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ISSN: 2522-3372 (Online) • ISSN: 2522-3372 (Print)

# The effect of corporate income tax on financial performance: evidence from Palestine

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Abstract: The purpose of this study is to investigate the corporate income tax effect on the financial performance of Palestinian firms. As Palestinian firms exist in an unstable situation and political risk with a fluctuating economy. It is worth studying to what extent the performance of these firms is affected by the corporate income tax (CIT) imposed by the Palestinian authority. This study is using panel data from 20 listed non-financial Palestinian firms during the period from 2016 to 2020. The random-effects model is used to empirically determine the effect of corporate income tax on financial performance after controlling for the most comprehensive macroeconomic factors, which have not been studied in the Palestinian context yet. This paper reveals a significant negative relationship between CIT and a firm's performance. In contrast, the asset turnover ratio showed a significant positive relationship with financial performance. However, firm size is unrelated to financial performance, it shows up an insignificant relationship with the performance of Palestinian firms. This study proposes a further examination of the relationship between CIT and performance by extending empirical research on CIT performance determination using a different technique. This paper fulfills an identified need to study how an effective tax rate policy imposed in the Palestinian territory can sustain firms' performance.

**Keywords:** corporate income tax, effective tax rate, size, financial performance, Palestinian firms.

# أثر ضرببة دخل الشركات على الأداء المالى: أدلة من فلسطين

الدكتور / سالم محمد عبد العزيز سالم $^1$  ، أ. زبد ربحي حماد قطيط $^{*1}$  كلية الأعمال و الاقتصاد | جامعة فلسطين التقنية خضوري | فلسطين

المستخلص: هدفت هذه الدراسة الى تبيان أثر ضرببة الدخل على الأداء المالي للشركات الفلسطينية، مع الأخذ في الاعتبار عمل الشركات الفلسطينية في ظروف تتسم بعدم الاستقرار، كالسياسية والاقتصادية، التي تؤثر على أدائها المالي. وعليه فإن هذه الدراسة ضرورية لبيان أداء الشركات غير المالية المدرجة في بورصة فلسطين، حيث اعتمد الباحثان على البيانات المقطعية الزمنية (panel data) لعشرين شركة فلسطينية غير مالية، مدرجة في بورصة فلسطين، خلال الفترة من 2016 إلى 2020 م. استخدم الباحثان نموذج الأثار العشوائية لتحديد تأثير ضرببة الدخل على الأداء المالي. مع الاخذ بعين الاعتبار تأثير عوامل الاقتصاد الكلي، كمتغيرات ضابطة، والتي لم يتم استخدامها في الدراسات السابقة. أظهرت هذه الدراسة وجود علاقة عكسية بين زيادة الضرببة وبين الأداء المالي للشركات، وأثبتت الدراسة أن دوران الأصول يتفق طردياً مع الأداء المالي للشركات. وبينت الدراسة أن حجم الشركة لا يوثر على الأداء المالي. وأخيراً، تقترح هذه الدراسة مزيداً من الأبحاث التي تسلط الضوء على التأثير السلبي لضرببة الدخل على أداء الشركات المالي. والتوسع في الدراسات باستخدام تقنيات مختلفة، من أجل العمل على الغاء الضرائب التي من شأنها التأثير السلبي على أداء الشركات. وهذا بدوره يؤدي المستمرار الشركات بأعمالها والصمود خاصة انها في مناطق غير مستقرة سياسياً.

الكلمات المفتاحية: ضرببة الدخل على الشركات ، معدل الضرببة الفعلى ، الحجم ، الأداء المالى ، الشركات الفلسطينية.

**Received**: 10/01/2023

**Revised**: 12/01/2023

Accepted:

18/06/2023

**Published**: 30/10/2023

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Citation: Salem, S. M., & Qutait, Z. R. (2023). The effect of corporate income tax on financial performance: evidence from Palestine. *Journal of Economic, Administrative and Legal Sciences, 7*(10), 100 – 110. https://doi.org/10.26389/

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AJSRP.Q100123

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#### 1. INTRODUCTION

Along with the labor tax and value-added tax, corporate income tax (CIT) is a significant type of corporate tax. It is important to assess how effectively firms are decreasing CIT responsibility. However, the economic units and governments both have contradictory objectives. More specifically, governments are interested in collecting funds from different resources mainly from taxation, whereas companies are oriented toward financial performance by reducing taxes and duties. Therefore, the tax system is the interface between governments and economic entities in the process of improving financial performance (Pitulice, Stefanescu, Minzu, Popa, & Niculescu, 2016). Besides, the Agency Theory assumes that the owners' interests conflict with the managers' interests; instead of seeking the best possible return on their investment, managers seek the greatest possible benefit from the position they occupy, leaving the owners' goals behind (Santa, & Rezende (2016). Thus, the reduction of CIT liability would enhance firms' financial performance. Therefore, this study aims to investigate whether CIT influences the Palestinian company's financial performance and market value. Taking into account the political risk and unstable environment in the Palestinian context, this area is exposed to political risk and instability for quite a long time (Alalaya, & Al Khattab, 2015; Elfeituri, 2022).

An empirical study was conducted based on the sample of the selected Palestinian non-financial companies. The results of this study can be useful to many stakeholders, managers, and shareholders who are interested in the determinants of their company's financial performance and market value. Besides, this study presents the national tax authorities a piece of information about the effective CIT policy in Palestine, thus contributing to the existing literature by providing new empirical evidence on the impact of the CIT liability on firms' performance in unstable areas such as Palestine. Since 2015, the corporate income tax in Palestine has reached 15%, and this applies to all companies in Palestine, except for companies that monopolize a service or a commodity and hold a special privilege from the Palestinian state to engage in this commercial activity. These companies pay an income tax of 20%, an increase of 5% over the tax of ordinary companies. An increase of 5% contributes to an increase in the Palestinian state's income from income tax for companies with special privileges, given that these companies are the largest in Palestine and the most profitable, which is reflected positively on the state's public treasury and on the other hand increases the tax burden on these companies.

Therefore, the research questions addressed in this study are: Does CIT affect the ROA of non-financial firms in Palestine? What is the effect of the CIT on the ROE of the non-financial firms in Palestine? The rest of this study is structured as follows: Section 2 reviews the related literature on CIT and financial performance. Section 3 introduces the conceptual framework and measurements. Section 4 describes the research methodology. Section 5 presents data and empirical analyses. Section 6 presents the results and discussion, and finally, section 7 is the conclusion.

## 2. LITERATURE REVIEW

Previous research has shown the value of a firm's profitability and financial performance. However, few research projects have emphasized underdeveloped economies (Growe, DeBruine, Lee&Maldonado, 2014). Every financial and non-financial institution's primary goal is to please its shareholders, bank clients, and investors. Better financial results and high levels of profitability can be used to accomplish this. In this regard, a stronger business climate and a fair taxation structure can improve the company's financial success. More specifically, the return on assets (ROA) measures the ability to generate profits out of firms' assets. When ROA is high, the efficiency of asset utilization is high too, as the firm's assets have a direct effect on both income and expenditure, as well as profits. Hence, ROA is considered one of the most important profitability ratios (Growe *et al.*, 2014; Garcia & Guerreiro, 2016). Additionally, return on equity (ROE) is a popular metric that CEOs and investors use to assess how much profit can be generated from the capital of the right owners. Investors must calculate return on equity because it enables them to assess the advantages of their investments. This research is crucial for firms because it encourages investors to make investments. The ROE, which is a measure of income available to pay dividends to the company's owners (both ordinary and preferred shareholders) on the capital they invest, is the ratio of net income after taxes to equity. Naturally, the owner of the business will be in a better position the larger the return or revenue earned.

The ROE measures the profitability of one's own money, which is often known as the profitability of a company. This ratio is also influenced by the debt of large and small businesses; the greater the debt, the higher the share of this ratio will be (Purnamasari, 2015). However, it is not explicitly stated how capital structure and performance relate to one another. For instance, some studies have demonstrated a positive relationship between total debt to total assets ratio and performance, more specifically return on equity,

whereas long-term debt carries a negative impact (Abor, 2005). In another study, Andersen (2005) examined the relationship between capital structure and firm performance of 1323 companies across a variety of industries and concluded that capital structure and ROA are associated. Ebaid (2009) investigated further into effect of capital structure on the performance of Egyptian businesses in another study. The findings imply that ROA and total debt to total assets have a significant negative connection. However, there is no link between ROE and the total debt to total assets ratio. Further, Ayers, Jiang, and Laplante (2009) claim that compared to other firms, companies with big anomalous accruals have a significantly higher relative information content in their projected taxable income to book income. This might reveal the relationship between CIT and performance.

#### 2.1 Corporate income tax

# 2.1.1Effective tax rate

Multinational corporations' subsidiaries tend to have lower profits in countries with higher statutory CIT rates, whereby multinational corporations move their earnings to low-tax jurisdictions to reduce the amount of tax payable. According to Assidi *et al.* (2016), GAAP ETR has a negative influence on Tunisian companies' ROA. They also found that this influence is greater for publicly traded companies, indicating that listed companies have a higher chance of reducing their tax burden. In the Romanian context, Lazar (2011) indicates that when the difference between the statutory CIT rate and the present ETR is greater, listed businesses have a higher ROA. However, by utilizing ROE or profit margin instead of ROA, the analysis found no such link. According to Pitulice *et al.* (2016), ETR has a significant negative impact on net income and ROA in Romania due to the low statutory CIT rate. According to a different study by Al-Jafari and Al Samman (2015), ETR has little to no effect on the profit margin or ROA of listed businesses in Oman, and such finding contrasts with prior research findings. Furthermore, Christensen *et al.* (2021) explained how profitable businesses get low ETRs. Firms with the lowest ETRs are of interest to the business press, public interest groups, legislators, and academics. Nevertheless, they believe that little is known about this group of companies because most studies have examined variations in average ETRs. Thus, their study gives evidence implying that the majority of low ETR enterprises benefit from large net operating loss carryforwards rather than active tax preparation by adopting a research approach that specifically analyses low ETR firms. Vržina (2018) indicated in his study on 23 Serbian nonfinancial companies during the period 2013 — 2016 that variables such as firm size, debt-to-assets ratio, and asset turnover ratio are related to CIT and might have an effect on the firm's financial performance.

# 2.1.2Firm size

Previous studies on financial performance have found that size, operational efficiency, solvency, return on assets, and specialization are all drivers of a company's success (McKee, 2008). However, the findings on the possible impact of firm size on a cooperative's success are inconsistent (Barton, Schroeder, & Featherstone, 1993; McKee, 2008). The effect of size, as assessed by total assets, was significant for grain marketing and farm supply, but not as a determinant of profitability (Boyd et al., 2007; McKee, 2008). In their study, Vithessonthi, and Tongurai (2015) found that the magnitude of the effect of leverage on operating performance is non-monotonic and conditional on firm size, and added because to not having to simultaneously deleverage and liquidate their assets, around 75% of Thai companies appear to have survived the global financial crisis. Moreover, Pokharel et al. (2019) showed that efficiency and financial performance success were found to be positively affected by firm size. They also indicated that size was positively connected with financial performance, thereby implying that smaller cooperatives are more likely to face financial difficulties as a result of their size due to a lack of profit. In the context of Ghana, Gatsi, Gadzo, and Kportorgbi (2013) found in their study on the listed manufacturing firms in Ghana a strong negative association between corporate income tax and financial performance, but a significant positive relationship between firm size and financial performance was demonstrated. In another study, Hadid and Hamdan (2021) argue that the impact of firm size on cost systems is sophisticated and depends on the firm's age, and is mediated by product diversity rather than cost structure.

# 2.1.3Debt to assets ratio

The debt-to-total-assets ratio displays how much of a company's assets are owned by creditors (those who have lent their money) and how much is owned by shareholders. Along with the debt servicing ratio and the debt-to-equity ratio, it is one of three computations used to determine debt capacity. The debt capacity measures a company's ability to service existing debt as well as its

ability to raise cash from new debt if needed. Taking on debt could help the business whether a market slumps or seizes opportunities as they occur. More specifically, the debt-to-total-assets ratio is used to assess a company's ability to raise funds through additional debt. This assessment is achieved by comparing the ratio with other companies in the industry (Yahya & Hidayat, 2020). In another study, Aburub (2012) examined accounting and market measures of firm performance evaluation as well as four capital structure measures, namely short-term debt to total assets ratio (SDTA), long-term debt to total assets ratio (LDTA), total debt to total assets ratio (TDTA), and total debt to total equity ratio (TDTQ). According to his findings, capital structure has a positive effect on a company's performance evaluation metrics. Sucipto and Hasibuan (2020) indicate that the debt-to-assets ratio has a significant effect on tax avoidance as this variable represents CIT. Furthermore, Ištok and Kanderová (2019) indicate that debt per asset is the key indicator to measure tax aggression, the authors state that Slovak companies are more tax aggressive in using the debt channel as a technique for profit shifting, as it denotes the CIT which affects financial performance.

#### 2.1.4Asset turnover ratio

Fairfield (2001) specifies that the ability of a company to generate income from its assets is measured by asset turnover. However, the ability to control the expenditures needed to create those revenues is measured by profit margin. The profit margin and asset turnover both show the firm's asset usage. Parts of the firm's strategy are reflected in the firm's operating efficiency. As a result, he believes that disaggregating a firm's return will be useful, whereas asset turnover and profit margin will not provide information for forecasting the change in return on assets over the next year. In another study, Utami (2017) indicates in his study that the growth of total assets turnover has a substantial impact on the profit growth of companies from 2013 to 2016. It may be assumed that the company's asset turnover is quite effective in creating profits with total assets turnover, thereby having a favorable impact on profit growth. Total assets turnover is a comparison between total sales with total assets of a company where this ratio describes the speed of rotation of total assets in a certain period. Supriati, Kananto, and Kusriananda (2019) found that the assets turnover ATO has a positive and significant impact on the financial performance of the manufacturing companies listed on the Jakarta stock exchange over the period of 2011-2015. The better and more effective the management of the company's assets is, the higher the ATO ratio. The asset can spin faster and faster to generate profit, which affects the financial performance, and the higher the ATO ratio. Furthermore, Sembiring, Ardilla, and Siregar (2018) argue that the asset turnover ratio is significant in determining the high level of corporate taxable profitability. The company invests in fixed assets in the hope of recovering the funds invested in the assets.

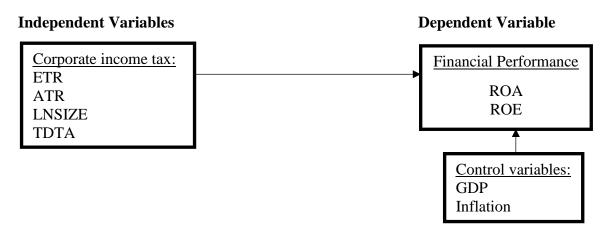
# 2.2 Control variables

In their analysis of Malaysian banks from 2004 to 2011, Jamal, Abdul Karim, and Hamidi (2012) discovered a substantial correlation between GDP and inflation rate, and firm performance. Similarly to this, Petria, Capraru, and Ihnatov (2015) contend that a company's profitability and the rate of inflation are related. Profitability could be impacted by this rising cost of funding. The yearly inflation rate (CPI) and profitability were also found to have a positive and significant association. Only the inflation rate has a meaningful correlation with a bank's profitability, according to Vong and Chan's 2009 analysis of Macao banks. As a result, we anticipate that the GDP and inflation rate will have an impact on the firm's performance.

# 3. CONCEPTUAL FRAMEWORK and MEASUREMENTS

The effect of corporate income tax on financial performance is examined in this study. The return on assets (ROA), which is calculated as net profit before taxes (EBIT) / total assets (EBIT /TA), and the return on equity (ROE), which is calculated as net profit after taxes/book value of equity (NPAT/EQ), both serve as indicators of the firm's financial performance. The conceptual framework of this study is explained in Figure 1. The measurements of the independent, dependent, and control variables in this study are shown in Table 1. These measurements of the independent variables that represent CIT are used by several scholars such as (Ištok, & Kanderová, 2019; Supriati, et al., 2019; Sucipto, & Hasibuan, 2020).

Figure 1: Conceptual Framework



## 3.1 Hypothesis

To examine the current gaps in the literature, our hypothesis has been established and mentioned. By the conclusion of this paper, the following eight hypotheses will either be proven accepted or rejected:

- H1: There is a significant relationship between ETR and ROA.
- H2: There is a significant relationship between ATR and ROA.
- H3: There is a significant relationship between LNSIZE and ROA.
- H4: There is a significant relationship between TDTA and ROA.
- H5: There is a significant relationship between ETR and ROE.
- H6: There is a significant relationship between ATR and ROE.
- H7: There is a significant relationship between LNSIZE and ROE.
- H8: There is a significant relationship between TDTA and ROE.

The research design and data collection strategies are discussed in more detail in the following section. To ensure a fair comprehension of what will follow, these methodologies are analyzed to support their selection for the current study. The model parameters, including independent and dependent variables, the procedure of sample selection, and the statistical data analysis techniques utilized in this study are also covered in the following section. Finally, the other tests such as VIF and Hausman test, are presented.

# 4. METHODOLOGY

Previous studies that have examined the effect of the CIT on the firm's performance set up a linear relationship between the performance of a company and the related income tax variables. They have used different methods to deal with panel data. The current study uses the multiple regression model to test the hypothesis of the study. The econometrics model of this study is shown as follows:

$$PERF_{i,t} = \alpha + \beta_{1}ETR_{i,t} + \beta_{2}ATR_{i,t} + \beta_{3}LNSIZE_{i,t} + \beta_{4}TDTA_{i,t} + \beta_{5}INFL_{t} + \beta_{6}GDP_{t} + \varepsilon_{i,t}$$

Where,  $PERF_{i,t}$  is the financial performance of the firm i in the time t.  $\mathcal{U}$  is the intercept. The explanatory variables are  $ETR_{i,t}$  is the effective tax rate,  $ATR_{i,t}$  is the asset turnover ratio,  $LNSIZE_{i,t}$  is the Firm size,  $TDTA_{i,t}$  is the debt to asset ratio,  $INFL_t$  is the inflation rate,  $GDP_t$  is the economic growth.  $\mathcal{E}_{i,t}$  is the error term.

# 4.1 Research design and data collection

The current study uses balanced data which includes twenty listed non-financial companies from Palestine. The data of this study cover the period from 2016 to 2020, taken from the company's annual reports and the World Bank. Six variables are selected for this empirical study. The selected variables are divided into two parts, out of which four variables are used as independent variables. The other two variables are the GDP and inflation rate used from the unstable macroeconomic environment in Palestine to control their effect on the firm's performance. The financial performance is the dependent variable in the current study measured by ROA and ROE. The ratio of net profit before taxes to total assets is known as the return on assets (ROA). The ratio of net profit after tax to equity book

value is known as the return on equity (ROE) (Kosmidou *et al.,* 2007; Athanasoglou, Brissimis & Delis, 2008; Dietrich & Wanzenried, 2011; Dietrich & Wanzenried, 2014; Growe *et al.,* 2014; Idawati & Wahyudi, 2015; Zhang, 2021). The measurements of the independent, dependent, and control variables are shown in detail in Table 1 (Vržina, 2018, Ištok, & Kanderová, 2019).

Table 1 Description of variables used in the regression models

Variable	Measurement	Notation		
Dependent Variable: Financial Performance	Return on assets (net profit before tax over total assets)	ROA		
	Return on equity (net profit after tax over total equity)	ROE		
Independent Variables:				
Effective Tax Rate	(Current CIT expense / Pre-tax income) x 100	ETR		
Asset Turnover ratio	Sales revenue / Total assets	ATR		
Firm size	Natural log of total bank assets (Ln of total assets)	LNSIZE		
Debt to asset ratio	Total debt / Total assets	TDTA		
Economic growth	Yearly change in GDP (in %)	GDP		
Inflation rate	Annual Inflation rate (CPI, in %)			
Source: Firm's annual reports and the world bank data				

Moreover, the current study uses the real gross domestic product growth rate (GDP) and consumer price index (CPI) as control variables since the GDP and the inflation rate might affect the performance of the non-financial firms in Palestine. The GDP is measured by the annual change in the GDP growth and the inflation rate indicates the changes in the consumer's price index (CPI) at a particular time for a specific country (Trujillo-Ponce, 2013; Salike & Ao, 2018).

However, the VIF test in Table 2 shows that the VIF mean is 1.34 less than 10, thus indicating that there is no multicollinearity problem in the data of this study (O'brien, 2007).

Table 2 The VIF test

Variable	VIF	1/VIF
ETR	1.49	0.671632
ATR	1.42	0.706170
LNSIZE	1.22	0.818157
TDTA	1.80	0.556697
GDP	1.08	0.930162
INF	1.05	0.956420
Mean VIF	1.34	

Source: researchers' analysis

Table 3 shows that the Hausman test result is insignificant. The null hypothesis in the Hausman test proposes that the estimators in both the fixed effect model and the random effect model do not differ substantially. If the null hypothesis is accepted, then the random effect model is more appropriate (Gujarati, 2009; Hair *et al.*, 2010). In other words, if the probability of chi2 in the Hausman test is lower than 0.05 (significant), the fixed effects model is preferred. Otherwise, the random-effects model is preferable, as in the case of this study.

Table 3 Hausman Test

	ROA			
	chi2(6) = 6.25			
Prob>chi2 = 0.3959				

Source: researchers' analysis

#### 5. DATA AND EMPIRICAL ANALYSIS

The sample in this study consists of 20 listed non-financial firms during the period from 2016 to 2020. The number of observations = 100, which is sufficiently large to be appropriate for the REM. The descriptive statistics of all the variables of the sample firms are shown in Table 3, which contains the mean, standard deviation, maximum and minimum values. It can be seen that the mean value of ROA is 5 percent and the standard deviation is 4.6 percent, with a minimum value of -0.009 and a maximum value of 0.218, thereby indicating a high variation in the firm's performance. The high variation of the ETR and ATR implies that there is an unstable stream of taxation and assets turnover during the period from 2016 to 2020 in Palestinian non-financial companies. The mean value for the Debt to asset ratio TDTA is 0.36, thus indicating high dependence on debts in financing assets in Palestinian companies.

Table 4 Descriptive statistics

Variable	Obs.	Mean	Std. Dev.	Min	Max
ROA	100	.0546164	.0467516	0094502	.2187933
ROE	100	.0830133	.0640356	0169548	.3250931
ETR	100	.1625393	.1771809	0459954	.5438445
ATR	100	.5302945	.4314408	.0384991	1.947528
LNSIZE	100	17.46999	1.465153	15.00263	20.74428
TDTA	100	.3614096	.1786168	.0376561	.7018215
GDP	100	.002834	.0658781	11457	.08865
INF	100	.00126	.00791	0074	.0158

Source: researchers' analysis

The TDTA ratio minimum value is 3.7 percent and the maximum value is 70.1 percent in the sample of the study, which indicates a high variation between the Palestinian companies in choosing the alternative financing option. The minimum value of 0.037 was for the company (ABRAJ) which depends on equity rather than debts.

Table 4 shows the correlation matrix between the variables included in the analysis and their significance level. Table 4 particularly demonstrates that there is a correlation between the variables that is less than 0.70. The correlation between the independent variables is not a problem until it approaches 0.70, claim Gujarati (2009) and Hair et al. (2010). The correlation coefficients are therefore thought to be within the acceptable range, according to this. The highest correlation between the independent variables is r = 0.4913 (between ATR and TDTA), so problems with multicollinearity are not expected. The dependent variables have a high degree of correlation, in contrast to the independent variables. Profitability metrics, ROA, and ROE have a strong association (r = 0.9369). In the taxation context, ETR has a moderate negative correlation with both profitability measures ROA and ROE (r = -0.46 & -0.42) respectively. This indicates an inverse normal correlation between ETR and profitability measures in Palestinian companies.

Table 5 Correlation metrics

Variable	ROA	ROE	ETR	ATR	LNSIZE	TDTA	INF	GDP
ROA	1							
ROE	0.9369	1						
ETR	-0.4670	-0.4228	1					
ATR	0.0122	0.2292	0.0161	1				
LNSIZE	-0.0038	0.1055	-0.2842	0.2193	1			
TDTA	-0.4106	-0.1419	0.4160	0.4913	0.1539	1		
INF	0.0597	0.0574	-0.0359	-0.0198	0.0153	0.0018	1	
GDP	0.1406	0.1087	-0.1204	0.0054	-0.0573	-0.1204	0.1996	1

Source: researchers' analysis

## 6. RESULTS AND DISCUSSION

The regression results for the performance of the non-financial firms in Palestine proxied by ROA and ROE are shown in Table 6. The regression model is conducted using the random effects technique. The  $R^2$  shown in Table 6 for ROA and ROE are 0.2532

and 0.1844, respectively. This indicates that the model explains 0.253 of a firm's performance in terms of the return on assets. According to Gujarati (2009), the minimum value of R<sup>2</sup> is 0.20 for the model that uses cross-sectional panel data and 0.60 if the model uses time-series data. Table 6 shows that ETR has a negative and significant relationship with both ROA and ROE at a 0.01 level. Besides, ATR has a positive significant relationship with ROE at a 0.05 level. This result is consistent with a study by Assidi *et al.* (2016), which showed a negative and significant association between the firm's economic performance and the effective tax rate (ETR). However, the size of the firm is insignificant as shown in Table 6 for both performance measurements (ROA and ROE). Furthermore, this study finds a significant negative relationship between the debt-to-asset ratio (TDTA) and firm performance. This result is consistent with the study of Vržina (2018) who found a statistically significant relationship at a 0.01 level between TDTA and firm performance. Thus, all hypotheses except H3 and H7 are accepted. Further, the control variables GDP and inflation have an insignificant effect on firms' performance. In contrast, the study of Petria *et al.* (2015) found that the inflation rate is linked to performance measured by ROA, whereby a higher inflation rate may increase financing costs which positively affects ROA.

Table 6 Regression Results Using Random Effects Techniques (ROA, ROE)

Variables	ROA	ROE
Independent variables		
ETR	0.006***	0.000***
	(0.0191756)	(0.0268833)
ATR	0.017**	0.005***
	(0.0194596)	(0.0280967)
LNSIZE	0.765	0.882
	(0.0061515)	(0.0090001)
TDTA	0.014**	0.733
	(0.0403984)	(0.0576434)
Control variables:		
INF	0.430	0.541
	(0.3023935)	(0.4235821)
GDP	0.643	0.807
	(0.0435105)	(0.0610852)
Constant	0.314	0.565
	(0.1054632)	(0.1542686)
Observations	100	100
No. of Firm	20	20
R-squared	0.2532	0.1844

ROA: Return on assets, ROE: Return on equity, ETR: Effective tax rate, ATR: Asset turnover ratio, LNSIZE: Firm size, TDTA: Debt to asset ratio, GDP: Gross domestic product, INF: Inflation rate. Standard errors are in brackets.

\*\*\* significant at 1% level, \*\* significant at 5% level, \* Significant at 10% level.

The H3 and H7 hypotheses are rejected since this analysis discovers a negligible correlation between company size and the performance measures ROA and ROE. The insignificant impact of firm size suggests that the size of a company does not have an impact on performance. This indicates no evidence to support the view that large companies experience economies of scale and scope. This result is similar to the result of Martins, Serra, and Stevenson (2019) who indicated that the firm size explains the corporate profitability in countries such as the US and Western Europe.

### 7. CONCLUSION

The random-effects model is applied in this study to identify the effect of CIT on the performance of the listed non-financial firms in Palestine. The company's annual reports for the years 2016 to 2020 provided the data used in this analysis. It may be said that the empirical results are almost in agreement with those of earlier investigations. All variables used in this research except the firm size

are significant to financial performance in terms of ROA. Thus, this study is proving that our results are interesting and important. The unique contribution of this study is that it is the first study conducted on the impact of CIT liability on the profitability of Palestinian companies taking into account the unstable situation in the area while controlling the effect of GDP and the inflation rate in the Palestinian fluctuating context. The following significant findings are made known after examining the impact of the key and most significant variables that represent CIT. First, the negative significant relationship between ETR and profitability indicates that profitability increases with a decrease in ETR. This finding is in line with several previous studies such as (Schwellnus & Arnold, 2008; Lazar, 2011; Assidi et al., 2016; Pitulice et al., 2016; Christensen et al., 2021). These studies described how profitable businesses get low ETRs. Second, the firm size has an insignificant relationship with profitability. This may be due to the instability in the Palestine area; therefore, the adverse effect on larger firms is more severe than on smaller ones.

#### 7.1 Implications of research

Consequently, it is recommended that the non-financial firms in Palestine should employ tax experts' services. This will help them in tax planning to reduce the net tax paid to increase their financial performance. Heitzman and Ogneva (2019), emphasized that high-tax planning firms earn higher returns. Furthermore, it was found that because of their regular audit, large businesses are less vulnerable to the risks associated with tax policy, which improves their performance. Although the average ETR in Palestine is almost high as it is the main income for the Palestinian authority. Particularly in non-advanced economies such as Palestine, governments in Palestine and the surrounding area could promote and encourage more competition and economic growth, and development by imposing encouraged lower tax rates. Non-financial firms in the region are recommended to diversify their income by avoiding taxable income to reduce tax liability and enhance their income.

#### 7.2 Limitation of research

The current study uses four independent variables along with the GDP and inflation rate as control variables due to the instability in economic growth and development in Palestine territories. Finally, Future research should look at how various ETRs (such as GAAP ETR and Cash ETR) affect financial performance. Future research should include more control variables as well as moderator and mediator variables including corporate governance indices.

### Acknowledgments

We would really like to express our gratitude to our university PTUK, for helping us publish this research. We appreciate this effort so much, as it is essential for improving academic staff as well as increasing the contribution and the rank of (PTUK).

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