Impact of Liquidity Ratio on Profitability: An Empirical Study of Automobile Sector in Karachi

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Abstract- This research paper has examined to tell about impact of liquidity ratio on company profitability that how can liquidity affect on profitability either negatively or positively. the liquidity ratio include current and quick ratio which measure the company's profitability or efficiency of return on assets and return on equity this research has been conducting on automobile sector of five companies in Karachi including Pak Suzuki , Nissan Ghandhara , Toyota , Honda atlas ,and Hino Pak .The data has been collected from different sources like financial statements , links other sources and so on .

Current and quick ratio are the financial tools to measure the liquidity position and profitability of the company that where company has stand to pay its short term debt or not and how company can increase their profit by making investment in different class and use effective strategy and policies to overcome negative results of liquidity problem .we apply different test to analyze the relationship between liquidity ratio and profitability to find out positive or negative impact on company

Keywords: Profitability , Return on Assets , Return on equity , liquidity management , quick ratio , current ratio, working capital management , financial performance , liquidity risk , financial indicators and so on

I. Introduction

Liquidity management play an important role in every organization because every organization wants to increase their profitability ROA And ROE by using liquidity ratio i.e. current ratio , quick ratio and to measure the financial performance and liquidity position of the company . There are many research have been conducted on liquidity ratios and company profitability which show that how liquidity can increase or decrease their company profitability .this study has been conducted on different sectors and countries but first time conducting on automobile sector of five listed companies in Karachi including Pak Suzuki , Toyota , Honda atlas , Nissan Ghandhara and Hino Pak to find out the relationship between liquidity and their profitability liquidity management means that company pay its short term debt obligations and improve their performance and efficiency. if any company faces liquidity problem so it should use effective policy or strategy to solve their liquidity problem. Companies should have enough sufficient cash to meet its liquidity problem. these three ratios have useful approach or techniques to determine liquidity management and profitability of any company.

This study will also help to determine the relationship between liquidity and profitability that how liquidity crisis would create negative results for the company income and can positively generate more income or profit for the organization.

1.1 PROBLEM STATEMENT:

The main purpose of this study is to determine the relationship between liquidity ratios and company profitability of five listed automobile company in Karachi including: Pak Suzuki , Toyota , Honda atlas , Nissan Ghandhara and Hino Pak that how can company measure their financial performance and profitability ROA and ROE and what are the impacts of liquidity on profitability by using liquidity ratios.

1.2 RESEARCH QUESTION:

What are the factor that impact on company profitability?
How liquidity affect company profitability?

1.3 SIGNIFICANCE OF THE STUDY:

This study has been conducting to find out the relationship between liquidity and profitability of five listed automobile companies in Karachi company uses three useful financial indicators i.e. current ratio , quick ratio and working capital ratio to measure the company performance and profit of the organization.

1.4 OBJECTIVE OF THE STUDY:

This research conducting following objectives:

- To find out the relationship between current ratio and Return on assets(ROA)
- To analyze the relationship between current ratio and Return on equity(ROE)
- To determine the relationship between Quick ratio and Return on assets(ROA)
- To analyze the relationship between Quick ratio and Return on Equity(ROE)

1.5 LIMITATION:

This research is conducting on five companies of automobile industry in Karachi by using only liquidity ratio for measuring company profitability and performance there are many indicators for measuring the profitability of companies but due to lack of time we use only liquidity indicator for this research purpose.

1.6 SCOPE OF THE STUDY:

The scope of this study is to define that how company can improve their performance and increase their profitability by using different effective strategies and policies to meet its short term obligation and resolve liquidity issue of the company.

II. LITERATURE REVIEW

According to the (Khidmat & Rehman, 2014)research that liquidity ratio has positive impact on the company profitability ROA and solvency ratio has negative impact on the ROA and ROE. liquidity, solvency and profitability run in opposite direction when one is decreases the other become increases. the data has been taken from 36 companies and 10 companies listed in Pakistan The main objective is to define the relationship between liquidity and profitability of companies. liquidity ratio show the positive while solvency ratio show the negative result on profitability because if company have more cash in hand than it would be capable to meet the liquidity problem.

As stated that (Lartey, Antwi, & Boadi, 2013)the relationship between liquidity and profitability of nine listed banks in Ghana find were declining and have weak positive relationship between them this is also find that their level of liquidity and profitability is decreasing. It is suggested that if bank will manage their liquidity in great manner so their profitability will be improved and will also help in reducing liquidity and financial risk .liquid asset have no capacity to create interest the bank can easily manage or handle any unforeseen risk caused by increase in asset side or decrease in liability side in unexpected situation of the financial statement.

This study examined that how much is the firm ability to meet its short term obligation through liquidity ratio because liquidity and profitability are the important instrument to measure the financial performance the profitability ratio is positively related with the effectively utilization of resources this research is conducted through publicly quoted companies that make domestic product have positive relationship between liquidity and profitability and have no relationship between acid test ratio and return on capital employed on profitability it is also suggested by the researcher that liquidity and profitability should not depend on liquidity policies for the consumption or expense of the profitability (EHIEDU & Chukwunweik, 2014)

Study is conducted to analyze the financial performance of banks through financial ratios. The data has been collected from major banks of Bahrain show the differences in financial management practices and ratios used by different banks this study find the relationship between liquidity , profitability and interest risk management of banks these ratio give the excellent result in measuring of liquidity assets and equity shares we can use these ratios in future for risk management and unpredicted financial problems. this is also helpful in taking business decision and better future plans liquidity ratio can provide good results and indication for future development but not all the time. the impact of financial ratios have the positive result on their operational activities. (Najjar & J., 2013)

According to the research of (Alshatti, 2015) has find the impact of liquidity management on profitability of commercial banks in Jordanian the data has been taken from 13 commercial banks show that there is positive impact of quick ratio and investment ratio on profitability ROE and negative impact on capital and liquid assets ratio the bank should utilize their cash in other investment class to generate banks profitability and try to achieve a balance between utilization of resources and funds for sufficient operational efficiency .researcher suggest that bank should improve their adequate liquidity position to generate more profit have to adopt general framework for cash management

There are number of studies is supporting liquidity management of companies which is the important factor of its profitability if there is mismanagement or excess liquidity so it is useless or have no opportunity to invest in any business and it can be harmful for the effective organization .The data of 30 listed manufacturing companies in Nigeria which show the relationship between liquidity and profitability .Current and quick ratio have positive while cash conversion period has negative impact on profitability this is because of in adequate management of liquid assets and long cash conversion period so companies can overcome these inappropriate management by using more realistic strategies or policies and have short conversion cycle. (1Ben-Caleb, Olubukunola, & Uwuigbe, 2013)

By the research of (Zygmunt & Justyna, 2013) liquidity is associated with company profitability which reflect company performance of polish listed IT companies have positive relationship between receivable conversion period ,inventory conversion period and profitability it is also confirm that when growth of account payable days increase their profitability would be increased the companies should tightly focus on opportunities of liquidity and profitability because liquidity shows cash flows in hand.

Research has been conducted to determine a company's profitability by using liquidity ratio of steel companies in India when we look towards liquidity position of a company they are facing its short term obligations so the liquidity ratios are the useful indictors for measuring its business operations .if company wants to run comfortably so they should have sufficient liquidity in hand to survive in business era. The company should have not excessive or inadequate cash but has sufficient liquidity to meet its short term obligations on time. excessive liquidity have no opportunity to invest and low profit and inadequate liquidity create trouble for business the companies should balance between in both situations through proper or efficient liquidity management. (J.Abarna & Dr.S.S.Saravanan, 2014)

After conducting the study of oil and gas companies in Pakistan researcher (Saleem & Rehman, 2011) suggested that every organization has to manage liquidity and profitability relationship in great manner. finding gives that there is positive relationship of liquidity ratio on ROA and have no relationship on ROE ,this study also suggest that each ratio has different impact on the financial position of the company. Stakeholders , suppliers and employees also concerned with the liquidity position of the company either they have enough cash to meet its obligations because liquidity and profitability ratios is directly or closely related to company profitability and performance.

according to (Kirkham, 2012) the traditional ratios and cash flow ratios used by telecommunication sector in Australia for the analysis of liquidity of twenty five companies resulted that traditional ratios have inappropriate decision regarding liquidity because companies have inadequate liquid assets or cash flows .Traditional and cash flow ratios are well compared with liquidity position of the company. the companies should used different approach or policies for making better decision making and financial position of the company. cash flow ratios gives more ideas , approach and useful values for better future decision making of the company's.

The current ratio , quick ratio , and absolute liquid ratio of pharmaceutical companies gives analysis of liquidity position of the companies that creditors , suppliers are interested to know the liquidity position of the company to meet its short term obligations that how much company is capable to pay its liabilities on time the analysis is based on three pharmaceutical companies i.e. Procter and gamble , Reddy and Cipla ltd . Cipla ltd company show the best result in liquidity ratio but the other companies has to manage their liquidity position for better results or outcomes so in this way the companies can improve their performance and increase profitability. (Yadav, 2014)

This study gives different factor that influence company profitability and its performance by using liquidity ratios for decision making in future .to analyze company performance that how can company create more interest to satisfy their shareholder through their profitability and better utilization of resources. profitability of any company is reflect through their liabilities , capital and inventory level that how can company is easily handling their short term obligations. Efficient use of current assets can create more profit for any organization the better management , strategies and combined sources for funds can increase profitability and positive results for the company . (Burja, 2011)

This study has been conducted to indicate the financial performance of 161 manufacturing companies of Malaysia and Sri Lankan show that Sri Lankan companies have positive impact on their profitability while Malaysian companies have vice versa result through ROA .Malaysian companies have try to increase profit by using different strategies or policies but Malaysian companies have slightly positive result by ROE. Sri Lankan companies should need to be increase their ROE to attract more shareholders through better future investment . companies should focus on their investment plans , policies , different opportunity class to increase their profitability and performance . (Zoysa, Manawaduge, & Chandrakumara, 2009)

Through the research of (Iqbal, Ahmad, & Ria, 2014) relationship between working capital and profitability of Pakistani KSE listed firms show negative relationship between cash conversion cycle and company profitability. In Pakistani companies have manage their cash in great manner to increase their profitability if any company properly manage their working capital in efficient manner so it become increase your shareholder equity and profit as well. Companies should focus on proper check and balance , current asset and liabilities that how much company can overcome their debt issues and liquidity problems in efficient manner.

After conducting the research of (Innocent, Mary, & Matthew, 2013) analyzed that financial ratio has great impact on Nigerian profitability of pharmaceutical industries .This study also help that how companies can improve their profitability and minimize risk in term of cost. Profitability of Nigerian companies has negative impact on their independent variables only inventory turnover ratio has significant effect on profitability. Creditor and debtor both policy should be balanced to increased their profitability .company should use their liquid assets to generate more income and how much company have ability to manage their liquidity obligation.

III. METHODOLOGY

3.1 HYPOTHESIS:

H01: Current ratio has no impact on profitability (Return on assets)

HA1:Current ratio has an impact on profitability (return on assets)

H02:Current ratio and return on equity has no association between each other.

HA2:Current ratio and return on equity has association between each other.

H03:There is no relationship between quick ratio and profitability (return on assets)

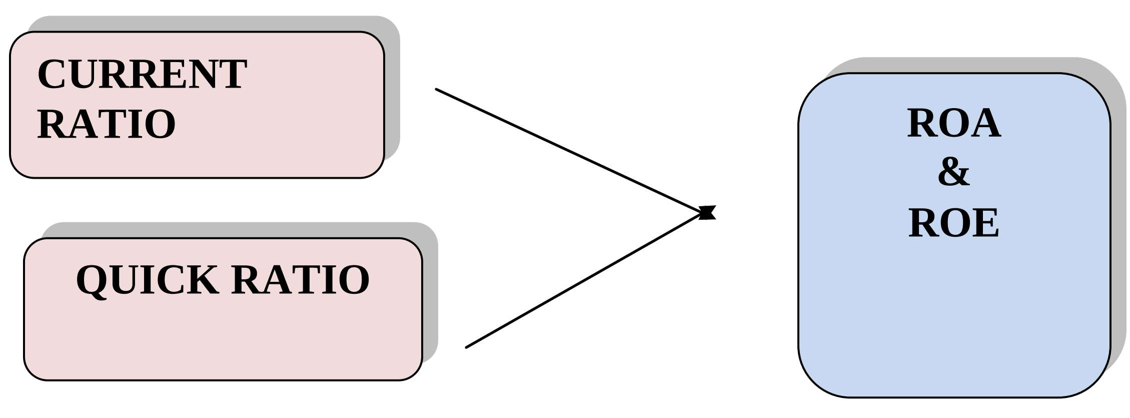
HA3: There is relationship between quick ratio and Profitability (Return on Assets)

H04:quick ratio and return on equity has no link with each other

HA4: quick ratio and return on equity has link with each other

3.2 RESEARCH MODEL:

INDEPENDENT VARIABLES **DEPENDENT VARIABLES**



3.3 DATA SOURCES AND COLLECTION TECHNIQUES:

This research paper is based on evaluation of liquidity management and profitability of five listed automobile companies Nissan Ghandhara , Toyota , Pak Suzuki , Honda and Hino Pak In Karachi by using liquidity ratios. Different research papers including national and international has also been taken for data collection. For this paper we have three independent variables Current ratio , quick ratio and working capital ratio and two dependent variables Return on assets and return on equity.

3.3.1 PRIMARY:

This research paper is firstly conducted on automobile industry of Karachi by taking five automobile company

3.3.2 POPULATION:

For this research paper population has been taken from five automobile industry of Karachi including Nissan Ghandhara , Toyota , Pak Suzuki , Honda and Hino Pak and we have compiled these data of last five years from (2010-2014)

3.3.3 DATA SOURCES:

Different websites, links , Company financial statements are used to collect for data purpose.

3.3.4 RESEARCH TECHNIQUES:

Different techniques are using in this research paper including i.e. SPSS descriptive statistics , correlation and linear regression among different variables.

IV. DATA ANALYSIS

4.1 DESCRIPTIVE:

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
current ratio	10	1.20	1.76	1.4740	.16783	-.070	.687
return on assets	10	-1.97	6.39	2.3524	2.66889	-.208	.687
return on equity	10	-9.58	19.42	5.2136	9.48983	-.121	.687
Valid N (listwise)	10						

We have taken five different automobile company from Karachi to analyze the relationship between different variables including current ratio , quick ratio , return on asset ratio and return on equity ratio by applying descriptive statistic which show the result between -1 t0 +1 under Skewness statistics

4.2 CORRELATION AND REGRESSION:

H01: Current ratio has no impact on profitability (Return on assets)
HA1:Current ratio has an impact on profitability (return on assets)

Correlations

		current ratio	return on assets
current ratio	Pearson Correlation	1	-.150
	Sig. (2-tailed)		.680
	N	10	10
return on assets	Pearson Correlation	-.150	1
	Sig. (2-tailed)	.680	
	N	10	10

The correlation between current ratio and return on assets show the 0.680 significance level which means that null hypothesis is failed to reject after applying Pearson correlation (2-tailed test) that current ratio has no impact on profitability (Return on Assets) there is negative relationship between both variables

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.433	1	1.433	.183	.680[b]
	Residual	62.673	8	7.834		
	Total	64.107	9			

The significance level of current ratio and return on assets is 0.680

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.857	8.242		.711	.497
	current ratio	-2.378	5.559	-.150	-.428	.680

current ratio = 0.497 return on assets + 5.857

H02:Current ratio and return on equity has no association between each other.
HA2:Current ratio and return on equity has association between each other.

Correlations

		current ratio	return on equity
current ratio	Pearson Correlation	1	-.243
	Sig. (2-tailed)		.499
	N	10	10
return on equity	Pearson Correlation	-.243	1
	Sig. (2-tailed)	.499	
	N	10	10

The correlation between current ratio and return on equity show the 0.499 significance level which means that null hypothesis is failed to reject after applying Pearson correlation (2-tailed test) that current ratio has no impact on profitability (Return on equity) there is negative relationship between both variables.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	47.875	1	47.875	.502	.499[b]
	Residual	762.637	8	95.330		
	Total	810.512	9			

The significance level of current ratio and return on equity is 0.499

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	25.470	28.750		.886	.402
	current ratio	-13.742	19.392	-.243	-.709	.499

current ratio = 0.402 return on equity + 25.470

H03:There is no relationship between quick ratio and profitability (return on assets)
HA3: There is relationship between quick ratio and Profitability (Return on Assets)

Correlations

		quick ratio	return on assets
quick ratio	Pearson Correlation	1	.095
	Sig. (2-tailed)		.794
	N	10	10
return on assets	Pearson Correlation	.095	1
	Sig. (2-tailed)	.794	
	N	10	10

The significance level of quick ratio and return on assets is 0.794 by applying Pearson correlation (2 -tailed test) to show that null hypothesis is failed to reject which means there is no relationship between quick ratio and profitability (return on assets) indicate negative relationship between each other or both variables.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.577	1	.577	.073	.794[b]
	Residual	63.530	8	7.941		
	Total	64.107	9			

The significance level of quick ratio and return on assets is 0.794

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.319	7.599		.042	.968
	quick ratio	2.833	10.514	.095	.269	.794

Quick ratio = 0.968 Return on assets + 0.319

H04:quick ratio and return on equity has no link with each other
HA4: quick ratio and return on equity has link with each other

Correlations

		quick ratio	return on equity
quick ratio	Pearson Correlation	1	.050
	Sig. (2-tailed)		.890
	N	10	10
return on equity	Pearson Correlation	.050	1
	Sig. (2-tailed)	.890	
	N	10	10

The significance level of quick ratio and return on equity is 0.890 by applying Pearson correlation (2 -tailed test) to show that null hypothesis is failed to reject which means there is no relationship between quick ratio and profitability (return on equity) indicate negative relationship between each other or both variables.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.049	1	2.049	.020	.890[b]
	Residual	808.464	8	101.058		
	Total	810.512	9			

The significance level of quick ratio and return on equity is 0.890

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.380	27.110		.051	.961
	quick ratio	5.340	37.507	.050	.142	.890

Quick ratio = 0.961 Return on equity + 1.380

V. CONCLUSION

liquidity play a vital role for the management of short term debt obligation and give opportunity to further invest in different classes where companies get more n more profit . Excess liquidity is also a problem for the companies because it means companies have not enough opportunity to invest their financial resources . in this research paper we examined that liquidity has an impact or not on companies profitability (return on assets and return on equity) either there is positive or negative impact on profitability.

for the first time research has been conducted on automobile sector in Karachi to measure the financial performance and liquidity position of the company by using liquidity ratio include current and quick ratio that how can liquidity can increase or decrease the performance and profitability of the companies after conducting research on automobile sector of Pak suzuki , Honda atlas , Nissan Ghandhara , Toyota and Hino Pak analyze the relationship between liquidity and profitability which show that there is negative relationship between profitability and liquidity ratios means companies has no sufficient resources or opportunities to invest in another class and companies has no efficient policies or strategies to pay its short term obligation or utilization by applying descriptive , correlation and regression (2-tailed test)

this study shows the negative impact on companies profitability (return on assets and return on equity) companies has to improve their performance and their financial liquidity position to increase their profit and performance as well.the data has been collected from companies financial statements , different websites and so on . liquidity management is the trade of financial indicator like stock or bond without affecting the its current price and have sufficient cash to pay its short term debt obligation or invest into different class to minimize their lose of risk and increase their profitability

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