

# A Study on Liquidity Management and Financial Performance Of Selected Steel Companies in India

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## ABSTRACT

Maintaining appropriate liquidity is the very vital part of any types of organization for their day to day operation. Retaining liquidity as well as proper liquidity management controls the financial performance and progress of an organization. For maintaining liquidity the organization has to maintain proper level of working capital, as adequate or inadequate working capital will be a damaging situation to the smooth operations of the organization. Therefore study is to catch out the influence of Profitability and Liquidity on the company's financial features. The paper is mainly related to expressive in natural backgrounds and discloses a prevailing statistic. For finding out the impact as well as relationship between liquidity on profitability sample of Indian Steel Companies (Tata Steel, Steel Authority of India Ltd., Visa Steel, JSW Steel and Bhushan Steel) financial statements have been used for the period of 5 years from 2010-11 to 2014-15. The collected data has investigated through the descriptive analysis, correlation; regression and different financial ratio analysis for finding out the influence of liquidity on profitability.

Keywords: Liquidity ratios, Profitability, Working Capital Management, Steel Companies in India

## INTRODUCTION

Maintaining an appropriate liquidity is the very vital part of any types of organization for their day to day operation. Liquidity of an organization means in what way effectively and quickly the current assets of the organization can convert into cash. In all kinds of business cash is the vital part, without cash which business unit cannot be sustained as well as it cannot take the benefit of different opportunities, Retaining liquidity as well as proper liquidity management controls the financial performances and progress of an organization. For maintaining liquidity the organization has to maintain proper level of working capital, as adequate or inadequate working capital will be a damaging situation to the smooth operations of the organization. Liquidity of organization is the ability to pay its current obligations and which can be measured by different financial ratios. The financial performance of an organization depends upon the proper liquidity management and the capability to generate revenue in addition to profit. The financial performances of an organization use to measure with different profitability ratios. The effective liquidity management of a company comprises proper planning and monitoring its current assets as well as current liabilities. Which will help the company's to minimize the risk

by meeting their current obligations and can maximize the profit by avoiding unnecessary investment in current assets.

Probability can be affected by the consecutively out of cash in the presence of current assets. In liquidity position requires enough money in term of cash for meeting the financial requirements for the day to day operation. Otherwise in the circumstance with assets, this can be transformed in to cash easily. Financial performance or profitability use to measure for a particular period in terms by which, an organization's income exceeds over its appropriate expenses. Profitability and liquidity are the two points of a straight line. In other words, there is a tradeoff among profitability and liquidity.

Managing liquidity is a thought that is getting thoughtful consideration all over the world particularly with the present financial conditions throughout the world economy. Owners and managers altogether over the world are to invent an approach of management of their operational activities (day to day operations) in order to fulfil their current obligations to maximize their profit and stockholder's wealth.

Liquidity management, in maximum case use to consider from the outlook of working capital management as greatest indicator of calculating liquidity. Managing the liquidity is very crucial, by way of it disturbs business profitability. The decisive part in handling working capital is compulsory for upholding its liquidity in day-to-day operation to safeguard its smooth transformation as well as to meet the obligation, which importantly effect on profitability of firms.

The main aim of this study is to examine the relationship between liquidity and profitability. In the company cash is vital thing, lacking cash business cannot exist and to acquire benefit of company opportunities, it is essential to preserve liquidity situation to overwhelm the problems. The liquidity and profitability management measures a vital role for achievement or disappointment of firm success. Therefore this study is to catch out the influence of Liquidity on Profitability on the company's financial performance.

## LITERATURE REVIEW

Deloof (2003) examined an example of Belgian firms and highlighted that the working capital is an important influence on the profitability of firms then upsurge in profitability by plummeting amount of days operating cycle. Additionally, well-organized working capital management is so significant to generate value for the stockholders. Garcia-Teruel and Martinez-Salano, (2004) examined the upshot of working capital management on profitability by using 8872 small and medium term Spanish firms and originate that a smaller cash conversion cycle can enhance the firm's profitability. Eljelly (2004) inspected the relationship among profitability and liquidity by correlation and regression techniques, originate that the cash conversion cycle was vital as a measure of liquidity and then current ratio that influences profitability. Shah and Sana (2006), by using sample of seven oil and gas sector firms to examine the association in working capital from 2001 to 2005. And the results recommended that firms can produce optimistic return for the company by efficient management of working capital.

Ganesan (2007) nominated telecommunication equipment industry to verify the efficiency of working capital management. This sample comprised financial performances of 349 telecommunication equipment companies from 2001 to 2007. Different statistical tools like correlation and regression analyses used for the study. Results presented that days of the working capital adversely influences the profitability of firms, whereas in real it does not affect the transportability of industry. Afza and Nazir (2007) examined the connection among aggressive and conservative working capital policies of 205 companies in 17 industries of Karachi Stock Exchange throughout 1998 to 2005 and originate a undesirable association between the profitability and assertiveness of working capital financing policies.

Sushma Vishnani and Bhupesh Kr. Shah (2007), completed an analysis of Indian consumer electronics sector to find out the influence of working capital performs on profitability form 1994-95 to 2004-05. In their research they originate a undesirable association between the factors of working capital and profitability for maximum of the companies. Dong (2010), in his study described that the companies' profitability and liquidity use to exaggerate by working capital management. He examined data from 2006 to 2008 for measuring the businesses of Vietnam stock market. His aim was to find profitability adaptation cycle in addition to its connected basics and the association that happens between them. It also originated that the relations amongst these variables are powerfully undesirable. This denotes that diminution in the profitability happen because of upsurge in cash conversion cycle.

Sharma and Kumar (2011) investigated that the constructive association and originate amongst accounts receivables and profitability is due to the circumstance that Indian companies have to maintain additional trade credit to

withstand their existence by their global participants. Bagchi and Bhasker (2012) examined the belongings of mechanisms of working capital policies like Cash Conversion Cycle, Inventory Conversion Period, Debtors Turnover Ratios, Creditors Turnover Ratios, debt to Total Assets and Debt Equity Ratio on profitability of FMCG companies. They found profitability of companies is consider in relation to Return on total Assets) and Return on Investment. Working capital policy is measured to be a dynamic and it influences both liquidity and profitability of the company.

Sandhar, (2013) in his article analyzed the working capital policy in terms of profitability and liquidity. In business cash is important thing, without cash company cannot survive and to take advantage of business opportunities, it's needed to maintain liquidity to overwhelm the problems. Ashok, P (2013), studied the Liquidity management of cement industries by using the different techniques of mean, standard deviation, coefficient of variation and ratio analysis to analyze the data. He found that the liquidity of small businesses are healthier as likened to bigger than greatest fascinatingly the development rate of current ratio, quick ratio and working capital to current assets of all the businesses are undesirable which designates an unreliable liquidity position.

## OBJECTIVES OF THE STUDY

1. To analyze the different liquidity and profitability position of sample companies.
2. To study the correlation associated with various liquidity and profitability ratios.
3. To establish the functional relationship between the profitability and liquidity.

## RESEARCH METHODOLOGY

The paper is mainly related to expressive in natural backgrounds and discloses a prevailing statistic. For finding out the impact as well as relationship between liquidity on profitability sample of Indian Steel Companies (Tata Steel, Steel Authority of India Ltd., Visa Steel, JSW Steel and Bhushan Steel) financial statements have been used as of the books, journals and different websites. The collected data has investigated through the correlation, regression analysis for finding out the influence of liquidity on profitability. Correlation analysis has used for finding out the connection between liquidity with profitability. The study has considered the secondary data for a period of five years from 2010-11 to 2014-15. The different financial ratios (liquidity and profitability ratios) have been used for investigating as follows:

- A. Liquidity Ratios: Current Ratio (CR), Liquid Ratio (LR), Inventory Turnover Ratio (ITR). Current Asset to Total Asset Ratio (CATAR) and Current Liabilities to Total Asset Ratio (CLTAR).
- B. Profitability Ratios: Operating Profit Margin (OPM), Net Profit Margin (NPM), Return on Investment (ROI) and Return on Assets (ROTA).

**ANALYSIS AND FINDINGS**

**Analysis of different Liquidity Ratios**

The table -1 shows the different liquidity ratios and the trend of these ratios of sample companies have elaborated below.

Current ratio shows the short term solvency of an organization. The current ratios of SAIL found to be uppermost; on the other hand Visa steel has the lowermost current ratios as compare to other steel companies throughout the study period. A comparatively lower current ratio

characterizes that the liquidity position of companies is not good then these companies will not be able to recompense their current obligation. The current ratios of Tata Steel, Visa Steel, JSW Steel and Bhushan Steel have recorded lower current ratios and are less than 1 most of the study period, which shows that these companies have the negative working capital. Similarly Tata Steel, Visa Steel, JSW Steel and Bhushan Steel have lower liquid ratios as compare to that of SAIL. Therefore these companies should try to maintain proper current as well as liquid ratios for improving their liquidity position.

**Table-1 Liquidity Ratios**

Current Ratio					
Year/Companies	Tata Steel	SAIL	Visa Steel	JSW Steel	Bhushan Steel
2010-11	1.55	1.92	0.53	0.78	0.62
2011-12	0.93	1.49	0.38	0.84	0.72
2012-13	0.86	1.42	0.58	0.95	1.06
2013-14	0.57	1.23	0.42	1.04	0.82
2014-15	0.62	1.20	0.38	1.04	0.96
Liquid Ratio					
2010-11	1.31	1.35	0.24	0.48	0.17
2011-12	0.69	0.82	0.19	0.57	0.29
2012-13	0.61	0.68	0.40	0.69	0.45
2013-14	0.32	0.62	0.27	0.71	0.31
2014-15	0.27	0.55	0.26	0.67	0.36
Inventory Turnover Ratio					
2010-11	30.69	4.19	3.39	6.25	2.39
2011-12	27.98	3.40	4.10	6.64	3.01
2012-13	26.40	3.16	7.61	7.96	1.93
2013-14	25.50	3.10	9.58	8.95	1.49
2014-15	17.94	2.90	12.12	6.70	1.60
Current Assets to Total Assets Ratio					
2010-11	0.35	0.68	0.48	0.38	0.24
2011-12	0.24	0.55	0.50	0.54	0.21
2012-13	0.22	0.49	0.17	0.47	0.28
2013-14	0.16	0.46	0.16	0.40	0.27
2014-15	0.15	0.46	0.13	0.47	0.29
Current Liabilities to Total Assets Ratio					
2010-11	0.23	0.36	0.72	0.49	0.39
2011-12	0.26	0.37	0.82	0.64	0.29
2012-13	0.26	0.35	0.29	0.50	0.26
2013-14	0.27	0.37	0.39	0.39	0.33
2014-15	0.25	0.38	0.34	0.45	0.30

Inventory turnover ratio measures the quickness of transformation of inventory into sales. Higher Inventory Ratio is better for an organization as the companies can convert inventory into sales in a year, which will maximize their profitability. The inventory turnover ratios of Bhushan Steel are bottommost as compare to other sample companies. However Tata steel recorded the highest Inventory Turnover Ratio as compare to the other steel companies. This indicates Tata Steel has efficiently managed inventory as compare to other steel companies.

A lower Current Asset Total Asset Ratios (Tata steel and Bhushan steel) shows that these companies are not using their assets optimally. On the contrary, SAIL has utilized its current assets efficiently. On the other hand Current Liabilities to Total Asset Ratios are higher in the case of Visa steel and JSW steel, whereas Tata steel has the lower Current Liabilities to Total Asset Ratios. A lesser Current Liabilities to Total Assets is promising and a higher the ratio indicates that sophisticated portion of firm's assets are demanded by its creditors which

indicates higher risk in operation meanwhile the company would discovery it problematic to acquire loans for newfangled scheme.

#### Analysis of different Profitability Ratios

The table-2 shows the different Profitability ratios and the trend of these ratios of sample companies have elaborated below.

Operating Profit Margin (OPM) shows firm's operating efficiency. From the table it can observe that Bhushan steel have recorded furthest and Visa steel recorded nethermost. Therefore Bhushan has performed better and Visa has underperformed in admiration of operational efficiency as compare to other steel companies during the study period. In the case of Net Profit Margin (NPM) indicates the overall efficiency of a firm. By studying the steel companies, it can observe that Bhushan steel has the highest NPM and Visa steel has the lowest NPM during study period.

**Table-2 Profitability Ratios**

Operating Profit Margin					
Year/Companies	Tata Steel	SAIL	Visa Steel	JSW Steel	Bhushan Steel
2010-11	0.14	0.16	0.15	0.18	0.27
2011-12	0.09	0.14	0.06	0.18	0.30
2012-13	0.09	0.10	-0.03	0.17	0.30
2013-14	0.11	0.09	0.08	0.17	0.28
2014-15	0.09	0.10	0.01	0.16	0.19
Net Profit Margin					
2010-11	0.10	0.16	0.06	0.09	0.18
2011-12	0.06	0.11	-0.13	0.06	0.14
2012-13	-0.03	0.07	-0.10	0.05	0.10
2013-14	0.04	0.07	-0.10	0.03	0.01
2014-15	-0.01	0.05	-0.23	0.05	-0.12
Return on Total Assets					
2010-11	0.17	0.13	0.06	0.08	0.08
2011-12	0.11	0.09	-0.14	0.06	0.05
2012-13	-0.05	0.05	-0.04	0.06	0.03
2013-14	0.08	0.05	-0.06	0.03	0.00
2014-15	-0.01	0.04	-0.10	0.05	-0.03
Return on Investment					
2010-11	0.80	0.22	1.89	0.26	0.13
2011-12	1.24	0.24	-0.20	0.26	0.13
2012-13	0.56	0.20	-0.05	0.24	0.10
2013-14	1.16	0.13	0.37	0.24	0.08
2014-15	0.75	0.12	0.01	0.24	0.06

Return on Total Asset Ratio (ROTA) of SAIL reorderehigher, which indicatescompany are managing their Total Asset efficiently. But negativeROTA of Visa steel indicates poor management of Total Asset. On the other hand, in the case of Return on Investment (ROI) of Tata steel is higher shows maximum return on capital employed that company is more profitable, while Visa steel has the negative ROJ, means the company has the negative profitability. This ratio would be only used to associate companies in the same industry.

### Descriptive Analysis of Steel Companies

The table-3 shows the descriptive statistics of sample steel companies. From the table it can illustrate the mean,

minimum, maximum and standard deviation of all the financial ratios under deliberation for the study period. The analysis likewise discloses that the mean values of current ratio (0.9166) and liquid ratio (0.5320) are underneath the normal conservative rule of 2:1 and 1:1 correspondingly. This designates that on an average the steel companies in India might find it problematic to encounter their short term obligations. Nevertheless, with the maximum of 1.9173 current ratio is adjacent to 2 and 1.3510 for the liquid ratio correspondingly demonstration that approximately of the companies are glowing in their liquidity position, by means of they are not likely to happenstance any struggle in meeting their small term obligations.

**Table-3 Descriptive Analysis**

Particulars	CR	LR	ITR	CATAR	CLTAR	OPM	NPM	ROTA	ROI
Mean	0.9166	0.5320	9.1592	0.3504	0.4154	0.1420	0.0280	0.0314	0.3673
Standard Deviation	0.3921	0.3065	9.0687	0.1541	0.2387	0.0829	0.0990	0.0710	0.4721
Kurtosis	0.3377	2.0058	0.7562	-1.0040	8.8127	0.1026	0.6494	0.2969	3.7624
Skewness	0.7507	1.3534	1.4372	0.2209	2.8216	0.2882	-0.9586	-0.5745	1.9071
Minimum	0.3767	0.1685	1.4931	0.1279	0.2252	-0.0294	-0.2303	-0.1367	-0.1990
Maximum	1.9173	1.3510	30.6912	0.6818	1.3200	0.3009	0.1822	0.1656	1.8932

In the case of OPM and NPM have recorded mean return of 14.20% and 2.80%, which is very less as per company standard. The ratios have also recorded maximum of 30.09% (OPM) and 18.22% (NPM), which suggest that some of the sample companies performed better and some performed badly during the study period.It clear from the table that the sample steel companies in India achieve a mean return on investment (ROI) of around 36.23% with a minimum of -19.90% and maximum of 189.32%.

### Analysis of Correlation

Correlation analysis concludes the strength and direction of the linear association among different variables elaborated at Table 4. The correlation results designate as follows

Current Ratio is positively related to all profitability ratios (OPM, NPM and ROTA) except ROI. On the other hand the liquid ratio is negatively correlated to OPM and positively correlated to other profitability ratios (NPM, ROTA and ROI). Both CR and LR are highly correlated to ROTA. The ITR has the negative correlation coefficient of -0.3669 & -0.0949 with OPM and NPM respectively, whileITR has positive correlation coefficient with ROTA (0.1653) & ROI (0.5384). Therefore ITR is highly correlated with ROI

**Table-4 Correlation Matrix**

Particulars	CR	LR	ITR	CATAR	CLTAR	OPM	PM	ROTA	ROI
CR	1.0000								
LR	0.8886	1.0000							
ITR	-0.0435	0.2647	1.0000						
CATAR	0.6317	0.5575	-0.4172	1.0000					
CLTAR	-0.3382	-0.2779	-0.3291	0.4516	1.0000				
OPM	0.1725	-0.0298	-0.3669	0.1107	-0.1085	1.0000			
NPM	0.5588	0.4267	-0.0949	0.4184	-0.1856	0.6176	1.0000		
ROTA	0.6545	0.6411	0.1653	0.3849	-0.3277	0.3982	0.8663	1.0000	
ROI	-0.0991	0.0388	0.5384	-0.0963	0.0169	-0.0757	0.2172	0.3856	1.0000

The CATAR & CLTAR are showing the opposite results in the comparison. CATAR is positively correlation with OPM, NPM and ROTA, while CLTAR have the negative correlation with these ratios. On the contrary, On the contrary, CLTAR is positively correlation with ROI, whereas CATAR have the negative correlation with ROI.

**Regression Analysis Operating Profit Margin and Liquidity Ratios**

The below table’s i.e, 5(a), (b) and (c) derived the regression analysis between OPM as dependent variable with the liquidity ratios as independent variables. The goodness of fit

consequences of standard linear multiple regressions through OPM as the dependent variable and numerous determinants as forecasters are described in Table 5(a) and the model result has elaborated in Table 5(b). This model discloses that statistically insignificant association among OPM and all liquidity ratios (Sig.> 0.05). The model coefficients have revealed in Table 5(c) and the outcomes designate that no one of the indicators of OPM are significant (p>0.05 in all cases). This study indicates that, the association among OPM and liquidity ratios by suggesting that statistically insignificant associations among OPM and on the liquidity ratios.

**Table-5Regression Results for Operating Profit Margin as Dependent Variable and Various Factors as Predictors**

**a) Model Summary**

Multiple R	R Square	Adjusted R Square	Standard Error
0.4690	0.2200	0.0147	0.0823

**b) Goodness of Fit – ANOVA**

Particulars	SS	MS	F	Significance F
Regression	0.0363	0.0073	1.0715	0.4069
Residual	0.1286	0.0068		
Total	0.1649			

**c) Regression Coefficients**

Particulars	Coefficients	Standard Error	t Stat	P-value
Intercept	0.1488	0.1002	1.4846	0.1541
CR	0.1203	0.1685	0.7140	0.4839
LR	-0.1194	0.1843	-0.6480	0.5248
ITR	-0.0027	0.0034	-0.7847	0.4423
CATAR	-0.0429	0.4007	-0.1071	0.9158
CLTAR	-0.0342	0.1893	-0.1804	0.8587

The adjusted R Square values of 0.0147 designate that around 1.47 % of the variation in OPM is clarified by the independent variables included in the model. The complete significance of the model was measured by ANOVA. The result designate that the model is statistically insignificant relation as demonstrated in the F value of 1.0715 and a P-value > 0.05. CR marks the maximum influence to the forecast of the OPM with a coefficient of 0.1203 while, the t statistic and the Sig-values of all the forecaster variables designate insignificant associations on OPM at 5% levels respectively.

**Regression Analysis Net Profit Margin and Liquidity Ratios**

The below table’s i.e, 6(a), (b) and (c) derived the regression analysis between NPM as dependent variable with the liquidity ratios as independent variables. The goodness of fit consequences of standard linear multiple regressions through NPM as the dependent variable and numerous determinants as forecasters are described in Table 6(a) and the model result has elaborated in Table 6(b). This model discloses that statistically insignificant association among NPM and all liquidity ratios (Sig.> 0.05). The model coefficients have revealed in Table 6(c) and the outcomes designate that no one of the indicators of NPM are significant (p>0.05 in all cases). This study indicates that, the association among NPM and liquidity ratios by suggesting that statistically insignificant associations among OPM and on the liquidity ratios.

**Table-6 Regression Results for Net Profit Margin as Dependent Variable and Various Factors as Predictors**

a) Model Summary

Multiple R	R Square	Adjusted R Square	Standard Error
0.6285	0.3950	0.2358	0.0865

b) Goodness of Fit – ANOVA

	SS	MS	F	Significance F
Regression	0.0929	0.0186	2.4813	0.0685
Residual	0.1423	0.0075		
Total	0.2351			

c) Regression Coefficients

Particulars	Coefficients	Standard Error	t Stat	P-value
Intercept	-0.0986	0.1054	-0.9350	0.3615
CR	0.1187	0.1773	0.6696	0.5111
LR	-0.2267	0.1938	-1.1697	0.2566
ITR	0.0033	0.0036	0.9372	0.3604
CATAR	0.5607	0.4214	1.3305	0.1991
CLTAR	-0.2136	0.1991	-1.0725	0.2969

The adjusted R Square values of 0.2358 designate that around 23.58 % of the variation in NPM is clarified by the independent variables included in the model. The complete significance of the model was measured by ANOVA. The result designate that the model is statistically significant relation as demonstrated in the F value of 0.2358 and a P-value < 0.10. CARAR marks the maximum influence to the forecast of the NPM with a coefficient of 0.5607 while, the t statistic and the Sig-values of all the forecaster variables designate insignificant associations on NPM at 5% levels respectively.

**Regression Analysis Return on Total Assets and Liquidity Ratios**

The below table’s i.e, 7(a), (b) and (c) derived the regression analysis between ROTA as dependent variable with the liquidity ratios as independent variables. The goodness of fit consequences of standard linear multiple regressions through ROTA as the dependent variable and numerous determinants as forecasters are described in Table 7(a) and the model result has elaborated in Table 7(b). This model discloses that statistically insignificant association among ROTA and all liquidity ratios (Sig.> 0.05). The model coefficients have revealed in Table 6(c) and the outcomes designate that no one of the indicators of ROTA are significant (p>0.05 in all cases). This study indicates that, the association among ROTA and liquidity ratios by suggesting that statistically insignificant associations among ROTA and on the liquidity ratios.

**Table-7 Regression Results for Return on Total Assets as Dependent Variable and Various Factors as Predictors**

a) Model Summary

Multiple R	R Square	Adjusted R Square	Standard Error
0.7347	0.5397	0.4186	0.0541

b) Goodness of Fit – ANOVA

Particulars	SS	MS	F	Significance F
Regression	0.0652	0.0130	4.4561	0.0074
Residual	0.0556	0.0029		

Total	0.1209			
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c) Regression Coefficients

Particulars	Coefficients	Standard Error	t Stat	P-value
Intercept	-0.0433	0.0659	-0.6564	0.5194
CR	-0.0020	0.1108	-0.0178	0.9860
LR	-0.0451	0.1212	-0.3720	0.7140
ITR	0.0031	0.0022	1.3898	0.1807
CATAR	0.4516	0.2635	1.7137	0.1028
CLTAR	-0.2075	0.1245	-1.6664	0.1120

The adjusted R Square values of 0.4186 designate that around 41.86 % of the variation in ROTA is clarified by the independent variables included in the model. The complete significance of the model was measured by ANOVA. The result designate that the model is statistically significant as demonstrated in the F value of 4.4561 and a P-value less than 0.01. CATAR marks the maximum influence to the forecast of the ROTA with a coefficient of 0.4516 while, the t statistic and the Sig-values of all the forecaster variables designate insignificant associations on ROTA at 5% levels respectively.

**Regression Analysis Return on Investment and Liquidity Ratios**

The below table's i.e, 8(a), (b) and (c) derived the regression analysis between ROI as dependent variable with the liquidity

ratios as independent variables. The goodness of fit consequences of standard linear multiple regressions through ROI as the dependent variable and numerous determinants as forecasters are described in Table 7(a) and the model result has elaborated in Table 7(b). This model discloses that statistically insignificant association among ROI and all liquidity ratios (Sig.> 0.05) except ITR. The model coefficients have revealed in Table 6(c) and the outcomes designate that no one (except ITR) of the indicators of ROTA are significant (p>0.05 in all cases). This study indicates that, the association among ROI and liquidity ratios by suggesting that statistically insignificant associations among ROI and on the liquidity ratios except ITR.

**Table-8 Regression Results for Return on Investment as Dependent Variable and Various Factors as Predictors**

a) Model Summary

Multiple R	R Square	Adjusted R Square	Standard Error
0.6722	0.4518	0.3076	0.3928

b) Goodness of Fit – ANOVA

Particulars	SS	MS	F	Significance F
Regression	2.4170	0.4834	3.1323	0.0315
Residual	2.9322	0.1543		
Total	5.3492			

c) Regression Coefficients

Particulars	Coefficients	Standard Error	t Stat	P-value
Intercept	-0.2339	0.4786	-0.4888	0.6306
CR	0.0138	0.8047	0.0172	0.9865
LR	-1.4361	0.8798	-1.6323	0.1191
ITR	0.0574	0.0162	3.5506	0.0021
CATAR	3.1565	1.9132	1.6498	0.1154
CLTAR	-0.6731	0.9040	-0.7446	0.4656

The adjusted R Square values of 0.4518 designate that around 45.18 % of the variation in ROI is clarified by the independent variables included in the model. The complete significance of the model was measured by ANOVA. The result designate that the model is statistically significant as demonstrated in the F value of 3.1323 and a P-value less than 0.05. CATAR marks the maximum influence to the forecast of the ROI with a coefficient of 3.1565 while, the t statistic and the Sig-values of all the forecaster variables (except ITR) designate insignificant associations on ROI at 5% levels respectively.

## CONCLUSION

The important of liquidity management in any form of organization is the most vital part for maintaining the profitability. This is since moreover adequate or inadequate liquidity may be harmful to the appropriate processes of the organization. This study is mainly related to the relationship between profitability and liquidity as well as their trade off. The experiential examination using both the correlation and regression analysis reveal that liquidity ratios measure by current ratio, liquid ratio, inventory turnover ratio, current assets turnover ratio and current liabilities to total assets have significant relationship with profitability measured by operating profit margin, net profit margin, return on total assets and return on investment. From the correlation analysis current ratio is positively related to operating profit margin, net profit margin and return on total assets. On the other hand the liquid ratio is positively correlated to net profit margin, return on total assets and return on investment. Both current and liquid ratios are highly correlated to return on total assets and inventory turnover ratio is highly correlated with return on investment. From the regression analysis current ratio and current assets turnover ratio marks the maximum influence to the forecast of all the profitability ratios. It also reveals that all the liquidity ratios measured by ANOVA are significant associations on the firm's profitability.

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