

The effect of financial policy and capital assets on firm performance: Evidence from service companies listed on the Amman Stock Exchange

Mohammed Zakaria Soda^{a*}, Yazan Oroud^a and Mohammed Hassan Makhoulouf^a

^aAccounting Department, Faculty of Business, Isra University, Jordan

CHRONICLE

Article history:

Received: September 28, 2020

Received in revised format:

December 28 2020

Accepted: December 28, 2020

Available online:

January 15, 2021

Keywords:

Assets turnover

Capital assets

Dividend

Market value added

Return on equity

Jordan

ABSTRACT

This study aimed to demonstrate the impact of the financial policy, represented in debt policy and dividend policy, and the capital assets on the financial performance measured by return on equity, total assets turnover and market value added of 53 service companies listed on the Amman stock exchange during the period 2014–2018, using the panel data models. According to the results of testing performed on return on equities (ROE) model, total assets turnover (TAT) model, and market value added (MVA) model, it can be concluded that debt policy has a negative significant effect on market value added and total assets turnover, on the other hand, it has a negative insignificant effect on return on equity. The financial performance of the Jordanian service companies is influenced negatively by the debt ratio as a measure of financial policy; which means service companies are using heavy debt to finance the operating activities, which increases financial cost and the risk of financial failure. The study recommended that service companies can increase the volume of investment in fixed assets to generate high financial performance indicators.

© 2021 by the authors; licensee Growing Science, Canada

1. Introduction

Most service companies are characterised by a high volume of investments in fixed assets. The ratio of capital assets in some hotel companies, for example, may reach 90% of total assets, in addition to their role in generating revenues and cash flows. Therefore, the necessary information must be provided about them, and their roles and methods of control must be explained in a way that helps senior management make related decisions. On the other hand, the financial policy within any company contributes to increasing the market value and the share of owners through financing and investment decisions, as well as dividend distribution decisions (al-Najjar, 2017). Therefore, we can say that the financial policy is a set of financial instruments used by companies to influence their economic value, improving the satisfaction of shareholders and those who wish to invest in the Stock Exchange (Mahdi dehdar al-aedi & Abadi, 2019). The debt policy is one of the most important financial policies followed by a company in order to secure its financial resources through the trade-off between returns and risks. The increased risk resulting from the use of large debt negatively affects the value of the company's shares while increasing the expected returns due to the resulting leverage. Therefore, it is necessary to strike a balance between returns and risks to achieve the optimal financing structure and reach the highest value per share in the market (Abu Shmala et al., 2017). Anwar (2017) defines

* Corresponding author. Tel.: +962798143014

E-mail address: zakaria.soda@iu.edu.jo (M.Z. Soda)

debt as capital that comes from outside the company and temporarily works within the company and must be repaid in a timely manner. It is a very sensitive tool for changing the company's value. The higher the debt ratio, the higher the share price, but at a certain point, the increase in debt will reduce the value of the company because the interest earned from using debts is smaller than the costs incurred in obtaining the debt.

The dividend policy has received great attention from researchers in recent years and remains one of the most controversial issues in most companies. It is the earnings distributed to the company's shareholders announced by the board of directors. It is considered one of the most important factors that investors examine because, in their opinion, it expresses the company's performance and its value in the financial market (Adimasu, 2019). Al-Dhaher (2011) suggests that many companies focus their policies on the dividends, whereas other companies focus on the retained profits. This is due to the different positions of companies in terms of liquidity, maturity dates of debt and the restrictions imposed by banks, especially if the company obtained a long-term loan, which limits its freedom to distribute profits. The available investment opportunities, which can bring guaranteed profits to the company, may also limit the possibility of distributing profits.

Based on the above, and given the importance and magnitude of the investments in fixed assets and the financial policy followed by the company (represented in indebtedness and the distribution of profits) the researcher found that there is a need to study the impact of financial policy on financial performance, represented in return on equity, the rate of assets turnover and the market value added within a research sample of the service companies listed on the Amman Stock Exchange.

2. Literature Review and Hypotheses Development

The relationship between the size of the investment in fixed assets and the nature of the asset's structures of all types, activities and financial performances of companies have received wide attention in many previous studies. Ramli (2019) found a positive relationship between the asset structure and the financial performance of the company. The asset structure is the ratio of total tangible assets plus inventory to the total assets. The higher this percentage is, the lower the debt ratio, because tangible assets are easy to guarantee and will generate more productivity that contributes to the company's value. A study conducted by Deari and Dinca (2015) found that a low ratio of fixed assets to total assets leads to a higher rate of assets turnover in joint stock companies. In other words, there is a positive correlation between a high ratio of current assets and the rate of asset turnover.

Financing decisions in most companies are based on the trade-off between the cost of debt and the returns that can be achieved through the investment of the funds borrowed. The achievement of an ideal capital structure is based on making the right decisions in raising the financing, in addition to capitalising on the tax benefits of borrowing that result from deducting the commissions and interest of the loan before reaching the taxable profit (Akhtar et al., 2012). Therefore, the debt ratio determines the extent to which the debt is used as a source of financing for joint stock companies, which also reflects the company's ability to meet its long-term obligations. Latha and Rao (2017) found that any decrease in the debt ratio leads to a higher profitability rate through his study conducted on cargo carriers listed on the Bombay Stock Exchange. Utami and Darmawan (2019) believe that a low debt rate will increase share prices because the information issued about the debt ratio affects the decisions of investors to buy the company's shares, and a high debt ratio gives them a bad impression of the company's ability to pay its debts, which negatively affects the company's share prices in the market. A study by Abu Shmala (2017) showed that only the long-term loans variable affects return on assets within the capital structures of services sector companies on the Palestine Stock Exchange. The impact was negative, which means that increased financing with long-term loans reduces the rates of return on assets for these companies and vice versa, which is contrary to theories of financial leverage and indicates that a low level of long-term loans reduces the risks that are considered important indicators of poor company management. A study conducted by Abdul Jalil (2014) found a statistically significant adverse effect (at a statistical significance level of 1%) of the debt rate on the rate of return on equity in Jordanian public industrial companies. The regression analysis did not find a statistically significant impact at a moral level of 10%. A study by Zargoun et al. (2017) shows that, by studying the impact of taking out loans on financial performance and examining such an impact through the representation of the debt policy at leverage ratio. Financial performance is expressed via return on assets, return on equity, ROS and DCA. Then one must examine which of the foregoing indicators has been affected by debt policy. The study concluded that debt policy adversely affects the rate of return on assets, the rate of return on sales and the rate of business growth, whereas debt policy does not impact return on equity.

It is deemed one of the most important decisions made by the management through the trade-off between the distribution of profits and the retention of profits for reinvesting. Therefore, the process of dividend distribution is one of the most important financial decisions that affect shareholders directly and is thus reflected in stock share prices, as well as in the value of the company in general (Mashkur, 2019). The dividend policy is one of the most important essential decisions in service companies. It concerns the amount of profits to be paid to investors and the amount to be retained for the company's future needs for expansion and investment. Making the right dividend distribution decisions is important for both the company and its investors.

Accordingly, many researchers are interested in the dividend policy and corporate financial performance. Adimasu (2019) found a positive relationship between the dividend policy and the rate of return on assets as a measure of the profitability of insurance companies. Al-Sa'eed (2018) examined the impact of the equity and dividends distribution structure, as independent variables, on the performance of industrial companies listed on the Amman Stock Exchange and found a positive impact of the independent variables on the performance of the survey sample. Moreover, earnings per share and total assets are among the most significant indicators of the performance of Jordan's publicly traded industrial companies. The asset turnover and debt ratio present moderate predictive value for corporate performance. A study conducted by Al-Habashneh et al. (2015) found that dividends, volume of trading and return on equity affect stock prices on the Amman Stock Exchange. A study by al-Najjar (2017), which was applied to Palestinian publicly traded companies in the industrial sector, found that financial policies are measured by the ratio of debt to equity, and the dividends ratio positively and substantially affects the market value of publicly traded industrial companies listed on the Stock Exchange.

Gordon (1960) and Lintner (1962) developed the bird in the hand theory, which is based on the fact that future cash flows are not guaranteed. Thus, investors prefer to distribute profits rather than retain them. The higher the dividend, the more investors are attracted to high profit distribution companies. This positively affects the value of the company and raises the price of its shares in the market. On the other hand, the agency theory is one of the most important theories affecting profit distribution policy. The policy of dividend distribution may lead to a reduction in the value of excess cash flows and prevent their use by managers for their own interests. Thus, the process of distributing profits to shareholders reduces the agency problems between directors and shareholders and increases the value of the company (DeAngelo et al., 2006). ROE indicates the return achieved by the dinar invested in the capital of the company. A higher ROE indicates more efficient investment decisions and more efficient company management, as well as the company's success in increasing investment profitability (SayfiHasania, 2015; O'Hara et al., 2000). Total assets turnover (TAT) expresses the efficiency of assets in generating revenues and the extent to which the company can deal with competitive market conditions. Baker and Xuan (2016) suggest that with the use of the asset turnover rate, the company will be able to predict the growth of its sales over time and the extent to which the assets contribute to this growth compared to those of competing companies in the market. Market value added (MVA) is one of the most important indicators of corporate performance. It reflects management's ability to create added value for shareholders and serves as a means to encourage financiers to invest their money in the company. Utami and Darmawan (2019) found a positive relationship between added market value and stock prices. The higher the added market value, the more successful the company's management, and this can create value for shareholders. Ba Aziz (2018) found that added market value is one of the most important indicators used in assessing the financial performance of banks. The more positive the added market value is, the more efficiently the bank can increase its administrative and operational performance, manage its resources and maximise shareholder wealth. Ibn Malik (2011) found many factors affecting the added market value, such as the revenue growth rate, the net operating profit and invested capital. For the added market value to be positive, the growth rates must exceed the cost of invested capital, in addition to the productivity of the invested dinar. The higher the productivity in the stability or decrease of the invested capital, the higher the added market value, especially when the cost of capital is low or stable. Therefore, the added market value is calculated by taking the difference between the market value of the company's shares and the book value of the equity (Ross, 1973). Based on the foregoing studies and theories, the hypotheses can be formulated as follows:

H_{01} : *Financial policy and capital assets do not impact the financial performance of service companies listed on Amman stock exchange.*

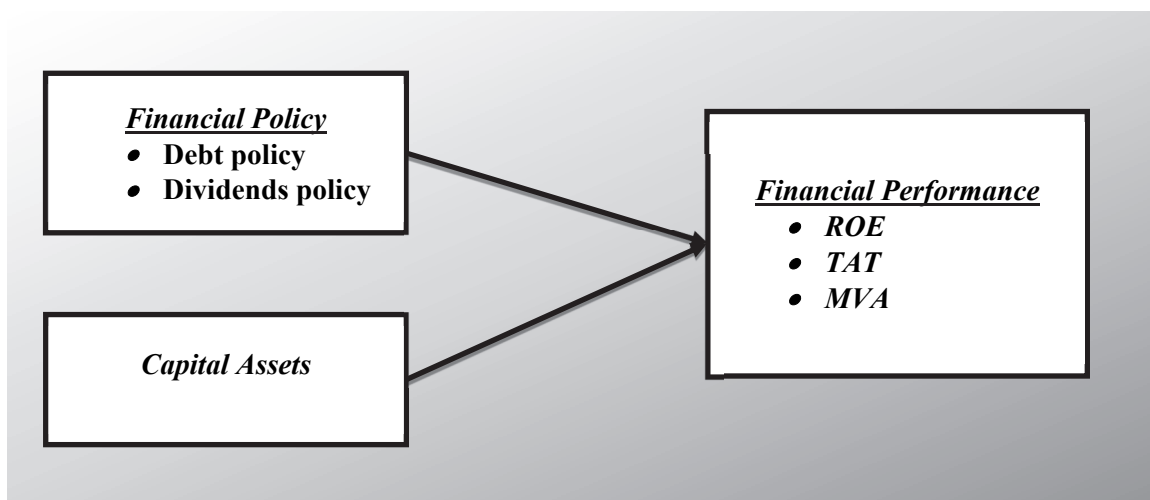


Fig. 1. Research framework

3. Methodology

This study is based on three empirical models. The first one is presented in equation one to examine the impact of financial policy and capital assets on the financial performance measured by return on equity, the second model is examine the impact of financial policy and capital assets on the financial performance measured by total assets turnover presented in equation two; and the final model is presented in equation three to examine the impact of financial policy and capital assets on the financial performance measured by market value added:

$$ROE_{it} = \alpha + \beta_1 DR_{it} + \beta_2 D_{it} + \beta_3 CA_{it} + \varepsilon_i \quad (1)$$

$$TAT_{it} = \alpha + \beta_1 DR_{it} + \beta_2 D_{it} + \beta_3 CA_{it} + \varepsilon_i \quad (2)$$

$$MVA_{it} = \alpha + \beta_1 DR_{it} + \beta_2 D_{it} + \beta_3 CA_{it} + \varepsilon_i \quad (3)$$

where ROE (Return on Equity), TAT (Total Assets Turnover), MVA (Market Value Added), DR (Debt Policy), D (Dividends Policy), CA (Capital Assets), β 's are estimated coefficients, and ε is the estimate error term for each firm (i) and each year (t). The measurements of variables are represented in Table 1

Table 1

Variable Measurements

Factors	Measurements
Independent Variables	
Debit Policy (<i>DR</i>)	(total liabilities /total assets) × 100%
Dividends policy (<i>D</i>)	(Cash Dividends/ Net Income Pertains to Shareholders) *100%
Capital Assets (<i>CA</i>)	(Total fixed asset ÷ total assets) ×100%
Dependent Variables – Financial Performance	
Returns on Equity (<i>ROE</i>)	net profit after taxes ÷ value of the equities
Total assets turnover (<i>TAT</i>)	Operating Revenues ÷ total assets
Market value added (<i>MVA</i>)	Market value per share (-) Book Value Per Share

The study population consists of public shareholding companies listed on the Amman Stock Exchange until the end of 2018 according to the published Amman Stock Exchange list. The researcher selected the study sample from service companies that published their financial reports in the period between 2014 and 2018. There are 53 companies. However, it has been confirmed that the companies' data were published and audited throughout the study period and listed on the ASE in accordance with the following distribution shown in Table 2:

Table 2

The Distribution of Study Sample Companies

Sector	Number of Companies	Percent
Commercial services	11	20.8%
Education services	6	11.3%
Health care services	4	7.5%
Hotels and tourism	11	20.8%
Information	1	1.9%
Technology and communications	2	3.8%
Transport	12	22.6%
Services and energy	6	11.3%
Total	53	100%

4. Results Discussion

This section presents the data analysis techniques and shows the regression analysis for each model used in this research and gives the statistical interpretations of the results of each hypothesis after testing the impact of independent variables on dependent variables. The results from using the descriptive statistics to analyse the characteristics of the pooled sample for the regression variables are presented in this section. The financial performance as a dependent variable was measured by return on equity (ROE), market value added (MVA) and total assets turnover (TAT). The financial policy was measured by the debt ratio (DR) and dividends policy (D), and the second independent variable is capital assets (CA). Table 3 presents the descriptive statistics of the secondary data collected for the variables. It summarises the mean, minimum, maximum and the standard deviation from the regression's observations. Panel data are categorised into balanced and unbalanced data. Baltagi (2008) and Greene (2008) state that data can be classified as balanced panel data if "the individuals are observed over the entire sample period." This assumption means that the number of years is frequent and constant for all of the cross-sectional data. Therefore, the balanced data do not include missing data (i.e., the balanced data are "complete data"), whereas the unbalanced data include

some missing data (i.e., they are “incomplete data”). This study uses balanced panel data to examine the relationships among the study variables. All the data were complete for each firm in each year.

Table 3
Variables Descriptive

Variable	Mean	Min	Max	Std. Dev
ROE	0.208	-0.977	0.970	0.412
TAT	0.506	0.000	3.490	0.502
MVA	0.880	-2.470	25.40	2.551
DR	0.442	0.104	0.983	0.250
D	0.303	0.000	0.999	0.361
CA	0.443	0.000	0.974	0.317

Where ROE, Return on Equity; TAT, Total Assets Turnover; MVA, Market Value Added; DR, Debt Policy; D, Dividends Policy; CA, Capital Assets.

Three different models (i.e., a pooled ordinary least square model (POLS), fixed effect regression model (FEM), and random effects regression model (REM)) can be used in the panel data analysis depending on the nature of the data. The control of the unexpected effect of unknown factors within an individual is the main function of the FEM to avoid a biased situation in outcome variables. The FEM undertakes that the error term of an entity is not correlated with the constant (that reflects the individual characteristics) but is correlated with the predictor variables. Thus, no correlation exists between the time-invariant characteristics of an individual and other individual characteristics; that is, “the individual effects are constant.” The FE is mainly determined by using binary (dummy) variables (Greene, 2008; Dougherty, 2007). Following Gujarati and Porter (2009) the test of Hausman has been assumed in this study to compare the FEM and the REM and to determine which is suitable for the study. In addition, the B-P Lagrange multiplier test has been implemented in this study to detect the existence of the RE (i.e., to decide whether random or POLS is appropriate), and the F-test has been used to determine which model is appropriate for the study (fixed or pooled OLS).

Table 4
Appropriate Models (Hausman Test, F-test & L.M test)

Models	Hausman Test (Chi-Sq. Statistic)	Decision	F-test /L.M test (Chi-Sq. Statistic)	Decision
ROE	12.16 ***	Fixed Effect	4.30	Fixed Effect
TAT	6.89	Random Effect	2.45***	Random Effect
MVA	14.54 ***	Fixed Effect	5.36	Fixed Effect

Diagnostic checks become crucial in analysing the panel data to verify the robustness level of individuals. Characteristic checks are practical to determine whether the research data suffer from any econometric problems. Using the panel data method assumptions, the diagnostic checks used in this study included the multicollinearity, heteroscedasticity and serial correlation tests (Baltagi, 2008; Gujarati & Porter, 2009; Baltagi, Jung, & Song, 2010). The study used the Pearson correlation matrix as the first indicator to check for the multicollinearity problem, the second indicator used are the variance inflation factor (VIF), and the inverse VIF, which is called tolerance (TOL, 1/VIF). Table 5 presents the Pearson correlation coefficients of the study variables. All results are less than 0.80, thereby implying that the regression models of this study do not suffer from the multicollinearity problem.

Table 5
Pearson Correlation Matrix

Variables	ROE	TAT	MVA	CA	DR	D
ROE	1.000					
TAT	0.155	1.000				
MVA	0.097	0.261	1.000			
CA	0.096	0.022	-0.050	1.000		
DR	0.039	0.306	0.239	-0.216	1.000	
D	0.419	0.255	0.284	0.070	0.067	1.000

Table 6 shows the VIF and TOL values for all variables of the regression models applied in this study. The results prove that the multicollinearity problem does not exist in any of the study models because the VIF value for all variables is less than 10, and the TOL value for all variables is more than 10%.

Table 6

Testing of Multicollinearity (VIF & Tolerance)

Variables	VIF	1/VIF
ROE	1.32	0.757
TAT	1.17	0.854
MVA	1.18	0.845
DR	1.34	0.744
D	1.16	0.865
CA	1.12	0.891
Mean	1.72	0.581

Table 7 shows that the null hypothesis (H_0 : no heteroscedasticity problem exists in the study data) is rejected, given that the modified Wald statistic test records a significant result at 0.01 for all models.

Table 7

Heteroscedasticity problem test

Models	Modified Wald Test (Chi-Sq. Value)
ROE	832.76***
TAT	543.47***
MVA	462.10***

The normality tests are unnecessary under this analysis type for panel data because it is classified as a distribution-free technique (Henderson, Carroll, & Li, 2008). Table 8 lists the robust results of the fixed effects regression for the ROE model by using the correcting regression with the Driscoll-Kraay standard errors method. Results indicate that the model is fit at a significant level of the F-statistic (29.20***). Furthermore, the independent variables in this model explain 0.3512 (overall $R^2 = 17.85\%$) of the variations in the ROE. The consistent term ($_Cons$) of this model is positive and significant at a p-value < 0.05 . The results of the ROE model reveal that the capital assets (CA) was the highest in terms of the interpretation of the model with 53% at a significance level of 1%. The β value of the dividends reached 16% at the statistical significance level of 1%. In turn, there was no impact of the debt ratio on the return on equity, and the value of β was negative and negligible.

Table 8

The Regression Results of the ROE (Fixed Effect)

Variables	$ROE_{it} = \alpha + \beta_1 DR_{it} + \beta_2 D_{it} + \beta_3 CA_{it} + (\varepsilon_{it} + v_{it})$		
	Coefficients	(t-static)	P>Z
DR	-0.0243	-0.50	0.622
D	0.164	7.55	0.000***
CA	0.526	3.11	0.003***
Con-	-0.085	-1.46	0.150
R-sq overall	0.1785		
(F-value)	29.20***		

*, **, *** = p-value $< .10, .05, .01$

Table 9 lists the robust results of the fixed effect regression MVA model by using the correcting regression with the Driscoll-Kraay standard errors method. The results indicate that the model is fit at a significant level of the F-statistic (245.99***). Furthermore, the independent variables in this model explain 0.3512 (overall $R^2 = 14.79\%$) of the variations in the MVA. The consistent term ($_Cons$) of this model is positive and significant at a p-value < 0.01 . The results of the model shown that the value of β had an impact on the financial policy measurement; its values were 2.192 to 1.919 for the debt ratio and the dividend, respectively at a statistical significance level of 1%. There was no significant impact of capital assets.

Table 9

The Regression Results of the MVA (Fixed Effect)

Variables	$MVA_{it} = \alpha + \beta_1 DR_{it} + \beta_2 D_{it} + \beta_3 ATA_{it} + (\varepsilon_{it} + v_{it})$		
	Coefficients	(t-static)	P>Z
DR	-2.192	-3.62	0.000***
D	1.919	4.68	0.000***
CA	-0.201	-0.42	0.673
Con-	-0.802	3.62	0.001***
R-sq overall	0.3479		
(F-value)	245.99***		

*, **, *** = p-value $< .10, .05, .01$

Table 10 lists the robust results of the random effects regression TAT model by using the correcting regression with the Driscoll-Kraay standard errors method. The results indicate that the model is fit at a significant level of the F-statistic (5.65***). Furthermore, the independent variables in this model explain 0.3512 (overall R2 = 26.09%) of the variations in the TAT. The consistent term (_Cons) of this model is positive and significant at a p-value < 0.01. The results reveal that all variables had significant impact at a level of 1%. The highest β value was for the debt ratio, at -0.614, followed by dividends at the value of 0.318.

Table 10

The Regression Results of the TAT (Random Effect)

Variables	$TAT_{it} = \alpha + \beta_1 DR_{it} + \beta_2 D_{it} + \beta_3 CA_{it} + (\varepsilon_i + \nu_{it})$		
	Coefficients	(t-static)	P>Z
DR	-0.614	-23.72	0.000***
D	0.318	12.07	0.000**
CA	0.112	10.84	0.000***
Con-	0.088	2.51	0.015**
R-sq overall	0.2609		
(F-value)	5.65***		

*, **, *** = p-value < .10, .05, .01

Table 11 shows the impact of the study variables for each of the previous three models.

Table 11

Summary of the Results of the Study Models

Variables	ROE Model		MVA Model		TAT Model	
	Result	Direction	Result	direction	Result	direction
DR	Insignificant	(-)	Significant	(-)	Significant	(-)
D	Significant	+	Significant	+	Significant	+
CA	Significant	+	Insignificant	+	Significant	+

5. Conclusion

The study has investigated the impact of financial policy and capital assets on the service company's financial performance which is measured by return on equity, total assets turnover and market value added. The finding results support the view of agency theory and bird on hand theory, also complement the literature review related to our study, such as (Adimasu, 2019; Als'eed, 2018; Ramli, 2019; Deari & Dinca, 2015; Latha & Rao, S2017; Utami & Darmawan, 2019; Abu Shmala, 2017). According to the results of testing that has been done on the ROE model, TAT model, and MVA model can be concluded that debt policy has a negative significant effect on market value added and total assets turnover, on the other hand, it has a negative insignificant effect on return on equity. The financial performance of the Jordanian service companies is influenced negatively by the debt ratio as a measure of financial policy; that means service companies are using heavy debt to finance the operating activities, which increases financial cost and the risk of financial failure. Dividends policy has a positive significant effect on all financial performance suggested measurement, the results suggested that companies that pay dividend to their equity shareholders show increase in financial performance and vice versa. Most Jordanian shareholders prefer to invest in service company that pay dividend promptly, they are likely to react positively to companies that are either making increase dividend and this provides evidence in support of Bird-in-hand theory, furthermore, the capital assets have a positive significant effect on return on equity and total assets turnover, but it has a positive insignificant effect on the market value added. The findings of this study provide serious financial insights and policy suggestions to stakeholders. The combination of financial policy and capital assets is a critical issue that must be seriously considered in the managers of the company and investors. Management of companies should attempt to put in place strong financial policy for their companies, they should also increase the volume of investment in fixed assets, thereby generating high financial performance indicators that will encourage prospective investors and enhance the market value added for listed service companies on Amman stock exchange.

Acknowledgement

The authors are grateful to Isra University, Amman, Jordan, for the financial support granted to this research project.

References

- Al-Najjar, J. H. (2017). The impact of investment in intangible assets, financial performance and fiscal policy on the market value of public shareholding companies listed on the Amman Stock Exchange. *Jordan Journal of Business Administration*, 13(3), 372.
- Al-Sa'eed, M. T. A. A. (2018). The impact of ownership structure and dividends on firm's performance: evidence from manufacturing companies listed on the Amman stock exchange. *Australasian Accounting, Business and Finance Journal*, 12(3), 107-126.

- Abu Shmala, S. N., Al-Khodari, Z.A.K., & Al-Sha'er, O. (2017). The impact of the debt structure on the financial performance. Some evidence from the companies listed on Palestine Stock Exchange. *Al-Quds Open University Journal for Administrative and Economic Researches*, 2(8), 251.
- Abdul-Jalil, T. (2014). The impact of the capital structure on the performance of Jordanian public shareholding industrial companies. *The Jordanian Journal of Business Administration*, 10(3), 390.
- Anwar, S. (2019). The influence of ownership structure, asset structure, and earning volatility on debt policy in Indonesia (Study in Pharmaceutical Companies in Indonesia Stock Exchange). *Journal of Accounting and Strategic Finance*, 1, 93-106.
- Adimasu, N.A. (2019). Dividend policy and firm's profitability: Evidence from Ethiopian private insurance companies. *Journal of Finance and Accounting*, 7(4), 116-121.
- Al-Habashneh, F., Mohammad Shahatit, J. A., & Al-Ammarin, Z. (2015). Factors affecting the ASE market price during the period 1984-2011. *Journal of University Studies*, 42(2), 461.
- Akhtar, S., Javed, B., Maryam, A., & Sadia, H. (2012). Relationship between financial leverage and financial performance: Evidence from fuel & energy sector of Pakistan. *European Journal of Business and Management*, 4(11), 7-17.
- Ba Aziz, S. (2018). The use of traditional and modern financial indicators in assessing the financial performance of commercial banks, Master Thesis, Arabi bin Muhaidi University, p. 55.
- Baker, M., & Xuan, Y. (2016). Under new management: Equity issues and the attribution of past returns. *Journal of Financial Economics*, 121(1), 66-78.
- Baltagi, B. (2008). *Econometric analysis of panel data*. John Wiley & Sons.
- Baltagi, B. H., Jung, B. C., & Song, S. H. (2010). Testing for heteroskedasticity and serial correlation in a random effects panel data model. *Journal of Econometrics*, 154(2), 122-124.
- Bin Malik, A. (2011), the modern approach of basic financial analysis in the performance evaluation - a case study of the Saudi Cement Company, a note to obtain a master's degree in management sciences, University of Mentouri Constantine, p. 103.
- DeAngelo, H., DeAngelo, L., & Stulz, R. M. (2006). Dividend policy and the earned/contributed capital mix: a test of the life-cycle theory. *Journal of Financial Economics*, 81(2), 227-254.
- Deari, F., & Dinca, G. (2015). Financial performances of Romanian wood industry companies. Bulletin of the Transilvania University of Brasov. *Economic Sciences. Series V*, 8(1), 147.
- Dougherty, C. (2007). *Introduction to econometrics*. Oxford: Oxford University Press.
- Greene, W. H. (2008). *Econometric analysis* (6th ed.). New Jersey: Prentice Hall.
- Gujarati, D. N., & Porter, D. (2009). *Basic econometrics* (5th ed.). New York: Mc Graw-Hill International.
- Henderson, D. J., Carroll, R. J., & Li, Q. (2008). Nonparametric estimation and testing of fixed effects panel data models. *Journal of Econometrics*, 144(1), 257-275.
- Latha, M., & Rao, S. N. (2017). Determinants of profitability: Evidence from listed companies in the BSE-FMCG. *International Journal of Economic Perspectives*, 11(3), 1264-1272.
- Mahdi dehdar al-aedi, A., & Abadi, M. K. N. (2019). The impact of financial policy and financial analysis in the banking credit decision An Analytical Study of Rafidain and Rasheed Banks (Model). *Al Kut Journal of Economics Administrative Sciences*, 31, 279-306.
- Mashkour, S. J., Sadeq, & Salam, A.A. (2019). The relationship between the dividend policy and the market value of the stock and their impact on trading volume - a study in a sample of banks registered in the Iraqi market for securities. *Journal of Dinars*, 15, 377.
- O'Hara, H. T., Lazdowski, C., Moldovean, C., & Samuelson, S. T. (2000). Financial indicators of stock price performance. *American Business Review*, 18(1), 90.
- Ross, S. (1973). The economic theory of agency: The principal's problem. *American Economic Review*, 63 (2), 134-139.
- Ramli, N. A., Latan, H., & Solovida, G. T. (2019). Determinants of capital structure and firm financial performance—A PLS-SEM approach: Evidence from Malaysia and Indonesia. *The Quarterly Review of Economics and Finance*, 71, 148-160.
- SayfiHasania, B. A. N. (2015). Measuring financial performance using the economic value added index, A case study of economic institutions listed in the CAC40 Index. *Researcher Journal*, 15, 181.
- Utami, M. R., & Darmawan, A. (2019). Effect of DER, ROA, ROE, EPS and MVA on stock prices in Sharia Indonesian stock index. *Journal of Applied Accounting and Taxation*, 4(1), 15-22.
- Zarqoun, M., Mayou, A., Tarfawi, M. (2017). The impact of the debt policy on the financial performance of the Algerian economic establishment - Case study of a sample of companies. *Journal of Economic Visions, Algeria*, 12, 301.

