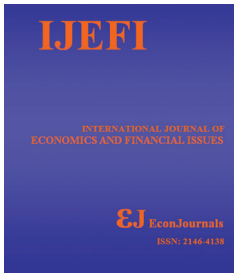

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Exploring the Relationship between Liquidity Ratios and Indicators of Financial Performance: An Analytical Study on Food Industrial Companies Listed in Amman Bursa

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ABSTRACT

The study aims to examine the relationship between liquidity ratios and indicators of financial performance (profitability ratios) in the food industrial companies listed in Amman Bursa during the period (2012-2014). The study sample included (8) industrial companies which operate in the field of food listed in Amman bursa. The results showed no relationship between all liquidity ratios and the gross profit margin, while there is a weak positive relationship between the current ratio and each of the operating profit margins and the net profit margin, as the study pointed to the existence of a positive relationship between (quick ratios, defensive interval ratio) and operating cash flow margin. There is a positive relationship between liquidity ratios (current ratio, quick ratio, cash ratio) and return on assets.

Keywords: Liquidity, Financial Performance, Profitability, Food Industrial Companies, Amman Bursa, Jordan
JEL Classifications: G10, G19

1. INTRODUCTION

Liquidity management is an important tool for the management of organizations; it reflects the organization's ability to repay short-term liabilities, which include operating expenses and financial expenses resulting within the organization in the short term. As well as part of long-term debt during the financial year or the operating cycle, whichever is longer? There are many liquidity ratios used by organizations to manage their liquidity such as (current ratio, quick ratio, cash ratio, defensive interval ratio) which can greatly affect the financial performance of companies (Robinson et al., 2015). Organizations working for the sake of success in its liquidity management on the ongoing calibration between current assets and current liabilities. Current assets include the receivable accounts, inventory, investments for trading and cash and other. While current liabilities include the short-term current liabilities such as accounts of creditors that part of long-term debt during the financial year or operating cycle (Sinha, 2012). Liquidity ratios show the entity's ability to meet its short-term liabilities, as the weakness of the value of these ratios indicates that the organization may face difficulties in meeting short-term financial liabilities (Amengor, 2010). This in turn would negatively affect the volume of company's activity, thus on its financial performance. On the other hand, the improvement in the values of these ratios can be pointing to recovery in liquidity of companies, which may reflect positively on the volume of activity, and therefore on its financial performance (Gibson, 2009).

It was selected this study because of the importance of subject studied where this study may help relevant parties to read and analyze the reality of these companies in a better way. In order to identifying the greatest factors that effect on the financial performance of companies, which may help these companies

to take appropriate administrative decisions relating to the management of liquidity and financial performance represented ratios of profitability. The study aims to identify the liquidity ratios in the studied food industrial companies, determine the levels of financial performance, and study of the relationship between liquidity ratios and indicators of financial performance.

2. PROBLEM OF STUDY

Jordanian industrial food companies are facing many changes and challenges, and most notably provide liquidity, as the decline in the level of liquidity of any company can be reflected negatively on the financial performance as a result of its inability to implement operational plans, considering that the financial performance is specific scale for the success of the companies. Many studies have confirmed that there is close relationship between liquidity ratios and indicators of financial performance or liquidity ratios and profitability ratios as delimiters of financial performance of the companies (Saleem and Rehman, 2011; Ajanthan, 2013; Priya, and Nimalathasan, 2013). In view of the above the research question for this study also evolved: What is the nature of the relationship between liquidity ratios and indicators of financial performance.

3. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

3.1. Liquidity Ratios

Liquidity refers to the speed in the transfer of assets into cash, liquidity ratios primarily focus on the cash flows, it is an indicator to measure a company's ability to meet its short-term liabilities. Liquidity management is achieved through the effective use of assets (Robinson et al., 2015). Liquidity ratios include the following:

3.1.1. Current ratio

Measure the company's ability to pay short-term liabilities such as payable accounts and short-term loans, which represents the ratio of current assets to current liabilities. The magnitude of this ratio expresses high liquidity of the company, thus a greater capacity to meet the short-term liabilities. In contrast, decrease in the ratio under (1) Expresses the deficit of liquidity and the part of the fixed assets financed by short-term debt. Although liquidity deficit could lead to a decline in the company's energy, thus can affect profitability. If the ratio (1) means that current assets equal to current liabilities (Robinson et al., 2015).

3.1.2. Quick ratio

This ratio only includes the most liquid of current assets to current liabilities. The rise in the value of this ratio expresses high liquidity of the company. This ratio excludes prepaid expenses and inventory from current assets being difficult conversion into cash (Sinha, 2012).

3.1.3. Cash ratio

This ratio of current assets depends only on short-term marketable investments plus its cash attributed to current liabilities (Gibson, 2009).

3.1.4. Defensive interval ratio

This ratio refers to the period in which the company can continue to pay the expenses of the existing liquidity without resorting to obtain cash flows from outside the company (Robinson et al., 2015).

3.2. Financial Performance Indicators (Profitability Ratios)

Profitability refers to the company's ability to generate profits as return on their money invested; profitability ratios reflect the competitive situation of the company in addition to the quality management. It is reflects the success or failure of the company (Robinson et al., 2015). Profitability ratios include the following:

3.2.1. Gross profit margin

This ratio refers to the sales' ability to generate gross profit. The high ratio refers to high of selling prices and low production costs. The high selling prices refer to the company's products having a competitive advantage. If a product has a competitive advantage either from cost or quality, then this will help the company to increase profitability (Robinson et al., 2015).

3.2.2. Operating profit margin

Operating profit can be obtained through operating costs deducted from gross profit. This is a very important ratio because it reflects the company's ability to generate profit from ordinary operations related to a company. The decline in this ratio refers to a weak control over operating costs (Gibson, 2009).

3.2.3. Net profit margin

This ratio includes the operating profit plus extraordinary revenue (non-recurring) and minus extraordinary expenses (Robinson et al., 2015).

3.2.4. Operating cash flow margin

The ratio measures the cash generated by the regular company's operations per unit in cash from sales. Cash flows can be found from the statement of cash flows, while revenue from the income statement. The rise in this ratio could refers that the company take effective policies to turn sales into cash, and may also refer to a high quality of profits (Sinha, 2012).

3.2.5. Return on assets

It refers to a relation between net profit and assets. The rise in the ratio refers to an effectiveness of the employment of assets by the company (Robinson et al., 2015).

3.3. The Relationship between Liquidity Ratios and Indictors of Financial Performance (Profitability Ratios)

Many previous researches has examined the relationship between liquidity ratios and indicators of financial performance or liquidity ratios and profitability ratios such as (Lartey, et al., 2013) which investigated the relationship between liquidity and profitability of the banks listed on the Ghana bursa during the period 2005-2010, the results showed a decrease in ratios of liquidity and profitability of listed banks, also show that there is a weak positive relationship between liquidity and profitability. But Ajanthan (2013) has proved significant relationship between liquidity and profitability in

commercial companies listed at the stock market in Sri Lanka for the 5 years from 2008 to 2012. Also explained Zygmunt (2013) important role of liquidity ratios in the company's performance, have pointed to the existence of a significant effect of the liquidity ratios on profitability in the Polish companies listed in information technology.

Khaldun (2014) noted that there is a weak significant relationship between current ratio, quick ratio, cash ratio, and gross profit margin, and those ratios together impact significantly on the growth of profit of industrial companies in sector food and drink listed on the IDX period 2010-2012. Wiyono and Se (2012) found that liquidity ratio has a positive impact on gross profit margin in Islamic bank in Indonesia. Based on the aforementioned review, the following hypotheses are formulated:

H1a: Current ratio will be positively related to gross profit margin
H1b: Quick ratio will be positively related to gross profit margin
H1c: Cash ratio will be positively related to gross profit margin
H1d: Defensive interval ratio will be positively related to gross profit margin.

Tugas (2012) used three ratios for liquidity are current ratio, quick ratio; cash ratio to identify the extent of its relationship with operating profit margin in companies belonging to the education sector in the Philippines for the years 2009-2011, he found positive relationship between current ratio, quick ratio and operating profit margin, while cash ratio is not associated with operating profit margin. Thus the following hypotheses were considered:

H2a: Current ratio will be positively related to operating profit margin
H2b: Quick ratio will be positively related to operating profit margin
H2c: Cash ratio will be positively related to operating profit margin
H2d: Defensive interval ratio will be positively related to operating profit margin.

The study conducted by Lyroudi et al. (1999) on listed firms of London stock exchange for 4 years' period revealed that, the current ratio and the quick ratio have a negative association with the net profit margin. Niresh (2012) found a positive correlation between the quick ratio and net profit margin in listed manufacturing firms in Sri Lanka for a period 5-year from 2007 to 2011. Also Niresh (2012) Recommended manufacturing companies in Sri Lanka should concentrate on maximizing profit while preserving liquidity. Based on the aforementioned review, we state the following hypothesis:

H3a: Current ratio will be positively related to net profit margin
H3b: Quick ratio will be positively related to net profit margin
H3c: Cash ratio will be positively related to net profit margin
H3d: Defensive Interval Ratio will be positively related to net profit margin.

The study conducted by Kirkham (2012) on the telecommunications sector in Australia revealed that differences existed between the traditional liquidity ratios and the cash flow ratios such as operating cash flow margin, where point out that current ratio and cash ratio influence significantly in operating cash flow margin. And this indicated by the study (Zeller and Stanko, 1994).

Based on the aforementioned review, the following hypotheses are formulated:

H4a: Current ratio will be positively related to operating cash flow margin
H4b: Quick ratio will be positively related to operating cash flow margin
H4c: Cash ratio will be positively related to operating cash flow margin
H4d: Defensive interval ratio will be positively related to operating cash flow margin.

Bolek and Wilinski (2012) found a relationship between the quick ratio and return on assets. While Akter and Mahmud, (2014) conclude that there is no significant relationship between current ratio and return on assets. Priya and Nimalathasan (2013) found that the current ratio and cash ratio are significantly associated with return on assets. Ruziqa (2013) and Vayanos and Wang (2012) confirmed the liquidity ratios have positive significant effect on return on assets. Saleem and Rehman, (2011) and Khidmat and Rehman (2014) indicated a relationship between liquidity ratios and return on assets. Thus the following hypotheses were considered:

H5a: Current ratio will be positively related to return on assets
H5b: Quick ratio will be positively related to return on assets
H5c: Cash ratio will be positively related to return on assets
H5d: Defensive interval ratio will be positively related to return on assets.

Therefore, the proposed research model was formulated in Figure 1.

4. METHODOLOGY

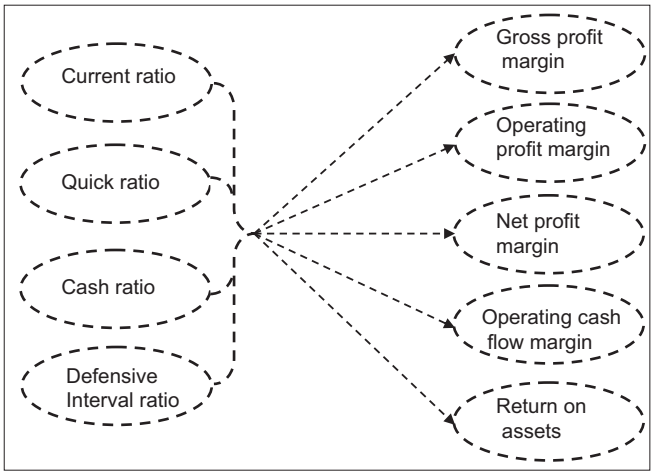
4.1. Design

The current study depended on analytical descriptive method to explore the relationship between liquidity ratios and indicators of financial performance on food industrial companies listed in Amman bursa.

4.2. Population and Sample

The study population consists of industrial companies listed in Amman bursa, Jordan. The study sample was selected from food

Figure 1: Study model



industrial companies during the period (2012-2014), which are (11) companies. But was selected (8) companies as described in Table 1, and excluding (3) companies because their data are not completed.

4.3. Measures

It was calculated measure of each ratio of liquidity ratios and profitability ratios as in Table 2.

4.4. Statistical Analysis Methods

Statistical Package for Social Sciences has been used to test hypotheses of the study using the following statistical methods: Mean, Standard deviations and simple Pearson correlation coefficient).

5. RESULTS

5.1. Descriptive Statistics for Liquidity

Table 3 shows the means and standard deviations for the ratios of liquidity (current ratio, quick ratio, cash ratio) to identify the liquidity rate during the period 2012-2014 in the food industrial companies listed on the Amman bursa.

Table 3 shows the following:

- The liquidity rates in food industrial companies ranged between (0.610 and 5.741) at a general liquidity mean of (1.822) and standard deviation of (1.686) where the company (NDAR) has the lowest liquidity, while company (UMIC) has the highest liquidity.
- In 2012 liquidity rate ranged between (0.310) as a minimum rate for the company (NDAR) and (5.360), as a maximum rate for the company (UMIC) and at a general rate of (1.460) and standard deviation of (1.644).
- In 2013 liquidity rate ranged between (0.693) as a minimum rate for the companies (NDAR) and (JPPC) and (8.542), as a maximum rate for the company (UMIC) and at a general rate of (2.160) and standard deviation of (2.651).
- In 2014 liquidity rate ranged between (0.603) as a minimum rate for the company (JPPC) and (3.320), as a maximum rate for the company (UMIC) and at a general rate of (1.847) and standard deviation of (1.035).
- Note that the liquidity rate fluctuates from year to year, in 2012 it is (1.460), and in 2013 it rises (2.160) and in 2014 it returns to (1.847).

Table 1: Company names and their symbols

No	Symbol	Name of the company
1	NATP	National Poultry
2	NDAR	Nutria Dar
3	JVOI	Jordan Vegetable Oil Industries
4	SNRA	Siniora Food Industries
5	JPPC	Jordan Poultry Processing Company
6	JODA	Jordan Dairy
7	GENI	General Investment
8	UMIC	Universal Modern Industries Company

5.2. Descriptive Statistics for Financial Performance (Profitability)

Table 4 shows the means and standard deviations for the ratios of profitability (gross profit margin, operating profit margin, net profit margin, and operating cash flow margin) to identify the profitability rate during the period 2012-2014 in the food industrial companies listed on the Amman bursa.

Table 4 shows the following:

- The profitability rates for the companies studied are between (−0.052 and 0.216) at a general profitability rate of (0.0870) and standard deviation of (0.0880), where the company (NDAR) has the lowest profitability, while the company (GENI) has the highest profitability.
- In 2012, profitability rate ranged between (−0.113) as a minimum rate for the company (NDAR), and (0.193) as a maximum rate for the company (GENI), and a general rate of profitability of (0.0540) and a standard deviation of (0.0940).
- In 2013, profitability rate ranged between (−0.088) as a minimum rate for the company (NDAR), and (0.240) as a maximum rate for the company (GENI), and a general rate of profitability of (0.0830) and a standard deviation of (0.1080).
- In 2014, profitability rate ranged between (0.033) as a minimum rate for the company (NATP), and (0.215) as a maximum rate for the company (GENI), and a general rate of profitability of (0.1070) and a standard deviation of (0.0760).
- Note that the profitability rate in these companies is growing from year to year. In 2012, it is (0.071) and in 2013, it rises to (0.0830), and in 2014, also it rises to (0.107).

5.3. Test of Hypotheses

To test the hypotheses of the study, simple correlation coefficient (Pearson) was calculated between the independent variables of the study and each dependent variable as shown in Tables 5 and 6.

Table 2: Liquidity ratios and profitability ratios

Variables	Symbol	Full name	Measure
Liquidity ratios	CR	Current ratio	Current assets/current liabilities
	QR	Quick ratio	Cash+short-term marketable investments+receivables/current liabilities
	Cash R	Cash ratio	Cash+short-term marketable investments/current liabilities
	DIR	Defensive interval ratio	Cash+Short-term marketable investments+receivables/daily cash expenditures
Profitability ratios	GPM	Gross profit margin	Gross profit/revenue
	OPM	Operating profit margin	Operating income/revenue
	NPM	Net profit margin	Net income/revenue
	OCFM	Operating cash flow margin	Cash flows from operating activities/revenue
	ROA	Return on assets	Net income/average total assets

Resource: (Robinson et al., 2015; Sinha, 2012; Gibson, 2009; Mohammed, et al., 2008)

6. DISCUSSION OF RESULTS

The results indicated that the average liquidity for food industrial companies listed on the Amman bursa amounted to (1.822), where the company (NDAR) was the lowest liquidity (0.610), this indicates that the company is experiencing difficulties from both cash sales, credit and collectable policy. This result means that current liabilities greater than current assets, indicating that the net working capital is negative. While Company (UMIC) is a highest liquidity reached to (5.741) This refers either that the company has a successful policy in the sales and credit and collectable policies and this is a good, Or that the company has surplus of liquidity is disabled and this is not good because their inability to invest that cash surplus in excess profitability. As it turned out that the liquidity rate of these companies reached to (1.460) in 2012 then rose in 2013 as it reached (2.160) and then fell to (1.847) in 2014, but it remained higher than the general rate of 2012. This volatility may be linked to the general economic situation and the resulting success in credit policies or collectable in periods of prosperity, or indulgence or lack of success in the credit and collectable policies in periods of deflation.

The results of the study also showed that the average profitability of food industrial companies listed on the Amman bursa stood at (0.0870), where the company (NDAR) was the lowest profitability (−0.052), while company (GENI) is a highest profitability reached to (0.216). This refers to the ability of companies to generate profits from the sales on the one hand and its ability to invest its assets optimally on the other hand. As it turns out that profitability rate is increasing from year to other, in 2012 profitability rate (0.0710) and in 2013 rose to (0.0830) and in 2014 continued to rise to settle at (0.1070). This refers either to the increased demand for food or to lower production costs in these companies.

At testing hypotheses, the study found no relationship between the ratios of liquidity (current ratio, quick ratio, cash ratio, and defensive interval ratio) and the gross profit margin as financial performance dimensions. This explains that the gross profit margin is calculated before all other operating expenses, which greatly affect the liquidity ratios, and liquidity ratios may be affected by factors never linked to the gross profit margin as increased capital or fixed asset sale. This result differs with the results of a study (Khaldun, 2014) which indicated the presence of a positive relationship between some liquidity ratios such as (current ratio, quick ratio, cash ratio) and the gross profit margin, also varies with results study (Wiyono and Se, 2012) which found a positive relationship between liquidity ratios and the gross profit margin.

The study also found a weak positive relationship between the current ratio and operating profit margin, where correlation coefficient reached to (0.228), while the rest of the other liquidity ratios (quick ratio, cash ratio, defensive interval ratio), they are not related with any relationship with the operating profit margin. This is logical, compared with the previous result as the impact of operating expenses has been removed, and this weak positive relationship remains as a result of other factors mentioned such as increased capital or fixed asset sale. This result is consistent with the results of a study (Tugas, 2012) which indicated a positive relationship between current ratio and operating profit margin.

The study also found a weak relationship between the current ratio and net profit margin, where correlation coefficient reaching (0.279), this due to the current ratio components such as receivable and payable accounts and inventory has a simple impact on net profit. While the rest of the other liquidity ratios (quick ratio, cash ratio, defensive interval ratio), they are not related with any relationship with the net profit margin. This result varies with the results of a study (Niresh, 2012) which indicated a positive correlation between the quick ratio and profit margin net. Likewise, the it varies with study (Lyroudi et al., 1999) that revealed the current ratio and the quick ratio have a negative association with the net profit margin.

Table 3: Descriptive statistics for liquidity

No	Company	Liquidity			Mean of liquidity	Company importance
		2012	2013	2014		
1	NATP	0.777	0.917	1.850	1.181	5
2	NDAR	0.310	0.693	0.827	0.610	8
3	JVOI	1.023	1.657	3.290	1.990	3
4	SNRA	0.523	0.833	1.143	0.833	6
5	JPPC	0.673	0.693	0.603	0.657	7
6	JODA	1.160	1.447	1.583	1.397	4
7	GENI	1.853	2.503	2.163	2.173	2
8	UMIC	5.360	8.542	3.320	5.741	1
Liquidity mean yearly		1.460	2.160	1.847	1.822	-
Standard deviation		1.644	2.651	1.035	1.686	-

Table 4: Descriptive statistics for profitability

No	Company	Profitability			Mean of profitability	Company importance
		2012	2013	2014		
1	NATP	0.020	0.035	0.033	0.029	7
2	NDAR	−0.113	−0.088	0.045	−0.052	8
3	JVOI	0.073	0.193	0.178	0.148	3
4	SNRA	0.178	0.153	0.198	0.176	2
5	JPPC	0.065	−0.113	0.043	0.035	6
6	JODA	0.083	0.095	0.093	0.090	4
7	GENI	0.193	0.240	0.215	0.216	1
8	UMIC	0.075	0.043	0.055	0.057	5
Profitability mean yearly		0.0710	0.0830	0.1070	0.0870	-
Standard deviation		0.0940	0.1080	0.0760	0.0880	-

Table 5: Coefficient of pearson correlation between liquidity ratios and financial performance indicators

Ratios	Gross profit margin	Operating profit margin	Net profit margin	Operating cash flow margin	Return on assets
Current ratio					
R	−0.219	0.228	0.279	0.237	0.319
Significant	0.602	0.047	0.013	0.573	0.041
Quick ratio					
R	−0.234	0.162	0.213	0.314	0.260
Significant	0.576	0.702	0.612	0.042	0.034
Cash ratio					
R	−0.309	0.076	0.151	0.085	0.219
Significant	0.457	0.857	0.775	0.842	0.026
Defensive interval ratio					
R	0.379	0.178	0.131	0.651	−0.104
Significant	0.354	0.674	0.757	0.020	0.806

Table 6: Result of Hypotheses

Hyp.	Paths	Results
H1a	Current ratio→Gross profit margin	Rejected
H1b	Quick ratio→Gross profit margin	Rejected
H1c	Cash ratio→Gross profit margin	Rejected
H1d	Defensive→Interval ratio gross profit margin	Rejected
H2a	Current ratio→Operating profit margin	Accepted
H2b	Quick ratio→Operating profit margin	Rejected
H2c	Cash ratio→Operating profit margin	Rejected
H2d	Defensive interval ratio→Operating profit margin	Rejected
H3a	Current ratio→Net profit margin	Accepted
H3b	Quick ratio→Net profit margin	Rejected
H3c	Cash ratio→Net profit margin	Rejected
H3d	Defensive interval ratio→Net profit margin	Rejected
H4a	Current ratio→Operating cash flow margin	Rejected
H4b	Quick ratio→Operating cash flow margin	Accepted
H4c	Cash ratio→Operating cash flow margin	Rejected
H4d	Defensive interval ratio→Operating cash flow margin	Accepted
H5a	Current ratio→Peturn on assets	Accepted
H5b	Quick ratio→Peturn on assets	Accepted
H5c	Cash ratio→Peturn on assets	Accepted
H5d	Defensive interval ratio→Peturn on assets	Rejected

The study showed a positive relationship between the quick ratio and operating cash flow margin, where correlation coefficient reaching (0.314). The reason for this relationship to be quick ratio include the item debtors in full their balance, while operating cash profit focuses on only collecting part of them. As it turned out, presence of medium-strength positive relationship between the defensive interval ratio and operating cash flow margin, where correlation coefficient reached (0.651). This is due to the fact that the defensive interval ratio measures the company's ability to continue to pay operating expenses, and thus the greater the operating cash flow margin increased defensive interval ratio. While the (current ratio, cash ratio) are not related significant relationship with operating cash flow margin. This is because the change in the value of each of the previous two ratios may be caused by non-operating factors such as cash capital increase or sale of fixed assets. This result differs with study (Kirkham, 2012) where showed that current ratio and cash ratio morally affect in operating cash flow margin.

Finally, the study found a positive correlation between each of the following liquidity ratios (current ratio, quick ratio, cash ratio) and return on assets, where correlation coefficient reaching (0.319) (0.260) (0.219) on respectively, and these relationships can be explained that the increase in the return on assets is reflected positively on the current assets in general and on the net working capital in particular. There is no relationship between defensive interval ratio and return on assets the possible reason for this is that any changes in the composition of assets leading to changes in the defensive interval ratio never lead to a change in the return on assets. This result is consistent with the results of studies (Khidmat and Rehman, 2014; Ruziqa, 2013; Saleem and Rehman, 2011; Vayanos and Wang, 2012) who also indicated a positive relationship between liquidity ratios and return on assets. Moreover, the study (Bolek and Wilinski, 2012) also showed a relationship between the quick ratio and return on assets. Likewise, this result is consistent with the results of a study (Priya and Nimalathasan, 2013) that found the current ratio and cash ratio significantly associated with return on assets. while it varies with the results of a study (Akter and Mahmud, 2014), which showed no significant relationship between current ratio and return on assets.

7. THEORETICAL AND PARTICAL IMPLICATIONS

The findings of the study provide valuable information and insights not only to academic researchers but also to interested, shareholders and owners of food industrial companies and other companies in various sectors. From a theoretical perspective the study model support many of previous studies results, and offers the best illustration of the extent of the relationship between liquidity ratios and indicators of financial performance which have measured through ratios of profitability. So should the food industries companies to pay attention to the ongoing calibration between liquidity and profitability in order to meet the operational and expansion process requirements as well as to achieve the aspirations of the shareholders through enhancing their wealth. Companies' management must also continuously work on the calibration between liquidity, profitability and lack of surplus in cash because the cash surplus would have a negative impact

on profitability. In addition to follow-up to maximize profit by companies because it enhances liquidity at the same time, as it should maintain sufficient liquidity in order to maintain existence of raw materials for the operational process. Lastly there is a need to maintain a net capital positive factor, as the net capital negative factor could reflect negatively on the production process and subsequently on profitability.

8. LIMITATIONS AND FUTURE DIRECTIONS

Firstly, the sample used in this study was of only (8) companies working in field of food industries listed in Amman bursa within the period from 2012 to 2014. Secondly, the data is collected through the published financial reports of the companies. Thirdly, only 4 ratios of liquidity were measured: (Current ratio, quick ratio, cash ratio, the defensive interval ratio). Fourth, indicators of financial performance were measured through profitability ratios comprising of gross profit margin, operating profit margin, net profit margin, operating cash flow margin, and return on assets. We hope future studies include other sectors in Amman bursa for longer periods of time in order to identify more deeply on the relations between the various liquidity ratios and indicators of financial performance.

9. CONCLUSIONS

The study reveals the liquidity rate in food industrial companies listed in Amman bursa fluctuate from year to year. Similarly, the profitability rate in food industrial companies listed in Amman bursa grow from year to another. The study shows no relationship between all the liquidity ratios (current ratio, quick ratio, cash ratio, defensive interval ratio) and gross profit margin. While there is a weak positive relationship between the current ratio and each operating profit margin and net profit margin. Also there exist a positive relationship between the following liquidity ratios (quick ratio, defensive interval ratio) and operating cash flow margin. Finally, existence a positive relationship between the following liquidity ratios (current ratio, quick ratio, cash ratio) and return on assets.

REFERENCES

Ajanthan, A. (2013), Nexus between liquidity and profitability: A study of trading companies in Sri Lanka. European Journal of Business and Management, 6(7), 47-63.

Akter, A., Mahmud, K. (2014), Liquidity-profitability relationship in Bangladesh banking industry. International Journal of Empirical Finance, 2(4), 112-134.

Amengor, C. (2010), Importance of Liquidity and Capital Adequacy to Commercial Banks, A Paper Presented at Induction Ceremony of ACCE, UCC Campus.

Bolek, M., Wilinski, W. (2012), The influence of liquidity on profitability of polish construction sector companies. Financial Internet Quarterly, 8(1), 77-89.

Gibson, C. (2009), Financial Reporting and Analysis. 11th ed. Mason, OH, México: Cengage Learning.

Khaldun, K. (2014), The influence of profitability and liquidity ratios on the growth of profit of manufacturing companies study of food and beverages sector companies listed on, Indonesia stock exchange (period 2010-2012). International Journal of Economics, Commerce and Management, 2(12), 1-17.

Khidmat, W., Rehman, M. (2014), Impact of liquidity and solvency on profitability chemical sector of Pakistan. Economics Management Innovation, 6(3), 34-67.

Kirkham, R. (2012), Liquidity analysis using cash flow ratios and traditional ratios: The telecommunications sector in Australia. Journal of New Business Ideas and Trends, 10(1), 1-13.

Lartey, V., Antwi, S. Boadi, E. (2013), The relationship between liquidity and profitability of listed banks in Ghana. International Journal of Business and Social Science, 4(3), 12-34.

Lyroudi, K., McCarty, D., Lazaridis, J., Chatzigagios, T. (1999), An Empirical Investigation of Liquidity: The Case of UK Firms. Orlando: Presented at the Annual Financial Management Association.

Mohammed, M., Ismail, N., Nasser, A. (2008), Financial Analysis Decision-Making Entrance. Amman: Dar Wael for Publication.

Niresh, A. (2012), Trade-off between liquidity and profitability: A study of selected manufacturing firms in Sri Lanka. Journal of Arts, Science and Commerce, 4(2), 1-34.

Priya, K., Nimalathasan, B. (2013), Liquidity management and profitability: A case study of listed manufacturing companies in Sri Lanka. International Journal of Technological Exploration and Learning, 2(4), 135-151.

Robinson, T., Henry, E., Pirie, W., Broihahn, M. (2015), International Financial Statement Analysis. 3rd ed. New Jersey: John Wiley & Sons, Inc.

Ruziqa, A. (2013), The impact of credit and liquidity risk on bank financial performance: The case of Indonesian conventional bank with total asset above 10 trillion Rupiah. International Journal of Economic Policy in Emerging Economies, 6(2), 93-106.

Saleem, Q., Rehman, R. (2011), Impacts of liquidity ratios on profitability, interdisciplinary. Journal of Research in Business, 1(7), 78-91.

Sinha, G. (2012), In: Ghosh AK, editor. Financial Statement Analysis. Eastern Economy Edition. New York: Prentice Hall of India Private Limited.

Tugas, F. (2012), Comparative analysis of the financial ratios of listed firms belonging to the education subsector in the Philippines for the years 2009-2011. International Journal of Business and Social Science, 3(21), 173-190.

Vayanos, D., Wang, J. (2012), Liquidity and asset returns under asymmetric information and imperfect competition. The Review of Financial Studies, 25(5), 1339-1365.

Wiyono, S., Se, S. (2012), The Effect of Credit and Liquidity risk to Islamic Bank Profitability with Islamic Income and Profit Sharing Ratio as Moderating Variable. 2nd Annual International Conference on Micro and Macro Economics, Indonesia.

Zeller, T., Stanko, B. (1994), Operating cash flow ratios measure a retail firm's ability to pay. Journal of Applied Business Research, 10(4), 51-59.

Zygmunt, J. (2013), Does Liquidity Impact on Profitability? Conference of Informatics and Management Sciences, March, 38-49.