

# The Analysis of Capital Structure and Performance on the Jordanian Banks' Share Price

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## Abstract

The variations in capital structure and financial performance consider being main significance to evaluate the overall returns of the firms and more significant point to know whether stock returns are sensible to change in capital structure. (Khan W., et al., 2013) This study conducted to verify the relationship presence between some of capital structure signal, and performance indicators expressed by some profitability measures on the Jordanian banks' share price over the study period which extend from 2009 to 2014. A quantitative approach was used to achieve the study objective. The study resulted in some findings summarized as follows: There is a significant impact of capital structure on Jordanian banks' share price, as well there is a significant impact of equity ratio on Jordanian bank's share price, and likewise there is a significant impact of debt ratio on Jordanian bank's share price. On the other hand there is a significant impact of performance on Jordanian banks' share price; however, there is no significant impact of return on asset (ROA) on Jordanian bank's share price, but there is a significant impact of return on equity (ROE) on Jordanian bank's share price. Finally, there is a significant impact of capital structure and performance on Jordanian banks' share price.

**Keywords:** Share price, Equity ratio, Debt ratio, Return on asset (ROA), Return on equity (ROE), Amman Stock Exchange (ASE).

## 1. Introduction and theoretical framework

From the investor perspective the share price is the company's value reflection, the high the price the high the company's value, and when it is low then the company's value is bad, because of that the share price is substantial for the company. (Purnomo, 2008). In theory differences in share prices will be influenced by the company's financial performance, also influenced by the supply and demand law. (Murniati S., 2016). The share price in this study will be calculated depending on the daily, weekly, monthly and yearly averages of closing price during the period of the study.

The share price in the market expanded a topical measure of an investment company's value. Thus, the share price is the investors' expectations reflection. When the financial performance of the company increased indirectly will raise the price of shares on the stock exchange, accordingly when investors suppose that the good performance will raise the company's value and enable provide reparations to investors in the shape of dividends. Conversely a reduction in the company's financial performance may cause share price reduction. Many elements can influence a company's share price, both resulting from the external circumstances or the coming from the internal environment of the company. (Murniati S., 2016). In this study the company's performance will be expressed by return on asset (ROA) and return on equity (ROE).

When a company borrows, it stimulates the impact of financial risk, which indicates the doubt of the expected net profit as return on equity (ROE). The main cause for the stimulation of this risk is fixed financial costs, which remain uninfluenced by periodic fluctuations in earnings before interest and tax (EBIT). (RADEVIĆ B., et al., 2013).

Debt is one of the base origins of financial risk. Logical, risk-unwilling investors should need a leverage premium, mentioning a predictable positive relationship between a company's leverage and share returns. The wide majority of surveys in the field of capital structure examine all the factors that decisively affect the leverage or the presence of a best capital structure. Moreover, there are a few studies that investigate the relationship between leverage and share returns, with conflicting results. (Muthukumaran K., 2012). In this study the capital structure will be expressed by debt to asset and debt to equity ratios for the period from 2009 until 2014.

## 2. Previous Studies

The effect of capital structure and profitability on share price was investigated by Purnamawati G. (2016) study which applied during the period from 2010 to 2013, and used the audited financial statement of 68 Manufacturing Sector Company Listed in Indonesia Stock Exchange. The results revealed that the capital structure and profitability influence the share price by 4.4%, also capital structure had positive effect on the share price of 12.4%, and finally the results showed that the profitability had a positive influence on the share price of 16.5%, and (4) the capital structure had a positive influence on the profitability of 11%

The effect of capital structure expressed by debt to asset ratio and debt to equity ratio, company size and profitability expressed by return on assets (ROA), return on equity (ROE) and net profit margin was applied on 11 Food and Beverage companies' share price listed on the Indonesia Stock Exchange by Murniati S., (2016)

study which was for the period from 2011 to 2014. The results showed a significant negative effect of debt to asset ratio on share price, also showed a significant positive effect of debt to equity ratio on share price, also revealed a significant positive effect of the company size on share price, and a significant positive effect of return on assets (ROA) on share price, but a significant negative effect of return on equity (ROE) on share price, and finally a significant negative effect of net profit margin on share price.

The effect of profitability on share price represented by share returns was studied by Foroghi et al. (2015), the study was applied on 60 units of the Tehran Stock Exchange for the period from 2005 to 2012, and using some methods and techniques, and the model of the study consisted of independent variable expressed by profitability, and two control variables; firm size and life cycle. The results showed that all models profitability affect the share returns, and profitability factor should be addressed for earning higher returns.

The effect of financial structure, financial leverage and profitability on industrial company's value was represented by Barakat A. (2014) study which applied on data collected from brochures issued by Saudi capital market for 46 Saudi industrial companies listed in Saudi Share Market by using a set of statistical methods during the period from 2009 to 2012. The study showed a significant direct relationship between return on equity, capital structure and share price, and insignificant relationship between financial leverage and share value, strong and positive relationship between capital structure and return on equity upon using multiple regression analysis; finally there is a clear impact of financial structure return on equity on company's value.

The relationship between capital structure expressed by equity, gearing ratio and share price was investigated by Buigut K et al. (2013) study which applied on energy sector during the period from 2006 to 2011 by using panel data and multiple regression method. The results showed that the debt, equity and gearing ratio are significant determinants of share price, gearing ratio and debt were found to positively affecting share price, while equity negatively affected share prices

The impact of capital structure expressed by debt on share price performance was applied by Muthukumar K., (2012) on sample consisting of listed Indian construction companies during the period from 2007 to 2011. The results revealed that the leverage risk factor contains significant information content and that have explanation of share returns.

The relationship between the ROA, ROE and ROI together and separately with Jordanian insurance public companies' share price was applied for the period from 2002 to 2007 by Kabajeh M, et al. (2012) study. The results revealed a positive relationship between the ROA, ROE and ROI with share price, also a low positive relationship between each of ROA separately and ROI ratio separately with share price and no relationship between the ROE separately with share price.

### 3. Hypotheses

In order to invent the impact of capital structure measures and performance indexes on the share price for banking sector in Jordan, the researcher will test the following hypothesis:

#### First Main Hypothesis

**H<sub>01</sub>:** There is no significant impact of capital structure on Jordanian banks' share price.

#### Sub Hypothesis

**H<sub>11</sub>:** There is no significant impact of equity ratio on Jordanian bank's share price.

**H<sub>21</sub>:** There is no significant impact of debt ratio on Jordanian bank's share price.

#### Second Main Hypothesis

**H<sub>02</sub>:** There is no significant impact of performance on Jordanian banks' share price.

#### Sub Hypothesis

**H<sub>12</sub>:** There is no significant impact of return on asset (ROA) on Jordanian bank's share price.

**H<sub>22</sub>:** There is no significant impact of return on equity (ROE) on Jordanian bank's share price.

#### Third Main Hypothesis

**H<sub>03</sub>:** There is no significant impact of capital structure and performance on Jordanian banks' share price.

### 4. Research Methodology

The current study tries to survey the impact of some capital structure and performance signals on the share price of banks in Jordan. This experimental study applies on available data for 10 items collected from the financial statements of the Jordanian Banks listed at Amman Stock Exchange (ASE) for six years from 2009 until 2014. The researcher used quantitative approach in order to find the impact of independent variables on dependent variable for this study. Moreover, in respect of check the relation and the strength of the relation amongst the variables showed above, the study used the Statistical Package for Social Sciences (SPSS v. 20), were the study has been applied Correlation and Multi-Regression analysis to test the hypotheses.

#### 4.1. The Research Sample

*The study conducted on the available financial reports information for 10 Jordanian Banks listed at Amman Stock Exchange (ASE) during the years from 2009 to 2014.*

#### 4.2. Variables of the Study

##### 4.2.1. Dependent Variables- Share price

**Share price:** is a singular share price of a number of marketable shares of a company, derivative or other financial asset. On the other words is the highest price someone is interested to pay for the share, or the lowest price that it can be bought for. (<https://en.wikipedia.org>)

The criteria that used to calculate the share price to achieve the study goal is to count daily then weekly then monthly and yearly averages for the share price, for the sake of the short period of the study, which extent about 5 years from 2009 to 2014.

##### 4.2.2. Independent variable- Equity Ratio, Debt Ratio, Return on Asset (ROA), Return on Equity (ROE).

**Equity ratio:** is a measure of the firm's utilized of fixed-cost financing sources. (Kaplan, Schweser, 2012)

It calculated as follows:

$$\frac{\text{Total debt}}{\text{Total shareholders' equity}} \quad (\text{Kaplan, Schweser, 2012})$$

**Debt ratio:** a little different way of analyzing debt employment. (Kaplan, Schweser, 2012)

It calculated as follows:

$$\frac{\text{Total debt}}{\text{Total assets}} \quad (\text{Kaplan, Schweser, 2012})$$

**Return on asset (ROA):** is a simple measure of how well management is circulating the firm's assets in the pursuance of a profit. (Gleim I., Flesher D., 2015)

It calculated as follows:

$$\frac{\text{Net income}}{\text{Average total assets}} \quad (\text{Gleim I., Flesher D., 2015})$$

**Return on equity (ROE):** measures the return per owner dollar invested. (Gleim I., Flesher D., 2015)

It calculated as follows:

$$\frac{\text{Net income}}{\text{Average total equity}} \quad (\text{Gleim I., Flesher D., 2015})$$

### 5. Data Analysis and Results

In respect to realize the study purposes, the study data is checked for Normality by Normality test (Shapiro-Wilk test), then normally data distributed is produced.

#### 5.1 Descriptive Data Analysis

In respect to conduct the nature and characteristics of data, measures of central tendency through mean, standard deviation, the lowest and highest values have been used as follows:

**Table (1), Measures of Central Tendency**

<u>Variable (2009 – 2014)</u>	<u>Minimum</u>	<u>Maximum</u>	<u>Mean</u>	<u>Std. Deviation</u>
Share price (JD)	.88	12.93	2.636	2.451
Equity Ratio %	9.58	19.09	14.245	2.503
Debt Ratio %	80.91	90.42	85.756	2.503
ROA %	-.17	2.10	1.057	.690
ROE %	-1.45	16.87	8.530	4.578

The figures above represent the results of the descriptive data analysis for the study during the six years, which can be resulted in the basis of mean values that the mean of share price was (2.636) JD, and the minimum share price was (0.88) JD. Also, the standard deviation of share price was (2.451). Moreover, the highest value of equity ratio was (19.09%). The mean of equity ratio was (9.58%), and the standard deviation for equity ratio was (2.503).

Table (1) shown that the highest value of debt ratio was (90.42%), and the mean of debt ratio was (14.245%), with the standard deviation of (2.503). Besides, the mean of ROA was (1.057%), and the standard

deviation for ROA was (0.690). finally, the highest value of ROE was (16.87%) and the minimum value of ROE was (-1.45%). The mean of ROE was (8.530%), with the standard deviation of (4.578).

### 5.2 Correlations between Variables

In order to discover the relationship between the variables, the researcher used Spearman correlation. The result of this test as follows:

**Table (2), Correlations between Variables**

		Share price	Equity Ratio	Debt Ratio	ROA	ROE
Share price	Pearson Correlation Sig. (2-tailed)	1				
Equity Ratio	Pearson Correlation	.231	1			
	Sig. (2-tailed)	.076				
Debt Ratio	Pearson Correlation	-.231	-1.000	1		
	Sig. (2-tailed)	.076	.000			
ROA	Pearson Correlation	-.187	.034	-.034	1	
	Sig. (2-tailed)	.151	.798	.798		
ROE	Pearson Correlation	-.380	-.237	.237	.768	1
	Sig. (2-tailed)	.488	.068	.068	.000	

The results above represent a positive correlation (high correlation) between share price and equity ratio of (0.231) and it is under the significance level (of 0.10). Moreover, there a positive correlation (high correlation) between debt ratio and ROE and it is under the significance level of (0.10). Also, there is full negative correlation and between equity ratio and debt ratio of (-1.000), and it is under the significance level of (0.01).

### 5.3 Hypotheses Testing

The following tests show the results of Multi-Regression test in order to achieve the study purposes.

**H01: There is no significant impact of capital structure on Jordanian banks' share price.**

H011: There is no significant impact of equity ratio on Jordanian bank's share price.

H012: There is no significant impact of debt ratio on Jordanian bank's share price.

**Table (3), Testing First Main Hypothesis**

Model	Adjusted R Square	F	Sig.	Decision
H01	.037	3.265	.076	Accepted
Model	Beta	T	Sig.	
(Constant)		2.052	.045	
H011	.231	-1.807	.076	Accepted
H012	-.231	-1.807	.076	Accepted

The results above appear that the correlation of debt ratio and share price is (.231), and the significance level for this hypothesis is (0.076) which point out less than the significance level of (0.10), Besides, according to correlation value between equity ratio and debt ratio of (-1.000) the results of (H11) and (H12) is similarity, hence null hypothesis (H012 H012) is rejected. Moreover, Adjusted R2 value of the full model regression is (0.037). As a conclusion, there is a significant impact of capital structure on Jordanian banks' share price during the study period (2009-2014), herewith, null hypothesis (H01) is rejected.

**H02: There is no significant impact of performance on Jordanian banks' share price.**

H021: There is no significant impact of return on asset (ROA) on Jordanian bank's share price.

H022: There is no significant impact of return on equity (ROE) on Jordanian bank's share price.

**Table (4), Testing Second Main Hypothesis**

Model	Adjusted R Square	F	Sig.	Decision
H02	.142	5.864	.005	Accepted
Model	Beta	T	Sig.	
(Constant)		6.883	.000	
H021	.254	1.347	.183	Rejected
H022	-.574	-3052	.003	Accepted

The results above indicate that the correlation of ROA and the share price is (.254), and the significance level for this hypothesis is (0.183) which means it is more than the Significance level of (0.10), thus null hypothesis (H021) is accepted. Also, the correlation of ROE and the share price is (-.574), and the significance level for this hypothesis is (0.003) means it is less than the significance level of (0.01), hence null hypothesis (H022) is rejected. Besides, Adjusted R2 value of the full model regression is (0.142). As a result, there is a significant impact of performance on Jordanian banks' share price, just like that, null hypothesis (H01) is rejected.

**H03: There is no significant impact of capital structure and performance on Jordanian banks' share price.**

**Table (5), Testing Third Main Hypothesis**

Model	R (Beta)	Adjusted R Square	F	Sig.	Decision
H03	.424	.136	4.085	.011	Accepted

The above table shows that there is significant impact of capital structure and performance on Jordanian banks' share price. This is because the significance level for this hypothesis (model) is less than the significance level of (0.05), hence null hypotheses for H03 models is rejected. The beta value for this model is (0.424), thus there is positive relationship between capital structure and performance and Jordanian banks' share price.

## 6. Conclusion

The following table shows the result of test the study hypotheses, both main and sub hypotheses.

**Table (6), Conclusion**

Hypothesis	Result
H01: There is no significant impact of capital structure on Jordanian banks' share price.	Null hypothesis is rejected
H011: There is no significant impact of equity ratio on Jordanian bank's share price.	Null hypothesis is rejected
H021: There is no significant impact of debt ratio on Jordanian bank's share price.	Null hypothesis is rejected
H02: There is no significant impact of performance on Jordanian banks' share price.	Null hypothesis is rejected
H021: There is no significant impact of return on asset (ROA) on Jordanian bank's share price.	Null hypothesis is accepted
H022: There is no significant impact of return on equity (ROE) on Jordanian bank's share price.	Null hypothesis is rejected
H03: There is no significant impact of capital structure and performance on Jordanian banks' share price.	Null hypothesis is rejected

The study revealed the following results: There is a significant impact of capital structure expressed by equity ratio and debt ratio on Jordanian banks' share price, as well there is a significant impact of performance expressed by of return on equity (ROE) on Jordanian bank's share price; however, there is no significant impact of performance expressed by return on asset (ROA) on Jordanian bank's share price.

Finally, there is a significant impact of capital structure and performance on Jordanian banks' share price.

The results above consistent with the majority of literature reviews were represented in this study, which support the theoretical approaches that discuss the existence of relation between capital structure and performance with the share price.

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