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The Relationship Between Firm Size and Profitability "Evidence from the Commercial Banks in Iraq"

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Abstract:

This research is aimed to identify the impact of firm size on the profitability of commercial banks. To achieve this goal, a model was developed to measure the relationship between the dependent and independent variables based on the use of simple linear regression method. The secondary data was collected from the audited financial statements of the commercial banks listed on Iraqi stock exchange (ISX) between the years (2011-2014) and statistically analyzed. The dependent variable is (profitability) and measured by the rate of return on assets (ROA) and the independent variable is (firm size) and computed by the indicators of (natural logarithm of total sales (TS), natural logarithm of total assets (TA) and the number of employees (EMP). The results revealed that there is a positive and significant relationship between total assets, number of employees and return on assets. In contrast, a negative association noted between total sales and return on assets. Lastly, the study proposed that future studies should focus on investigating and comparing the impact of applying different sectors to find the relationship between firm size and profitability.

Keywords: Firm size, Profitability, Commercial banks, Return on assets, Total sales, Total assets, Number of employees

الملخص:

يهدف هذا البحث إلى التعرف على تأثير حجم الشركة على الربحية للمصاريف التجارية. و لتحقيق هذا الهدف ، تمت صياغة نموذج لقياس العلاقة بين المتغيرات التابعة والمستقلة بناءً على استخدام طرق الانحدار الخطي البسيطة. تم جمع البيانات الثانوية من القوائم المالية المدققة للمصاريف التجارية المدرجة في سوق الأوراق المالية العراقية (ISX) بين السنوات (2011-2014) وتحليلها إحصائياً. المتغير التابع هو (الربحية) المقاسة بمعدل العائد على الأصول (ROA) والمتغير المستقل هو (حجم الشركة) ويحسب بمؤشرات (اللوغاريتم الطبيعي لإجمالي المبيعات (TS) ، اللوغاريتم الطبيعي لإجمالي الأصول (TA) وعدد الموظفين (EMP) في المصاريف التجارية. ظهرت نتائج هذه الدراسة أن هناك علاقة إيجابية ومعنوية بين إجمالي الأصول وعدد الموظفين والعائد على الأصول. أيضا، هناك وجود ارتباط سلبي بين إجمالي المبيعات والعائد على الأصول. و أخيرًا، كما أوصت البحث، أن تركز الدراسات المستقبلية على التحقيق و المقارنة تأثير تطبيق القطاعات المختلفة لإيجاد العلاقة بين حجم الشركة والربحية.

الكلمات المفتاحية: حجم الشركة، الربحية، البنوك التجارية، العائد على الموجودات، إجمالي المبيعات، إجمالي الأصول، عدد الموظفين.

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پوختە:

ئامانجی ئەم توێژینەوەیە بریتیە لە دەستنیشانکردنی کاریگەری قەبارەی دامەزراوە بانکیەکان لە سەر قازانجی بانکە بازرگانییەکان. بۆ گەیشتن بەم ئامانجە، مۆدلێک داڕێژراوە بۆ پێوانەکردنی پەیوەندی نێوان گۆڕاوە سەربەخۆو ناسەربەخۆکان لەسەر بنەمای بەکارهێنانی شێوازی گەڕانەوە بۆ هێڵی سادەیی زانستی ئامار. داتاکانی ئەم توێژینەوەیە کۆکراوەتەوە لە داتای لاوەکی کە بریتیە لە لیستە داراییە ووردبینیکراوەکانی بانکە بازرگانیەکان کە لە لیستی بۆرسەی عێراقی (ISX) لە نێوان ساڵانی (٢٠١١-٢٠١٤) تۆمارکراون وە دواتر شیکردنەوەیان بۆ کراوە. گۆڕاوی لاوەکی یان ناسەربەخۆ بریتیە لە (قازانج بەخش) کە پێوانەکراوە بە ڕێژەی گەڕانەوە لە سەر هەبووەکان (ROA) وە گۆڕاوی سەربەخۆ بریتیە لە (قەبارەی کۆمپانیا) کە پێوانە کراوە بە (لۆگاریتمی سروشتی بۆ کۆی فرۆشتن (TS) و لۆگاریتمی سروشتی بۆ کۆی هەبووەکان (TA) وە هەروەها ژمارەی فەرمانبەرانی بانکە بازرگانیەکان (EMP). ئەنجامەکانی ئەم لێکۆڵینەوەیە دەریخست کە پەیوەندیەکی ئیجابی زۆر باش هەیە لە نێوان کۆی هەبووەکان، ژمارەی فەرمانبەران و گەڕانەوە لە سەر هەبووەکان. بە پێچەوانەشەوە، پەیوەندی نەرێنی دۆزراوەتەوە لە نێوان کۆی فرۆشتن و گەڕانەوە لە سەر هەبووەکان. لە کۆتایشدا توێژینەوەکە پێشنیاری ئەوە دەکات کە لێکۆڵینەوەکانی داهاتوو دەتوانن جەخت لە سەر شیکردنەوەو بەراوردکردنی کاریگەری کەرتە جیاوازەکانی تر بکەن بۆ دۆزینەوەی پەیوەندی لە نێوان قەبارەی کۆمپانیاو قازانج.

کلیلە ووشەکان: قەبارەی کۆمپانیا، قازانج، بانکە بازرگانیەکان، گەڕانەوە بۆ هەبووەکان، کۆی فرۆشتن، کۆی هەبووەکان، ژمارەی فەرمانبەران.

1. Introduction

Growth has historically been used as a measure of firm performance and it is considered to be a predictor of long-term competitive advantages and profitability (Fuertes-Callen and Cuellar-Fernández, 2019). The primary assumption in financial sector is that the short-term deviation in a company's profit from the market price must be quickly fixed by the impacts of actual or potential entries and other competitive pressures. Otherwise, firm cannot earn more profit for an extended period of time (Niresh and Velnampy, 2014 and Doğan, 2013).

In an institutional climate, profitability refers to the amount of profit that companies are able to make with restricted resources (Niresh and Velnampy, 2014). Organizations operate their assets in the vast majority to increase profits. The management planning and their efforts are focused on increasing profitability (Vijayakumar, 2010). Firms which are more profitable may potentially grow their operations frequently by applying their resources as they can access to them very easily (Niresh and Velnampy, 2014). On the other hand, the entire financing procedure is not simple as it appears, companies must be cautious when choosing financing options because it has a significant impact on the stock market. If they are focusing on debt financing only, they are putting their company at danger, and several investors may be turned off (Azhar and Ahmed, 2019).

Further, in comparison to small businesses, big businesses have stronger and more competitive power. They also have a chance to benefit more due to applying greater assets in their operations (Jonsson, 2007 and AlGhusin, 2015). Likewise, enormous firm can grab the opportunity to work in their fields continuously if they have high capital rates and this circumstance gives them the chance to grow and expand in more beneficial ways with little rivalry (Bayyurt, 2007 and Peng, 2016).
The size of a company refers to its capacity and capability in terms of the diversity and amount of production capability that can concurrently provide to their customers (Shaheen and Malik, 2012). It is extremely important in today's society as a result of the diversity of economic scale (Yadav et. al.,

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2022). In comparison to small businesses, large companies may produce products at significantly reduced costs (Fuertes-Callén and Cuellar-Fernández, 2019). Companies today want to expand their scales and maximize their profitability in order to get a competitive advantage over the competitors by reducing manufacturing costs and growing market share as well (John and Adebayo, 2013).

Although, the rate of growth is influenced by a variety of internal and external factors, including profitability and the country's political and economic circumstances, but still companies are motivated to grow their scale and scope of activities (Azhar and Ahmed, 2019). Hence, Growth that is not accompanied by profitability does not appear to be long-term and sustainable (Fuertes-Callen and Cuellar-Fernández, 2019).

2. Statement of the Problem

Firm size has been identified in the literature as a critical variable to explain the profitability of the business organization. Numerous studies have attempted to investigate the impact of firm size on profitability. In this study, the following research questions have been considered:

a. Is there any effect of firm size on profitability in commercial banks that listed on Iraqi stock exchange?
b. Is there any significant relationship between organizational size and profitability in commercial banks that listed on Iraqi stock exchange?

3. Research Objectives

The main objective of this study is to determine the strength of the relationship between company size and profitability of commercial banks that listed on Iraqi Stock Exchange (ISX). Furthermore, the specific research objectives are listed below:

a. To investigate the relationship between total assets (TA), total sales (TS) as a firm size indicators and profitability of commercial banks in Iraq.
b. To explore the relationship between the number of employees (EMP) as a measure of firm size and profitability of commercial banks in Iraq.

4. Importance of the Study

This study will be significant because there has not been much research on this topic in Iraq. Currently, in Iraqi market, the size of the companies and their profit are not stable. In order to know the relationship between firm size and profitability, it is important to focus on aspects and factors from a global viewpoint. Additionally, this paper will be important due to raising awareness and comprehension among the firms towards the topic.

5. Literature Review

The majority of the examinations evaluating the impact of firm size and profitability have found results with positive relationship between organizational size and profitability. The greater part of these examinations has utilized the resources and added a number of variables as firm size indicators. Jang and Park (2011) applied the data from (1978 to 2017) to estimate a positive relationship between firm size and profitability among US restaurant businesses. According to their results, higher

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profitability indicated more growth, according to the study, however, growth processes decreased benefits. This means that focusing only on growth targets would return risk for a long-term. Thus, restaurants were intended to accomplish high profit margins should pay attention to maintain their growth. Atems and Shand (2018) also found a similar connection between organizational size and profitability from the different sectors in the United States.

Ghafoorifard et al. (2014) developed a study to determine the relationship between firm size and organizational performance in companies that listed on Tehran Stock Exchange in Iran, and the finding was that there is a significant and positive connection between firm size and organizational performance. The findings of their study are compatible with (Ehi-Oshio et al., 2013; Akbas and Karaduman, 2012; Kipesha, 2013).

Velnampy and Nimalathashan (2010) enhanced an investigation to discover the impacts of the firm size on profitability of Ceylon Bank and Commercial Bank of Cyelon Ltd over the time of 10 years from (1997 to 2006). Optional information was utilized to quantify the factors which are identified to measure the firm's profitability. The pointers of profitability, for example, Net Profit Margin (NPM), Operating Benefit (OB), Return on Investment (ROI), Return on Equity (ROE), Return on Average Assets (RAA) and Return on Average Shareholders (RAS) were considered. The findings demonstrated that there was a statistically significant relationship between firm size and profitability in commercial banks.

Lee (2014) conducted a study in construction industry for the South Korean and the findings illustrated a positive and significant relationship from firms' growth to profitability. Çoban (2014) also examined 137 manufacturing companies in Turkey by applying data from (1997 to 2012). The results revealed a statistically significant relationship between growth and profits.

Akbas and Karaduman (2012) investigated the impact of company size on profitability in the industrial sector for the companies that listed on Islamabad Stock Exchange (ISE) in Pakistan between (2005 to 2011). The findings in this study indicated that profitability has been impacted positively by firm size.

Doan (2013) explored the correlation between firm size and profitability in Turkey from)2008 to 2011) and the study concluded that there was a positive relationship between firm size indicators such as (number of employees, total assets and total revenues) and return on equity as a measurement for profitability in all three approaches.

Banchuenvijit (2012) analyzed the parameters that influence the performance of Vietnamese firm. A strong association has been identified among total sales and firm's profitability, on the other hand, a negative relationship has been revealed between total assets and profitability. Further, the study also examined a statistically insignificant connection between profitability and number of employees.

Serrasqueiro and Nunes (2008) have also considered the association between firm size and profitability of every kind of imaginable scale firms working in Portugal between the years of (1999-2003). The results illustrated a positive and significant connection between firm size and profitability. Lee (2009) moreover, has conducted research to find the association between firm size and profitability for 7000 publicly-held firms in the United States between the years of (1987-2006)

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around 20 years. The outcomes of this examination have shown a positive association between firm size, profitability and return on assets (ROA). However, a negative and insignificant association have been found among return on equity (ROE) and total assets.

There are other investigations that have adverse outcomes, for example, (Becker-Blease et al., 2010) examined the relationship between firm size and profitability within 109 Standard Industrial Classification (SIC) four-digit U.S manufacturing industries. The findings demonstrated that the relationship between the number of employees as a firm size indicator and profitability is negative and insignificant.

In addition, Banchuenvijit (2012) investigated the impact of firm size on profitability. The study utilized total assets and total sales for the firm size measurement and return on assets, return on sales and return on equity were the indicators for profitability. Finally, the study found that the size of a company regarding to total assets has a negative and insignificant relationship with return on assets. Based on the above arguments, the study proposed the following hypothesis:

H0: There is a negative relationship between firm size and profitability of commercial banks listed on Iraqi Stock Exchange (ISX).

6. Research Methodology

6.1 Research Design and Data Collection

This investigation is aimed to examine the relationship between the size of the firm and profitability by applying a descriptive study technique that illustrates all of the study major components. The data in this paper is depend on the secondary data and was captured from the audited financial statement of three commercial banks listed on Iraqi Stock Exchange (ISX) for four years from (2011-2014). Due to the restriction to access the data for the recent years by the selected firms, the author obtained the data from the years of (2011-2014).

6.2 Variables

Table 1: Description of the Variables

Variables	Description
Dependent variables:	
Return on Assets (ROA)	Earnings before interest and tax (EBIT) divided by total assets and multiplied by 100
Independent variables:	
Firm size 1: Total sales (TS) Firm size 2: Total assets (TA) Firm size 3: Number of employees (EMP)	Logarithm of total sales Logarithm of total assets Collected from the salary list of the selected commercial banks

The independent variable of the investigation is firm size. Logarithm of total sales, total assets and number of employees have been utilized as firm size signal in this study. Return on assets is dependent

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variable that has been used as the measurement for the firm's profitability. Size markers have been tried by creating a model as opposed to being considered in a solitary model. This is to maintain a strategic distance from auto connection issues in this investigation. Based on the simple linear regression methods, the following regression model was developed to the variables that used in this paper. Many researchers, including (Khatab et al., 2011 and Saliha and Abdessatar, 2011) have already employed these approximations to compute the variables in their investigations.

$$\boldsymbol{ROA = \beta 0 + \beta 1TS + \beta 2TA + \beta 3EMP + \varepsilon}$$

Where:

TS= Logarithm of total sales
TA= Logarithm of total assets.
EMP= Number of employees.
$\beta1$ to $\beta3$= coefficients of concerned explanatory variable
ROA = Return on Assets.
$\beta0$= Constant.
ε= Error term.

7. Empirical Results and Discussion

7.1 Descriptive Statistics

Table 2: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Return On Assets (ROA)	4	.19	.57	.36	.125
Log Total Sales (LTS)	4	9.19	10.51	9.89	.592
Log Total Asset (LTA)	4	11.21	12.21	11.67	.395
Number of employees (EMP)	4	19.81	60.52	39.21	12.966
Valid N (listwise)	4				

Table (2) demonstrates the descriptive statistic results to concern the dependent and independent variables. The mean of commercial banks was evaluated from (2011-2014). Total assets have a mean log of 11.67, with a range of 11.21 to 12.21. The log of total sales has a mean of 9.89 with a range of 9.19 to 10.51. The number of employees has a mean of 39.21 with a range of 19.81 to 60.52. Return on assets has a mean of 0.36 with a range of 0.19 to 0.57. The standard deviation could be a degree of the spread of scores inside a set of information. Table (2) shows the standard deviation for return on assets is 0.125, number of employees is 12.9, logarithm total sales is 0.59 and logarithm total asset is 0.39. Thus, the standard deviation = ≥ 0, which means there is a positive relationship between firm size and profitability of commercial banks that listed in Iraqi stock exchange (ISX).

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7.2 Correlation Analysis

Table 3: Correlation Analysis

		ROA	Number of employees (EMP)	Log Total Sales (TS)	Log Total Asset (TA)
Return On Assets	Pearson Correlation	1	.701**	.417	.516
	Sig. (2-tailed)		.000	.304	.425
	N	4	4	4	4
Number of employees (EMP)	Pearson Correlation	.701**	1	.404	.455
	Sig. (2-tailed)	.000		.321	.320
	N	4	4	4	4
Log Total Sales (TS)	Pearson Correlation	.417	.404	1	-.621
	Sig. (2-tailed)	.304	.321		.100
	N	4	4	4	4
Log Total Asset (TA)	Pearson Correlation	.516	.455	-.621	1
	Sig. (2-tailed)	.425	.320	.100	
	N	4	4	4	4

** Correlation is significant at the 0.01 level (2 tailed).

The results from table (3) illustrated the correlation between dependent and independent variables and they are explored to see if there is any existing association among the variables. The results show that "return on assets (ROA)" positively linked with firm size and it is measured by "logarithm of total sales (TS), total assets (TA) and the number of employees (EMP)" with a rate of 0.701 or (70.1%), 0.417 or (41.7%) and 0.516 or (51.6%) respectively. This clearly noted that, the size of the commercial banks in Iraq has a positive relationship with the profitability. The findings also demonstrated a positive relationship between "number of employees (EMP) with total sales (TS) and total assets (TA)" that used them to measure a firm size with the rate of 0.404 or (40.4%) and 0.455 or (45.5%) sequentially. However, negative correlation can be seen between total sales and total assets with the rate of (-0.621).

Moreover, the pearson correlation coefficient between return on assets and number of employees is significant at 0.701, This indicates a strong relationship between the variables (dependents and independents) and also it revealed that both variables are moving in the same direction. Hence, these outcomes demonstrate a positive relationship between firm size and profitability in commercial banks listed on Iraqi stock exchange.

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7.3 Regression analysis

The study conducted a regression analysis to test the hypothesis of the investigation which anticipated the presence of negative connection between firm size and profitability. The outcomes are introduced in the below table, which is table (4).

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.875[a]	.761	.752	.0747

From table 4, R represents the numerous connection coefficient and is 0.875. The value of R2 is the coefficient of assurance which is the extent of change in the relevant variable that can be clarified by the autonomous factors. The result shows R square with the rate of 0.761, which infers that the free factors clarify by nearly 76.1% of the variability of profitability.

7.4 Analysis of Variance

In order to examine the influence of relationship between firm size and profitability of commercial banks in Iraq, the research applied an analysis of variance and the summary of the results are listed below:

Table 5: Analysis of variances
ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.525	4	.270	72.457	.000[b]
	Residual	.045	3	.001		
	Total	.570	7			

a. Dependent variable: Return on assets (ROA).
b. Predictors: (Constant), Log. of Total asset (TA) and Total sales (TS), and number of employees (EMP).

Table 5 demonstrates the analysis of variances (ANOVA). The mean square value is 0.270 and F value is 72.457. As a result, F is statistically significant since the P value is below 0.05. As a result, the study is rejected the null hypothesis and accepted the alternative hypothesis instead.

7.5 Model of Coefficients

Table (6) displays a significance level for the variables as well as the standardized and unstandardized coefficients:

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Table 6: Model of Coefficients

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	.625	.222		.601	.528
Log Total Sales (TS)	-.125	.070	-.052	-.374	.524
Log Total Asset (TA)	.341	.017	.077	.687	.251
Number of employees (EMP)	.010	.000	1.002	0.008	.000

a. Dependent Variable: Return on assets (ROA)

The objective of this paper is to examine the relationship between firm size and profitability in commercial banks in Iraq. The following regression equation was developed by the researcher:

$$\boldsymbol{ROA = 0.625 + -0.125 + 0.341 + 0.010 + \varepsilon}$$

Table (6) shows the measurement of firm size by applying logarithm of total sales, logarithm of total assets and number of employees. The result shows the regression model to demonstrate a significant relationship between firm size and profitability. To support this, a single unit of total assets and number of employees raise the value of the dependent variable “return on assets” by 0.341, and 0.010 respectively. On the other hand, logarithm of total sales has an adverse beta value of – 0.125, indicating that an increase in total sales by one unit would result in -12.5% decline in profitability. The findings also show that increasing the beta for number of employees to 1% and total assets to 34.1% has a positive impact on profitability. Thus, the study is rejected the null hypothesis and acknowledged the positive hypothesis. This basically means that the association between total assets, number of employees and return on assets are statistically significant. However, negative relationship can be seen between total sales and return on assets.

8. Conclusion and Recommendation:

The goal of this study is to find the relationship between firm size and profitability. The data in this paper is based on the secondary data and collected from the audited annual report of the commercial banks that listed on Iraqi Stock Exchange (ISX) between (2011 to 2014). Return on Assets (ROA) is used as a dependent variable to estimate the profitability. Logarithm of total assets, total sales and number of employees are applied as independent variables to compute the firm size. To measure the connection between firm size and profitability, a model was expanded depend on the applying regression simple linear method.

The empirical findings illustrated a positive association between number of employees (EMP), total sales (TS), total assets (TA) and “return on assets” (ROA) as a “profitability measurement” by 0.701, 0.417 and 0.516 respectively. The findings demonstrated standard deviation (SD) for return on assets, total sales, total assets and number of employees by 0.125, 0.592, 0.395 and 12.966 accordingly. Since they are = ≥ 0, a positive relationship can be noted among firm size and

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profitability. In addition, total assets and number of employees have a betas value of 0.341 and 0.010. This means that one unit of total assets and employees can increase a value of return on assets by 34.1% and 1% respectively. Also, the value of mean square is 0.270 and F is significant at 72.457 because P value is under 0.05. Therefore, the study is accepted alternative hypothesis and rejected the null hypothesis. This finding means that there is positive relationship between firm size and profitability of commercial banks listed on Iraqi Stock Exchange (ISX). This could be driven by the fact that large banks are more efficient than small banks because they can take benefits from the economic scale.

The study results are similar with the investigation of (Serrasqueiro and Nunes, 2008; Lee 2009; Stierwald, 2009; Karadeniz and İskenderoğlu, 2011; Saliha and Abdessatar, 2011; Khatab et al., 2011). Finally, the study also recommended that future research could explore into the influence of utilizing different sectors listed on Iraqi Stock Exchange (ISX) in order to find the association between company size and profitability. In addition, a comparison with firms from other developing countries with the similar financial condition to Iraq might be necessary to undertake.

9. Reference:

Akbas, H., & Karaduman, H. (2012). The effect of firm size on profitability: An empirical investigation on Turkish manufacturing companies. *European Journal of Economics, Finance and Administrative Sciences*, *55*, 21-27. https://doi.org/10.17261/Pressacademia.2017.762

AlGhusin, N. A. S. (2015). The Impact of Financial Leverage, Growth, and Size on Profitability of Jordanian Industrial Listed Companies. Research Journal of Finance and Accounting, *6*(16), 86–93.

Atems, B., & Shand, G. (2018). An empirical analysis of the relationship between entrepreneurship and income inequality. Small Business Economics, *51*, 905–922. https://doi.org/10.1007/s11187-017-9984-1

Azhar, K.A., & Ahmed, N. (2019). Relationship Between Firm Size and Profitability: Investigation from Textile Sector of Pakistan. *International Journal of Information, Business and Management*, *11*(2), 62-74.

Bayyurt, N. (2007). İşletmelerde Performans Değerlendirmenin Önemi ve Performans Göstergeleri Arasındaki İlişkiler. *Sosyal Siyaset Konferansları Dergisi*, Sayı, *53*, 577-592.

Banchuenvijit, W. (2012), Determinants of Firm Performance of Vietnam Listed Companies. *Academic and Business Research Institute*, SA12078.

Becker-Blease, J., Kaen, F., Etebari, A., & Baumann, H. (2010). Employees, firm size and profitability in U.S. manufacturing industries. *Investment Management and Financial Innovations*, *7*(2), 7-23.

Çoban, S. (2014). The interaction between firm growth and profitability: Evidence from Turkish (listed) manufacturing firms. *Bilgi Ekonomisi ve Yönetimi Dergisi*, *4*, 73–82.

DOI: http://dx.doi.org/10.25098/6.1.34
Distributed under the terms and conditions of the License 4.0 (CC BY-NC-ND 4.0)

Doğan, M. (3013). Does Firm Size Affect the Firm Profitability? Evidence from Turkey. *Research Journal of Finance and Accounting*, *4*(4), 53-59.

Ehi-Oshio, O.U., Adeyemi, A., & Enofe, A.O. (2013). Determinants of Corporate Profitability in Developing Economies. *European Journal of Business and Management*, *5*(16), 42-50.

Fuertes-Callén, Y., & Cuellar-Fernández, B. (2019). Inter-relationship between firm growth and profitability in a context of economic crisis. *Journal of Business Economics and Management*, *20*(1), 86-106. https://doi.org/10.3846/jbem.2019.6928

Ghafoorifard, M., Sheykh, B., Shakibaee, M., & Joshaghan, N.S. (2014). Assessing the relationship between firm size, age and financial performance in listed companies on Tehran Stock Exchange. *International Journal of Scientific Management and Development*, *2*(11), 631-635.

Jang, S., & Park, K. (2011). Inter-relationship between firm growth and profitability. *International Journal of Hospitality Management*, *30*, 1027–1035. https://doi.org/10.1016/j.ijhm.2011.03.009

John, A.O., & Adebayo, O. (2013). Effect of Firm Size on Profitability: Evidence from Nigerian Manufacturing Sector. *Prime Journal of Business Administration and Management (BAM)*, *3*(9), 1171-1175.

Jonsson, B. (2007). Does the size matter? The relationship between size and profitability of Icelandic firms. *Bifrost Journal of Social Science*, *1*, 43-55.

Karadeniz, E., & İskenderoğlu, Ö. (2011). İstanbul Menkul Kıymetler Borsası'nda İşlem Gören Turizm İşletmelerinin Aktif Kârlılığını Etkileyen Değişkenlerin Analizi. *Turizm Araştırmaları Dergisi*, *22*(1), 65-75.

Khatab, H., Masood, M., Zaman, K., Saleem, S., & Saeed, B. (2011). Corporate Governance and Firm Performance: A Case study of Karachi Stock Market. *International Journal of Trade, Economics and Finance*, *2*, 39-43. https://doi.org/10.7763/IJTEF.2011.V2.76

Kipesha, E.F., (2013). Impact of Size and Age on Firm Performance: Evidences from Microfinance Institutions in Tanzania. *Research Journal of Finance and Accounting*, *4*(5), 105-116.

Lee, J. (2009). Does Size Matter in Firm Performance? Evidence from US Public Firms. *International Journal of the Economics of Business*, *16* (2), 189-203. https://doi.org/10.1080/13571510902917400

Lee, S. (2014). The relationship between growth and profit: Evidence from firm-level panel data. *Structural Change and Economic Dynamics*, *28*, 1–11. https://doi.org/10.1016/j.strueco.2013.08.002

Niresh, J.A., & Velnampy, T. (2014). Firm Size and Profitability: A Study of Listed Manufacturing Firms in Sri Lanka. *International Journal of Business and Management*, *9*(4), 57-64. https://doi.org/10.5539/ijbm.v9n4p57

Peng, M. W. (2016). *Global Business* (4 edition). Mason, OH: South-Western College Pub.

Saliha, T., & Abdessatar, A. (2011). The Determinants of Financial Performance: An Empirical Test Using the Simultaneous Equations Method. *Economics and Finance Review*, *10*(1), 1-19.

DOI: http://dx.doi.org/10.25098/6.1.34

Distributed under the terms and conditions of the License 4.0 (CC BY-NC-ND 4.0)

Serrasqueiro, Z.S., & Nunes, P.M. (2008). Performance and Size: Empirical Evidence from Portuguese SMEs. *Small Business Economics*, *31*(2), 195-217. https://doi.org/10.1007/s11187-007-9092-8

Shaheen, S., & Malik, Q.A. (2012). The impact of capital intensity, size of firm and profitability on debt financing in textile industry in Pakistan. *Interdisciplinary Journal of Contemporary Research in Business*, *3*(10), 1061-1066.

Stierwald, A. (2009). Determinants of Firm Profitability – The Effect of Profitability and its Persistence. *Melbourne Institute of Applied Economic and Social Research*, The University of Melbourne.

Velnampy, T., & Nimalathasan, B. (2010). Firm Size on Profitability: A Comparative Study of Bank of Ceylon and Commercial Bank of Ceylon Ltd in Srilanka. *Global Journal of Management and Business Research*, *10*(2), 96-103.

Vijayakumar, A., & Tamizhselvan, P. (2010). Corporate Size and Profitability: An Empirical Analysis. *College Sadhana-Journal for Bloomers of Research*, *3*(1), 44–53.

Vinasithamby, S. (2018). Firm size influence on profitability of sri lankan diversified holdings firms. *International Journal of Advanced Research in Management and Social Sciences*, *7*(6), 34-44.

Yadav, I.S., Pahi, D., & Gangakhedkar, R. (2022). The nexus between firm size, growth and profitability: new panel data evidence from Asia–Pacific markets. *European Journal of Management and Business Economics*, *31*(1), 115-140. https://doi.org/10.1108/EJMBE-03-2021-0077

DOI: http://dx.doi.org/10.25098/6.1.34
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