supplies of the anti-avoidance of transactions, such as transfer pricing and controlled foreign firm. Khan et al. (2017) dispute that corporate tax avoidance practices prohibit governments from accessing their main resources. Otherwise, tax avoidance provides valuable benefits for firm's shareholders. Firstly, tax avoidance strategies have become mutual practice to mitigate a reduction in firm's dividend (Annuar et al., 2014). Secondly, Practices of tax avoidance phenomenon may be created cash flows, and this can lead to a chain of investments that will finally result in a rise in the company's value (Alkurdi & Ghassan, 2020). Thirdly, management can benefit from tax avoidance by maximizing its rewards (Alkurdi & Ghassan, 2020). Finally, tax avoidance activities can be used to minimize the cost of financing the company's projects (Molina, 2005).

There is a growing streak of research has inspected the relation between various ownership structures and tax avoidance (Abdul Wahab & Holland, 2012; Armstrong et al., 2015; Badertscher et al., 2013; Chen et al., 2010; Minnick & Noga, 2010). This paper aims to examine the association between foreign ownership, managerial ownership and tax avoidance in the firms listed in Egypt Stock Exchange (EGX 100), 2014-2019 period.

Our study is contributions to the literature on tax avoidance and ownership structure in two ways. First, prior studies have focused on developed markets (Fernandez-Rodriguez et al., 2019; Khan et al., 2017; Mindzak & Zeng, 2019). We study tax avoidance phenomenon of firms listed in Egypt Stock Exchange, which has become one of the largest economies on the Middle East and North Africa region. Second, we contribute evidence on the relation between tax avoidance and ownership structure, especially foreign ownership and managerial ownership.

The remainder of this study proceeds as follows. Section 2 develops the theoretical framework, reviews the literature and develops the hypotheses. Section 3 explains the methodology, while Section 4 presents and analyses the results. Finally, the conclusions of the study are found in Section 5.

## Theory and Hypotheses Development

Agency theory explain the firm relationship between principals and agents Hanlon & Heitzman (2010). The separation of ownership and control among a firm’s management and owners lead to conflicts of interest (Bauer & Kourouxous, 2018). According to agency theory framework, the management owned more information than shareholders. Therefore, the management may work aggressively when decision making process (Mangoting et al., 2020). Tax avoidance indicates management’s interest. It is done by reducing the company’s profit, which leads to the information from the financial reporting not rendering the real condition and creating the possibility for information asymmetry between the company and its stockholders (Napitupulu, 2019). In this regard, a firm’s tax decisions represent one of the areas of financial reporting decisions can reflect the views of both management and shareholders. The tax decision-making process thus depends on different interests between management and shareholders (Evana, 2019; Zemzem & Ftouhi, 2013). For example, Evana (2019) expressed that management fulfils its own interests by increasing compensation through higher profit, while shareholders need to limit income tax expense by paying accrued tax and enhanced firm's stock price. The different standpoints between management and stockholders can influence the management to decision making in order to achieve firm’s performance, one of them is the policy on tax.

The shareholders want the managers to react with tax law, while the management exploits loopholes in the tax law to minimize tax expense (Sonia, 2018). In this direction, numerous studies have deducted arguments regarding the relationships between tax avoidance and agency problems (Bauer & Kourouxous, 2018; Hanlon & Heitzman, 2010; Shackelford and Shevlin, 2001). The formularization of tax avoidance decisions relay on the decision-makers’ trade-offs of tax avoidance yield and costs. Therefore, management may be practice opportunistic activities by hidden some transactions related to taxable income, which leads to maximize the gap in both conflict of interest and information asymmetry between management and shareholders (Armstrong et al., 2015; Desai & Dharmapala, 2006). However, agency theory concept is a linkage or interchange between the interest of management and shareholders in achieving good performance of company (Jensen & Meckling, 1976). A overall theoretical framework has been confirmed that adopts the agency theory, to demonstrate the influence of corporate governance mechanisms on manager's tax avoidance decisions (Chen, 2005; Crocker & Slemrod, 2005; Hanlon & Heitzman, 2010). From management's viewpoint, the benefits of tax avoidance may exceed the costs (Shi et al., 2020). Ownership structure affects the process of the firm’s achievement of tax obligations (Friese et al., 2008). Moreover, it helps to inspire an environment that is useful for efficient and sustainable development in company (Siswanti et al., 2017). In this regard, corporate governance mechanism plays a material role in ensuring that management acts ethically and in the best interest of the firm's shareholders. The effectiveness of corporate governance mechanisms, such as ownership structure characteristics, may help relieve levels of tax avoidance (Shi et al., 2020). Mangoting et al. (2019) argued that the visibility of the management influences its decisions, including tax avoidance. The ownership structure also includes further classes of owners. In correspondence with key previously studies, the current study focuses on what are considered the most important classes within its structure, and these may influence the level of tax avoidance and its adequacy, namely, managerial, and foreign ownership (Landry et al., 2013; Richardson et al., 2016). The current section discusses the tax avoidance literature related to the role of the managerial, and foreign ownership structure in the reduction of tax avoidance.

**Managerial Qwnership and Hypotheses Development**

Poor corporate governance led to tax avoidance and increased potential risk of a conflict of interest. In terms of the managers’ ownership perspective, management may be desire to maximize its self-benefits through tax avoidance strategies, which leads to negative effects on the firm’s value (Armstrong et al., 2015). Prior studies have discussion that the presence of managerial ownership is related to material individual effects on tax avoidance (Annuar, 2014; Badertscher et al., 2013; Dyreng et al., 2010; Minnick & Noga; 2010; Ratnawati et al., 2018). For example, Minnick & Noga (2010) dispute that managerial ownership, as one of the mechanisms of corporate governance, can affect tax strategy, with managers’ incentives acting as a remuneration, which results in a reduction in the rate of engagement with tax avoidance, and thence to increased profit for shareholders. Good governance mechanisms contribute to the monitoring of management actions, thus limiting their opportunistic behaviour and protecting the interests of shareholders (Ashbaugh-Skaife et al., 2006). Managers may increase ownership levels to improve firm value and sustainability of business, as part of which may result from tax avoidance strategies (Austin & Wilson, 2017; Core & Larcker, 2022). The managerial ownership is able to enhance oversight and may influence the management in making tax avoidance policy (Surnasih & Kartika, 2016). From the above debate, it can be seen that tax avoidance practices cover many of the aspects that are related to both managements' interests and those of shareholders, represented in terms of value and reparations, and that when the management's power comes from their shareholding ratio. This increases the likelihood that management will use tax avoidance as a tool with which to obtain unobserved benefits (Desai & Dharmapala, 2006). Bradshaw et al. (2019) propose managerial incentives and tax reporting are contingent by the ownership structure of the company.

Previous studies have provided mixed evidence for the relationship between managerial ownership and tax avoidance. Some studies found a significant negative relationship between managerial ownership and tax avoidance (Scholes et al., 2009; Minnick & Noga, 2010). Sunarsih & Kartika (2016) provided empirical evidence that the board of managerial ownership are negative effect on tax avoidance. Alkurdi & Ghassan (2020) provide empirical evidence that that tax avoidance is negatively related to managerial, which reduces the usage of tax avoidance strategies. Other studies, concluded that there is no significant relationship between managerial ownership and tax avoidance (Mayang & Silvy, 2020; Sonia, 2018; Jamei, 2017). Previous studies have found mixed results of the relationship between managerial ownership and tax avoidance. Based on the above conflicting results findings, the following hypothesis is proposed.

*H1: There is an association between tax avoidance and managerial ownership.*

## Foreign Ownership and Hypotheses Development

Foreign ownership is a cute resource for a firm, as it offers the ability to monitor and promote firm performance. Moreover, a board with foreign owners helps to understand preferable a firm’s strategies, such tax avoidance, and to intensify procedures to increase shareholders’ wealth (Barros & Sarmento, 2020). According to the agency theory, conflicts of interest may arise between foreign investors and other shareholders or between management and foreign investors (Young et al., 2008). Foreign investors have incentives to intensely supervise managerial behavior. Thus, according to the agency theory, foreign investors can mitigate agency conflicts within firms (Yoo & Koh, 2014). Foreign investors will carefully monitor firm behavior due to prospect opportunism by management lead to decease tax avoidance. Firms with foreign investor influence have more instinctive opportunities for tax planning and tax strategies to maximize the income (Shi et al., 2020). Aggarwal et al. (2011) found that foreign ownership affects firms’ tax avoidance through their oversight role, and they dispute that the existence of foreign investors enhances corporate governance mechanisms. This reveals that foreign investors can also impact of corporate tax avoidance by suggesting corporate governance tax strategies (Hasan et al., 2016). In examining the impact of foreign ownership on tax avoidance, many papers have documented a negative relationship between foreign ownership and tax avoidance harmonious with the agency theory. Yoo & Koh (2014) found that greater foreign ownership significantly decreases firm tax avoidance. Also, Hasan et al. (2016) found that foreign ownership is negatively related to corporate tax avoidance across 43 countries.

Some prior studies have found significant and positive correlation between a proportion of foreign ownership and firm's tax avoidance (Huizinga & Nicodeme, 2006; Salihu et al., 2013). They explained that foreign investors have with the ability to exercise monitoring over management through their voting rights on a firm’s accounting and taxation policies negatively affects tax avoidance usage (Badertscher et al., 2013; Chen et al., 2010). Salihu et al. (2015) found that foreign ownership is positively related to corporate tax avoidance among publicly listed Malaysian firms. Likewise, Suranta et al. (2019) showed that the structure of foreign ownership has a positive effect on tax avoidance. Shi et al. (2020) yields empirical evidence of a significant and positive relationship between the level of foreign sharing in boards and tax avoidance. From the discussion above, the literature review documented mixed results of the relationship between foreign ownership and tax avoidance. Because of these different views, the current study develops the following neutral hypothesis:

*H2: There is an association between tax avoidance and foreign ownership.*

# RESEARCH DESIGN

## Sample Selection and Data Source

We take a sample of Egypt listed firms and draw data from multiple firm year observations to make our empirical analyses. Data for this study were collected by analyzing and hand collecting vital information disclosed in the firm’s annual report and financial statement. The initial sample included all of the EGX 100 listed on the Egypt stock market over the 2015–2019 period. The final sample included 69 non-financial firms across a period of five years (2015–2019) after excluding firms that fall into the following categories: (a) firms in the financial sector, (b) firms with missing financial and/or ownership data, (c) firms whose financial period does not end on December 31 of each year. Table 1, panel A, summarizes the processing of the final sample, while panel B illustrates the final sample per sector. Thus, there were 345 observations used for empirical analysis.

**Table 1**
**FINAL SAMPLE**

| **Panel A: Final sample process** | |
|---|---|
| EGX 100 listed on the Egypt stock market at the beginning of the financial year | 100 |
| Less: | |
| Missing data | 10 |
| Financial firms | 14 |
| Firms whose financial period does not end on 31/12 of each year | 7 |
| Final sample | 69 |
| Panel B: Final sample per sector | |
| Food, drinks and tobacco | 12 |
| Real estates | 15 |
| Building materials | 5 |
| Basic Resources | 10 |
| Communications, Media and Information Technology | 2 |
| Transportation and freight services | 3 |
| Textiles and durable goods | 4 |
| Healthcare and medicine | 5 |
| Industrial products and services and cars | 4 |
| Contracting and engineering construction and services | 9 |
| Final sample | 69 |
| No. of observations (2015-2019) | 345 |

## Dependent Variable

Tax avoidance measures can be classified into two groups (Gebhart, 2017; Edosa, 2019). First group, Book-Tax Difference (BTD) Measures. BTD Measures as used in literature include, Total Book-Tax Difference, Temporal Book-Tax Difference, Total Discretionary Book-Tax Difference, Tax Effect Book-Tax Difference, and Discretionary Permanent Book-Tax Difference. Second group, Effective tax rate (ETR) Measures. ETR measures as used in literature include, Accounting ETR, current ETR, cash and ETR differential. Our dependent variable is corporate tax avoidance. Consistent with most previous studies we employ effective tax rates (ETRs) as proxy of tax avoidance (e.g. Gupta & Newberry, 1997; Manzon & Plesko, 2002; Rego, 2003; Dyreng et al., 2010; Chen et al., 2010; McGuire et al., 2012). ETRs are normally calculated as current income tax expenses divided by pre-tax accounting income (Gupta & Newberry, 1997). They thus measure a firm’s ability to minimize its income tax expenses compared with its pre-tax accounting income (Rego, 2003).

## Independent Variables

The researchers use two independent variables which are foreign ownership (Minnick & Noga, 2010; Core & Larcker, 2002) and managerial ownership (Armstrong et al., 2015; Minnick & Noga, 2010).

## Control Variables

To control for other effects, we include the following control variables in our regression model Table 2: -

1. Firm Size (FZ). Indriani & Juniarti, (2020) debate that the larger the size of a company, the more it becomes the center of awareness of the government and will cause tendencies for management to be more tax avoidance. Therefore, larger firms engage more in corporate tax avoidance compared to smaller firms because of their further social and economic power (Lin et al., 2014; Richardson et al., 2013).
2. Levrage (LEV). Richardson et al. (2015) and Badertscher et al. (2013) find a positive relation between leverage and tax avoidance.
3. Profitability (ROA). Lanis & Richardson, (2012) and Minnick & Noga, (2010), documented that firms have more incentives to attract in firm tax avoidance to decline their tax encumbrance.
4. Audit Quality (AQ). Bae (2017) concluded that audit quality is positively related with tax avoidance.
5. Firm Age (CA). Company age is used to measure the effect of the company's length of operation on company performance (Indriani & Juniarti, 2020).
6. Firm Industry (FI). Cai & Qiao, (2009) concluded that firms in more competitive environments engage in more tax avoidance activities.

**Table 2**
**DEFINITION OF VARIABLES**

| Variable Type | Symbol | Proxy employed | Key reference |
|---|---|---|---|
| **Dependent Variable** | | | |
| Tax avoidance | ETR | the firm's ETR that refers to total tax expense divided by the pre-tax income | Gebhart, 2017; Edosa et al., 2019 Chen et al., 2010; Kraft, 2014; Purwantini, 2017; Sonia, 2018 |
| Independent Variables | | | |
| Foreign Ownership | FO | managerial ownership percentage is calculated by this formula: the percentage of shares held by managers divided by total share outstanding | Minnick and Noga (2010); Core & Larcker (2002) |
| Managerial Ownership | MO | foreign ownership percentage is calculated by this formula: the percentage of shares held by foreign investors divided by total share outstanding | Armstrong et al. (2015); Minnick & Noga (2010) |
| Control variables: | | | |
| Firm size | CS | is the natural log of total assets | Evangelos et al., 2020, Sunday et al., 2019; Lin et al., 2014; Richardson et al., 2013; Indriani & Juniarti, 2020 |
| Firm Profitability | FP | is the ratio of return on assets ratio | Sunday et al., 2019; Lanis & Richardson, 2013; Minnick & Noga, 2010 |
| Audit quality | AQ | is the auditing firm size, a dummy variable that takes the value 1 if the company is audited by one of the big 4 auditing firms and 0 otherwise | Gaaya et al. (2017); |

| | | | |
|---|---|---|---|
| Firm industry | FI | 1 = Real estates, 2 = Food, drinks and tobacco, 3= Building materials ,4= Basic Resources,5= communications, Media and Information Technology, 6= Transportation and freight services, 7= Textiles and durable goods ,8= Healthcare and medicine, 9= Industrial products and services and cars,and 10= Contracting and engineering construction and services | Armstrong et al. (2015); Cai & Qiao, (2009) |
| Firm Age | FA | It is the logarithm of the number of years since the firm has been listed on the Egypt Stock Exchange. | Amanda & Frida (2018); Salehi et al. (2020); Sunday et al., (2019) |
| Leverage | LEV | is the ratio of total long-term debts scaled by total assets | Evangelos et al., 2020; Sunday et al., 2019 |

## Regression Models

The multiple regression models used to examine the association between foreign ownership and managerial ownership and tax avoidance is represented as follows:

$$\mathbf{ETR = \beta 0 + \beta 1\ FOit + \beta 2\ MOit + \beta 3\ CSit + \beta 4\ FPit + \beta 5\ AQit + \beta 6\ FIit + \beta 7\ FAit + \beta 8\ LEVit + \varepsilon it}$$

where ETR, the effective tax rate of each company, measured by to total tax expense scaled the pre-tax income; FO: foreign ownership measured by the percentage of shares held by foreign investors; MO: managerial ownership measured by the percentage of shares held by firm management ; CS: firm size measured by the logarithm of total assets ; FP: firm profitability measured by the return of assets; AQ: audit quality measured by auditing firm size; FI: Firm industry; FA : firm age measured by the logarithm of the number of years since the firm has been listed on the Egypt Stock Exchange; LEV: leverage, measured by debt to equity ratio .

# EMPIRICAL RESULTS

## Descriptive Statistics

Table 3 presents the descriptive statistics for the dependent variable (ETR), independent variables (FO and MO) and control variables (CS, FP, AQ, FI, FA, LEV). We found that the mean values and Std. Deviation for ETR in our sample .348 and 1.22 respectively. Also, the mean values for foreign ownership and managerial ownership in our sample 10.4% and 10.5% respectively. While, the Std. Deviation for foreign ownership and managerial ownership in our sample 0.306 and 0.305 respectively.

**Table 3**
**DESCRIPTIVE STATISTICS OF VARIABLES (N = 345)**

| Variable | Mean | Std. Deviation | Minimum | Maximum |
|---|---|---|---|---|
| Dependent variable | | | | |
| ETR | 0.348 | 1.22 | 0.0001 | 1.202 |
| Independent variables | | | | |
| FO | 0.104 | 0.306 | 0 | 1 |

| | | | | |
|---|---|---|---|---|
| MO | 0.105 | 0.305 | 0 | 1 |
| CS | 5.51 | 1.049 | 1.8 | 7.6 |
| FP | 0.442 | 5.83 | 0.0001 | 9.78 |
| AQ | 0.313 | 0.464 | 0 | 1 |
| FI | 4.46 | 3.23 | 1 | 1.2 |
| FA | 1.96 | 9.38 | 1 | 6.2 |
| LEV | 1.44 | 3.9 | -4.15 | 4.17 |

## Correlation Results

We ran the variation inflation factor (VIF) test for multi-collinearity problems. Table 4 represents the linearity test of model variables. In summary, the VIF values among all the variables are less than two, and this indicates the lack of a multi-collinearity problems in the regression models (Neter et al., 1996).

**Table 4**
**THE LINEARITY TEST OF MODEL VARIABLES**

| | Collinearity statistics | |
|---|---|---|
| **Variable** | **Tolerance** | **VIF** |
| FO | 0.792 | 1.263 |
| FM | 0.799 | 1.251 |
| CS | 0.963 | 1.038 |
| FP | 0.969 | 1.032 |
| AQ | 0.953 | 1.049 |
| FI | 0.893 | 1.12 |
| FA | 0.724 | 1.382 |
| LEV | 0.847 | 1.18 |

Table 5 represents the Pearson correlation test, which was used to explore the relationship between tax avoidance strategies and ownership structures and foreign ownership, as well as the control variables. We find significantly positive correlations between ETR and MO, reflect that increased levels of ownership structures increased the probability of tax avoidance. Table 5 also represent negative correlations between ETR and FO, indicating that increased levels of foreign structures decreased the probability of tax avoidance. We also find we also find significant correlations between ETR and some of the control variables (CS, AQ and FI).

**Table 5**
**THE PEARSON CORRELATIONS TEST**

| Variable | | ETR | FO | MO | CS | FP | AQ | FI | FA | LEV |
|---|---|---|---|---|---|---|---|---|---|---|
| ETR | Pearson Correlation | 1 | -0.062 | .274** | .166** | -0.018 | .154** | -.124* | 0.023 | -0.008 |
| | Sig. (2-tailed) | | 0.255 | 0 | 0.002 | 0.764 | 0.005 | 0.023 | 0.68 | 0.89 |
| FO | Pearson Correlation | -0.062 | 1 | -.117* | .197** | -0.023 | -0.02 | -0.019 | -.372** | 0.078 |
| | Sig. (2-tailed) | 0.255 | | 0.033 | 0 | 0.698 | 0.71 | 0.733 | 0 | 0.153 |
| MO | Pearson Correlation | .274** | -.117* | 1 | -0.106 | -0.019 | -0.02 | -.230** | .180** | 0.07 |
| | Sig. (2-tailed) | 0 | 0.033 | | 0.052 | 0.747 | 0.71 | 0 | 0.001 | 0.202 |
| CS | Pearson Correlation | .166** | .197** | -0.106 | 1 | -0.091 | 0.014 | 0.041 | -.216** | 0.07 |
| | Sig. (2-tailed) | 0.002 | 0 | 0.052 | | 0.13 | 0.803 | 0.45 | 0 | 0.2 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| FP | Pearson Correlation | -0.018 | -0.023 | -0.019 | -0.091 | 1 | 0.09 | -0.008 | 0.018 | .129* |
| | Sig. (2-tailed) | 0.764 | 0.698 | 0.747 | 0.13 | | 0.133 | 0.888 | 0.769 | 0.031 |
| AQ | Pearson Correlation | .154** | -0.02 | -0.02 | 0.014 | 0.09 | 1 | -.137* | -0.077 | 0.098 |
| | Sig. (2-tailed) | 0.005 | 0.71 | 0.71 | 0.803 | 0.133 | | 0.012 | 0.159 | 0.074 |
| FI | Pearson Correlation | -.124* | -0.019 | -.230** | 0.041 | -0.008 | -.137* | 1 | -0.057 | -0.045 |
| | Sig. (2-tailed) | 0.023 | 0.733 | 0 | 0.45 | 0.888 | 0.012 | | 0.297 | 0.415 |
| FA | Pearson Correlation | 0.023 | -.372** | .180** | -.216** | 0.018 | -0.077 | -0.057 | 1 | -.115* |
| | Sig. (2-tailed) | 0.68 | 0 | 0.001 | 0 | 0.769 | 0.159 | 0.297 | | 0.036 |
| LEV | Pearson Correlation | -0.008 | 0.078 | 0.07 | 0.07 | .129* | 0.098 | -.045- | -.115* | 1 |
| | Sig. (2-tailed) | 0.89 | 0.153 | 0.202 | 0.2 | 0.031 | 0.074 | 0.415 | 0.036 | |
| Notice: - *, and ** indicate significance at the 0.10, and 0.05 levels, respectively. The p-values are one-tailed for the directional hypotheses and two-tailed otherwise. | | | | | | | | | | |

## Regression Results

In this study, we test if there is a significant relationship between managerial ownership and foreign ownership and tax avoidance in the Egyptian Stock Market. Table 6 affords the results of the regression analysis for the associations between tax avoidance strategies, managerial ownership, foreign ownership of the Egyptian registered companies. The results of research hypotheses are presented in Table 6. The outcomes show that the p-value calculated for F-statistic is less than 0.05, the significance of the whole model can be confirmed. We also can say that 15.9 percent of the changes in the dependent variable are explained by independent variables. Another interesting point is that because the amount of Durbin–Watson state is 1.899 (between 1.5 and 2.5), this provides strong evidence of the lack of serial autocorrelation in the residuals.

Table 6 reveals that ETR has a significant and positive relationship with FM at the 5% level, while it there no relationship between ETR and FO. Also, ETR has a significant and positive relationship with CS and AQ at the 5% level. ETR has a significant and negative relationship with LEV.

Furthermore, both FP and FI, and FA, show no relation with the tax avoidance strategy, namely, ETR.

These findings reveal that the current study supports the acceptance of the first proposition: tax avoidance is associated with managerial ownership, and reject of the second hypothesis: tax avoidance is associated with foreign ownership. In other words, a positive relation between ETR and managerial ownership (FM) leads us to accomplish that the greater the fraction of the managerial ownership, increase the likelihood of tax avoidance usage and contrariwise. But the tax avoidance was not associated with foreign ownership.

The results of the current study provide valued awareness into tax avoidance and ownership structure. Firstly, the results propose that a manager who holds a high amount of stocks in a Egyptian company inclines to involve in tax avoidance practices more frequently. This result is inconsistent with previous findings, which have shown that there is a negative relationship between managerial ownership and tax avoidance (Scholes et al. 2009; Minnick and Noga, 2010; Alkurdi, and Ghassan, 2020). Secondly, the current findings not support the notion that foreign-owned Egyptian firms deceased the tax avoidance. This finding is not consistent with prior studies, which have shown that there is a negative relationship between foreign ownership and tax avoidance (Huizinga & Nicodeme, 2006; Salihu et al., 2013).

**Table 6**
**THE RESULTS OF THE STUDY**

| Variable | Coefficient | t-statistic | p-value |
|---|---|---|---|
| Constant | -1.52 | -2.783 | 0.006 |
| FO | -0.209 | -0.827 | 0.409 |
| FM | 1.376 | 5.377 | 0.000 |
| CS | 0.327 | 4.29 | 0.000 |
| FP | 0.002 | 0.154 | 0.878 |
| AQ | 0.532 | 3.329 | 0.001 |
| FI | -0.015 | -0.652 | 0.515 |
| FA | 0.003 | 0.256 | 0.798 |
| LEV | -0.109 | -2.107 | 0.036 |
| **Model summary** | | | |
| Adjusted R Square | 0.159 | Durbin–Watson state | 1.899 |
| R Square | 0.183 | Sig. | 0.000 |
| R | 0.428 | | |
| Notes: Significant at 5% | | | |

## CONCLUSION

The consequences of this study provide evidence that directors with a higher total of portion ownership have a positive effect on the value of ETR. The current research has examined tax avoidance through the agency theory framework, with a focus on motivations produced by different ownership structures. This result supports the view that benefits of tax avoidance may exceed the costs (Shi et al., 2020; Armstrong et al., 2015).

This study is subject to two limitations. Firstly, it did not examine the influence of institutional ownership and ownership concentration and government ownership classes on tax avoidance strategies for firms listed Egyptian market stock. Future study might include investigate the relation between tax avoidance and ownership concentration and institutional ownership. Secondly, the current study did not used the Book-Tax Difference (BTD) as a tax avoidance measurement. Future study may examine these limitations with sample from the Gulf Collaboration Council region. Future studies may consider tax avoidance implications for a company’s performance or investigate the relation between company's investment efficiency and tax avoidance. This future research may offer new understandings and descriptions the causes and impact of tax avoidance for firms.

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