The Effect of Financing Structure on the Profitability of Jordanian Industrial Companies and their Dividends

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Abstract

This study investigates the effect of financing structure in achieving profits and distributing dividends, and the interactive effect between them, in order to help companies improving their profits and dividends policy. The study was carried on a population consists of the Jordanian public industrial companies. A random sample of (47) companies was selected, that having all required information for the period from 2008 to 2014, simple and multiple regression was used to test the hypotheses of the study. The main results of the study were: there is a negative effect to the liabilities (debt funds) on the income, and positive effect to the capital paid and returned earnings on the income, and the effect of the dividends on the income is more than the effect of the income on the dividends of Jordanian industrial companies, The researcher can reach to different recommendations the most prominent was Securities official bodies and authority in Jordan must increase their interest in the financial market efficiency by enabling the Jordanian industrial companies issuing new financial instruments such as preferred shares in facilitating terms, and helping companies to obtain financing sources, thus enabling these companies to take advantages of investment opportunities and reach to the idle financing structure, that maximizing the wealth of the owners and
the value of the company.

Keywords: Liabilities; Capital Paid; Returned Earnings; Income; Dividends

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INTRODUCTION

Creditors and shareholders' all considered risk funds in the companies and sets their ability to doing their performance and achieving competitive profit satisfy the goals of depositors and investors, and distribute dividends in the form that achieves the company goals. So like all other companies, the industrial companies aim to increase their profits and to strengthen their financial position for the purpose of being competition on the local and global level.

The dividends distribution considered one of the important financing policies related to their direct relation with the shareholders and division of profits between dividends and retained earnings, even though the high dividends rate means a reduction in retained earning which may reflect negatively on future earnings growth rate. In the other side, the dividends decision is important especially to the shareholder because it will encourage them to retain their shares and increasing shareholder attachment to their companies and to attract new investors too. In the other side, high dividends indicate increasing the company’s profits and the company’s performance is getting better and gives a good prediction on the company’s ability to distribute future profits.

For all the above the issue of financing structure and its effect on the profits and dividends, needs more research and study, and that's what we are trying to do in this research, hoping in reaching suitable recommendations to use them in developing performance of the companies and theoretical and practical accounting literature. Therefore the significance and contribution of this study is trying to focus the light on the ideal financing structure that help Jordanian industrial companies to improve their performance and its ability to achieve earnings and distribute it, and helps them determining the weighted average capital cost that is important in the capital budget decisions. So the important relationship between the financing structure and its cost, make companies looking to get the financing structure that ensures lower costs and will maximize their investment profits. In addition studying and evaluating financing structure help external auditors to understand the performance of industrial companies, and help creditors including banks and financing companies to assess the ability of the companies to achieve profits and their ability to pay their debts and their costs. Finally evaluating financing structure helps financial analysts in analyzing the company’s ability to obtain profits and distribute dividends and evaluate the interactive effect between them will help them determining the strength of financial position and estimating the intrinsic value of a companies and theirs stocks.
PROBLEM STATEMENT

The problem of the study observed when the researcher noted a clear drop in the return on assets for Jordan Phosphate Mines company which consider one of the big industrial companies in Jordan, from 44%, on 2008 to 3% at the end of 2015, therefore the researcher noted significantly increase in indebtedness of the Jordan Phosphate Mines company during this period. So, this will lead to ask about the effect of financing structure on the profitability of the companies.

The sources of funds that are used in operations and investments processes are considered the primary source for achieving income and distribute it, and indicates the company strength and its ability to improve its competitive position in the market, and increase their ability to attract new investors and to get credit facilities in easy terms, thus increase the company's investment funds. So this study is trying to investigate the effect of financing structure in achieving profits that in turn effect the dividends, and the interactive effect between profits and dividends, which means increase company profit, an indicator in increasing dividends, in other side increase company dividends, an indicator in increasing the ability of the companies to obtain profits. So the researcher worked on diagnosis the problem statement in asking those questions:

1. What is the effect of financing structure (liabilities, capital paid, returned earnings) on the income of Jordanian industrial companies for the period from 2008 to 2014?
2. What is the effect of Income, on the dividends of Jordanian industrial companies for the period from 2008 to 2014?
3. What is the effect of dividends, on the income of Jordanian industrial companies for the period from 2008 to 2014?

THEORETICAL FRAMEWORK AND LITERATURE REVIEW

The administration of the company aims to find the idle financing structure for the company's sources of funds, and its combination of debts, preferred stock, common stock and retained earnings. The companies differ in determining the idle financing structure depending on the use and investment of available resources. So the companies must determine and alternate the sources of funds that maximize profits and dividends to shareholders and encourage them to keep their investment and increase it. Financing structure in companies is divided into short-term finance that was through trade credit or bank credit, and long-term finance which divided into long term through direct borrowing, or issuing bonds or financial leasing in addition to equity finance in the form of ordinary or preference shares, and retained earning which consider as self-financing.

Frank [1] show that the companies prefer to use debt finance because it's cost lower than the owner equity cost, especially when to take interest rate as tax shield and save tax expense, which reflected on the company's profits and increase available cash flow for shareholders. Also, from investors view debt instrument is less risky than equity
instrument because it pays fixed interest and have a priority in the company's income and assets when liquidated the company in case of bankruptcy.

Since profit increase by increasing the risk, the required return in debt investment is usually less than the required return in owner equity investment, so exceed return achieved from the difference between debt investment return and its cost, considered return and benefit for the owner equity, whenever this difference was positive and significant, it will reflect positively on the profit achieved by the company. Harris [2] reached that the companies should tradeoff between the return and risk, so increasing risk resulting from high indebtedness expected more returns, but may lead the company to financial troubles and crises that get worst and lead to bankruptcy.

Almedine [3] considered dividends policy is one of the important policies in the company, because it has direct relationship with the shareholders and share price, also divided income between dividends and retained earnings consider a reciprocal relationship between profits and dividends, because when retain earning increase the company's growth rate expected to increase, then expected future dividends will increase. Therefore, the company must determine dividends policies that help it to reach idle situation between retained earnings that affects the company's growth rate and the dividends that affects the decisions of shareholders to maintain their shares and increase their investment in the company. Hanafi [4] defined retained earnings finance as funds from the owner equity source and might be the only source for funding, especially when the company can't have ability to issue debt or owner equity instruments, and maintain retained earning might implicitly mean that the company have successful invest its funds and these investments will result in high profits in the future which reflect positively on the company's performance and its value. In the other hand maintain retained earnings will lead to fluctuate the dividends from year to year that means unstable in dividends policy, and this effect investor who rely on dividends income as their decision to maintain their investment in stock, and this might negatively affects the stocks prices in the financial market. So dividends and retained earnings is an important financing decision, because it is related to the financing policy which effect investment decisions and ability of the company to make future profits that considered an important factor for its survival.

Many different studies and researches tried to give the right answer about the question that say's "what is the idle financing structure for companies?" and through many theories that have been studied since the end of fifties, where the well-known duo (Modigliani and Miller, 1958) started putting their theory of (M&M theory) that denies any relation between financing structure and the ability of the company making income, and therefore no effect on the market value of the company stocks, that mean's the financing decision doesn't effect company performance and just affected by the investment decisions.

Modigliani [5] back and release their previous theory (M&M theory) form taxes perspective concluded that the company performance better in case of debt finance
than those based on equity funds because of the debt tax shield, therefore the maximum company market value achieved when the company financing relay on debt source.

Jensen [6] searched the agency theory that discuss the relation between agency costs and financing structure, were the results showed negative influence for debt funds on the market value of shares, results from increasing control and management cost related in managing debt funds and inefficiency management.

Ross [7] have discussed the (signaling theory) which says that the management have more information than the investors, although it's not necessary the information available in the market be reliable and truthful, which called asymmetric information. According to (signaling theory) the companies that expected high investment return prefers to use debt funds more than equity funds. So the owners’ equity benefit from this returns, and vice versa the company that expect a worse investment returns look for new equity funds instead of debt funds, then the new shareholders will share the loses with the oldest one.

Myers [8] discussed the pecking-order theory where arranged the long term financing according to its preference for the companies as follows: retained earnings (internal financing), and issuing bonds then convertible funds like bonds and preferred stock convert to common stocks, and issuing common stock as a last alternative. He reached to static trade off theory that considered an extent to Modigliani and Miller theory for 1963 whereas the company can determine the target extent of the debt funds and move progressively toward it. This theory done by balancing between the positive effect of tax shield and negative effects of agency and bankruptcy costs then reached to the limit where the agency and bankruptcy costs equal of tax saving resulted from debt financing, in this point the financing cost arrives to its lowest level and the income arrives to its maximum level. Then the company can arrive to the idle financing structure that increases market shares value. (Myers and Majluf, 1984) see management issues shares when company shares overvalued and issues debt instruments, if the company's shares were undervalued. Above that issuing shares done when the expected risk of financial failure is high.

Jensen [9] developed agency costs concept which relates to financing structure to involve management cost of misuse of surplus liquidity to serve own interests at the expense of stockholders interests, called free cash flow theory. According to this theory debt financing will provide better chances for management control and their uses and investments of company funds. Also, management in case of debt financing will work under the threat of financial failure which makes them more effectiveness to avoid it, and reduce the agency cost.

The Aivazian [10] studied (863) Canadian company between the period (1982-1999) shown there is a negative effect for increasing debt financing on return on investment and this effect is more negatively for low growth chances companies comparing with
high growth chances companies. Abbad [11] show on his study that have done on the Jordanian industrial company during the (1991-2000) negative effect for increasing the debt financing on net income, because the cost of debt financing is higher than the earned returns from company investments. The research recommended using self-financing through returned earnings to financing investments, which considered more profitable to the companies. Abed [12] distributed questionnaires to the Sudan financial market investors and to the banks and companies employees to recognize the effect of dividends policies on the market value of shares.

The study indicates the company shares value affected by dividends policies, and the company follows stable dividends policy increase the shareholder trust, and stable its shares value. Also, dividends policy reflects the ability of company to achieve future profits. The study that done by zagreb [13] on the listed companies of Palestine financial market during the period (1997-2005) concluded there is a positive effect for: earning per share, date of declared dividends, dividends, and retained earnings per share, on the shares market value. And the effect of dividends on shares market value higher than the effect of retained earnings per share. Hnanda [14] studied the effect of financing structure on the financial performance for the Jordanian industry companies during (1996-2006) the researcher concluded there is a relationship between financing structure (debt, owner equity, retained earnings) and the financial performance for the Jordanian industrial companies. The study that conducted by Alown [15] identified the determinants of financing structure for Jordanian industrial companies during the period (1997-2001) concluded there is a negative effect of the company's profitability, liquidity and growth rate on the financing structure of Jordanian industrial companies, the researcher recommended companies with high profit rate to relay on retained earnings to finance their operations instead of using debt funds because of increasing risk.

Houson [16] study which was held on the Malaysian companies listed on the Kuala Lumpur Stock Exchange during the period from (1999 to 2002), showed financing structure and dividends policy does not effect the performance of companies measured by variable (Tobin Q) in the expected and unexpected growth companies. The Frank [1] discussed the most factors that effect the financing structure in the companies issuing their shares in the US financial market. Concluded the size of the company's assets and rates of inflation positively effect the financing decisions in these companies, while the company's profitability and the market value relative to book- value effect negatively financing decisions on these companies.

Hamada [17] applied on non-financial service Jordanian companies listed in the financial market during the period (1998-2007) concluded there is a negative effect of the high indebtedness on the shares market value, the researcher recommended companies with high profit rate to relay on retained earnings to finance their operations instead of using debt funds, especially in the unstable economic conditions faced by the region including Jordan. Najjar [18] study shows that most influential factor on the capital structures of Jordanian industrial companies are: institutional ownership, profitability, risks, liquidity and size. The study by Gharsalli [19] concluded there is a
positive effect of the indebtedness of the company or financial leverage on the profitability of the company through making tax saving and there is a negative effect of the indebtedness on the company’s financial risk and opportunities of companies’ growth.

HYPOTHESE

Depending in the previous research questions and theoretical frame work and literature review, the researcher can derive the following hypotheses:

1) H01: There is no effect of financing structure (liabilities, capital paid, returned earnings) on the income of Jordanian industrial companies for the period from 2008 to 2014.

2) H02: There is no effect of income, on the dividends of Jordanian industrial companies for the period from 2008 to 2014.

3) H03: There is no effect of dividends, on the income of Jordanian industrial companies for the period from 2008 to 2014.

RESEARCH METHODOLOGY

This section consists of an analytical description for the methodology of the study and view stages and statistics methods to achieve the study objectives. So this part starts with mentioning a population and a sample of the study, resources of collecting the data, the statistical methods used in analyzing study data.

The population and study sample

The study was carried on a population consists of the Jordanian public industrial companies. The researcher has collected the necessary data from the Jordanian guide of public shareholding companies issued by securities commission board, the number of Jordanian industrial companies was (72) at the end of the year (2014). Using unrestricted or simple random sampling method a random sample of (47) companies was selected and their financial reporting fulfilled the conditions for selection of the sample, and having all required information for the period from 2008 to 2014, to test the hypotheses of the study.

The researcher selected Jordan to his study to ease of access to study data. In addition to that Jordan is a developing country and the financial market in Jordan in the growth and development stages and Jordanian companies in the various sectors still seeking to develop financing strategies in order to increase the efficiency of financial market that reflect on reducing the worsening trade deficit and promote the growth and stability of the Jordanian economy.
**Statistical Method**

To test study's hypotheses, the Statistical Program for Social Sciences (SPSS) was used; particularly multiple-regression and simple regression analysis was used to test the effect of independent variables on the dependent variable. The multiple linear regressions and the ordinary least squares approach were used; the study models were drafted in the form of regression equations to fit the objective to be tested. Regression model is used when the independent variables are related to the dependent variable and the independent variables interpretation the variances (effect) in the dependent variable, or that the independent variables can be relied upon to predict the value of the dependent variable according to the regression equation. The effect was represented between the dependent and independent variables as linear equations [20].

The explanatory power of the regression models was measured using (R2) to denote the explanatory power of the independent variables to explain the change in the dependent variable. Further, (F) value was employed to indicate acceptance of the regression models and that the value of variation in (R2) was statistically significant at significance level (α ≤ 0.05); Then in simple regression the value of the correlation coefficient (R) measured strength of the relationship between the independent variable and the dependent variable at significant level (α ≤ 0.05); Beta regression coefficients were used to determine the variance of dependent variable as a result of variation in the independent variables, in order to examine the effect of independent variables on the dependent variable, and which independent variables have the largest effect on the variation of the dependent variable at the significance level (α ≤ 0.05).

In order to apply multiple linear regressions model, the researcher test all the necessary statics terms such as Durbin- Watson's test; it show the (D-W) calculated value was greater than the maximum value (D-W) for all linear regression models, which indicates the absence of the autocorrelation problem between the limits of the random error in the linear regression models. The mean of the variance inflation factor (VIF) and the value of (VIF) to all study variables were less than (10), and the tolerance factor value more than 10%, indicated the absences of multicollinearity problem between the variables of the study. Finally, the study samples were 329 items, indicated that the data distribution followed the normal distribution depending on the central limit theorem which states that the condition of the normal distribution of the data which its items are more than 30 items [21].

**Measurement Study Variables**

The study measures the variables of the study as shown in Table 1.
Table 1: Study variables and measurement method.

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Study variables</th>
<th>Measurement method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income</td>
<td>Net income</td>
<td></td>
</tr>
<tr>
<td>Dividends</td>
<td>Cash dividends + shares dividends</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Study variables</th>
<th>Measurement method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liabilities (depts)</td>
<td>Total asset - total owners equity</td>
<td></td>
</tr>
<tr>
<td>Paid capital</td>
<td>shares capital at par value + (-) premium (discount)</td>
<td></td>
</tr>
<tr>
<td>Returned Earnings</td>
<td>*Total owners equity - Paid capital</td>
<td></td>
</tr>
</tbody>
</table>

*There aren't any preferred stocks issued by Jordanian industrial companies and study sample doesn't own treasury stocks.

The study formulation of mathematical equations from multiple and simple regression in order to test the hypotheses of the study. These mathematical equations were:

\[ \text{Income}_{i,t} = \alpha_{i,t} + \beta_1 \text{LI}_{i,t} + \beta_2 \text{CP}_{i,t} + \beta_3 \text{RE}_{i,t} + \varepsilon_{i,t}, \]

Income \(_{i,t}\)=dependent variable to measure the ability of the companies to obtain net income.
\(\alpha_{i,t}\)=constant (the intercept of equation)
\(\text{LI}_{i,t}\)=Liabilities: to measures the effect of all debts finance on the dependent variable (Income)
\(\text{CP}_{i,t}\)=Capital Paid: to measure the effect of equity finance from shareholders on the dependent variable (Income).
\(\text{RE}_{i,t}\)=Returned Earnings to measure the effect of internal finance on the dependent variable (Income)
\(\varepsilon_{i,t}\)=estimated error of the regression equation.
\(B_1, B_2, B3\)=Beta regression coefficients to measure the effect on the dependent variable as a result of variation in the independent variables.

\[ \text{Dividends}_{i,t} = \alpha_{i,t} + \beta_1 \text{LI}_{i,t} + \varepsilon_{i,t}, \]

Dividends\(_{i,t}\)=dependent variable Cash and Shares dividends
\(\alpha_{i,t}\)=constant (the intercept of equation)
\(\text{LI}_{i,t}\)=Net Income
\(\varepsilon_{i,t}\)=estimated error of the regression equation.
\(B_1\)=Beta regression coefficients to measure the effect on the dependent variable (Dividends) as a result of variation in the independent variable (Income).

\[ \text{Income}_{i,t} = \alpha_{i,t} + \beta_1 \text{DI}_{i,t} + \varepsilon_{i,t}, \]
Income, dependent variable net income.

$\alpha_{i,t} =$ constant (the intercept of equation)

$D\text{I}_i =$ Cash and Shares dividends

$\varepsilon_{i,t} =$ estimated error of the regression equation.

$\beta_1 =$ Beta regression coefficients to measure the effect on the dependent variable (Income) as a result of variation in the independent variable (dividends).

STATISTICAL RESULTS

This section of study represents statistical results related to descriptive statistics of the financing structure of the study sample and regression tests results to test the hypotheses of the study. It begins with an analytical average percentage of the liabilities and owners' equity structure in the Jordanian Industrial companies for the years (2008-2014) show in the Table 2.

**Table 2:** Description statistics.

<table>
<thead>
<tr>
<th>Average</th>
<th>Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>31%</td>
<td>total liabilities/total liabilities and owners equity</td>
</tr>
<tr>
<td>%69</td>
<td>total owners equity/total liabilities and owners equity</td>
</tr>
<tr>
<td>81%</td>
<td>Capital paid/total owners equity</td>
</tr>
<tr>
<td>19%</td>
<td>Returned earnings/total owners equity</td>
</tr>
</tbody>
</table>

Reference to the Table 2 reveals that the proportion of total liabilities to total financing structure in Jordanian Industrial companies for the years (2008-2014) was 31% where the difference represents owners’ equity proportion while the proportion of capital paid to total owners’ equity was 81% where the difference represents returned earnings portion. However, we can see that Industrial Jordanian companies depending obviously on owners’ equity funds in their financing structure approximately representing two-thirds of the total financing funds, Also, the portion of capital paid in owners’ equity funds almost equal four-fifths of the total owners’ equity and the rest related to the returned earnings, this means Industrial Jordanian companies depending in capital paid in financing their operations more than returned earnings which consider internal resources, and this may be returns to distribution of dividends or inefficiency of these companies to obtain profit and build returned earnings.

To test the hypothesis of the study related with the effect of financing structure (liabilities, capital paid, returned earnings) on the income of Jordanian industrial companies for the period from 2008 to 2014. The results of multiple linear regressions testing as showed in Table 3.

The Table 3 shows a statistically significant effect for the regression model related to
the independent variables liabilities, capital paid, returned earnings explanation of the depending variable income in the multiple regression models, it show $R^2=0.704$, indicated 70.4% of variance in income can be explained by the variance of the financing structure (liabilities, capital paid, returned earnings). The value of $(F=256.955)$ at a significant level $(\text{Sig } F=0.000)$, indicates the acceptance of the multiple regression model and the explanation factor $(R^2)$ at a significance level $(\alpha \leq 0.05)$.

**Table 3:** The effect of the of financing structure (liabilities, capital paid, returned earnings) on income.

<table>
<thead>
<tr>
<th>Income</th>
<th>R-squared</th>
<th>0.704</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adj. R-squared</td>
<td>0.701</td>
<td></td>
</tr>
<tr>
<td>F-statistic</td>
<td>F-Ratio</td>
<td>256.955</td>
</tr>
<tr>
<td></td>
<td>Prob. (F)</td>
<td>0.000</td>
</tr>
<tr>
<td>Constant</td>
<td>Coefficient</td>
<td>-3737853</td>
</tr>
<tr>
<td></td>
<td>T-test</td>
<td>-2.156</td>
</tr>
<tr>
<td></td>
<td>Sig (t)</td>
<td>0.032</td>
</tr>
<tr>
<td>$L_{ii}$, liabilities</td>
<td>Coefficient (Beta)</td>
<td>-0.171</td>
</tr>
<tr>
<td></td>
<td>T-test</td>
<td>-3.290</td>
</tr>
<tr>
<td></td>
<td>Sig (t)</td>
<td>0.001</td>
</tr>
<tr>
<td>$C_{pi}$, capital paid</td>
<td>Coefficient (Beta)</td>
<td>0.482</td>
</tr>
<tr>
<td></td>
<td>T-test</td>
<td>3.537</td>
</tr>
<tr>
<td></td>
<td>Sig (t)</td>
<td>0.000</td>
</tr>
<tr>
<td>$R_{ei}$, Returned Earnings</td>
<td>Coefficient (Beta)</td>
<td>0.220</td>
</tr>
<tr>
<td></td>
<td>T-test</td>
<td>12.439</td>
</tr>
<tr>
<td></td>
<td>Sig (t)</td>
<td>0.000</td>
</tr>
</tbody>
</table>

The regression coefficient value related to the effect of liabilities on income in the multiple regression models was $(\text{Beta}=-0.171)$ and $(t=-3.290)$ with the significance level $(\text{sig}(t)=0.001)$ at a significance level $(\alpha \leq 0.05)$ means a negative effect of the liabilities funds on income and indicating the liabilities (debt funds) effect negatively the ability of the Jordanian industrial companies in obtaining Income or profit. Also, The regression coefficient value related to the effect of capital paid on income was $(\text{Beta}=0.482)$ and $(t=3.537)$ with the significance level $(\text{sig}(t)=0.000)$ at a significance level $(\alpha \leq 0.05)$ means there is a positive effect of the capital paid on the income, so capital paid in
financing structure in Jordanian industrial companies effect positively the ability of the companies to earn income. Therefore, the regression coefficient value related to the effect of returned earnings on income was (Beta=0.220) and (t=-12.439) with the significance level (sig(t)=0.000) at a significance level (a ≤ 0.05) means a positive effect of the returned earnings funds on income and indicating the returned earnings (internal funds) effect positively the ability of the Jordanian industrial companies in obtaining income. As a result, the null hypothesis of the study is rejected and the alternative one is accepted which states:

There is an effect of financing structure (liabilities, capital paid, returned earnings) on the income of Jordanian industrial companies for the period from 2008 to 2014.

The multiple regression equation can be reformulated so that the effect of financing structure (liabilities, capital paid, returned earnings) on the income can be demonstrated as follows:

\[ \text{Income}_i = -3737853 + 0.171 \text{LI}_i + 0.482 \text{CP}_i + 0.220 \text{RE}_i + \epsilon_i, \]

To show the effect of Income on dividends, and the effect of dividends on income, simple regression was used and Table 4 showed the statistics results:

**Table 4**: The effect of the income on Dividends and the effect of dividends on income

Simple regression results related to effect of dividends on income and effect of income on dividends.

<table>
<thead>
<tr>
<th></th>
<th>R</th>
<th>0.785</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-squared</td>
<td>0.617</td>
<td></td>
</tr>
<tr>
<td>Adj. R-squared</td>
<td>0.616</td>
<td></td>
</tr>
<tr>
<td>F-statistic</td>
<td>F-Ratio</td>
<td>524.922</td>
</tr>
<tr>
<td></td>
<td>Prob.(F )</td>
<td>0.000</td>
</tr>
</tbody>
</table>

\[ \text{dividends}_{i,t} = \alpha_{i,t} + \beta_{1} \text{Li}_{i,t} + \epsilon_{i,t}, \]

\[ \text{dividends}_{i,t} = \alpha_{i,t} + \beta_{1} \text{DI}_{i}, + \epsilon_{i}, \]

\[ \text{Income}_i = \alpha_{i,t} + \beta_{1} \text{DI}_{i,t} + \epsilon_{i}, \]

<table>
<thead>
<tr>
<th></th>
<th>Coefficient</th>
<th>518880</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-test</td>
<td>0.694</td>
<td></td>
</tr>
<tr>
<td>Sig (t)</td>
<td>0.488</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Coefficient (Beta)</th>
<th>0.46</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-test</td>
<td>22.911</td>
<td></td>
</tr>
<tr>
<td>Sig(t)</td>
<td>0.000</td>
<td></td>
</tr>
</tbody>
</table>
Table 4 demonstrates that the correlation between Income and dividends representing the relationship between the two variables in the simple regression analysis was (R=0.785) indicating a strongly positive relation between Income and dividends. And Table 4 shows a statically significant effect of the simple regression model related to the independent variables on the explanation of the depending variable as the value R²=0.617 indicated 61.7% the variance in the Income can be explained by the variance of dividends, vice versa. Also the value of (F=524.922) at a significant level (Sig F=0.000), indicates the acceptance of the simple regression model and the explanation factor (R²) at a significance level (α ≤ 0.05).

The regression coefficient value related to the effect of Income on the dividends was (Beta=0.46) and (t=22.911) with the significance level (sig(t)=0.000) at a significance level (α ≤ 0.05) means there is a positive effect of the income on the dividends of the Jordanian industrial companies and the ability of the companies to obtain income will effect positively the ability of these companies to distribute dividends. Therefore, the null hypothesis will be rejected and accepting the alternative hypothesis which stated:

There is an effect of income, on the dividends of Jordanian industrial companies for the period from 2008 to 2014.

The simple regression equation can be reformulated so that the effect of Income on the dividends can be demonstrated as follows:

\[ \text{dividends}_{i,t} = 518880 + 0.46I_{i,t} + \epsilon_{i,t} \]

Table 4 showed the regression coefficient value related to the effect of dividends on income was (Beta=1.342) and (t=22.911) with the significance level (sig(t)=0.000) at a significance level (α ≤ 0.05) means there is a positive effect of the dividends on the Income. Also the increase in the dividends in the Jordanian industrial companies effect positively the ability of the companies in obtaining Income, therefore, the null hypothesis will be rejected and accepting the alternative hypothesis which stated:

There is the effect of dividends on the income, of Jordanian industrial companies for the period from 2008 to 2014.

The simple regression equation can be reformulated so that the effect of dividends on
the Income can be demonstrated as follows:

\[ \text{Income}_{it} = 2133755 + 1.342 \, D_{li} + \varepsilon_{it} \]

Thereby all of the above confirming an interactive effect between income and dividends in Jordanian industrial companies.

**DISCUSSION AND PRACTICAL IMPLICATIONS**

The main results and their implications can be summarizing as follows:

1. There is a negative effect to the liabilities (debt funds) on the income of Jordanian industrial companies. Indicating high debt burdens and costs and may require high collateral, and these companies cannot benefit from advantages of the financial leverage and tax savings achieved by the debt financing structure; in addition to the bond market in Jordan is not strong enough.

   Different studies agreed with this result [2,6,10,11,15] showed increasing risk resulting from high indebtedness leads to negative influence on the market value of shares, results from increasing control and management cost related in managing debt funds may lead the company to financial troubles and crises, especially when the cost of debt financing is higher than earned returns from company investments. Also this result disagreed with [1,5,7,9,19], showed that the companies prefer to use debt finance because it’s cost lower than the owner equity cost, especially when take advantage from interest paid as tax shield and save tax expense. Also, exceed return achieved from the difference between investment rate of return and debt fixed cost, considered return and benefit for the owner equity, and reflect positively on the profit achieved by the company.

2. There is a positive effect to the capital paid and returned earnings on the income of Jordanian industrial companies. It is an indication that these companies benefiting from owners’ equity funds which formed approximately two of three of total funds, as we mentioned in this study. Myers [22], Najjar [18] agreed with this result and confirm the importance of equity finance on company profitability. while Modigliani [23] disagree with this result and concluded that the company performance better in case of debt finance than those based on equity funds and the maximum company market value achieved when the company financing relay on debt source.

3. The effect of the capital paid is more than returned earnings on the income of Jordanian industrial companies. Indicating of lower retains earnings, especially as a study showed, it formed almost one of five of total owner equity (19%), and lower efficiency in using company internal funds on financing investments that contribute profit and increase its value. This result consistence with Hanafi [4], Abbad [11], Alown [15] which consider equity funds and retains earnings is an
important financing decisions, because it is effect investment decisions and ability of the company to make future profits that considered an important factor for its survival, especially in the unstable economic conditions.

4. There is a positive effect to the income on the dividends of Jordanian industrial companies. Indicating increasing company's ability to achieve profits, provide them with adequate liquidity and helping them in distribution dividends. this result agree with Hanafi [4], considered positive effect to the profit on the dividends, that means unstable profit will lead to unstable dividends policy, and this will effect investor who rely on dividends income as their decision to maintain their investment in stock, which might negatively effect the stocks prices in the financial market.

5. There is a positive effect to the dividends on the income of Jordanian industrial companies. Reflected the important of dividends policy from a view of shareholders, which reflected on the value of company shares and its ability to raise capital and achieve profits. This result agrees with Abed [12], Almedine [3], zagreb [13] mentioned there is a direct relationship with dividends and share price, also, dividends effect the decisions of shareholders to maintain their shares and increase their investment in the company.

6. There is appositively and strongly correlation between income and dividends of the Jordanian industrial companies. This confirms the interactive effect between profits and dividends in the Jordanian industrial companies. Also Almedine [3], Abed [12] consider a reciprocal relationship between profits and dividends, because when profit increase the company’s growth rate expected to increase, then expected future dividends will increase. Also, dividends policy reflects the ability of company to achieve future profits.

7. The effect of the dividends on the income is more than the effect of the income on the dividends in Jordanian industrial companies. Especially dividends policy a crucial policy effects the company's reputation and impressions of shareholders about financial position strength. In contrast dividends, policy effects the company's ability to retain returned earnings, which is reflected in the company’s growth rate and its ability to achieve profit. This result agree with study done by zagreb [13] concluded that the effect of dividends higher than the effect of profit on shares market value.

CONCLUSION AND RECOMMENDATIONS

The purpose of study investigates the effect of financing structure in achieving profits and distributing dividends of the Jordanian public industrial companies, and the interactive effect between profits and distributing dividends. The researcher can reach to different consultation and recommendations the most prominent were:

- The necessity of Jordanian industrial companies concentrate and increase their
attention and efficiency of investing borrowed funds, through making decision balances between the important elements related with return on investment expected of debt funds on the one side, and the interest paid and controlling debt costs on the other side.

- Determining the dividends policy that help in improving the company's reputation and image between investors, and reflects the value of its shares and its ability to achieve earnings and retained earnings. In contrast, increasing dividends lead to decline the value of returned earnings, which adversely affect the company's growth rate and its value.

- Securities official bodies and authority in Jordan must increase their interests in the financial market efficiency by enabling the Jordanian industrial companies issuing new financial instruments such as preferred shares in facilitating terms, and helping companies to obtain financing sources, thus enabling these companies utilization investment opportunities and reach to the idle financing structure, that maximizing the wealth of the owners and the value of the company.

- Researcher need to continue their research in this field and applied comparative studies in other sectors such as financial and service sectors. And study the idle composition of financing structure that related returns and weighted average capital cost of financing funds, and makes the weighted cost of funds at a minimum level.

- Finally, the researcher confirms the need for the companies to diversify their financing resources that lead to diversity risks and obtain a balance between the degrees of risk associated with increasing debt on the one hand and the use of their advantages on the other hand. And directed their funds toward thoughtful and profitable investments able to cover their costs and increase the company's value in the long run.

REFERENCES


