# ASSESSING THE IMPACT OF ACCOUNTING INFORMATION ABOUT COMPANIES ON THEIR STOCK QUOTES: AN EMPIRICAL ANALYSIS OF THE ACTIVITIES OF COMPANIES PARTICIPATING IN KUWAIT AND SAUDI ARABIA STOCK EXHANGES 

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#### Abstract

Market Share Prices have important roles in determining the performance of the companies. Companies aim continuously to have a high market share prices for many goals. Therefore, understanding all variables that affect share prices is vital for investors. To examine if the Accounting Information affects market share prices, we studied the effect of some financial ratios determined from accounting statements on share prices for listed firms on Kuwait Stock Exchange and Saudi Stock Exchange. For Kuwait stock exchange, the quantitative methodology relied on the panel multiple regression through compiling and analyzing the Accounting Information and Market Share Price using secondary data for the period 2011-2018. The independent variables are Return on Equity (ROE), Earning per Share (EPS), and Dividend per Share(DPS) and the dependent variable is Market Share Price (MSP) of premier listed companies on Kuwait stock exchange. The analysis of the coefficient of correlation ( $R$ ) shows that the correlation is very strong among DPS and EPS, DPS and ROE, EPS and ROE whilst it is strong among MSP and ROE, MSP and DPS, and EPS and MSP. Moreover, the variation of the three variables affects strongly the variation of MSP significantly on 1\%. Therefore, there is a cause-effect relation between Accounting Information and MSP. Moreover, this paper examines the impact of return and leverage ratios on the Market Share Price of listed firms on Saudi Stock Exchange. The panel-data approach of fixed effect is used during the period of 2015 to 2018. To achieve the purpose of research return on equity as a proxy for profitability information, debt to equity ratio as a proxy for profitability ratio and natural logarithm of total assets as a proxy for the firms' size are considered as dependent variables while market share price is considered as an independent variable. The results indicate that debt ratio and degree of financial leverage is negatively determining the share price while size has significant positive impact on the share. Debt to equity ratio is insignificant in effecting share price.


Keywords: market share prices, accounting information, coefficient of correlation, earning
Market share Prices have important roles in determining the performance of the companies. Thus, companies aim continuously have a high market share prices for many goals. First, high share prices show high performance for the companies and their staff, impact companies reputations, and give trust to investors and shareholders. In brief, shares values determines firms' values as they represent the wealth for investor that change directly proportional with them. Therefore, understanding all variables that affect share prices is vital for investors. And as investors demand the disclosure of adequate, reliable accounting information to make the investment decisions, they become very essential for the market growth. After examining various studies made on the determinants of market share price, it is noticeable that there is a debate whether the market data or the accounting data extracted from financial statements has more explanatory power.

This research is designed to capture the impact of accounting information on listed firms on Kuwait Stock Exchange and Saudi Stock Exchange.

To determine the impact of accounting information on listed firms on Kuwait stock exchange the main research question to be investigated are as follows:

- How do accounting information affect the listed firms on Kuwait stock exchange and Saudi Stock Exchange?
- The specific questions are:
- What is the effect of return on equity on market share price in the listed firms on Kuwait stock exchange and Saudi Stock Exchange?
- What is the effect of earning per share on market share price in the listed firms on Kuwait stock exchange?
- What is the effect of dividend per share on market share price in the listed firms on Kuwait stock exchange?
- What is the effect of debt to equity on market share price in the listed firms on Saudi Stock Exchange?
- What is the effect of Size of the firm on market share price in the listed firms on Saudi Stock Exchange?

Information level is an essential factor which determines financial market efficiency. And since shares are the most preferred investment tools due to their high returns. Therefore, the determinants of stock prices are vital subjects in accounting and finance literature. Investors would leverage their profits depending on the effect of this information on stock prices.

The findings of paper are significant for investors in terms of forming investment strategies and market efficiency so they can choose the most appropriate investment decisions. Moreover, Accounting information might affect the profitability and risk for investors willing to have diversified portfolios. Hence, this study would provide guidelines for the investors in Kuwait stock exchange to optimize their portfolios. Additionally, this study might help the financial policy makers in Kuwait stock market and Saudi Stock Market to sketch the appropriate policies and for firms to make consider a framework in their future financial performance. Also, this research may be an added value foe academics as a reference in the studies.

To achieve the goal of the research the following hypotheses are formulated:

- Return On Equity affects Market Share Price significantly price in the listed firms on Kuwait stock exchange.
-Earning Share Price affects Market Share Price significantly price in the listed firms on Kuwait stock exchange.
-Dividend per share affects Market Share Price significantly price in the listed firms on Kuwait stock exchange.
- Return On Equity affects Market Share Price significantly price in the listed firms on Saudi stock exchange.
- Debt to Equity affects Market Share Price significantly price in the listed firms on Saudi stock exchange.
- Size of The Firm affects Market Share Price significantly price in the listed firms on Saudi stock exchange.

The next sections of the paper are divided as follows: Section II shows literature review. Section III reveals the data collection method and the methodology used. Then results are found in section IV. Section V concludes. Finally, the list of references is listed.

In finance and accounting, information is vital in evaluating the quality of investments and since stocks are the most preferred investment instruments due to their high returns, there are a real and continuous need to study the factors that plays roles in determining stock prices. The market price per share of stock is the amount that investors are willing to pay for one share of the firm's stock which is different from book value per share of the firm's assets extracted from a firm's balance sheet [1]. Investors can increase their profits according to the impact of this information on stock prices.

There are many studies relating the determinants of stock returns in the literature.Some of them link changes in stock price to firm accounting information. Accounting information is an important factor for investment decisions, stock price, and consequently firm's future profit. In assessing the market value of companies, marketbased ratios are significant tools used by investors. These ratios as price to earning ratio ( $\mathrm{P} / \mathrm{E}$ ), earnings per share (EPS) and market to book ratio (M/B) can give indicators to investors of the real value of stocks in contrast to the market value of the stocks. Thus, stocks that forms good investment decisions are ones which their real values exceed their market value [2].

## 1. Return On Equity and Market Share Price

The return on equity focuses on the equity part invested in the firm and relates net income to it [3]. The accounting formula (1) of return on equity reflects this:

$$
\begin{equation*}
\text { Return on Equity }=\text { Net income } \div \text { book value of shareholders equity. } \tag{1}
\end{equation*}
$$

Kabajeh M. [4] conducted their study to analyze the relationship between the ROA, ROE and ROI ratios with Jordanian insurance public companies share prices during the period (2002-2007). Their empirical results supported a positive relationship between the ROA, ROE and ROI ratios together with Jordanian insurance public companies share prices. However, the results showed no relationship between the ROE ratio, low relationship between each ROA, ROI separately with Jordanian insurance public companies market share prices

In a research of [5], a significant positive relationship between the market price per share with the ratios of return on assets and return on equity for a sample of forty Jordanian public companies listed in Amman Security Exchange during the period between the year of 1984 to 1996. Abu Hasheesh [6], AL Khalayleh [5] tested the effect of return ratios and found significant positive relationship between the market price per share with the ratios of return on assets and return on equity. Whilst Abu Shanab [7] found that there is no for the returns on the market value per share. Ndubuisi showed that Return on Equity has a positive and statistically significant effect on Market Share Price, Communication and Technology firms listed on Nigeria Stock Exchange from 2010-2016.

## 2. Earnings Per Share and Market Share Price

Earnings per share the amount of current period earnings or profit (or loss) attributable to a unit of ordinary share. Investors can forecast the real value of stocks by using market based ratios such as price to earning ratio (P/E), (EPS) [2]. The accounting formula (2) of Dividend Per Share is:

$$
\begin{equation*}
\text { Earning per Share }=\text { Net income } \div \text { outstanding common shares. } \tag{2}
\end{equation*}
$$

Earnings per share affects calculation of stock price significantly. Moreover, Earnings per share that depend on net income can assess firms' performance in operations and financing [8].

Zeytinolu E. tested the effect of Earning per share (EPS), price to earning ratio (P/E) and market to book ratio (M/B) on stock returns of insurance companies in Turkey. Based on results, the ratios have explanatory power on stock returns.

Findings of Ndubuisi showed that Earnings per Share has a positive and statistically significant effect on Market Share Price Findings

In a recent study for EPS has positive effect on firm value in property and real estate companies listed on the Indonisia stock exchange for the perion (2014-2017)

Khan and Amanullah [9], Malhotra and Tandon [10], Almumani [11] found that P/E ratio has a strong effect on market price. Furthermore, Sharma [12], Malhotra and Tandon [10], Almumani [11] showed in his empirical study that ESP is one of the strongest determinants among his other variables of market price.

Mirfakhr E. also find negative and significant relationship between stock price and price to earning ratio. Another studies for Somoye R. [13], Rahgozar R. [14] find weak and negative relationship between EPS and share prices.

In their study, Anwar and Rahmalia [19] analyzed the effect of returns on equity (ROE), earnings per share (EPS), and price-earnings ratio (PER) on stock prices (SP). The results show that the three independent variables namely ROE, EPS and PER simultaneously affect the Stock Price on the Indonesia Stock Exchange. However, Partially the ROE has a significant impact but EPS and PER do not.

## 3. Debt to Equity and Market Share Price

Debt to Equity of firm is a measure used for leverage ratios. It is the measured by dividing debt of each firm on a certain period on the equity of the same period (3).

$$
\begin{equation*}
\text { Debt to Equity }=\text { Debt } \div \text { shareholders equity. } \tag{3}
\end{equation*}
$$

As Ehrhard and Bringham [16] believe that the value of a firm depending on the going concern approach is the present value of all the expected future cash flows coming from the assets, discounted at the firms weighted average cost of capital (WACC). Hence, the structure of the capital including equity and debt is important [17] as it will maximize shareholder's wealth. Minimizing WACC that is used to discount the future cash flows of any firm will maximize value of the firm [18]. For instance, in their study, Nirmala P. [19] found that leverage has significant positive impact on share price

Modigliani and Miller [20] in their capital structure theory -MM approach argue that capital structure of firms don't affect their share value.

Chowdhury A. [20] found that long-term debt to total asset has positive but insignificant effect on the share price. While Barakat A. [21] observed that debt ratio has insignificant and weak negative relationship with share price. turning to Abdullah et al (2015) where they observed that leverage is significant negatively and size is significant positively impacting on stock returns in overall industrial data.

## 4. Dividend Per Share and Market Share Price

Dividend per share is the gross dividend divided by number of ordinary shares. It represents the retention policy of firms as investors seeks for higher ratio to continue to retain their investments [23].

The accounting formula of Dividend Per Share is (4):
Dividend per Share $=$ total dividend for a period $\div$ outstanding shares for the period.
Regarding the effect of DPS on the firms' values, there are two opinions. the first opinion considers the dividend policy Gordon M. [24] considered relevant in relation to the value of the firm and the market price of shares Khan K. [25] stated in his paper that a positive relation is found between dividend yield and stock price changes for a sample of firms listed in the London Stock Exchange

Khan K. considers dividend per share is more than a just an income for investors, but it is an indicator for assessing firms in investment as they consider dividends not only the source of income but also an instrument to assess company from investment point of view and to evaluate the cash generative ability of firms. On other hand, higher DPS ratio indicates less future investments. Also, lenders consider high DPS ratio means less servicing and redemption of their claims [26]. Dividend return is important to investors returns, and assess the valuation of the firm's shares [27]. This makes the volatility of stock prices as important to firms as it is to investors [28].

AL Thaher M. [29] in his study showed a significant positive relationship between the impact of dividend policy and the market share prices for a sample of seven Jordanian commercial banks listed in Amman Security Exchange during the period between the year of 1996 to 2000.

Findings of Ndubuisi showed that Dividend per Share has a positive and statistically significant effect on Market Share Price. Whilst others believed in irrelevance theory Miller and Modigliani [30], [7] showed that there is no effect for the returns, risks and dividends on the market value per share for a sample of thirty-eight industrial
public companies in Jordan listed on Amman Security Exchange for the period (2000 - 2007). Data and Research methodology for Saudi stock exchange.

## 5. Firms Size and Market Share Price

The size of a firm can be measured in terms of total assets. It is an important financial measure used to represent the volume of the firm.

Concerning the effect of size of the firm on the effect of the firm's value, Abdullah [31] revealed in their study size is significant positively impacting on stock returns.

Additionally, firm size has a positive and significant effect on the average share price [32].
The methodology employed in this study is quantitative. Quantitative methodology relies on numbers to analyze and predict the relation between the accounting information and the market share price of listed companies on Kuwait stock exchange and Saudi stock exchange.

The correlation between two variables is a measure of the degree of association (magnitude and sense) between the two variables.

According to Hejase A.J. [33], the standards of the coefficient of correlation (R) are:
$0-0.19$, then don't even think about a correlation between X and Y .
$0.2-0.39$, then there is weak correlation between X and Y .
$0.4-0.59$, then there is a moderate correlation between X and Y .
$0.6-0.79$, then there is a strong correlation between X and Y .
$0.8-1$, then there is a very strong correlation between X and Y .
If the sign of R is negative, this means that it is a negative relation between X and Y .
If the sign of $R$ is positive, this means it is positive relation.
Regression is a statistical tool that has been used in this research for the purpose of studying the relationship between the accounting information and market share price where data are both cross-sectional and time series.

Thus the equation is formulated as follows (5):

$$
\begin{equation*}
\text { MSPit }=\beta 0+\beta 1 \mathrm{X} 1 i t+\beta 2 \mathrm{X} 2 i t+\beta 3 \mathrm{X} 3 i t \tag{5}
\end{equation*}
$$

where the X1it, X2it, X3it - are independent variables.
A good measure to quantify the goodness of a simple regression fit is the coefficient of determination " R square" which is nothing than the correlation squared. R square determine what percentage variation of the dependent variable is attributed to the variations of the independent variable [33].

Three independent variables were used in the research namely: Return on Equity, Earning per Share, Dividend per Share, Debt to Equity and Size of firm.

The Market share price is the dependent variable used in the research.
The listed companies in Kuwait stock market are divided into three segments:
a) Premier: Premier Market forms the elite segment within Kuwait exchange. It will be occupied by high caliber companies with high liquidity and medium to large market capitalizations. Companies in this segment are subject to annual reviews to assess their performance and trading activities in Kuwait exchange throughout the entire year, base on which their classification under the Premier Market for the following year is determined, or else demoted to either the Main Market or Auction Market.
b) Main: the main market consists of those stocks that fall short of the premier market requirements, but still have sufficient liquidity as determined by the exchange.
c) Auction: The Auction Market is designed to concentrate liquidity on low trading stocks at specific times during trading hours. Listed companies that do not meet the requirements of the Premier or Main Markets will be listed in the Auction Market. Constituents within the Auction Market are illiquid securities regardless of their market capitalization.

The sample is consisted of all twelve listed companies in premier market classified as in table 1:
Table 1. - Premier listed firms sectors sample

| Sector | Banks | Basic Materials | Financial Services | Industrials | Real States | Telecommunications |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of <br> listed firms | 5 | 2 | 1 | 2 | 1 | 1 |

The study used the secondary data from several sources: Kuwait stock exchange website, journals, text books, and articles. The data collected from financial statements extracted from publications of Kuwait stock exchange website consists of 96 observations for each variables market from 2010 till 2018. With respect to Saudi stock exchange, the data is collected using random sampling from annual financial statements of the listed firms.Closing share prices are collected from Saudi Stock Exchange website

The research framework can be described in the figure 1:


Figure 1. - Kuwait model framework
The study analyzed the correlation between the variables values of the listed firms for the given period, thus having a sample of 96 data for each variable.
a) Kuwait stock exchange model

Fixed effects panel regression in SPSS using Least squares dummy variable approach is used.
The fixed effects model can be used to study the relationship between time-varying predictors and outcomes [34].

It is a statistical tool that has been used in this research for the purpose of studying the relationship between the accounting information and market share price where data are both cross-sectional and time series.

Thus the equation is formulated as follows (6):

$$
\begin{equation*}
\text { MSPit }=\beta 0+\beta 1 \text { ROEit }+\beta 2 \text { ESPit }+\beta 3 \text { DPSit }+\gamma 2 D 2 i+\gamma 3 D 3 i+\ldots+\gamma n D n i+u \tag{6}
\end{equation*}
$$

where the $D 2 i, D 3 i, \ldots, D n i$ - are Dummy variables;
ROEit - Return on equity of firm $i$ in year $t$ which is a measure used for return ratios;
ESPit - Earning per Share of firm $i$ in year $t$;
DPSit - Dividend per Share of firm $i$ in year $t$.
A good measure to quantify the goodness of a simple regression fit is the coefficient of determination "R square" which is nothing than the correlation squared. R square determine what percentage variation of the dependent variable is attributed to the variations of the independent variable [33].

## b) Saudi stock exchange model

The study examines the effect of return and debt ratios on the share price of listed firms in Saudi Stock Exchange. The study uses the fixed effect model of the panel data approach to control all the stable attributes of the firms under study for the period (2015-2018).. Descriptive statistics, correlation matrix and fixed effect multiple regression model using dummy variables is employed to explore the relationship and find the empirical results. Return, leverage ratios, and size are used as independent variables. Return on equity is used to express return ratios whereas debt to equity ratio used as to express leverage Whilst market share price is used as dependent variable. While size used as controlled variable.

Thus the conceptual framework model is represented in figure 2 :


Figure 2. - Model framework
For the purpose of the study, our econometric model is built according to this equation (7):

$$
\begin{equation*}
\text { MSPit }=\beta 0+\beta 1 \text { ROEit }+\beta 2 D T E i t+\beta 3 T A i t+u i t \tag{7}
\end{equation*}
$$

where $i=1, \ldots ., n$ and it expresses the firms;
$t=1, \ldots \ldots, t$ and $i t$ expresses the time;
MSPit - Market share price of firm $i$ in year $t$;

ROEit - Return on equity of firm $i$ in year $t$ which is a measure used for return ratios. It is measured by dividing returns of each firm on a certain period on the equity of the same period;

DTEit - debt to equity of firm $i$ in year $t$ which is a measure used for leverage ratios. It is the measured by dividing debt of each firm on a certain period on the equity of the same period.

TAit - size of a firm $i$ in year $t$ in terms of total assets. It is an important financial measure used to represent the volume of the firm. Here, it is used as size natural logarithm to ensure normality. Firm size is defined as the natural logarithm of total assets at the end of period (LOGSIZE $i t=\log (A i, t))$.
$\beta 0$ - the intercept (the constant term)
$\beta 1, \beta 2, \beta 3$ - regression coefficient for respective variables (slopes that represent the extent of the dependent changes as the independent variable changes by one-unit variable).
uit - is the part of the price which is not interpreted by the model (errors or residuals).
Firstly, summary descriptive statistics of variables is presented. then correlations between the variables are shown. Finally, regression model is clarified.

This section provides descriptive statistics of variables in the study for the given period from 2011 till 2018 and then they are interpreted. Sample minima, maxima, means, medians, standard deviations are reported. The descriptive statistics are presented in table 2.

Table 2. - Descriptive statistics

|  | N | Min. | Max. | Mean | Std. Deviation |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Statistic | Statistic | Statistic | Statistic | Statistic |
| ROE2011 | 96 | .018705 | .501648 | .11474052 | .087246751 |
| EPS2011 | 96 | .002 | .259 | .04651 | .040129 |
| DPS2011 | 96 | .000 | .185 | .02682 | .031949 |
| MSP2011 | 96 | 161.000 | 3739.500 | 610.08865 | 541.766921 |

Source - Done by the author depending on SPSS calculations.
Table (1) shows that the market share price ranges from a minimum value of 161 to a maximum value 3739.5 and a mean equal to 610.088 . The return on equity ranges from a minimum value of 0.18705 to a maximum value of 0.501648 and a mean equal to 0.11474 . The earning per share ranges from a minimum value of 0.002 to a maximum value of 0.259 and a mean equal to 0.04651 . The dividend per share on investments ranges from a minimum value of 0 to a maximum value of 0.185 and a mean equal to 0.02682 .

The correlations between the variable ROE, EPS, DPS, and MSP are shown in the table 3.
Table 3. - Correlations

| N for each variable $=96$ | ROE2011 | EPS2011 | DPS2011 | MSP2011 |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ROE2011 | Pearson Correlation | 1 | $.856^{* *}$ | $.837^{* *}$ | $.729^{* *}$ |
|  | Sig. (2-tailed) |  | .000 | .000 | .000 |
| EPS2011 | Pearson Correlation | $.856^{* *}$ | 1 | $.933^{* *}$ | $.790^{* *}$ |
|  | Sig. (2-tailed) | .000 | .000 | .000 |  |
| DPS2011 | Pearson Correlation | $.837^{* *}$ | $.933^{* *}$ | 1 | $.759^{* *}$ |
|  | Sig. (2-tailed) | .000 | .000 | .000 |  |
|  | Pearson Correlation | $.729^{* *}$ | $.790^{* *}$ | $.759^{* *}$ | 1 |
|  | Sig. (2-tailed) | .000 | .000 | .000 |  |

Source - Done by the author depending on SPSS calculations.
As shown in table, the analysis of the coefficient of correlation R shows that the correlation is very strong among DPS and EPS, DPS and ROE, EPS and ROE whilst it is strong among MSP and ROE, MSP and DPS, and EPS and MSP.

## 6. Determination Coefficient Test (R2)

The coefficient of determination (R2) aims to measure how far the ability of the model in explaining the variation of the dependent variable. The coefficient of determination is zero and one. To explain the variation MSP, table is presented:

Table 4. - Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| :--- | :--- | :--- | :--- | :--- |
| 1 | $.933^{\mathrm{a}}$ | .870 | .848 | 211.142569 |
| a. Predictors: (Constant), DPS2011, AUB, AGLTY, KPROJ, BPCC, ALQ |  |  |  |  |
| HUMAIN, ZAIN, KFH, BURG, KIB, MABANEE, |  |  |  |  |

Source - Done by the author depending on SPSS calculations.

The estimated model has a good explanatory power, since it can explain $87 \%$ of the variability of dependent variable (shown by the R -square). The adjusted R -square is $84.8 \%$. This indicates that percentage of variation of MSP is affected by the variation of ROE, EPS and DPS variables with the obtained Adjusted R Square value of 0.848 . Moreover, the overall model is significant, shown by its F-statistic (38.89) in table, and the significance of F-statistic (at the $1 \%$ level).

Table 5. - ANOVAa

| Model | Sum of Squares | df | Mean Square | F | Sig. | Durbin-Watsun |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | Regression | 24272506.779 | 14 | 1733750.484 | 38.890 | $.000^{\text {b }}$ |  |
|  | Residual | 3611075.926 | 81 | 44581.184 |  |  | 1.191 |
|  | Total | 27883582.705 | 95 |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

Table 6. - Coefficientsa

| Model |  | Unstandardized Coefficients |  | Standardized Coefficients | t | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | B | Std. Error |  |  |  |
|  | (Constant) | 309.839 | 93.710 |  | 3.306 | 001 |
|  | KIB | -218.193 | 109.290 | -. 112 | -1.996 | . 049 |
|  | BURG | -96.577 | 109.566 | -. 050 | -. 881 | . 381 |
|  | KFH | 145.131 | 108.124 | . 074 | 1.342 | 183 |
|  | KPROJ | -163.355 | 111.533 | -. 084 | -1.465 | 147 |
|  | MABANEE | 314.797 | 137.146 | . 161 | 2.295 | . 024 |
|  | BPCC | -558.505 | 128.070 | -. 286 | -4.361 | . 000 |
|  | ALQURAIN | -338.289 | 108.637 | -. 173 | -3.114 | . 003 |
|  | AGLTY | -88.806 | 110.127 | -. 046 | -. 806 | 422 |
|  | ZAIN | -441.193 | 112.407 | -. 226 | -3.925 | . 000 |
|  | HUMANSOF | -484.592 | 148.104 | -. 249 | -3.272 | . 002 |
|  | AUB | -818.920 | 108.009 | -. 420 | -7.582 | . 000 |
|  | ROE | -821.351 | 969.620 | -. 132 | -. 847 | . 399 |
|  | EPS | 7943.535 | 2070.831 | . 588 | 3.836 | . 000 |
|  | DPS | 9472.350 | 2937.534 | . 559 | 3.225 | . 002 |
| a. Dependent Variable: MSP2011 |  |  |  |  |  |  |

Source - Done by the author depending on SPSS calculations.
From the above table these findings can be extracted:

1. The constant is equal to 309.839 , this means that if there is no change in the variable ROE, EPS, and DPS, MSP remains at 309.839 .
2. ROE variable regression coefficient is obtained at 8251,212 , this means that if the ROE increases by 1 unit, it will decrease MSP by 821.351 or vice versa but it is not statistically significant.
3. EPS variable regression coefficient value obtained at 7943.535 this means that every increase in EPS by 1 unit will cause MSP to rise by 7943.535 and it is statistically significant on $1 \%$
4. Regression coefficient value of DPS variable is 9472.35 , this means that every increase in MSP by 1 unit will stock prices to rise 9472.35 and it is statistically significant on $5 \%$.
5. The coefficients of the dummy variable (companies) show the differences between each dummy variable and (KIB) as reference category.

Table 7 extracts the descriptive statistics of the variables used in the model. The data belongs to 20 listed firms on Saudi Stock Exchange during the period of 2015 to 2018. A sum of 80 observations was analyzed for investigation. It is found that average market share price of the market came to 30.5925 SAR with volatility of $24.30 \%$ with a range of 6.16 to 116.2 .

The mean value of return to equity ratio is .073315 with a volatility $12.73 \%$. The mean value of debt to equity ratio is 2.607869 which implies that the listed firms depend on debt in high leverage. The mean size of firm found by a logarithm of total asset came to 16 .
Table 7. - Descriptive statistics

|  | N | Minimum | Maximum | Mean | Std. Deviation |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ROE | 80 | -.4453 | .2888 | .073315 | .1273213 |
| DTE | 80 | .2017 | 7.0896 | 2.607869 | 2.1716032 |
| TA | 80 | 4.0000 | 19.9566 | 16.005426 | 3.6255785 |
| MSP | 80 | 6.16 | 116.20 | 30.5925 | 24.30370 |

Source - Done by the author from SPSS output.

Table 8, represents the association among all explanatory variables i.e. return to equity ratio, debt to equity ratio, firm size and dependent variable namely market share price. This table illustrates that market share price has moderate positive relationship with ROE while it holds a weak negative relationship DTE and weak positive relationship with size of firm. Relationship among the three independent variables of ROE, DTE, and TA is seemed to be weak, it indicates that assumption of no multicollinearity is valid in this model.

Table 8. - Correlations among variables

|  |  | ROE2015 | DTE2015 | TA2015 | MSP |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ROE | Pearson Correlation |  | . 024 | 190 | .475** |
|  | Sig. (2-tailed) |  | 830 | . 092 | . 000 |
|  | N | 80 | 80 | 80 | 80 |
| DTE | Pearson Correlation | . 024 | 1 | .275* | -.263* |
|  | Sig. (2-tailed) | . 830 |  | . 013 | . 019 |
|  | N | 80 | 80 | 80 | 80 |
| TA | Pearson Correlation | . 190 | .275* | 1 | .293** |
|  | Sig. (2-tailed) | . 092 | . 013 |  | . 008 |
|  | N | 80 | 80 | 80 | 80 |
| MSP | Pearson Correlation | .475** | -.263* | 293** | 1 |
|  | Sig. (2-tailed) | . 000 | . 019 | . 008 |  |
|  | N | 80 | 80 | 80 | 80 |
| **. Correlation is significant at the 0.01 level (2-tailed). |  |  |  |  |  |
| *. Correlation is significant at the 0.05 level (2-tailed). |  |  |  |  |  |

Source - Done by the author from SPSS output.
Fixed-effects model through the General Linear Models is employed in this study to capture the relationship between crossectional and longitudinal variables. First, we have done the tolerance and the variance inflation factor (VIF) tests to test for the mulicollinearity for data since the presence of multicollinearity may be expected to impact the accuracy of the model. Different recommendations for cutoff levels of tolerance and VIF have been published in the literature. Almost a value of .10 is suggested as the minimum level of tolerance [35]. However, a recommended minimum value of .20 has also been used in the literature [36] and a value of .25 can be seen found [37]. As a rule of thumb, higher Tolerance is preferred. As table 8 shows, Tolerance is higher than the minimum recommended in the various recommendations. This indicates that there is no collinearity among the independent variables. Tolerance is about 0.9 for each independent variable which indicates that about $90 \%$ of the variance in each independent variable is unique to itself independent from the other independent variables. And it should be lower than 10,5 , or 4 according to various recommendations. Regarding VIF, it is just the reciprocal of Tolerance and indicates the degree at which the standard errors are inflated due to the levels of multicollinearity (table 9,10 ).

Table 9. - Multicollinearity test

| Model |  | Collinearity Statistics |  |
| :---: | :---: | :---: | :---: |
|  |  | Tolerance | VIF |
| 1 | ROE2015 | . 963 | 1.038 |
|  | DTE2015 | . 923 | 1.083 |
|  | TA2015 | .891 | 1.123 |

Source - Done by the author depending on SPSS output.
Table 10. - Model test

| Source | R Squared | Adjusted R Squared | DF | F | Sig. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Model | $43531.405^{\text {a }}$ | .907 | 22 | 36.016 | .000 |

Source - Done by the author from SPSS output.
Table 11. - Parameter Estimates

| Parameter | B | Std. Error | t | Sig. |
| :--- | :--- | :--- | :--- | :--- |
| Intercept | -129.847 | 101.741 | -1.276 | .207 |
| ROE | 15.813 | 12.047 | 1.313 | .195 |
| DTE | -3.191 | 2.354 | -1.356 | .181 |
| TA | 11.453 | 6.754 | 1.696 | .095 |

Source - Done by the author from SPSS output.
Tables 10 shows that the model is significant on $1 \%$ and has strong predictive power ( $90.7 \%$ ). And Table 11 portray the outcomes of fixed effect and significance of variables used in the model. The random effect model presents that return to equity, firms size has positive but insignificant predictive power if market share price
significant at five percent level. This suggests that one percent change in ROE and in TA increase market share price by 15.813 and 11.453 SAR respectively and 11.45 respectively. Results also indicate that debt to equity ratio found insignificant in an estimation of the share price. The study found that debt ratio is negatively insignificant in effecting share price. Where an increase in $1 \%$ of DTE ratio decrease the stock price by3.191 SAR.

The study explored the impact of leverage, profitability, and size measures on the market share price in listed companies on Saudi Stock Exchange. For this purpose, debt to equity ratio, return on equity, logarithm of total assets is used to measure leverage, profitability, and firm size respectively. Panel data regression with fixed effect is applied as a model for the study. We can conclude the study as:
-Fixed effect model is significant for this data.

- Debt to equity ratio and has insignificant negative impact on market share price.
- ROE and Size are found impacting market share price positively but insignificantly which may be an indicator that more debt is not beneficial for a market value of share.

This study examined the relationship between the ROA, ROE and ROI ratios simultaneously prices during the period (2011-2018). Fixed effect panel regression models was used to test the hypotheses of the study. Correlations between variables were done. Additionally, descriptive statistics for each variable were done. Based on the results of the study, the following conclusions can be made: First, the analysis of the two variables of EPS and DPS together showed a strong and positive relationship with share prices whilst ROE showed a negative one and a strong explanatory power as an overall model. Second, ESP and DPS showed significant relation while ROE showed insignificant predictive relationship with market share prices of Kuwait listed companies.

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Поступила 17.03.2021

# ОЦЕНКА ВЛИЯНИЯ УЧЕТНОЙ ИНФОРМАЦИИ О КОМПАНИЯХ НА КОТИРОВКИ ИХ АКЦИЙ: ЭМПИРИЧЕСКИЙ АНАЛИЗ ДЕЯТЕЛЬНОСТИ КОМПАНИЙ-УЧАСТНИКОВ ФОНДОВЫХ БИРЖ КУВЕЙТА И САУДОВСКОЙ АРАВИИ 

Ф. РАХАЛЬ

Котировки или биржевые курсы акиий, как правило, отражают финансовое состояние и эффективность акиионерных обществ, акиии которых торгуются на фондовой бирже. Инвесторы проявляют больший интерес к приобретению акиий именно тех фирм, котировки которых устойчиво растут. Поэтому для них большой интерес представляет бухгалтерская информация, отражающая результатьь производственной и финансовой деятельности акиионерных обществ. Чтобы установить, какие из показателей хозяйственной деятельности акйонерных компаний отражают их финансовое состояние и, следовательно, в наибольшей степени влияют на динамику биржевых курсов их акиций, были проанализированы следующие из них: прибыльность собственного (акиионерного) капитала, прибыль на акиию, дивиденд на акцию. Анализировалась корреляиионная зависимость между данными измерителями в различных комбинациях. Была установлена причинно-следственная связь между независимыми переменными и котировкой акиий. Результатьь анализа показали, что негативно влияют на курс акиий коэффициент задолженности и уровень финансового рычага, положительно воздействует на котировки ценных бумаг размер компании. В анализе был выведен ряд регрессионных зависимостей между независимой переменной - биржевым курсом акиий - и зависимыми переменными, рассчитанными на основе бухгалтерской информации о фирмах.

Ключевые слова: рыночная цена акций, бухгалтерская информация, коэффициент корреляции, прибыль.

