

The Impact of Capital Structure Components on the Total Assets Turnover Evidence from Amman Stock Exchange

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Abstract

This research examines the effect of Capital Structure Components on the Total Assets Turnover. Using information of 62 industrial firms listed on Amman Stock Exchange from 2012 through 2017. The findings of the research revealed that Capital Structure components measured by Total Debt to Total Assets of showed a positive but insignificant effect on Total Assets Turnover. While the relationship is negative and significant between capital structures measured by Debt to Equity Ratio and Total Assets Turnover.

Keywords: capital structure, total assets turnover, debt to equity ratio, Amman

1. Introduction

The capital structure has an effective impact on the value of the company under assumptions in an ideal market where no taxes or costs are available for trading, in which individual and corporate investors borrow at a risk-free interest rate (Michelle and others, 2015) according to the traditional theory developed by Modigliani and Miller 1958). However, depending on the debt in full without specifying the extent of its use may threaten the company to bankruptcy and liquidation.

As many of the previous studies pointed to the importance of the components of the capital structure on the liquidity risk by investors in companies because of their impact on the improvement and development of investment, as the study (zurigate 2009)

The aim was to study the determinants of capital structure in the Jordanian market by focusing on the interpretation of Pecking order theory and the trade off theory. As each project has a specific objective and composition in the extent of liquidity risk and the degree to which the relationship exists between the capital structure and liquidity risk ratios (Nemat, Mohamed El Moataz , 2016).

The importance of the study is to study the components of the capital structure of the industrial companies and their successes in the industry, to know the data and indicators of the financial statements through the liquidity risks and to know the impact of them through the components of the financing structure, And knowledge of the results of the financial statements through the positive and negative effects on the use of different financing options (Nemat and Mohammad Al-Mu'taz 2016).

The study has agreed with the study (Ismail, 2016) and the study (Alani and Amiri, 2015) and study (strange, 2015) and the study of Osman, 2014) and study (Saadi, 2012). The AbWahab & Rami Study, 2014 and the Jensen Study, 2013 and the Akinyomi & Olagunju Study, 2013 Nilssen, 2014 In relation to the industrial companies subject to the study. It differed with some studies on the independent variable and dependent variable in determining the variables (return on assets, return on equity, and return on sales, sales growth, and market value of the company, capital structure, growth rate and profitability). The study also agreed with all studies on the use of the tool for the analysis of the financial statements.

The study aims to achieve many items by measuring the financing provided to the project by the funds of others, as well as measuring the extent of the administration's dependence on the funds of others in financing their needs, and measuring the adequacy of the group of assets in meeting the short-term obligations, The ability of an entity to settle its short-term liabilities without having to sell any asset that is difficult to sell without loss, and to measure the adequacy of the most liquid assets, cash to settle short-term liabilities.

The problem of this study is to clarify the internal and external financing of capital structure components on liquidity risk ratios. The study problem is illustrated by the following questions:

- What is the ratio of loans to total assets to the Total Assets Turnover?

in Jordanian industrial companies?

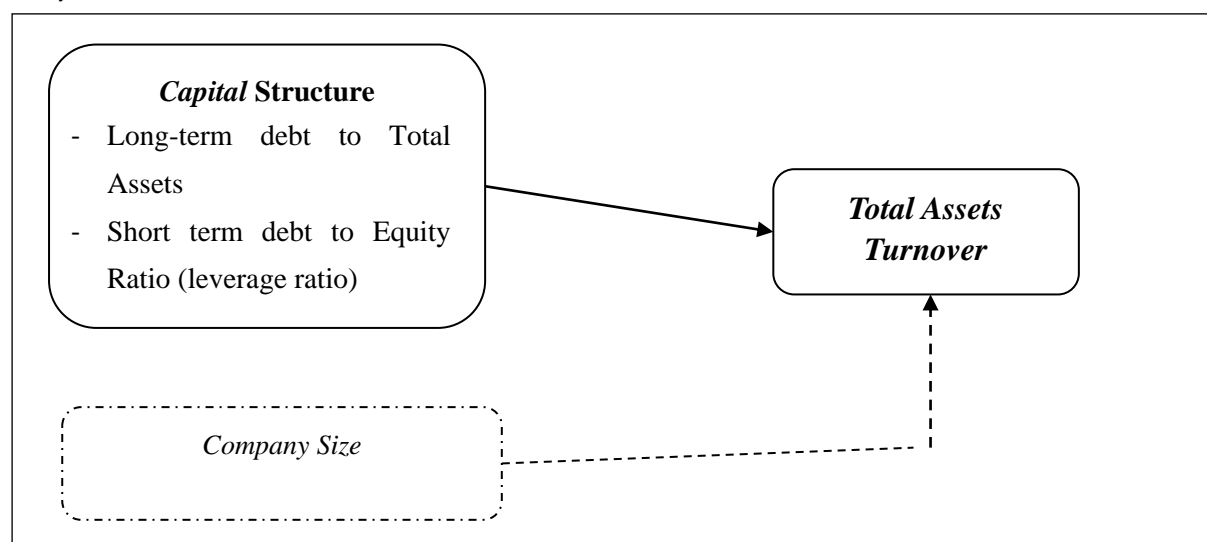
- What is the effect of the ratio of loans to equity on the Total Assets Turnover in Jordanian industrial companies?

2. Research Methodology

Population and Study Sample

The study population will be composed of 62 industrial Jordanian firms that are listed on the Amman Stock exchange from 2012 to 2017.

Study model



Hypotheses of the study

First Hypothesis: There is no Statistical effect of the total debt to total assets on the total of assets turnover.

Second Hypothesis: There is no Statistical effect of the debt to equity ratio on the total of assets turnover.

Diagnostic Analysis

Diagnostic checks are applied to determine if the study data suffer from any econometric problems. Under the assumptions of the panel data method, the diagnostic checks that are used in this study contain the multicollinearity, heteroscedasticity, and serial correlation tests (Baltagi, 2008; Gujarati & Porter, 2009; Baltagi, Jung, & Song, 2010). The current study uses Pearson correlation coefficients (correlation matrix) as the first indicator to check the multicollinearity problem and the variance inflation factor (VIF) and the inverse VIF, which is called tolerance (TOL, 1/VIF), as a second indicator. Table 4.2 presents the result of the Pearson correlation of the study variables, respectively. Gujarati (2004) Claimed that the multicollinearity problem appears when the correlation coefficient result between two variables is more than 0.8. All results are less than 0.80, implying that the regression models of this study do not suffer from the multicollinearity problem.

Table 1. Pearson Correlation Coefficients

Variables	TAT	EQ	LIA	Size
TAT	1.000			
EQ	-0.0784	1.000		
LIA	-0.1108	-0.0275	1.000	
Size	0.0251	-0.0140	-0.0409	1.000

Table 2. Variance Inflation Factor

Table 2 shows the VIF and TOL values for the all variables of the regression model applied in this study. The result proves that the multicollinearity problem does not existed in all of the study model because the VIF value for all variables is less than 10 and the TOL value for all variables is more than 10%.

Variables	VIF	1/VIF
EQ	1.00	0.997539
LIA	1.00	0.999015
Size	1.00	0.998099

Testing of Multicollinearity (VIF & Tolerance)

Table 3. Heteroscedasticity and Serial-Correlation Tests

Table 3 shows that the null hypothesis (H_0 : no heteroscedasticity problem exists in the study data) is rejected given that the modified Wald statistic test records a significant result at 0.01 for all models.

The Modified Wald Test for GroupWise Heteroscedasticity

Model	Modified Wald Test (Chi-Sq. Value)
TAT Model	632.743***

Notes. Significant level *** 1% and ** 5%

Table 4 presents that the null hypothesis (no serial correlation) is accepted because the Wooldridge test records an insignificant result for model. Thus, the models used in this study are free from the first-order autocorrelation.

Table 4. The Wooldridge Test for Autocorrelation

	Wooldridge Test F-value
TAT Model	82.112***

Regression Model Analysis

Table 5 lists the robust results of the fixed effect GLS regression (i.e., according to the indicated results of the Hausman and Breusch–Pagan Lagrange multiplier tests) by using the correcting Regression with Driscoll-Kraay standard errors method. Results indicate that the model is fit at a significant level of the F -statistic (11.32***). Furthermore, the independent variables in this model explain 0.1012 (*overall $R^2 = 10.12\%$*) of the variations in the TAT. The consistent term (*_Cons*) of this model is positive and significant at p -value < 0.01.

Table 5. The regression result of the TAT - model (fixed-effect)

Variables	$TAT_{it} = \alpha + \beta_1 EQ_{it} + \beta_2 LIA_{it} + \beta_3 size_{it} + + (\varepsilon_i + v_{it})$		
	Coefficients	(t-static)	$P > t $
EQ	0.0105	0.4895	0.625
LIA	-0.736	-2.837	0.005***
Size	0.244	4.751	0.000***
Con-	-3.51234	-4.089	0.000***
<i>R-sq overall</i>	.1012		
(F-value)	11.3182***		

*, **, *** = p-value < .10, .05, .01

Total debt to total assets is leverage ratio that measure of the firm's assets that are financed by debt, rather than equity. The result indicates that the leverage ratio does not have an impact on the assets turnover. On the other hand, the findings indicate that the relationship between capital structure component measured by Debt and Equity Ratio is significant but negative. This result imply that the debt to equity ratio which shows the percentage of company financing that comes from creditors and investors are inversely proportional to the assets turnover.

3. Conclusion

In this paper the impact of capital structure components is shown on assets turnover of industrial firms in Jordan. Results show that there is a significant negative impact of long term debts on assets turnover ratio. Thus, the study suggests that percentage of company financing that comes from creditors and investors do not have the ability to generate or maximize the sales. Moreover, the results suggest that although leverage ratio has a positive but is insignificant. Thus, the firms in Jordan should seek to find another capital structure component that enhances the efficiency of assets to maximize the production level and maximize the sales.

Furthermore, the results of this paper can be considered as helpful for managers and decision-makers in Jordan

who are anxious to develop financial description quality and practices of performance of capital structure, and may help the decision-makers to formulate clear policies for the industrial sector in Jordan that may develop the decision-making. Thus, the future studies may be extended by including all Jordanian listed companies in Amman Stock Exchange from all sectors and add other factors of capital structure that may have an effect on assets turnover.

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