

Determinants of Market Stock Price: New Evidence from an Emerging Market

Ahmad Abdallah¹, Malik Abu Afifa^{1,*}, Isam Hamad Saleh¹ and Fares Alsufy²

¹Department of Accounting, Faculty of Business, Al-Zaytoonah University of Jordan, Amman, Jordan

²Department of Accounting, Faculty of Business, Isra University, Amman, Jordan

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Abstract: The current study's goal is to investigate the financial determinants of the market stock price in Jordan, which is an emerging market. It gives empirical evidence from the industrial companies listed on the Amman Stock Exchange. This research was carried out over nine years (2010-2018), with a panel data analysis of 57 industrial companies used during the period. The study sample consists of all of the companies in the population, for a total of 513 observations. In conclusion, the findings of the study reveal that the ratio of assets turnover, long-term debt-to-total assets ratio, earnings per share, return on assets, inventory-to-total current assets ratio, total current assets-to-total assets ratio, and total assets significantly affect the market stock price of Jordanian industrial companies; while the equity-to-total assets ratio and working capital ratio have no significant effect. These results are compatible with the pecking order theory and signalling theory. Besides, the shift in the market stock prices of Jordanian industrial companies is governed by financial indicators at a relatively high level. As a final point, these results can be used by financial analysts, investors, and other strategic decision-makers to boost the effectiveness and efficiency of the Jordanian financial market.

Keywords: Financial Indicators, Stock Price, Jordanian Market, Financial Markets, Market Efficiency.

1 Introduction

Stock market dynamics impact the companies' stock price and industry in the same market correspondingly [1]. The stock price of the company and industry in the same market frequently shift in parallel with each other [2]. Many researchers addressed that the company's stock price often rises from company success metrics and pieces of bad news for its rival [3,4]. At the same time, they noted that strong performance metrics and good news about the company would boost demand on the company's stock and increase its stock price [5,6,7,8]. Trust and sentiment among investors can also cause stock prices to rise or fall [9]. Investors also buy stocks, hoping that they will see higher stock prices and potential profits [10,11,12,8].

Previous literature such as [13,14,15,16,17,2] suggests that economic factors, such as employment, incomes, inflation, interest rates, and monetary policy influence business patterns. For example, higher interest rates and inflation positively affect the cost of the debt, which decreases the income of the business and reduces the dividends paid to its shareholders [18]. As a result, stock prices drop. Moreover, Garay et al. [19] and Haggard et al. [20] have proposed that company disclosures have an impact on the stock price, where further disclosures, such as voluntary disclosures,

would increase investor trust and then boost the stock price. Bai et al. [21] observed that the readability of financial disclosure influences the synchronicity of stock returns. Also, the readability of financial disclosure works to boost investors' company-specific use of information and minimize company-specific information-processing costs. Hence, the synchronicity of stock returns decreases [22,23]. In the same vein, Ni et al. [24] addressed the impact of financial results on the market stock price. They noted that the market stock price is influenced by financial performance, where good financial performance boosts the market stock price. In other words, good financial performance strengthens investors' decisions to pursue stocks at high prices.

In addition, and within the financial disclosure, Subing et al. [25] and Purnamawati [26] documented that the profitability and the composition of the capital influence the market stock price. Saleem and Usman [4] observed that the financial disclosure indicators have a substantial impact on market stock prices, whether negative or positive. This is confirmed by the pecking order theory and signalling theory. The first theory, known as "the pecking order theory," gives the appearance that the company has several options for deciding the source of its financing [27,28]. The company has used the pecking order theory to raise more money by selling assets. In other words, Matemilola and Bany-Ariffin

*Corresponding author e-mail: m.abuafifa@zuj.edu.jo

[28] suggested that pecking order theory means that a company conducts an approach by reducing the ownership of its assets as an alternative way to avoid exorbitant financing costs for its investments. Besides, the second theory, termed “signalling theory,” clarifies the need for the company to offer information to broad users [29].

Profitability and market indicators, according to Martani et al. [28], have a considerable influence on stock returns. Dimitropoulos and Asteriou [30] also observed that the profitability ratios such as return on assets (ROA) and return on equity (ROE) have a positive influence on the stock return, whilst net profit-to-net sales ratio and working capital-to-total assets ratio negatively impact the stock return. At the same time, Kumar and Sopariwala [31] noted that there are positive relationships between long-term success strategies, profitability, and earnings per share, as well as stock prices, which are also positively influenced by earnings per share. These findings have been clarified by the fact that long-term success strategies will work to enhance the accounting profitability measurements, leading to an improvement in earnings per share and then in stock prices [32]. Seetharaman and Raj [33] revealed that there is a substantial positive relationship between earnings per share (EPS) and stock prices and that earnings disclosure has a direct impact on stock prices. They also reported that EPS is an investment valuation instrument for assessing the success of business companies. Kabajeh et al. [34] continued to note that ROA, ROE, and the return on investment (ROI) have, together and independently, favorable association with the company's stock prices.

Thus, the current work claims that previous literature discussed factors that influence stock prices from various angles, whereas some of the previous literature covered microeconomic factors. Other previous shreds of literature covered certain financial indicators, particularly those related to performance indicators. We also note that there are few attempts by previous literature to cover emerging markets, such as the Jordanian market. In this case, the study's contribution is twofold. This study is the first to analyze the impact of nine financial determinants (i.e. assets turnover ratio, long-term debt to total asset ratio, EPS, ROA, working capital ratio, inventory-to-total current assets ratio, total current asset-to-total asset ratio, equity-to-total assets ratio, and total assets), covering a broad range of financial disclosures made by companies on the market stock price. Hence this study aims to increase the body of knowledge in the financial determinants of the market stock price in an emerging market (Jordanian market). The second contribution is to assess the level to which the Jordanian stock market controls the financial determinants protected by the financial disclosures of the companies, and then provide some evidence about it. These findings provide documentary information to financial analysts, investors, and other policy-makers.

2 Literature Review and Research Hypothesis

Stock prices are an essential feature of companies [35, 32]. The pioneering paper of Collins [36] investigated whether earnings per share, operating cash flow, dividends, and the book value of equity are considered useful determinants of market stock prices, using a sample of 37 banks in 27 countries. This paper found that EPS, operating cash flow, dividends, and the book value of equity mainly influence the market stock prices. Edirisinghe and Zhang [37] investigated the effect of financial indicators (i.e. capital, inventory turnover, assets turnover, ROA, current ratio, EPS, total debt-to-asset ratio, and leverage) on the stock prices. They concluded that the impact of these indicators on the stock return would contribute to strengthening the financial assets of the company; hence the stock prices will increase. Arkan [38] also concluded that ROE and the price-to-earnings ratio have a favorable effect on stock prices, although the leverage ratio has little effect.

Martani et al. [39] reported that the assets turnover, profitability, and EPS have a direct influence on the stock price, which means that the higher the performance indicators, the higher the stock prices. The high performance of companies sends a message to investors about the health of their business processes, thereby growing the demand for stocks and eventually increasing their prices. In addition, Almunani [40] and Sum [41] argued that the price-to-earnings ratio, EPS, book value, and company size have a favorable influence on market stock prices. Furthermore, Nisa and Nishat [42] investigated the relationship between financial fundamentals, macroeconomic conditions, and stock prices of Karachi Stock Exchange businesses. They stated that the most important elements influencing the market stock price are recent patterns in stock prices, company size, and EPS.

Malhotra and Tandon [43] discovered that the company's EPS, price-to-earnings ratio, and book value all had a positive relationship with the stock price. Pouraghajan et al. [44] studied the association among the strategies for working capital and shifts in the stock prices of 110 companies listed on the Tehran Stock Exchange during 2008-2012. They revealed that working capital techniques have an impact on stock price movements. This is because accounting information may aid economic investors in making judgments. Riyani et al. [45] investigated the influence of non-performing loans (NPLs) and the loan-to-deposit ratio (LDRs) on the ROA and the implications for the stock price shift rate. They demonstrated that NPLs and LDR had a substantial effect on the stock price shift rate, but ROA was influenced by NPLs and LDR. Also, ROA has no significant influence on the stock price shift rate.

Continuously, Wijaya and Yustina [46] analyzed the influence of dividend policy using dividend pay-out ratio, profitability proxies (i.e. ROA and ROE), alongside solvency ratio using debt to equity on the market stock price.

They demonstrated that dividend policy, profitability proxies, and the solvency ratio had a substantial relationship with the market stock price. Jermisittiparsert et al. [43] investigated the impact of financial variables on market stock prices in four ASEAN countries: Malaysia, Indonesia, Thailand, and Singapore. They discovered that asset turnover, asset growth, working capital ratio, return on capital employed, and price-to-earnings ratio all influenced Malaysian companies' market stock prices. Asset growth has a strong correlation with market stock prices for Indonesian companies. In the case of Thai companies, the assets turnover, the ROA, the ROE, the working capital ratio, and the price-to-earnings ratio all have a direct relationship with market stock prices. Working capital ratio, asset turnover, average collection period, ROE, asset growth, and ROA are all directly related to market stock prices for Singaporean companies.

Arkan [8] discussed the role of financial indicators in predicting the change in market stock prices as a case study in the emerging market. Panel data analysis of 15 companies listed in three sectors of the Kuwaiti financial market during the period (2005 to 2014) is used in this study. The findings revealed that ROA, ROE, and the net profit ratio had an influence on stock price behavior and trends in the industrial sector, whereas ROA, ROE, the price-to-earnings ratio, and EPS have an impact on stock price behavior and trends in the service and financial sectors.

Furthermore, and in line with prior research, the hypothesis of this study may be summarized as follows:

H: Assets turnover ratio, long-term debt-to-total assets ratio, earnings per share, return on assets, working capital ratio, inventory-to-total current assets ratio, total current assets-to-total assets ratio, equity-to-total assets ratio, and total assets affect the market stock price.

3 Methodology

Using a wide range of financial variables, this study explores the financial determinants of market stock price based on a piece of evidence from the Jordanian market, which is considered an emerging market. This study employs a panel data analysis of 57 industrial businesses listed on the Amman Stock Exchange (ASE) from 2010 to 2018. The research sample includes all of the businesses in the population, and a total of 513 observations for each variable are made.

The following section presents the description of the study variables.

3.1 Description of the Study Variables

The study focuses on the main financial determinants of the market stock price supported by previous literature, namely assets turnover ratio, long-term debt-to-total assets ratio, EPS, ROA, working capital ratio, inventory-to-total current assets ratio, total current assets-to-total assets ratio, equity-to-total assets ratio, and total assets. In other words, the study's structure includes nine financial indicators (determinants) as independent variables and the market stock price as a dependent variable. As a result, Table (1) displays the definition and description of each variable's code.

Table 1: Codes definition and description of each variable.

Item	Variable	Code	Description
Independent Variables	Assets turnover ratio	AT	It is an efficiency indicator that shows the capacity of a company to produce revenue (sales) from its assets [47, 39, 48]. It is measured by the value of sales of a company relative to the value of its total assets.
	Long-term debt-to-total assets ratio	LDtoTA	It is the ratio of assets of a company funded by loans and other financial obligations that last over a year [49].
	Earnings per share	EPS	It is earnings per outstanding share of the common stock [40, 50, 51, 52].
	Return on assets	ROA	It is a profitability measure that shows how much earnings a company can generate on its overall assets [53, 49, 34, 53, 55, 51].
	Working capital ratio	WC	It is referred to as the current ratio, which is determined using total current assets divided by total current liabilities [56].
	Inventory-to-total current assets ratio	ItoCA	Inventory is an illiquid asset, as inventory will take more time to turn into cash. Therefore, this study uses ItoCA to identify the portion of assets tied up in inventory [57].

	Total current asset-to-total asset ratio	CATA	It is determined by dividing the total current assets by the total assets [58]. CATA offers a measure of the size of the total funds invested for working capital [57].
	Equity-to-total assets ratio	ETA	ETA formula is calculated by dividing total equity by total assets [59]. In other words, ETA compares the amount of equity retained by the company relative to its total assets, and this ratio represents the degree to which the company depends on an internal funding strategy for its expenditure rather than external financing [55].
	Total assets	TA	It is the total current and long-term assets. It is estimated by the natural logarithm (ln) of total assets [60, 55].
Dependent Variable	Market stock price	SP	It is the stock price at the time of the closing price during the study period (2010 – 2018) for the company [40, 61, 8].

4 Data Analysis

The following sections give insight into the diagnostic analysis, descriptive analysis for the study data, and regression model analysis.

4.1 Diagnostic Analysis

The study is based on the application of multicollinearity tests to determine whether the data in the study has any econometric issues [62]. The Pearson Correlation test is used as the first indicator in the study, while the Variance Inflation Factor (VIF) and the inverse VIF are used as the second indication [63]. Table (2) displays the Pearson correlation coefficients (Beta) among independent variables. Gujarati

and Porter [64] stated that if the correlation coefficient (Beta) between two independent variables is more than 0.8, there is a multicollinearity problem. As a consequence, all of the Pearson correlation coefficients in Table (2) are less than 0.80, indicating that the current study's regression model does not suffer from multicollinearity.

Table (3) also shows the VIF and inverse VIF values for the independent variables in the regression model. The results show that the study model is fit (there is no multicollinearity problem), since the VIF and inverse VIF values for all independent variables are less than 5 and larger than 20%, respectively [63].

Table 2: Pearson Correlation Coefficients.

Variables	AT	LDtoTA	EPS	ROA	WC	ItoCA	CATA	ETA	TA
AT	1.000								
LDtoTA	-0.111	1.000							
EPS	0.233	-0.139	1.000						
ROA	0.345	-0.196	0.722	1.000					
WC	0.037	-0.278	0.296	0.236	1.000				
ItoCA	0.353	-0.082	-0.110	-0.086	0.059	1.000			
CATA	0.358	-0.244	0.079	0.176	0.240	0.196	1.000		
ETA	-0.084	-0.523	0.287	0.239	0.648	-0.078	0.083	1.000	
TA	0.206	0.044	0.323	0.230	0.065	0.095	-0.058	-0.156	1.000

Table 3: Multicollinearity Test.

Variables	VIF	Inverse VIF (1/VIF)
AT	1.740	0.575
LDtoTA	1.626	0.615
EPS	2.564	0.390
ROA	2.592	0.386
WC	2.109	0.474
ItoCA	1.401	0.714
CATA	1.791	0.558
ETA	2.804	0.357
TA	1.307	0.765

4.2 Descriptive Analysis

The study tried to eliminate anomaly values to improve the reliability of the study results. Therefore, this study focuses on the use of descriptive analysis tests. This is done to explain the data of the analysis over its period (2010 to 2018). Table (4) indicates that the mean value for AT was (0.531) and that the maximum value was (2.66) with a standard deviation (0.403). For the variable LDtoTA, the highest value was (0.55) and the mean value was (0.046) with a standard deviation (0.087). The mean EPS was (0.057 %) with a standard deviation (0.334). Also, the mean ROA was (2.335 %) with a standard deviation of (7.839). This indicates that there is a difference (deviation) in the ROA among industrial companies listed on the ASE during the study period. This may relate to the effect of environmental uncertainty on the companies' performance during the period, where the period was impacted by several crises, such as rising energy prices and shifting consumer preferences and desires as a result of Syrians' migration to Jordan, along with the prosperity of globalization.

The highest value for WC was then (12.83) and the lowest value was (0.02). As well, the mean WC was (2.262), which

indicates the high capacity of companies to pay off their existing debts. The mean ItoCA was (0.325) with a standard deviation (0.215), which means that these companies hold approximately (67.5 %) high liquid assets to meet their obligations. In comparison, for the variable CATA, the maximum value was (0.96) and the mean value was (0.498) with a standard deviation (0.216). The mean ETA was (0.636) with a standard deviation of (0.234). After this, the mean value for Total Assets was (64,678,633 JD) with a standard deviation (186,444,429 JD). This indicates that there is a disparity (deviation) in the total assets among industrial companies listed on ASE during the study period, owing to the existence of the industrial market, where some industrial activities need a specific allocation of high-value infrastructure than others. Due to the nature of the industrial sector, some industrial activities required a specific allocation of high-value infrastructure than others. Finally, the mean SP was (2.345 JD) with a standard deviation (4.367 JD). This standard deviation resultant from the SP of the industrial companies over the study period is based on many considerations, such as the net income of these companies and the valuation of the stock demand.

Table 4: Descriptive Analysis.

Variable	Minimum	Maximum	Mean	Standard Deviation
AT	0.00	2.66	0.531	0.403
LDtoTA	0.00	0.55	0.046	0.087
EPS %	-1.17	2.39	0.057	0.334
ROA %	-21.01	31.12	2.335	7.839
WC	0.02	12.83	2.262	1.863
ItoCA	0.00	0.90	0.325	0.215
CATA	0.00	0.96	0.498	0.216
ETA	0.01	1.00	0.636	0.234
TA (JD)	320,140	1,211,466,000	64,678,633	186,444,429
SP (JD)	0.13	46.51	2.345	4.367

4.3 Regression Model Analysis

To evaluate the hypothesis, the current study used linear regression analysis. The regression model's findings are shown in Table (5). The findings demonstrate that the regression model fits the F-statistic at a substantial level (138,341***). All independent variables in the model (namely: AT, LDtoTA, EPS, ROA, WC, ItoCA, CATA, ETA, and TA) describe (0.804) - Adjusted R Square = 80.4 % of the variance in the market stock price of industrial companies listed on ASE during the timeframe. In addition, the consistent term ($_Cons$) of this model is positively important (Beta=0.900) at p-value < 0.01. In other words, due to the determinants of the study model, all financial indicators together are closely related to the stock price of the industrial companies listed on ASE. Finally, we can see

that the movement of Jordanian industrial companies' market stock prices is regulated by quite high-level financial indicators. This is due to the transparency standards imposed by the Jordanian financial market's governmental entities. This conclusion also demonstrates the objectivity of stock prices concerning the financial situation of the listed companies.

More specifically, the results in Table (5) reveal that AT, LDtoTA, EPS, ROA, ItoCA, CATA, and TA all have a substantial (p-value) impact on the market stock price of Jordanian industrial companies listed on ASE. At the same time, the WC and ETA do not influence their own. Finally, the hypothesis is partially accepted.

Table 5: Result of Regression Model.

Variable	Coefficients(β)	(t-static)	Sig.
Con-	-6.453	-3.411	0.001***
AT	-1.038	-2.402	0.017**
LDtoTA	-3.700	-2.007	0.046**
EPS	14.569	25.235	0.000***
ROA	-0.206	-8.385	0.000***
WC	0.050	0.558	0.577
ItoCA	-1.914	-2.823	0.005***
CATA	1.543	1.949	0.052*
ETA	-1.487	-1.584	0.114
TA	0.572	5.746	0.000***
<i>R (Beta)</i>	0.900		
<i>Adjusted R Square</i>	0.804		
<i>(F-value)</i>	138.341***		
Notes: (1) ***, ** and * indicates significant at 1%, 5% and 10% level of significance based on t-statistics. (2) $SPI_{i,t} = \alpha + \beta_1 AT_{i,t} + \beta_2 LDtoTA_{i,t} + \beta_3 EPS_{i,t} + \beta_4 ROA_{i,t} + \beta_5 WC_{i,t} + \beta_6 ItoCA_{i,t} + \beta_7 CATA_{i,t} + \beta_8 ETA_{i,t} + \beta_9 Total\ Assets(ln)_{i,t} + (\varepsilon_i + \nu_{it})$			

5 Discussion

According to the above findings, AT, LDtoTA, EPS, ROA, ItoCA, CATA, and TA have a considerable impact on the market stock price of Jordanian industrial companies listed on ASE. However, the WC and ETA have no discernible influence. These findings agree with those of [65, 66, 38, 67, 68, 69]. Furthermore, these findings are consistent with the pecking order theory, which holds that the cost of funding grows with asymmetric information, negatively influencing market stock prices.

Arkan [38] observed that the most significant financial metrics impacting industrial company stock prices are ROA, ROE, and the net profit ratio. According to the findings, greater ROA, ROE, and net profit margin ratios indicate higher stock prices. According to Vedd and Yassinski [67], the larger the company's debt-to-equity ratio is, the higher the risk perceptions of investors, and consequently the lower the stock price. At the same time, they discovered a favorable relationship between the assets turnover ratio and the market stock price. In other words, a greater asset turnover ratio indicates that the company's assets are being used more effectively, leading to an increase in the market stock price.

Chan et al. [68] concluded that the liquidity of the company determines the synchronicity of the market stock price, where the liquidity of the company is an indicator of the company's performance. In detail, when the company has high liquidity, investor trust in the company's stock increases, leading to an increase in the stock price. Furthermore, Hunjra et al. [66] and Laurens [65] found no relationship between dividend per share and market stock price, whereas earnings per share had a positive relationship with the market stock price. This is because investors are very interested in the company's earnings, and when the

company's earnings are high, investors' demand for the company's stocks increases, and the stock price rises.

Al-Malkawi et al. [69] also found that earnings per share return on equity, price-to-earnings ratio, and book value per share all had a positive impact on market stock price; however dividend yield has a negative impact. Furthermore, Dananti et al. [70] sought to investigate the impact of capital structure on company stock price using the long-term debt-to-total assets ratio, short-term debt-to-total assets ratio, short-term debt-to-total equity ratio, total debt-to-total assets ratio, total debt-to-total equity ratio, and long-term debt-to-total equity ratio. They discovered that the capital structure resulting from these ratios may explain roughly (24.3 %) of the company's stock price.

At that point, the ItoCA ratio represents the extent of inventory invested out of the total current assets of the company. This ratio is an indicator for working capital management in the company [71]. In the industrial sector, inventory issues are very important, and this refers to the nature of its business [72]. Likewise, if inventory turnover is increased, it will boost cash flow and eliminate liquidity risk [73]. Effective inventory management increases free cash flow by placing more cash on the balance sheet to be distributed to shareholders, and this can boost investors' trust, and thus raise the stock price [74].

Working capital has a positive relationship with the market stock price, according to Dadrasmoghadam and Akbari [75] and Pouraghajan et al. [44]. They highlighted that increased working capital indicates a high level of liquidity followed by a surge in the market stock price, even though this outcome contradicts the findings of this study. At the same time, the results of this study related to the effect of WC on the market stock price are consistent with the work results of Dimitropoulos and Asteriou [30] and Abuzayed [13].

Dimitropoulos and Asteriou [30] also noted that working capital-to-total assets negatively affect stock returns. As well, Abuzayed [13] documented that “financial markets failed to penalize managers for inefficient working capital management in emerging markets”, chiefly in the Jordanian market.

Furthermore, when it comes to the influence of the ETA ratio on the market stock price, the results show that ETA negatively affects the market stock price. This is consistent with the findings of Chan and Abd Karim [76], which discovered that ETA has a negative influence on efficiency, implying that the use of loans in business operations helps to greater efficiency.

Conflict of interest

The authors declare that there is no conflict regarding the publication of this paper.

6 Conclusion

In a few words, the current study intends to look at the financial determinants of the market stock price in Jordan, an emerging market. It offers empirical evidence from Jordanian industrial companies listed on ASE. This study covers nine years (2010-2018), hence a panel data analysis of 57 companies was employed during that period, with the sample of the study included all of these companies included in the population, yielding a total of 513 observations for each variable. As proxies for the financial determinants, the study used nine financial indicators (namely, assets turnover ratio, long-term debt-to-total assets ratio, earnings per share, return on assets, working capital ratio, inventory-to-total current assets ratio, total current assets-to-total assets ratio, equity-to-total assets ratio, and total assets) from a wide range of financial companies' disclosures.

According to the study findings, the market stock prices of Jordanian industrial companies are influenced by AT, LDtoTA, EPS, ROA, ItoCA, CATA, and TA. Meanwhile, the market stock price of the targeted companies is unaffected by WC and ETA. Furthermore, the movement of Jordanian industrial companies' market stock prices is influenced by quite high-level financial indicators. This is since the relationship value between all of the financial indicators in the research model and the market stock price is about (90%), and all of the financial indicators in the model explain approximately (80.4%) of the market stock price. Finally, financial analysts, investors, and other strategic decision-makers may apply these findings to improve the efficacy and efficiency of Jordan's financial market. For example, these findings may improve policymakers' capacity to enact sound laws, increasing the efficiency and efficacy of Jordan's financial industry. Furthermore, these findings may motivate investors to make sound selections by utilizing financial variables capable of forecasting market stock prices.

The study's limitation is that it examined the Jordanian industrial companies listed on ASE between 2010 and 2018 to meet the study's aims. Thus, this study advises that future work examines the study model for other sectors in the MENA area.

References

- [1] H. Rjoub, T. Türsoy and N. Günsel, The effects of macroeconomic factors on stock returns: Istanbul Stock Market. *Studies in Economics and Finance.*, **26(1)**, 36-45 (2009).
- [2] R.G. Cong, Y.M. Wei, J.L. Jiao and Y. Fan, Relationships Between Oil Price Shocks and Stock Market: An Empirical Analysis from China. *Energy Policy.*, **36(9)**, 3544–3553 (2008).
- [3] J. L. Campbell and P. E. Yeung, Earnings comparability, accounting similarities, and stock returns: Evidence from peer firms' earnings restatements. *Journal of Accounting, Auditing, and Finance.*, **32(4)**, 480– 509 (2017).
- [4] S. Saleem and M. Usman, Information risk and cost of equity: The role of stock price crash risk. *The Journal of Asian Finance, Economics and Business.*, **8(1)**, 623-635 (2021).
- [5] J. Francis, R. LaFond, P. Olsson and K. Schipper, The market pricing of accruals quality. *Journal of Accounting and Economics.*, **39(2)**, 295– 327 (2005).
- [6] S.S. Crawford, D.T. Roulstone and E.C. So, Analyst initiations of coverage and stock price synchronicity. *The Accounting Review.*, **87(5)**, 1527– 1553 (2012).
- [7] M. Ayoush, H. Rabayah and T. Jibreel, The Impact of Mergers on the Financial Performance of Jordanian Public Shareholding Companies. *The Journal of Asian Finance, Economics, and Business.*, **7(10)**, 751-759 (2020).
- [8] F. Alsufy, M. A. Afifa and M.Z. Soda, Mediating Effects of Liquidity in the Relationship between Earnings Quality and Market Value of the Share Price: Evidence from Jordan. *Review of Applied Socio-Economic Research.*, **19(1)**, 17-32 (2020).
- [9] J. Piotroski and D. Roulstone, The influence of analysts, institutional investors and insiders on the incorporation of market, industry and firm' specific information into stock prices. *The Accounting Review.*, **79(4)**, 1119–1152 (2004).
- [10] M. S. Drake, J. N. Myers, L. A. Myers and M. D. Stuart, Short sellers and the informativeness of stock prices with respect to future earnings. *Review of Accounting Studies.*, **20(2)**, 747– 774 (2015).
- [11] D. Weiss, Cost behavior and analysts' earnings forecasts. *The Accounting Review.*, **85(4)**, 1441–1471 (2010).
- [12] K. W. Hui and P. E. Yeung, Underreaction to industry-wide earnings and the post-forecast revision drift. *Journal of Accounting Research.*, **51(4)**, 701– 737 (2013).
- [13] B. Abuzayed, Working capital management and firms' performance in emerging markets: the case of Jordan. *International Journal of Managerial Finance.*, **8(2)**, 155-179 (2012). <https://doi.org/10.1108/17439131211216620>

- [14] A. Ajmi, G. El-montasser, S. Hammoudeh and D. Nguyen, Oil Prices and MENA Stock Markets: New Evidence from Nonlinear and Asymmetric Causalities During and after the Crisis Period. *Applied Economics*, **46**(18), 2167–2177 (2014).
- [15] H. Liu and C. Hou, Does trade credit alleviate stock price synchronicity? Evidence from China. *International Review of Economics and Finance*, **61**, 141-155 (2019).
- [16] N. Dimic, J. Kiviahio, V. Piljak and J. Äijö, Impact of financial market uncertainty and macroeconomic factors on stock-bond correlation in emerging markets. *Research in International Business and Finance*, **36**, 41-51 (2016).
- [17] A. Hatemi-J, A. Al Shayeb and E. Roca, The effect of oil prices on stock prices: fresh evidence from asymmetric causality tests. *Journal Applied Economics*, **49**(16), 1584-1592 (2016).
- [18] A. Durnev, R. Morck, B. Yeung and P. Zarowin, Does greater firm-specific return variation mean more or less informed stock pricing?. *Journal of Accounting Research*, **41**(5), 797– 836 (2003).
- [19] U. Garay, M. González, A. Guzmán and M. Trujillo, Internet-based corporate disclosure and market value: Evidence from Latin America. *Emerging Markets Review*, **17**, 150-168 (2013).
- [20] K.S. Haggard, X. Martin and R. Pereira, Does Voluntary Disclosure Improve Stock Price Informativeness?. *Financial Management*, **37**(4), 747-768 (2008).
- [21] X. Bai, Y. Dong and N. Hu, Financial report readability and stock return synchronicity. *Applied Economics*, **51**(4), 346-363 (2018).
- [22] L. Song, Accounting disclosure, stock price synchronicity and stock crash risk. *International Journal of Accounting and Information Management*, **23**(4), 349-363 (2015).
- [23] F. Bravo, Forward-looking disclosure and corporate reputation as mechanisms to reduce stock return volatility. *Revista de Contabilidad*, **19**(1), 122-131 (2016).
- [24] Y. Ni, P. Huang and Y. Chen, Board structure, considerable capital, and stock price overreaction informativeness in terms of technical indicators. *The North American Journal of Economics and Finance*, **48**, 514-528 (2019).
- [25] H. J. T. Subing, Y. Mulyati and C. Mariana, Factors Affecting Islamic Stock Price in the Indonesian Capital Market. *International Journal of Innovation, Creativity and Change*, **6**(6), 125-134 (2019).
- [26] G. Purnamawati, The Effect of Capital Structure and Profitability on Stock Price: Study of The Manufacturing Sector in Indonesia Stock Exchange. *International Journal of Business, Economics and Law*, **9**(1), 10-16 (2016).
- [27] S. C. Myers and N. S. Majluf, Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, **13**(2), 187–221 (1984).
- [28] B.T. Matemilola and A.N. Bany-Ariffin, Pecking Order Theory of Capital Structure: Empirical Evidence from Dynamic Panel Data. *International Journal on GSTF Business Review*, **1**(1), 185–189 (2011).
- [29] R. Morris, Signalling, Agency Theory and Accounting Policy Choice. *Journal Accounting and Business Research*, **18**(69), 47-56 (2012).
- [30] P. Dimitropoulos and D. Asteriou, The value relevance of financial statements and their impact on stock prices: Evidence from Greece. *Managerial Auditing Journal*, **24**(3), 248-265 (2009).
- [31] R. Kumar and P. Sopariwala, The Effect of Adoption of Long-Term Performance Plans on Stock Prices and Accounting Numbers. *Journal of Financial and Quantitative Analysis*, **27**(4), 561-573 (2009).
- [32] B. R. T. Shammout, The Impact of Stock Characteristics on Its Market Price in Jordanian Commercial Banks. *Modern Applied Science*, **14**(3), 45-55 (2020).
- [33] A. Seetharaman and J. R. Raj, An Empirical Study on the Impact of Earnings per Share on Stock Prices of a Listed Bank in Malaysia. *The International Journal of Applied Economics and Finance*, **5**, 114-126 (2011).
- [34] M. A. Kabajeh, M. Al Nu'aimat and N. Dahmash, The Relationship between the ROA, ROE and ROI Ratios with Jordanian Insurance Public Companies Market Share Prices. *International Journal of Humanities and Social Science*, **2**(11), 115-120 (2012).
- [35] M. Mazzucato and W. Semmler, The Determinants of Stock Price Volatility: An Industry Study. *Nonlinear Dynamics, Psychology, and Life Sciences*, **6**(2), 230-253 (2002).
- [36] J. Collins, How to Study the Behavior of Bank Stocks. *Financial Analysts Journal*, **13**(2), 109-113 (1957).
- [37] N.C.P. Edirisinghe and X. Zhang, Portfolio Selection Under DEA-Based Relative Financial Strength Indicators: Case of US Industries. *Journal of the operational research society*, **59**, 842-856 (2008).
- [38] T. Arkan, The Importance of Financial Ratios in Predicting Stock Price Trends: A Case Study in Emerging Markets. *Finanse, Rynki Finansowe, Ubezpieczenia*, **79**, 13-26 (2016).
- [39] D. Martani, Mulyono and R. Khairurizka, The Effect of Financial Ratios, Firm Size, and Cash Flow from Operating Activities in the Interim Report to the Stock Return. *Chinese Business Review*, **8**(6), 44-53 (2009).
- [40] A. M. Almumani, Determinants of Equity Share Prices of the Listed Banks in Amman Stock Exchange: Quantitative Approach. *International Journal of Business and Social Science*, **5**(1), 91-104 (2014).
- [41] V. Sum, Dynamic effect of Tobin's Q on price-to-earnings ratio. *Managerial Finance*, **40**(6), 634-643 (2014). <https://doi.org/10.1108/MF-07-2013-0193>
- [42] M. Nisa and M. Nishat, The Determinants of Stock Prices in Pakistan. *Asian Economic and Financial Review*, **1**(4), 276-291 (2011).
- [43] N. Malhotra and K. Tandon, Determinants of Stock Prices: Empirical Evidence from NSE 100 Companies. *International Journal of Research in Management and Technology*, **3**(3), 2249-9563 (2013).

- [44] A. Pouraghajan, Y. Taghipouryan and S. Bavandi, Effect of Working Capital Strategies on Stock Price Changes and Cash Value Added of Companies Listed in Tehran Stock Exchange. *Applied mathematics in Engineering, Management and Technology.*, **3(1)**, 762-770 (2015).
- [45] Y. Riyani, K. Mardiah and L. Suherma, Determinants of Return on Assets and Implications on Stock Price Changes Level. *International Journal of Economics and Financial.*, **9(2)**, 110-114 (2019).
- [46] M. Wijaya and A. Yustina, The impact of financial ratio toward stock price: evidence from banking companies. *Journal of Applied Accounting and Finance.*, **1(1)**, 1-36 (2017).
- [47] M. Gupta and R. Huefner, A Cluster Analysis Study of Financial Ratios and Industry Characteristics. *Journal of Accounting Research.*, **10(1)**, 77-95 (1972).
- [48] K. Jermisittiparsert, D. Ambarita, L. Mihardjo and E. Ghani, Risk-return through financial ratios as determinants of stock price: a study from ASEAN region. *Journal of Security and Sustainability Issues.*, **9(1)**, 199-210 (2019).
- [49] L. J. Gitman and C.J. Zutter, *Principles of Managerial Finance (3rd Edition)*, Prentice Hall, Boston, (2012).
- [50] E. Geetha and M. Swaaminathan, Study on the factors influencing stock price A Comparative study of Automobile and Information Technology Industries stocks in India. *International Journal of Current Research and Academic Review.*, **3(3)**, 97-109 (2015).
- [51] I. Saleh, M. Abu Afifa and F. AlSufy, Does Earnings Quality Affect Companies' Performance? New Evidence from the Jordanian Market. *The Journal of Asian Finance, Economics and Business (JAFEB).*, **7(11)**, 33-43 (2020).
- [52] R. Alqirem, M. Abu Afifa, I. Saleh and F. Haniah, Ownership Structure, Earnings Manipulation, and Organizational Performance: The Case of Jordanian Insurance Organizations. *The Journal of Asian Finance, Economics, and Business.*, **7(12)**, 293-308 (2020). <https://doi.org/10.13106/JAFEB.2020.VOL7.NO12.293>
- [53] E. Brigham and S. Besley. *Principles of finance (6th Edition)*, Cengage Learning, USA, (2011).
- [54] S. M. Kathuo, Effect of mobile banking on the financial performance of banking institutions in Kenya. *Strategic Journal of Business and Change Management.*, **2(2)**, 1440-1457 (2015).
- [55] S. Devin, O. Ara and M. Jafari, The Impact of Loans to Deposit Ratio (LTD) and Return on Assets (ROA) on the Capital Adequacy Ratio of the Tehran Stock Exchange and OTC. *UCT Journal of management and accounting studies.*, **7(1)**, 21-26 (2019).
- [56] F. Al Qaisi, A. Tahtamouni and M. AL-Qudah, Factors Affecting the Market Stock Price: The Case of the Insurance Companies Listed in Amman Stock Exchange. *International Journal of Business and Social Science.*, **7(10)**, 81-90 (2016).
- [57] H. Dalnial, A. Kamaluddin, Z. Sanusi and K. Khairuddin, Detecting Fraudulent Financial Reporting through Financial Statement Analysis. *Journal of Advanced Management Science.*, **2(1)**, 17-22 (2014).
- [58] S. Pierre and J. Anderson, An analysis of the factors associated with lawsuits against public accountants. *The Accounting Review.*, **59(2)**, 242-263, (1984).
- [59] K. M. Fanning and K. O. Cogger, Neural network detection of management fraud using published financial data. *International Journal of Intelligent Systems in Accounting, Finance and Management.*, **7(1)**, 21-41 (1998).
- [60] D.E. Kieso, J. J. Weygandt and T.D. Warfield, *Intermediate Accounting (IFRS Edition)*, John Wile and Sons Inc, USA, (2012).
- [61] O. John, Stock Market Price and Its Determinants: A Case Study of Nigerian Banks. *Journal of Advance Research in Business, Management and Accounting.*, **1(10)**, 26-33 (2015).
- [62] B. H. Baltagi, B. C. Jung and S. H. Song, Testing for heteroskedasticity and serial correlation in a random effects panel data model. *Journal of Econometrics.*, **154(2)**, 122-124 (2010). <https://doi.org/10.1016/j.jeconom.2009.04.009>
- [63] B. H. Baltagi, *Econometric analysis of panel data* (4th Edition), John Wile and Sons, Inc, USA, (2008).
- [64] D. N. Gujarati and D. C. Porter, *Basic Econometrics (5th Edition)*, McGraw-Hill, New York, (2009).
- [65] S. Laurens, Influence Analysis of DPS, EPS, and PBV toward Stock Price and Return. *The Winners.*, **19(1)**, 21-30 (2018).
- [66] A. I. Hunjra, M. S. Ijaz, M. I. Chani, S. Hassan and U. Mustafa, Impact of dividend policy, Earning Per Share, Return on Equity, Profit after Tax on stock price. *International Journal of Economics and Empirical Research.*, **2(3)**, 109-115 (2014).
- [67] R. Vedd and N. Yassinski, The effect of Financial Ratios, Firm Size and Operating Cash Flows on Stock Price: Evidence from the Latin America Industrial Sector. *Journal of Business and Accounting.*, **8(1)**, 15-26 (2015).
- [68] K. Chan, A. Hameed and W. Kang, Stock price synchronicity and liquidity. *Journal of Financial Markets.*, **16**, 414-438 (2013).
- [69] H. Al-Malkawi, M. AlShiab and R. Pillai, The impact of company fundamentals on common stock prices: evidence from MENA region. *The Business and Management Review.*, **9(4)**, 162-172 (2018).
- [70] K. Dananti, M. Cahjono and M. Mujiyono, The Best Indicator of Capital Structure to Predict Firm's Performance. *Review of Integrative Business and Economics Research.*, **6(4)**, 317-326 (2017).
- [71] S. Vishnani and K.B. Shah, Impact of Working Capital Management Policies on Corporate Performance- An Empirical Study. *Global Business Review.*, **8**, 267-281 (2007).
- [72] H.J. Weinraub and S. Visscher, Industry Practice Relating to Aggressive Conservative Working Capital Policies. *Journal of Financial and Strategic Decision.*, **11(2)**, 11-18 (1998).
- [73] G. Filbeck and T. Krueger, Industry Related Differences in Working Capital Management. *MidAmerican Journal of Business.*, **20(2)**, 11-18 (2005).
- [74] V. Shrotriya, Analysis of Working Capital Management of Hero MotoCorp Limited. *THINK INDIA*, **22(4)**, 10379-10394

(2019).

- [75] A. Dadrasmoghadam and S. Akbari, Relationship between Financial Ratios in the Stock Prices of Agriculture-Related Companies Accepted on the Stock Exchange of Iran. *Research Journal of Fisheries and Hydrobiology.*, **10(9)**, 586-591 (2015).
- [76] S. Chan and M. Abd Karim, Bank efficiency, profitability and equity capital: evidence from developing countries. *American J. Finance and Accounting.*, **2(2)**, 181-195 (2010).