Research Journal of Finance and Accounting
ISSN 2222-1697 (Paper) ISSN 2222-2847 (Online)
Vol.9, No.7, 2018

Relationship Between Liquidity and Profitability: An Empirical Study of Trade Service Sector in Jordan

Naim Salameh Al-Qadi Ibrahim Marwan Khanji
Al-Balqa' Applied University

Abstract
The aim of this paper is to examine the relationship between liquidity and profitability, through more than liquidity indicator. The paper main goal is to answer the following question: Do different indicators of liquidity have the same effect on profitability either negatively or positively?Liquidity indicators include current ratio and quick ratio which measure the company's ability to meet its short-term obligations, while profitability is measured by ROA and ROE.The data has been collected from ASE. Different tests applied to analyze the relationship between liquidity and profitability. This study sought to find out whether liquidity through quick ratio has significant impact on Jordanian trade services companies profitability through return on asset (ROA). The study used the 2008-2015 financial reports of 11 Jordanian trade companies listed at Amman Stock Exchange (ASE). The study revealed that there is significant impact of independent variable quick ratio on dependent variable return on asset (ROA). That means profitability through return on assets (ROA) is significantly influenced by liquidity through current and quick ratio
Keywords: Liquidity, Current ratio, Quick ratio, Profitability, Return on Assets, Jordanian trade sector.

1. Introduction

Investors are always concerned with the firm's ability to generate, maintain, and increase income. Profitability can be measured in many differing but interrelated dimensions. First there is the relationship of a firm's profits to revenue, that is, the residual return on the firm per sales dollar. Another measure, return on asset (ROA), relates profits to the investment required to generate them. Analysis of income is of vital concern to stock holders because they derive revenue in the form of dividends. Further, increased profits can cause an increase in market price, leading to capital gains. A company's ability to sustain its short-term debt-paying ability is important to all users of financial statements. If the company cannot keep a long-term debt-paying ability, nor will it able to satisfy its stockholders. Even a very profitable company will find itself bankrupt if it fails to meet its obligations to short-term creditors. The ability to pay current obligations when they due is also related to the cash generating ability of the company. Analyzing the short-term debt-paying ability of the company, reveal a close relationship between the current assets and the current liabilities. Generally, the current liabilities will be paid with cash generated from the current assets. The profitability of the firm does not determine the short term debt-paying ability. In other words, using accrual accounting, the company may report very high profits but may not have the ability to pay its current bills because it lacks available funds. If the entity reports a loss, it may still be able to pay short-term obligations. The Liquidity contra Profitability Principle, there is a differentiation between liquidity and profitability; gaining more of one ordinarily means concede some of the other. The liquidity as a determinant of profitability is similar to that considered in research on profitability, which classified as management controllable internal determinants. In this study we will try to examine whether the liquidity through current and quick ratio has significant impact on Jordanian trade companies profitability through return on asset (ROA).

2. Literature Review

The issue of trade-off between liquidity and profitability has been discussed intensively since this it is crucially important for companies. Gitman (2011) and Rose (2000) showed that much liquidity is an expense for the company. Money tied up in current assets can be invested and generate interest income. Therefore, the price of liquidity over financing is the interest rate. In the case of liquidity shortage the company must either attract short term loan or sell some liquid assets, which is also an expense. Only the optimal level of liquidity benefits profitability. The relationship between the liquidity and the profitability of banks listed on Amman Stock Exchange is presented by Warrad. et al. (2015) study. Fifteen listed banks were involved in the study. The study used the panel method. The financial reports were studied and relevant liquidity and profitability ratios were computed. The trend in liquidity and profitability were determined by the use of time series analysis. The main liquidity ratio was regressed on the profitability ratio. It was revealed that for the period 2005-2011, the study revealed that there is significant impact of independent variable quick ratio on dependent variable return on asset (ROA). That means profitability through return on assets (ROA) in Jordanian banks is significantly influenced by liquidity through quick ratio.

The influence of liquidity on profitability is presented by Irawan and Faturohman. (2015) study, this study analyzed the profitability using panel data for the period 2005-2013, and used the liquidity asset and liquidity

asset square for estimating liquid asset and profitability relationship. The relationship between liquid assets and profitability is as predictable. A coefficient for the liquid assets ratio is negative and significant. The point to which effective liquidity impacts profitability and how companies can stimulate their liquidity and profitability situation is presented by Adebayo O. et al. (2011) study by using quantitative methods of research. Findings indicated that there is significant relationship between liquidity and profitability. That means profitability in firms is significantly influenced by liquidity and vice versa. The study concluded that for the prosperity of operations and survival, firms should not expose efficient and effective liquidity management and that both illiquidity and excess liquidity are "financial diseases" that can simply wear out the profit rule of a business as they affect firms in order to arrive high profitability level. The relationship between liquidity and profitability is presented by Saleem Q., et al. (2011). The results revealed that there is a significant impact of only liquid ratio on ROA while insignificant on ROE and ROI; the results also revealed that ROE is no significant effected by three ratios current ratio, quick ratio and liquid ratio while ROI is greatly affected by current ratios, quick ratios and liquid ratio. The main results of the study explained that each ratio (variable) has a significant effect on the financial positions of enterprises with differing amounts and that along with the liquidity ratios in the first place. Profitability ratios also play an important role in the financial positions of enterprises.

The effect of liquidity on profitability is presented by Svitlik and Poutnik. (2016) study. Results proposed that profitability is improved for banks that hold some liquid assets; however, there is a place at which holding further liquid assets minimize profitability, all else equal. Furthermore, empirical evidence also indicated that this relationship varies depending on a business model and the state of the economy. These results are particularly relevant as policymakers devise new standards establishing an appropriate level of liquidity.

3. Research Methodology

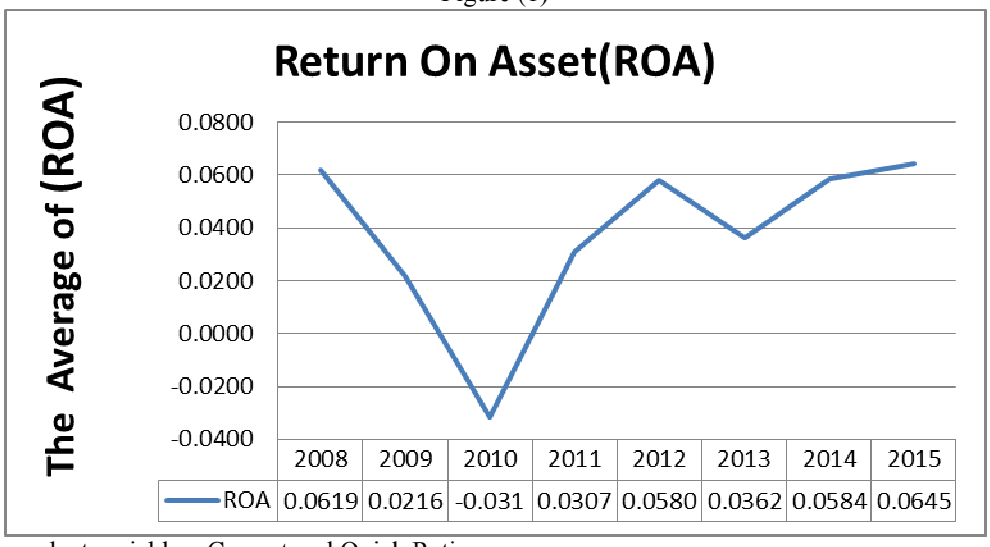
The study checks financial reports for overall Jordanian trade companies listed on the Amman Stock Exchange (ASE) for the period 2008- 2015

3.1. Variables of the Study

3.1.1. Dependent Variable- Return on Asset

The return on assets (ROA) compares income with total assets (equivalently, total liabilities and equity capital). It can be interpreted in two ways. First, it measures management's ability and efficiency in using the firm's assets to generate operating profits. Second, it reports the total return accruing to all providers of capital (debt and equity), independent of the source of capital. The return is measured by net income prior to the cost of financing and is computed by adding back (after tax) interest expense to net income.

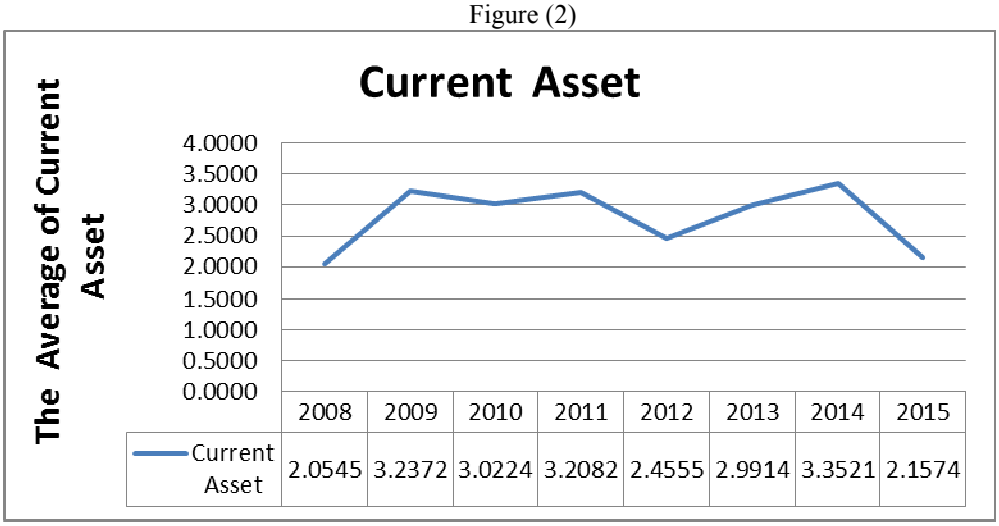
Figure (1)



3.1.2. Independent variables- Current and Quick Ratio

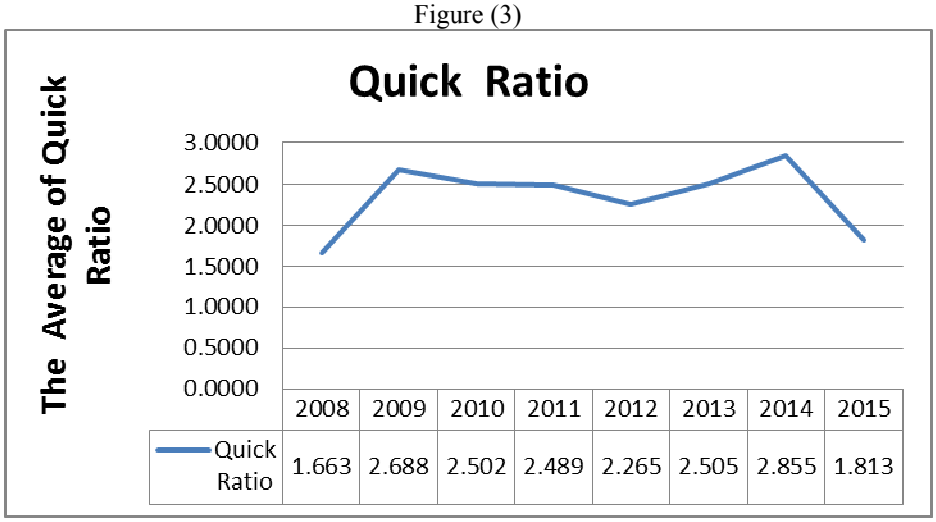
The quick ratio is more conservative than the current ratio because it includes only the more liquid current assets (sometimes referred to as quick assets) in relation to current liabilities. Like the current ratio, a higher quick ratio indicates greater liquidity.

Figure (2)



The quick ratio reflects the fact that certain current assets-such as prepaid expenses, some taxes, and employee-related prepayments- represent costs of the current period that have been paid in advance and cannot usually be converted back into cash. This ratio also reflects the fact that inventory might not be easily and quickly converted into cash, and furthermore, that a company would probably not be able to sell all of its inventory for an amount equal to its carrying value, especially if it were required to sell the inventory quickly. In situations where inventory illiquid (as indicated, for example, by low inventory turnover ratios), the quick ratio may be a better indicator of liquidity than is the current ratio.

Figure (3)



3.2. Major Hypothesis

H01: There is no significant impact of independent variable current ratio on dependent variable return on asset (ROA).

H02: There is no significant impact of independent variable quick ratio on dependent variable return on asset (ROA).

Research Model In order to examine the study hypotheses, the research model can be designed as follows:

Return on asset (ROA) = a1-b1 Current ratio +e1

Return on asset (ROA) = a2-b2 Quick Ratio +e2

Where (a) denote the intercept of regression equation and b are co-efficient of Current and Quick Ratio.

Table (1)

		Standard	T	
Parameter	Estimate	Error	Statistic	**P-Value**
CONSTANT	0.0058	0.0156	0.3751	**0.0700**
CURRENT RATIO	0.0112	0.0033	3.3354	**0.0013**

Analysis of Variance				
Source	Sum of Squares	Df Mean Square	F-Ratio	**P-Value**
Model	0.1518	1	11.12	**0.0013**
Residual	898.077	86		

R-squared 25.2268 %	**R-squared (adjusted for d.f.) = 26.6827 %**
Standard Error of Est. = 0.1168	
Durbin-Watson statistic = 2.19614	

ROA = 0.0058 + 0.0112*Current Ratio

By reading the table above we find that the value of (F) is highly significant, at α=5% and this support the reject of the main null hypothesis.

Which show that the liquidity (current ratio) has in important influence on profitability measured by return on assets (ROA), explained by (R2 = 25%).

There is significant impact of independent variable current ratio on dependent variable return on asset (ROA).

Table (2)

		Standard	T	
Parameter	Estimate	Error	Statistic	**P-Value**
CONSTANT	0.0069	0.016	0.4322	**0.0600**
QUICK RATIO	0.01299	0.00427	3.0406	**0.0031**

Analysis of Variance				
Source	Sum of Squares	Df Mean Square	F-Ratio	**P-Value**
Model	0.1286	1	3.25	**0.0031**
Residual	1.1969	86		

R-squared = 22.0829 %	**R-squared (adjusted for d.f.) = 20.8611 %**
Standard Error of Est. = 0.117	
Durbin-Watson statistic = 2.13865	

ROA = 0.00695455 + 0.0129945*Quick Ratio

This section shows the results of descriptive analyses for the study variables.

By reading the table above we find that the value of (F) is highly significant, at α=5% and this support the reject of the main null hypothesis.

Which show that the liquidity (quick ratio) has in important influence on profitability measured by return on assets (ROA), explained by (R2 = 22%).

There is significant impact of independent variable quick ratio on dependent variable return on asset (ROA).

4. Summary and Conclusion

This study is conducted by studying the Trade sector in Jordan as one of the most animated and leading sectors in Jordan. For the analysis use the simple regression for the period from 2008 to 2015, to investigate the impact of liquidity through current ratio and quick ratio on profitability through return on asset (ROA). Based on the statistical results, we conclude that there is significant impact of independent variables current ratio and quick ratio on dependent variable return on asset (ROA). That means profitability in Jordanian trade companies is significantly influenced by liquidity. However, many studies such as Adebayo O. et al. (2011) study showed that is significantly influenced by liquidity and vice versa. Also Saleem Q., et al. (2011) study mentioned that there is a significant impact of only liquid ratio on ROA. Where Rafiq (2016) conclude there is weak positive relation between liquidity and profitability.

The paper has provided justification that liquidity has a significant determinant of profitability in Jordan. Therefore, careful consideration and planning of liquidity management is one of the ways to improve efficiency

of Jordanian Trade sector.

References

Adebayo O., David A., Samuel O., (2011),"Liquidity Management and Commercial Banks' Profitability in Nigeria." Research Journal of Finance and Accounting, 2222-1697 (Paper), ISSN 2222-2847 (Online), Vol. 2, No 7

Ahmad, Rafiq, (2016)." A Study of Relationship between Liquidity and Profitability of Standard Charterd Bank Pakistan: Analysis of Financial Statement Approach, Global Journal of Management and Business Research: C Finance, Volume 16 Issue 1 Version 1.

Bordeleau É., Graham C., (2010), "The impact of Liquidity on Bank Profitability." Bank of Canada Working Paper 2010, ISSN 1701-9397

Brigham, E., Ehrhardt, M. , (2011). Financial Management, Theory and Practice, 13th Edi, South Western – Cengage Learning Press, USA.

Ejelly, A. (2004): Liquidity-Profitability Trade-off: An empirical Investigation in an Emerging Market, International Journal of Commerce & Management Vol. 14 (2), pp. 48 – 61, 2004.

Irawan A, and Faturohman T. (2015), "**:**A Study Of Liquidity And Profitability Relationship: Evidence From Indonesian Capital Market, International Journal of Management and Applied Science (IJMAS) , pp. 87-91, Volume-1,Issue-9.

Gibson, Charles, 2013, Financial Statement Analysis: Using Financial Accounting Information, South-Western College Pub., 13th edition.

Gitman ,L. ,Michael,(2012) .Principle of Managerial finance, Person Publishers, New york , 13th edition.

Lartey V., Antwi1 S., Boadi E. (2013), "The Relationship between Liquidity and Profitability of Listed Banks in Ghana."International Journal of Business and Social Science, Vol. 4 No. 3; March 2013.

M.A., Saleem S. and Aziz T. (2013): The Relationship of Cash Conversion Cycle and Profitability of Firms: An Empirical Investigation of Pakistan Firms. Journal of Emerging Issues inEconomics, Finance and Banking1 (1)

Pandey I. M. (2005): Financial Management, New Delhi, India, Vikas Publishing House.

Ross, S., R. Westerfield and B. Jordan. 2000. Fundamentals of Corporate finance. 9th ed. McGraw-Hill.

Saleem Q. &Rehman R.U. (2011) "Impacts of liquidity ratios on profitability (Case of oil and gas companies of Pakistan) Interdisciplinary Journal of Research in Business Vol. 1, Issue. 7.

Shahchera M. (2012), "The Impact of Liquidity Asset on Iranian Bank Profitability." International Conference on Management, Behavioral Sciences and Economics Issues, (ICMBSE'2012) Penang, Malaysia

Svitlik,j. and Poutnik L. (2016)," Relationship between Liquidity and Profitability: Empirical Study from the Czech Republic, European Financial and Accounting Journal, 2016, vol.11, no. 3.

Uremadu S. O., Egbide B. C. & Enyi P. E. (2012): "Working Capital Management, Liquidity among quoted firms in Nigeria evidence from productive sector". International journal of academic research in accounting, finance and management sciences, Vol. 2, No. 1,

Ware, Emmanuel Opoku (2015):" Liquidity Management and Its Effect on Profitability in a Tough Economy: (A Case of Companies Listed on the Ghana Stock Exchange)" International Journal of Research in Business Studies and Management Volume 2, Issue 11