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# Determinants of Stock Prices in Jordanian Banks: An Empirical Study of 2006–2018

Omar Khlaif GHARAIBEH<sup>1</sup>, Mahmoud Ali JARADAT<sup>2</sup>

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## **Abstract**

This study comprehensively investigates whether there is an impact of risk, size, profitability, earnings per share, dividend yield, and book-to-market equity on the stock prices of Jordanian banks listed on the Amman Stock Exchange (ASE) for the period 2006–2018. To mitigate endogeneity concerns and to control for within-bank dynamics, panel data fixed effects estimations are used. This study shows that size (SIZE), profitability (ROA), dividend yield (DY) and book-to-market equity (BE/ME) ratios are statistically significant determinants of stock prices. The risk (RISK) factor measured by volatility of ROA has a positive and significant effect on the stock prices, while earnings per share has minimum influence on the stock prices. The results show that ROA has a significant and positive effect and provides the largest effect among all variables used in this study, while the RISK factor has a positive and significant effect. In contrast, SIZE, DY, and BE/ME have a significant negative effect on stock prices. The paper presented new evidence showing that ROA is a better determinant of stock prices in Jordanian banks, and RISK significantly affects stock prices. The researcher recommends using a factor of profitability represented by ROA which has a significant positive effect on the stock prices in Jordanian banks and applying the ROA variable to other sectors.

Keywords: Firm Size, Profitability, Risk, Dividend Yield, Book to Market

JEL Classification Code: G21, G15, G01

# 1. Introduction

Jordanian banks play an effective role in supporting and developing the Jordanian economy, as they take a large part of the market value, which represents about 56% of the total market value of the Amman Stock Exchange (ASE). Jordanian banks are among the leaders in the stock markets and act as an intermediary between savers and borrowers and provide financial facilities to economic projects. The Jordanian banking sector represents a link with the outside world and attracts local and foreign capital. In addition, based on the Financial Stability Report of the year 2017 issued

by the Central Bank of Jordan, Jordan enjoys an excellent banking sector, as capital adequacy has reached a high level, and it is ranked third among 19 European countries.

The decline in the stock prices of Jordanian banks during the study period (2006–2018) was the main motivation for this study. Whereas, after the global financial crisis in 2008, it is evident that the average stock prices of Jordanian banks declined, on average, from 4.47 dinars to 2.20 dinars from 2006 to 2018. For example, the largest Jordanian bank is the Arab Bank, and the stock price reached 21.36 dinars in 2006 and decreased to 6.21 Jordanian dinars in 2018. In particular, with regard to the market value of the Jordanian banking sector, it decreased from 16,633,405,557 Jordanian dinars in 2006 to 8,913,090,500 Jordanian dinars in the year 2018. This sharp decline either in the stock price or market value in Jordanian banks motivated us to study the determinants of stock prices and understand the most important factors that affected the stock prices of Jordanian banks during the period 2006-2018.

Previous studies such as Srinivasan (2012), Enow and Brijlal (2016), Pradhan and Dahal (2016), Sha (2017), and Singh (2018) showed that size, earning per share, dividend yield, book value per share play an important role in

<sup>&</sup>lt;sup>1</sup>First Author and Corresponding Author. Associate Professor, Finance and Banking Department, Faculty of Economics and Administrative Sciences, Al-alBayt University, Jordan [Postal Address: Al-Mafraq, Jordan] Email: omar.k.gharaibeh@gmail.com <sup>2</sup>Professor, Finance and Banking Department, Faculty of Economics and Administrative Sciences, Al-alBayt University, Jordan. Email: Mahmoud.jaradat@aabu.edu.jo

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determining the stock prices for different markets. Therefore, this study adopts the same previous factors in determining the stock prices in Jordanian banks. Furthermore, looking at the ROA of banks during the study period, we note that they were unstable and volatile. This motivate us to study the impact of profitability (ROA) and ROA fluctuation (RISK) on the stock prices of Jordanian banks. No research to date has examined the effect of ROA and RISK beside other internal factors used in this study on Jordanian bank stock prices. Therefore, this paper attempts to fill this gap and contributes to the literature by investigating the effect of RISK and ROA beside other important factors such as SIZE, EPS, DY, and BE/ME on stock prices in Jordanian banks.

## 2. Literature Review

The determinants of stock prices are often a matter of debate among investors, financial managers, and researchers. Previous studies show that changes in stock prices are affected by several factors (Irfan et al., 2002). These factors are important to financial managers as they will provide valuable information and help them to enhance their firm's value. In addition, these factors help investors to have good decisions before investing in any specific firm. According to the efficient market theory, there are key factors that determine stock prices such as, payout ratio, size of the firm, dividend yield, dividend per share, BE/ME ratio, and management. Fundamentals analysts employ stock valuation ratios to forecast future stock prices by deriving a stock's current fair value. If fair value deviates from the current stock price, fundamental analysts think that the under or overvalued stock will eventually gravitate towards fair value. Fundamentalists believe that prices do not precisely reflect all available information. Therefore, they look to utilize current price discrepancies.

Many fundamental factors such as dividend payout ratio, dividend yield, and size are found to have a significant relationship with market price (Irfan et al., 2002). In particular, using panel data regression based on annual data on the Karachi Stock Exchange in Pakistan over the period from 1981-2000, Irfan et al. (2002) examined the effect of six variables on the stock price. They pointed out that the dividend yield, payment ratio, and company size are important factors in determining the stock price, while asset growth, return on assets, and leverage have an insignificant effect on the stock price. In another attempt to recognize factors that determine stock price movements, Sanju et al. (2011) found that leverage, price-earnings ratio, dividend, and profitability significantly influence stock prices. The stock price is positively and significantly correlated to the dividend and price-earnings ratio.

Using a sample of 333 American firms over the period from 2009–2011, Gill et al. (2012) investigated the variable

that can explain the variance of equity share prices. They found that variance of the stock price in the USA can be explained by earning per share, book value per share, dividend per share, CEO duality, price-earnings ratio, and the internationality of the firm. Tandon and Malhotra (2013) also examined the determinants of stock prices using panel data of 95 companies listed on the national stock exchange from 2007 to 2012. The study revealed that price-earnings ratio, earning per share, and book value can explain 51.6% of stock price movements.

Pradhan and Dahal (2016) used panel data of 14 listed commercial banks in Nepal from 2002 to 2013. The findings revealed that dividend per share, earnings per share, book value, price-earnings ratio, size, and return on assets play an important role in determining stock prices. Moreover, macro-economic factors such as inflation, gross domestic product, money supply, and gross domestic product are major factors that affect the stock price. In Nepal, Gautam (2017) investigated the effect of firm-specific variables on stock price volatility and stock return of commercials banks for 2008/09 to 2015/16. The study showed that market capitalization, leverage, dividend payout, and dividend yield are positively related to stock return, while the growth of assets, earning price ratio, and book to market are negatively related to stock return. The stock price volatility is positively affected by dividend payout. Leverage and dividend yield have a positive relationship with share price volatility, while share price volatility is negatively affected by market capitalization, growth of assets, the book to market, and earning price ratio.

In the Indonesia Stock Exchange (IDX), Perdana and Adriana (2018) investigated the factors affecting the stock price of banking sector companies with a sample of 7 banks. These factors are non-performing loans, loan to deposit ratio, interest rate risk, managerial ownership, independent commissioner, institutional ownership, size of the board of directors, and committee audit. They showed that the interest rate risk, loan to deposit ratio, managerial ownership, institutional ownership, size of the board of directors, and institutional ownership affect the stock price. In the Turkish stock market, Hasan et al. (2019) examined the effect of changes in selected macroeconomic variables on the BIST-KYD Price Index. They found that money supply, inflation, exchange rate, and interest rate have a negative effect on the BIST-KYD index. These independent variables can explain 87.4% of the change in the price of the BIST-KYD index in Turkey.

In Korea, Lee and Brahmasrene (2020) investigated short and long-run dynamic relationships between stock prices and macroeconomic variables. Monthly data was used from January 1986 to June 2018 from the Bank of Korea. Based on the Johansen co-integration test and vector error correction estimates, they found that there is a negative

significant long-run dynamic relationship between stock prices and macroeconomic variables. They also found that stock price is positively related to the nominal exchange rate, while negatively related to interest rates in the short-run; they concluded that the global financial crises did not affect the stability in the co-integrating vector since the coefficient of crises is insignificant. In addition, their model is still stable in terms of the endogenous variables.

In Indonesia, Widarjono et al. (2021) examined the asymmetric response of the Indonesian Islamic stock market to macroeconomic variables encompassing money supply, domestic output, exchange rate, and Federal Reserve rate. They employed the Jakarta Islamic Index (JII) after the financial crisis in the Southeast Asian country using monthly data from January 2000 to December 2019. Non-linear Autoregressive Distributed lag (NARDL) was applied. Their study considered two models consisting of the model without the Federal Reserve rate and the model with it. Their findings confirm the long-run link between Jakarta Islamic Index and macroeconomic factors being studied. Furthermore, the Jakarta Islamic Index asymmetrically responds to broad money supply and exchange rate, but not to domestic output and Federal Reserve rate. A reduction in the money supply has a worse effect on Islamic stock prices as compared to an increase in the money supply. The Jakarta Islamic Index responded differently to depreciation and appreciation. The transmission of the exchange rate to Islamic stock prices occurs only for appreciation. Their study found an absence of transmission mechanism from the domestic output and the interest rate to Islamic stock prices. Their results implied that the easy money policy and stabilizing currency are key to supporting Indonesian Islamic stock prices.

In Jordan, Almumani (2014) attempted to identify the quantitative factors that influence share prices for the listed banks in the Amman Stock Exchange over the period 2005–2011 using empirical analysis of a set of independent and dependent variables. In the present study, the ratio analysis, correlation, and linear multiple regression models have been selected to measure the individual as well as combined effects of explanatory variables on the dependent variables. The empirical findings showed that there is a positive correlation between the independent variables DPS (dividend per share), EPS (earnings per share), BV (book value per share), PE (price-earnings ratio), and S (size) and dependent variable MP (market price of the share) and it is also significant at a 1% probability level. However, further empirical findings showed that there is a significant positive relationship between EPS and the MP of the listed banks in Jordan. Moreover, there is a significant relationship between banks BV and MP. Another empirical finding from the regression analysis showed a positive relationship between P/E and MP. Empirical findings from the regression analysis

on the relationship between S and MP indicated that there is an inverse relationship between S and MP. Finally, other variables (DPS and DP (dividend payout per share)) have an insignificant impact on MP

Gharaibeh and Al-Qudah (2020) analyze the determinants of the risk factor model for the Jordanian banking stocks from 2006 to 2018. This study employed the Five-factor Fama and French (2015) model and used the annual returns of all Jordanian banks including 2 Islamic and 13 commercial banks listed on the Amman Stock Exchange (ASE) over a period of 13 years. The results showed that the factors of value and profitability have an important role in evaluating the expected return in Jordanian banking stocks. Moreover, the value HML and profitability RMW factors provide the highest cumulative returns among these five factors, while the investment CMA and size SMB factors are still around zero cumulative returns. For the market factor, it provides the least negative cumulative returns. The results showed that the largest correlation is between value and investment factors which means that banks with a high book to market value become banks with a conservative investment strategy. The result of the sub-periods confirmed the value and profitability results. The findings of this study suggested that the five-factor Fama and French (2015) model is the choice of building an investment portfolio, especially the factors of value and profitability.

Given the previous studies, some of these studies focus on macroeconomic factors, while others concentrate on microeconomic factors. In particular, previous Jordanian studies focused on microeconomic factors, and these microeconomic factors demonstrated the ability explain stock prices. Therefore, the purpose of this study is to comprehensively investigate the impact of more microeconomic factors such as a RISK, SIZE, ROA, EPS, DY, and BE/ME on the stock prices of Jordanian banks listed on the ASE. Thus, the research problem questions within this context read as follows: Is there a RISK effect on the stock prices of Jordanian banks? Is there a SIZE effect on the stock prices of Jordanian banks? Is there a ROA effect on the stock prices of Jordanian banks? Is there an EPS effect on the stock prices of Jordanian banks? Is there a DY effect on the stock prices of Jordanian banks? Is there a BE/ME effect on the stock prices of Jordanian banks? The research hypotheses within this context read as follows:

**H1:** RISK factor has a significant impact on the stock prices of Jordanian banks.

**H2:** SIZE factor has a significant impact on the stock prices of Jordanian banks.

**H3:** ROA factor has a significant impact on the stock prices of Jordanian banks.

**H4:** EPS factor has a significant impact on the stock prices of Jordanian banks.

**H5:** DY factor has a significant impact on the stock prices of Jordanian banks.

**H6:** BE/ME factor has a significant impact on the stock prices of Jordanian banks.

# 3. Research Methods

This paper has addressed all Jordanian banks listed on the ASE during the period 2006–2018. Table 1 provides the name, establishment year, average, and standard deviation of stock prices of all Jordanian banks. The main objective of this study is to investigate the determinants of stock prices in Jordanian banks. The sample includes all Jordanian banks which are 15 banks. All data is mainly downloaded from the ASE website. For Jordanian banks, the annual closing stock prices are used as the dependent variable, while RISK, SIZE, ROA, EPS, DY, and BE/ME are used as the independent variables.

The study adopts panel data involving annual time series data over the period 2006–2018 and cross-section data applying to 15 Jordanian banks. To select the better approach for the estimation, different tests have been used before beginning the regression analysis. For example, the panel data approach has been selected when the Lagrange multiplier test is lower than 5%. To check if there is a problem of Heteroskedasticity, the Breusch–Pagan test is conducted to solve the problem of the error variance when

it is non-constant. The Hausman test is used to compare fixed and random effect models (Hausman, 1978). The Hausman specification test in the current study provides a significant result which is less than 5%. Therefore, the fixed effect is an appropriate test. Therefore, this paper uses a fixed effect model to examine the determinant of the stock prices in Jordanian banks listed on the ASE over the period 2006–2018. This study uses the following model:

$$P_{ii} = \alpha_i + \beta_1 RISK_{ii} + \beta_2 SIZE_{ii} + \beta_3 ROA_{ii} + \beta_4 EPS_{ii}$$
  
+ \beta\_5 DY\_{ii} + \beta\_6 BE/ME\_{ii} + \varepsilon\_{ii}

Where  $P_{ii}$  = is the log of the yearly closing stock price for bank i in period t, the log price is used rather than price to get data smoothing. RISK<sub>ii</sub> = volatility of stock price for bank i in period t, the volatility of the stock price is calculated by the standard deviation between two years of the stock price. SIZE<sub>ii</sub> = natural logarithm of total assets (In total assets) for bank i in period t. ROA<sub>ii</sub> = profitability for bank i in period t, ROA is calculated by dividing net income on total assets. EPS<sub>ii</sub> = earnings per share for bank i in period t, DY<sub>ii</sub> = dividend yields for bank i in period t, it is calculated by dividing annual dividends per share on the current stock price. BE/ME<sub>ii</sub> = book to market equity for bank i in period t. It is calculated by dividing book value by market value.

Table 1: Name of Jordanian Banks Listed on the ASE

Bank Names	Establishment Year	Average	S.D.	
Arab Bank	1930	14.70	15.57	
The Housing Bank For Trade & Finance	1973	9.06	3.25	
Jordan Kuwait Bank	1976	4.82	2.18	
Jordan Islamic Bank	1978	3.70	0.91	
Cairo Amman Bank	1964	3.11	2.19	
Bank of Jordan	1963	2.86	1.05	
Bank Al Etihad	1978	2.63	2.12	
Invest Bank	1982	2.01	1.39	
Arab Jordan Investment Bank	1978	1.98	1.03	
Jordan Ahli Bank	1955	1.86	1.08	
Safwa Islamic Bank	1963	1.68	0.92	
Societe General De Banque (Jordanie)	1965	1.65	1.12	
Jordan Commercial Bank	1977	1.64	0.78	
Arab Banking Corporation (Jordan)	1989	1.56	0.99	
Capital Bank of Jordan	1995	1.52	0.65	

The first column reports the names of Jordanian banks listed in the ASE. The second column details the establishment year. The third and fourth columns detail the average stock price and standard deviation during the study period from 2006–2018.

The market value of stock reflects future cash flows, while book value is considered an accounting standard based on the historic cost principle and reflects the previous stock issued enhanced by profits or losses.  $\alpha_{ii}$  = Constant term,  $\beta_1$ ,  $\beta_2$ ,  $\beta_3$ ,  $\beta_4$ ,  $\beta_5$ , and  $\beta_6$ , = slope to be estimated,  $\varepsilon_{ii}$  = Component unobserved error term.

Table 2 shows the summary statistics for all Jordanian banks listed on ASE from 2006 to 2018. The time period 2019 and 2020 is excluded due to the impact of the Covid-19 pandemic, which effects began at the end of 2019. The data was annually downloaded from the ASE website. This data included annual stock price, return on assets, market capitalizations (total assets), earnings per share, book-to-market ratios, and dividend yields. Table 2 shows that the mean stock price is 3.49 with a volatility of 5.30. This indicates that stock prices for Jordanian banks are experiencing high volatility. The value of stock prices ranges from 0.79 to 63.30 and this indicates that the differences in Jordanian stock prices are very large. The skewness and kurtosis are 7.45 and 75.30, respectively. This means that the stock price value has a lack of symmetry and has a heavy tail.

#### 4. Results and Discussion

A panel method is used to achieve the purposes of this study. First, the unit root test based on the Levin-Lin-Chu test (LLC) is considered to identify if the data and variables are stationary. The test results in Table 3 show that all the variables are stationary at the level and they are significant at 1%.

#### 4.1. Correlation Matrix Test

The problem of multicollinearity appears when two independent variables are strongly correlated with each other. To check this problem, the degree of correlation matrix between these variables is calculated. Table 4 shows the highest level of correlation is 76% which is between EPS and BE/ME ratio. Based on statistical studies, if the correlation is less than 80%, the dataset is free from the problem of multicollinearity (Gujarati, 2003) The correlation matrix shown in Table 4 indicates no problems between variables, as all the values range between (-0.30) and (0.76).

Table	2.	Descriptive	Statistics
Table	Ζ:	Descriptive	STATISTICS

Variables	PRICE	RISK	SIZE	ROA	EPS	DY	ВЕМЕ
Mean	3.49	0.003	9.19	0.01	1.97	0.04	21.00
S.D.	5.30	0.004	0.46	0.01	1.31	0.03	13.83
Max.	63.30	0.03	10.41	0.08	6.86	0.14	77.01
Min.	0.79	0.00	8.06	-0.01	-0.56	0.00	2.48
Skew.	7.45	3.28	0.55	3.07	1.33	0.39	1.83
Kurt.	75.30	16.43	4.05	22.32	5.36	2.63	6.49
Obs.	195	195	195	195	195	195	195

The first row reports the name of each variable employed in this study, while the second and third rows detail the average stock price and standard deviation for all Jordanian banks during the study period from 2006–2018. Maximum and minimum values are documented in the fourth and fifth rows, while skewness kurtosis is detailed in the sixth and seventh rows. The number of observations of each variable is detailed in the last row.

Table 3: LLC Unit Root Test

Variables	Level Intercept	Level Intercept with Trend		
PRICE	-12.8088 (0.0000)	-11.3240 (0.0000)		
RISK	-23.2350 (0.0000)	-22.2046 (0.0000)		
SIZE	-5.63805 (0.0000)	-5.24202 (0.0000)		
ROA	-8.33704 (0.0000)	-9.03793 (0.0000)		
EPS	-2.94361 (0.0016)	-10.1952 (0.0000)		
DY	-4.00226 (0.0000)	-2.94395 (0.0016)		
BE/ME	-2.45937 (0.0070)	-6.07305 (0.0000)		

# 4.2. Breusch and Pagan Test for Heteroskedasticity

To check if there is a problem with Heteroskedasticity, the Breusch–Pagan test is conducted. Heteroscedasticity exists when the error variance is non-constant. The result of Breuch–Panan test is  $\chi^2 = 54.46$  with a statistical significance of less than 5%. This means that the heteroscedasticity problem is present in the dataset and robust standard errors should be applied to solve this problem.

Table 5 provides the estimate of pooled, fixed effect, and random effect models for the Jordanian banks. The result of the Hausman test indicates the use of the fixed

effect model. Therefore, the fixed effect model is adopted in the analysis. The fixed effect model result shows that adjusted *R*-square is high (88%), which means that the independent variables used in this model can explain 88% in the stock prices variation of Jordanian banks. Table 6 shows that SIZE, ROA, and DY of the Jordanian bank proved to be significant in the confidence level of one percent, while BE/ME is significant in the confidence level of ten percent.

Stock Price =  $2.0537 + 3.6980 \times RISK - 0.1900 \times SIZE + 8.0419 \times ROA - 0.0079 \times EPS - 1.4008 \times DY - 0.0089 \times BE/ME + \varepsilon$ 

Variables	RISK	SIZE	ROA	EPS	DY	BE/ME
RISK	1					
SIZE	-0.32***	1				
ROA	0.08	-0.10	1			
EPS	-0.18***	0.51***	0.34***	1		
DY	-0.30***	0.26***	0.13*	0.46***	1	
BE/ME	-0.08	0.56***	-0.07**	0.76***	0.30***	1

<sup>\*\*\*, \*\*, \*</sup>Indicate statistical significant at 1%, 5%, 10% level, respectively.

Table 5: The Effect of Financial Characteristics and Performance on the Stock Price

Damandant Variables	Stock Price							
Dependent Variables	Pooled N	Pooled Model		Fixed Effects		Random Effects		
Independent Variables	Coefficient	Coefficient <i>t</i> -stat.		<i>t</i> -stat.	Coefficient	<i>t</i> -stat.		
Constant	-4.73226***	(-45.12)	2.0537***	(2.98)	-2.1852***	(-7.08)		
RISK	7.0859**	(5.26)	3.6980	(0.84)	7.3801***	(1.80)		
SIZE	0.5294	(0.01)	-0.1900***	(-2.63)	0.2624***	(9.51)		
ROA	21.4206***	(2.67)	8.0429***	(5.88)	14.5696***	(7.31)		
EPS	0.0251	(1.52)	-0.0079	(-1.35)	0.0063	(0.78)		
DY	-3.4601***	(-5.86)	-1.4008***	(-4.13)	-2.6980***	(-5.36)		
BE/ME	0.0051	(0.45)	-0.0089*	(-1.77)	-0.0024	(-0.25)		
Adjusted R-squared	69%	69%		88%		33%		
Cross-section included	15		15		15			
Number of Observations	208		208		208			
Lagrange Multiplier test	10.8172***	(0.0000)						
Huasman Test	119.0805***	(0.0000)						

The sample includes all Jordanian Banks. A pooled model OLS regression, Fixed effect, and Random effect are based on equations (1, 2, and 3). Stock price  $\log(P)$  is the dependent variable downloaded from the ASE website. \*\*\*, \*\*,\*Indicates statistically significant at 1%, 5%, and 10% level, respectively.

#### 4.3. Discussion

Although the stock price is positively affected by RISK, it is statistically insignificant. The coefficient value for the bank risk is relatively large (3.698%) which means that if the volatility of ROA increases by 1%, this will increase the stock price by 3.698%. This effect is economically significant and supports the positive relationship between risk and return documented by Sharpe (1964).

The SIZE of the bank has a negative and statistically significant effect on the stock price. The coefficient value of the size of the bank is -0.19% which indicates that a 1% size increase will lead to a -0.19% decrease in stock price. This indicates that stocks of large banks are not actively traded, less liquid, and less marketable to investors. This negative result is in line with Irfan et al. (2002) and Almumani (2014).

The stock price is affected positively and significantly by ROA. The coefficient value of ROA is 8.0419% and it is the highest amongst the independent variables. This means that if ROA increase by 1%, the stock price will increase by 8.0419%. This is consistent with previous studies such as (Barakat, 2014; Chandra & Veronica, 2018; Simu & Pangaribuan, 2020) who pointed out that profitability is also a measure of operating efficiency. In other words, the more profitable a company is, the more operating efficient the company uses its assets. This will finally increase the company's stock price.

Unlike the findings of Almumani (2014) who showed that earning per share has a positive effect on market price, the result shown in Table 5 demonstrates that EPS had no significant influence on the stock price of Jordanian banks. This contradicts the results of the current study and THE Almumani (2014) finding may be attributed to the more appropriate method and the length of time used in the current study.

The DY has a negative effect on stock price and it is significant at a 1% level. This means that after the stock goes ex-dividend, the stock price usually decreases by the amount of dividend paid to reflect the fact that the new stockholder is not entitled to that payment. This finding is consistent with the findings of Zahir and Khanna (1982) and Sharma (2011). This finding confirms that the DY of a stock may be increased as a result of decreasing stock prices of Jordanian banks.

BE/ME has a negative and significant effect on the stock price. The coefficient value of BE/ME of the Jordanian banks is 0.0089 which means that if BEME increases by 1% this will lead to a decrease of 0.0089% in stock price. The negative effect indicates the ineffectiveness of bank management to meet financial services that meet the desires of individuals and companies. The increase in the book value compared to market value can be attributed to the unstable economic and political conditions in Jordan, which

forces Jordanian banks to adopt conservative rather than aggressive policies. This result is consistent with Gharaibeh and Al-Qudah (2020).

# 5. Conclusion

This study primarily examines the effect of RISK, SIZE, ROA, DY, EPS, and BE/ME factors on stock prices of Jordanian banks listed on the ASE from 2006–2018. Using a panel fixed effects model, the result shows that RISK, SIZE, ROA, DY, EPS, and BE/ME factors explain 88% of stock price movements.

The stock prices are significantly and positively affected by ROA and this indicates that the operational efficiency of the assets is high which leads to an increase in the stock prices. This finding is supported by the findings documented by Gharaibeh and AL-Qudah (2020) who found that profitability represented by ROA has a significant effect in estimating the expected return in Jordanian banking stocks based on formulating portfolios. In addition, the risk factor is positively significant, which is consistent with finance theory based on the trade-off relationship between risk and return. On the other hand, SIZE, DY, and BE/ME have a significant and negative impact on stock prices. SIZE indicates that the stock prices of the large Jordanian banks are adversely affected during the study period. In other words, the stock prices of large banks decreased, while small banks increased, especially after the global financial crisis and during the Arab Spring events.

According to the findings above, it is recommended that the bank managers or directors in Jordanian banks listed on the ASE can maximize the stock prices of their banks by increasing their profitability represented by ROA and decreasing SIZE. The portfolio managers have to take into their consideration the stocks that show small SIZE, high ROA, low DY, and low BE/ME. The portfolio managers and investors have to keep in mind that a rise in DY does not necessarily indicate attractive investment opportunities because the DY of a stock can be increased as a result of a lower stock price. As approximately 12% of the movement in the stock prices remains unexplained. Therefore, the researcher recommends conducting more research on this topic using macroeconomic variables such as inflation, money supply, interest rate, as well as conducting more research on other sectors such as industry and services.

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