

A Study of Financial Efficiency and Liquidity Position of Indian Pharmaceutical Industry Special Reference to Cipla Ltd.

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Abstract: For a successful working of a business organization fixed and current assets play a vital role, Effective use of working capital has direct impact on profitability of the company. An attempt has been made in this paper to study the working capital components and impact of efficient use of working capital management on profitability of Indian pharmaceutical company. The paper also makes an attempt to study the correlation between liquidity and profitability (PBT) of Indian pharmaceutical company. The study is based on secondary data collected from annual reports of Indian pharmaceutical company. for the study period 2000 to 2013. Ratio analysis and percentage method and co – efficient of correlation have been used to analyze the data. Panel regressions were used to check the significant impact on the profitability of Indian pharmaceutical company.

Key words: efficiency, liquidity, inventory, account receivable, current assets etc

I. INTRODUCTION

A successful commercial organization needs two types of assets, viz fixed assets: land, building, plant, machinery, furniture etc. these are not purchased for the purpose of sale but for the purpose of earning profit for many year and second is current assets i.e. raw materials, work – in – progress, finished goods, sundry debtors, bills receivables, cash, bank balance etc. these assets are purchased for the purpose of production and sales, like raw material into semi finished products, semi finished products into finished products, finished products into debtors and debtors transferred into cash or bills receivables.

The fixed assets are used in increasing production of an organization and current assets are used in using the more fixed assets and day to day working. The management of this working capital is known as working capital management. The term working capital refers to the amount of capital which is readily available to an organization. Management of working capital deals with the problems that arise in managing the current assets, the current liabilities and inter – relationship that exists between them. It should neither be inadequate nor excessive.

Working capital is an important part of finance having a decisive influence on the liquidity, which is regarded as the lifeblood of a business plays a pivotal role in keeping the wheels of a business. Working capital management has always been a fascinating subject from the academic point of view and it must be admitted that in the real world situation also, efficiency with which working capital is managed in a concern is of great significance for its overall well being – its growth and decline.

II. LITERATURE REVIEW

National Council of Applied Economic Research (NCAER) (1966) studied on the structure of working capital with reference to three industries namely fertilizer, cement and sugar: eight companies from fertilizer, nine from cement and fifteen from sugar industries were taken as sample. The study was mainly devoted to the ratio analysis of composition, utilization and financing of working capital for the period 1959 to 1963. The study classified these three industries into private and public sector for comparing their performance as regards the working capital management. The study pointed out that the inventory constituted a major proportion of

working capital. The study absorbed that the control of inventory had not received proper attention. As far, the utilization is concerned cement and fertilizer industry had a more efficient utilization of working capital. The sugar industry had inefficient utilization of working capital largely due to the accumulation of stock with the factories. As regards financing of working capital, the study showed that internal sources had contributed very little towards the financing or working capital. However, NCAER failed to put into sharp focus the various problems involved in the management of different components of working capital.

Mishra (1975) studied the problems of working capital with special reference to six selected public sector undertakings in India over the period of 1960/61 to 1967/68. By analysis of financial ratios and responses to a questionnaire, the study revealed that in all the 4 selected enterprises, inventory constituted the most important of working capital. The study focused that the efficiency of working capital funds employed in receivable was awfully low in the selected enterprises. The size of cash was on the high side in terms of operational requirements. Its main reason was stated to be the lack of proper planning on control of cash. For the reduction of overstocking, the study suggested installing an integrated inventory management department from the very inception of the enterprises. He concluded that the selected enterprises have not been able to utilize working capital efficiently. He revealed somewhat the same results as those of NCEAR study with respect to composition and utilization of working capital.

Campbell and Brendsel (1977) empirically examined the impact of compensation balance requirements of the cash holdings of US firms for the period 1953-1963. By employing the Miller and Orr's OLS regression of the target cash balances over the cash holdings by the firms, they find that compensating balance requirements are not binding. These results are further verified by applying Cochran-Orcutt technique.

Varden (1978) researched on the application of the portfolio balance framework of the portfolio behavior with special focus on management of working capital of nonfinancial corporation. Further, he hoped that this study would yield some insight into the short-term decision making process of corporate portfolio managers. In his study, he assumed that non-current assets and non-current liabilities as well as equity were treated as exogenous variables while current assets and liabilities were treated as endogenous.

Shin and Soenen (1998) studied on efficiency of working capital management and corporate profitability. They investigated the relation between the firm's net trade cycle and its profitability. The relation was examined using correlation and regression analysis. They found that in all cases, a strong negative relation between the length of the firm's net trade cycle and its profitability. Pinkowitz and Willian son (2001) examined the effect of bank power on cash holding patterns of industrial firms for a sample of Japanese firms for the periods 1974-1995, German firms for the periods 1984-1994 and US firms for 1971-1994. They found that high cash holdings mean higher rents extracted by the banks during the periods when they enjoy certain power in the corporate lending system. Toby (2005) in his paper he suggested that; the finance managers in manufacturing enterprises needed to redefine their banking relationship regularly as a strategy for managing anticipated and unanticipated gap. Nguyen (2005) investigated the hypothesis that money balances have a preventive motive and serve to mitigate the volatility of operative earnings that they used as a proxy for risk. Their results showed that money holdings are completely related to firm level risk, however negatively concerning trade risk. In line with past researches, money holdings were found to be decreasing with the firm's size and debt ratio and increasing with its gain, growth prospects, and dividend pay-out ratio. Guney et al (2006) examined the impact of leverage on cash balances of companies. They found high levels of leverage, a positive relationship between money holdings and leverage exists. Their results counsel a significant non-linear relationship between cash holding and leverage. Drobotz and Gruninger (2006) investigated the determinants of Swiss no financial firms' cash holdings over the 1995-2004. The results showed that the median of Swiss corporations hold almost doubly the maximum amount cash and cash equivalents because the median of UK or U.S. firm.

3.1 Objective of the Study

In this study an attempt has been made to analyze the size and composition of working capital. In working capital analysis, the direction of change over a period of time is of crucial importance. Not only that, analysis of working capital trends provides a base to judge whether the practice and prevailing policy of the management with regard to working capital is good enough or an improvement is to be made in managing the working capital funds. Hence in this study, an attempt is made about the trend of the working capital management of the Indian pharmaceutical company.

With this end in view, an effort has been made in this article to make an in depth study Indian pharmaceutical company, in respect of its performance and its working capital management. The findings of this study not only throw light on technical weakness in the managerial activities of the companies, but may also help scholars and researchers to develop new ideas, techniques and methods in respect of the management of working capital.

3.2 Collection of Data and Methodology

This study is based on secondary data. The data required for this study have been extracted from the annual reports of Indian pharmaceutical companies. The study covered a period of fourteen years starting from 2000 to 2013. The study covers mainly the following aspects of working capital analysis (i) Current Ratio, (ii) Velocity

(Turnover) of Working Capital, (iii) Operating Profit Margin and (iv) Impact of working capital management on Profitability. Statistical techniques namely co – efficient of correlation and panel regression are used for analyzing the data.

III. ANALYSIS

Current Ratio

Current ratio also referred to as working capital ratio, could be a measure of general liquidity and its most generally used to make the analysis of short-run financial position or liquidity of a firm. It compares a firm's current assets to its current liabilities. Acceptable current ratios vary from trade to trade and are usually between 1.5 and 3 for healthy businesses. If a company's current ratio is during this vary, then it usually indicates sensible short-run monetary strength. If current liabilities exceed current assets (the current magnitude relation is below 1), then the corporate could have issues meeting its short-run obligations. If the current ratio is simply too high, then the corporate might not be with efficiency mistreatment its current assets or its short-run funding facilities. This could also indicate issues in working capital management. 2:1 is taken into account as a perfect current ratio.

It is seen from the table 1 that the industry average of current ratio is 3.63. The highest average current ratio is on an average of 5.63 in Sun Pharmaceutical Inds. Ltd. and lowest is 2.3 of Cadila healthcare Ltd. throughout the study amount Sun pharmaceutical Ind. Ltd. maintains sensible current ratio because it is moving between 3.22 to 10.74. However the highest and lowest position is good in Cipla Ltd. as it is moving between ideal positions between 2.62 to 4.17

Velocity (Turnover) of Working Capital

Funds are invested in varied assets in business to make sales and earn profits. The potency with that assets are managed directly affects the volume of sales. The better the management of assets, massive is that the amount of sales and profits. Current assets movement ratios measure the potency with that a firm manages its resources. These ratios are referred to as velocity or turnover ratios as a result of they indicate the speed with that assets are born-again or turned over into sales. Relying upon the aim, variety of turnover ratios is calculated.

The working capital turnover ratio measures however well a company is utilizing its capital to support a given level of sales. A high turnover ratio indicates that management is being extremely economical in using a firm's short-term assets and liabilities to support sales. Conversely, a low ratio indicates that a business is investment in too several accounts receivable and inventory assets to support its sales, that may eventually cause an excessive amount of bad debts and obsolete inventory.

The average working capital turnover ratio of Indian pharmaceutical companies is 1.96 times. The trend of working capital turnover ratio is declining trough out study period of all indian pharmaceutical companies. The beigest fall found in Glaxosmithkline Pharmaceuticals Ltd. as it has become 1.05 times in 2013 form 4.55 times of 2006 and the same condition can be seen in Piramal Enterprises Ltd. In which w.c.t.r. becomes 0.08 times in 2010 from 4.28 times in 2009. On the basis of average working capital turnover ratio Cadila Healthcare Ltd. has highest turnover of working capital at 2.71 times followed by 2.52 times of Glaxosmithkline Pharmaceuticals Ltd. Working Capital turnover ratio of Cipla Ltd. is moving between 1.55 times to 2.44 times during the study period. On the basis of each year's working capital turnover ratio Cadila Healthcare Ltd., all companies have better performance as their working capital turnover ratio is always more than 1.

Operating Profit Margin (OPM)

Overall industry average of Operating Profit Margin is 0.35times. Due to a huge jump in profitability of Piramal Enterprises Ltd. in the year 2010, when it becomes 20.03 times from 0.18 times of 2009. It has highest Operating Profit Margin i.e. 1.5 times. But the overall profitability on the basis of operating profit is better in Divi'S Laboratories Ltd. except in the year of 2013, which has maintained 0.32 times on an average, which is followed by Sun Pharmaceutical Inds. Ltd. and Glaxosmithkline Pharmaceuticals Ltd. by maintaining 0.31 times and 0.30 times respectively. Genuinely these three companies are following the industry average. The waste Operating Profit Margin is of Aurobindo Pharma Ltd. whose average Operating Profit Margin is 0.11 times and industry average of operating profit are moving between 0.10 times to 2.27 times.

Impact of working capital management on Profitability

Table 4 presents Pearson correlation coefficients for the variables used to assess the impact of working capital management on profitability, measured by return on total assets. ROTA is significantly positively correlated with OPM and capital-turnover ratio, but negatively correlated with Trade Debtors to Current, Assets Accounts Receivables days and Accounts Payables days. This positive relation for CCC is consistent with the view that resources are blocked at the different stage of the supply chain, thus prolonging the operating cycle. This might increase profits due to increase sales, especially where the costs of tied up capital is lower than the benefits of holding more inventories and granting more trade credit to customers.

However, care must be exercised while interpreting the Pearson Correlation coefficients because they cannot provide a reliable indicator of association in a manner which controls for additional explanatory variables. Examining simple bivariate correlation in a conventional matrix does not take account of each

variable's correlation with *all* other explanatory variables. Our main analysis will be derived from appropriate multivariate models, estimated using fixed effects framework and pooled OLS.

Regression Analysis

To investigate the impact of working capital management on profitability, the model used for the regressions analysis is expressed in the general form as given in *equation 1* and the variable *ivndays* will be replaced in turn by the other explanatory variables: ARdays, APdays and CCC.

$$\begin{aligned}
 \text{ROTA} &= f(\ln \text{ sales}, \text{ gear}, \text{ cata}, \text{ clta}, \text{ turnca}, \text{ cccdays}) && \text{Equation (1)} \\
 \text{ROTA} &= \beta_0 + \beta_1 \ln \text{ sales}_{it} + \beta_2 \text{ gear}_{it} + \beta_3 \text{ cata}_{it} + \beta_4 \text{ clta}_{it} + \beta_5 \text{ turnca}_{it} + \beta_6 \text{ ivndays}_{it} + \varepsilon_{it} && \text{[model 1]} \\
 \text{ROTA} &= \beta_0 + \beta_1 \ln \text{ sales}_{it} + \beta_2 \text{ gear}_{it} + \beta_3 \text{ cata}_{it} + \beta_4 \text{ clta}_{it} + \beta_5 \text{ turnca}_{it} + \beta_6 \text{ ardays}_{it} + \varepsilon_{it} && \text{[model 2]} \\
 \text{ROTA} &= \beta_0 + \beta_1 \ln \text{ sales}_{it} + \beta_2 \text{ gear}_{it} + \beta_3 \text{ cata}_{it} + \beta_4 \text{ clta}_{it} + \beta_5 \text{ turnca}_{it} + \beta_6 \text{ apdays}_{it} + \varepsilon_{it} && \text{[model 3]} \\
 \text{ROTA} &= \beta_0 + \beta_1 \ln \text{ sales}_{it} + \beta_2 \text{ gear}_{it} + \beta_3 \text{ cata}_{it} + \beta_4 \text{ clta}_{it} + \beta_5 \text{ turnca}_{it} + \beta_6 \text{ ccc}_{it} + \varepsilon_{it} && \text{[model 4]}
 \end{aligned}$$

Where *i* denoting firms (cross-section dimension) starting from one to ten and *t* denoting years (time-series dimension) starting from one to fourteen.

The model specifies on top of is calculable using the regression-based framework (Fixed Effects and Pooled OLS) as used by Deloof (2003). Our model differs, initial by using ROTA as a comprehensive measure of profitability and also the model includes asset-management and funding policy as management variables. the information set used for this half is pooled across companies and years, given associate balanced panel data set of one hundred forty firm-year observations.

Table 5 gives the results of the fixed effects estimations (regressions 1 to 4), for the random effect estimations (regression 5 to 8) and for the pooled OLS (regressions 9 to 12). In all regressions, standard errors are calculated using White's correction for heteroscedasticity.

The OLS regressions were also run with industry dummies and year dummies. The results being not significantly different are not reported.

The Hausman test, which is a test for the null hypothesis of no correlation, rejects this null hypothesis and so the decision is taken to employ a fixed effects framework.

Table 5 represents the results of regression 1 to 4, applying a fixed effects methodology, where the intercept term is allowed to vary across firms except regression 1. It is immediately obvious from the adjusted R-squared values that the use of a firm specific intercept improves the explanatory power of these models. While the coefficient of inventories variable is negative in regression 1, The coefficients of the other variables included in the model are significant, except for GEAR and LNSales. The firms' profitability as measured by ROTA increases with firms' size, gross working capital efficiency, and with a lesser aggressiveness of asset management. Indian pharmaceutical companies to the traditional theory of asset management, where a conservative policy is expected to sacrifice profitability at the expense of liquidity. This could be explained by the fact that pharmaceutical firms tend to have a lower fixed assets base and thus rely mostly on the turnover of current assets to generate more profits. This was observed consistently in the regressions results, with a p-values ranging from 0.02 to 0.05. As reveals by the study of Deloof (2003), the capital structure has a negative impact on profitability; except for our findings the coefficient of GEAR is insignificant for the FEM, but is significant for the pooled regressions at 0.1level. The aggressive financing policies observe for the sample firms, which are expected to contribute positively to profitability, have revealed otherwise. But, however, the results are significantly different from zero (p-values ranges from 0.02 to 0.05). This is a commonly observed feature of the small firms and this has the tendency of increasing the risk of a short-term liquidity problem.

Table: 1 Current Ratio (in times)

Company Name	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Average
Aurobindo Pharma Ltd.	3.16	3.55	3.20	4.98	4.09	4.13	5.45	4.38	4.11	3.73	3.84	4.48	3.66	3.75	4.04
Cadila Healthcare Ltd.	2.47	2.13	1.88	2.00	1.80	2.02	1.55	2.29	2.61	2.12	2.62	2.62	3.25	2.87	2.30
Cipla Ltd.	2.62	2.73	2.68	2.88	2.75	3.01	4.17	3.10	3.39	3.54	3.99	3.99	4.00	3.48	3.31
Divi'S Laboratories Ltd.	1.71	2.91	2.47	3.79	3.68	2.62	3.16	3.19	4.29	4.46	4.12	4.11	4.90	5.86	3.66
Dr. Reddy'S Laboratories Ltd.	4.37	6.91	6.58	3.89	4.49	3.08	4.77	3.08	2.44	1.64	2.68	2.44	3.58	3.75	3.84
Glaxosmithkline Pharmaceuticals Ltd.	2.82	2.41	2.17	1.75	1.84	1.40	1.52	1.78	4.58	6.36	6.74	9.11	58	6.87	4.07
Glenmark Pharmaceuticals Ltd.	3.57	2.69	3.29	3.60	5.91	4.70	3.54	3.27	2.49	2.56	1.90	1.50	1.38	1.76	3.01
Lupin Ltd.	3.15	3.18	3.05	2.27	2.10	3.73	3.73	3.37	1.87	2.86	3.21	3.31	3.69	4.31	3.13
Piramal Enterprises Ltd.	1.93	1.81	2.34	2.15	2.02	2.19	2.22	2.29	2.22	1.75	12.20	5.98	5.24	2.00	3.31
Sun Pharmaceutical Inds. Ltd.	4.22	4.55	5.13	3.22	9.62	10.74	4.43	3.40	4.34	4.71	7.84	5.90	4.16	6.53	5.63
Industry Average	3.00	3.29	3.28	3.05	3.83	3.76	3.45	3.01	3.23	3.37	4.92	4.34	4.15	4.12	3.63

Table: 2 Working Capital Turnover Ratio (in times)

Company Name	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Average
Aurobindo Pharma Ltd.	2.48	2.06	1.80	1.74	1.46	1.26	1.14	1.33	1.42	1.50	1.42	1.53	1.58	1.47	1.58
Cadila Healthcare Ltd.	2.70	3.06	3.04	3.12	3.48	3.32	2.64	2.76	2.33	2.39	2.31	2.17	2.21	2.45	2.71
Cipla Ltd.	2.44	2.08	1.64	1.90	1.77	1.62	1.66	1.59	1.55	1.67	1.72	1.92	1.94	2.12	1.83
Divi'S Laboratories Ltd.	2.51	2.16	2.02	1.59	1.50	1.31	1.89	2.08	1.74	1.30	1.39	1.53	1.52	1.47	1.71
Dr. Reddy'S Laboratories Ltd.	2.15	1.42	1.17	1.55	1.00	1.26	1.39	1.72	1.77	2.05	1.87	1.61	1.50	1.39	1.56
Glaxosmithkline Pharmaceuticals Ltd.	2.94	3.06	2.64	3.36	3.69	4.43	4.55	4.05	1.44	0.98	0.95	1.00	1.09	1.05	2.52
Glenmark Pharmaceuticals Ltd.	2.16	2.31	1.91	1.71	1.32	1.20	1.27	1.58	1.54	2.06	3.08	2.72	2.18	1.65	1.91
Lupin Ltd.	1.76	1.79	1.80	2.68	2.42	1.54	1.55	1.80	2.08	2.14	2.01	1.86	1.96	1.87	1.95
Piramal Enterprises Ltd.	2.50	3.23	3.15	3.59	2.92	3.37	3.27	3.12	3.28	4.28	0.08	0.24	0.34	1.00	2.45
Sun Pharmaceutical Inds. Ltd.	2.22	2.55	1.83	2.44	0.79	0.76	0.80	0.98	1.14	1.51	0.81	0.91	1.16	0.75	1.33
Industry Average	2.38	2.37	2.10	2.37	2.04	2.01	2.01	2.10	1.83	1.99	1.57	1.55	1.55	1.52	1.96

Table: 3 Operating Profit Margin (OPM)(in times)

Company Name	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Average
Aurobindo Pharma Ltd.	0.08	0.08	0.12	0.13	0.04	0.06	0.12	0.14	0.06	0.21	0.19	-0.04	0.10	0.21	0.11
Cadila Healthcare Ltd.	0.15	0.14	0.11	0.15	0.13	0.14	0.15	0.16	0.17	0.26	0.27	0.24	0.17	0.26	0.18
Cipla Ltd.	0.22	0.20	0.20	0.19	0.21	0.23	0.22	0.20	0.17	0.23	0.18	0.20	0.24	0.19	0.21
Divi'S Laboratories Ltd.	0.14	0.20	0.27	0.32	0.28	0.27	0.31	0.38	0.38	0.41	0.36	0.37	0.37	0.40	0.32
Dr. Reddy'S Laboratories Ltd.	0.18	0.31	0.27	0.17	0.03	0.13	0.33	0.16	0.16	0.22	0.18	0.19	0.21	0.25	0.20
Glaxosmithkline Pharmaceuticals Ltd.	0.11	0.08	0.14	0.23	0.33	0.42	0.43	0.42	0.45	0.39	0.38	0.25	0.31	0.27	0.30
Glenmark Pharmaceuticals Ltd.	0.10	0.11	0.12	0.14	0.16	0.14	0.23	0.33	0.28	0.12	0.21	0.17	0.19	0.21	0.18
Lupin Ltd.	0.07	0.11	0.09	0.12	0.07	0.13	0.19	0.21	0.16	0.19	0.19	0.19	0.24	0.35	0.16
Piramal Enterprises Ltd.	0.13	0.08	0.11	0.14	0.16	0.13	0.14	0.17	0.13	0.18	20.03	0.10	-0.25	-0.24	1.50
Sun Pharmaceutical Inds. Ltd.	0.26	0.27	0.32	0.31	0.31	0.36	0.37	0.43	0.46	0.51	0.73	0.69	0.27	-0.93	0.31
Industry Average	0.14	0.16	0.17	0.19	0.17	0.20	0.25	0.26	0.24	0.27	2.27	0.24	0.19	0.10	0.35

Table: 4 Pearson Correlation Coefficients

	ROTA	OPM	A_TURN	GEAR	CA/TA	SK/CA	TD/CA	CL/TA	INV_DAYS	AR_DAYS	AP_DAYS	CCC	LN_Sales
Return on total assets	1	0.716	0.157	0.041	0.311	0.121	-0.107	0.044	0.093	-0.051	-0.052	0.048	-0.054
Operating profit margin		1	-0.199	-0.147	0.138	-0.185	-0.199	-0.140	-0.019	0.034	0.175	-0.051	-0.070
Assets turnover			1	0.546	0.436	0.486	0.377	0.737	-0.083	-0.120	-0.343	-0.009	-0.162
Gearing				1	0.601	0.042	0.798	0.537	0.123	0.725	-0.143	0.554	0.063
Current Assets/Total Assets					1	-0.164	0.092	0.344	0.205	0.334	-0.127	0.373	0.019
Stock/Current Assets						1	0.132	0.374	0.445	-0.293	-0.230	0.194	-0.150
Trade Debtors/Current Assets							1	0.451	-0.032	0.689	-0.139	0.431	0.062
Current Liabilities/Total Assets								1	-0.050	0.104	0.082	0.001	-0.144
Inventories Days									1	0.218	03	0.777	-0.055
Accounts Receivables days										1	0.118	0.690	0.155
Accounts Payables days											1	-0.265	-0.090
Cash Conversion Cycle												1	0.086
Ln(sales)													1

Notes:

The Standard Deviations is given in parentheses. ROTA (Return on total assets) is PBIT/Total Assets, OPM (Operating profit margin) is PBIT/Sales, GEAR (Gearing) is Total Debt/Total Assets, CR (Current Ratio) is Current Assets/Current Liabilities, QAR (Quick Assets Ratio) is (Current Assets – Stocks)/Current Liabilities, CA/TA (Current Assets to Total Assets), CL/TA (Current Liabilities to Total Assets), SK/TA (Stocks to Current Assets), TD/CA (Trade Debtors to Current Assets) and CA_TURN (Current Assets Turnover) is Sales/Current Assets.

Table: 5 Regressions of Profitability on Working Capital Variables

Variables	Fixed Effect			
	1	2	3	4
Const	-0.2487	-0.4164	-0.4809	-0.2588
	0.111	0.006	0.004	0.084
GEAR	-0.135787	-0.807582	-0.105461	-0.115471
	0.488	0.003	0.579	0.603
CATA	0.605913	0.820799	0.734602	0.606047
	0.000	0.000	0.000	0.000
CATURN	0.048804	0.092084	0.072585	0.048804
	0.002	0.000	0.000	0.002
CLTA	-0.666031	-0.586492	-0.984734	-0.680593
	0.014	0.024	0.001	0.018
LNSales	0.018270	0.011504	0.025363	0.018845
	0.151	0.349	0.045	0.142
INVDAYS	-8.18222e-05			
	0.775			
ARDBAYS		0.001796		
		0.001		
APDBAYS			0.001176	
			0.008	
CCCDAYS				-5.30208e-05
				0.827
Adjusted R-squared	0.3344	0.39209	0.371447	0.334283

In regression 2, a highly significant relation is found between ROTA and number of days accounts receivable (p -value = 0.01), which implies that an increase in the number of days accounts receivable by 1 day is associated with a increase in profitability by 0.17%. The coefficient for accounts payable days is positive but the negative correlation between profitability and the number of days accounts payable. Unlike the previous work of Deloof (2003), the result is significant for the FEM at 0.01 level. This would imply that more profitable firms take longer to settle payment to creditors. So when profitability falls, less cash is generated from operations and firms are able to survive by postponing payment to suppliers. Trade credit received from other firms in particular suppliers of goods represent a major source of working capital financing. The results confirm the relationship between profitability and the working capital measurement. Except for inventory days & CCC, the coefficients of accounts receivable, accounts payable are significant. It is interesting to note that the adjusted R^2 s good. Thus the regression models explain a much higher proportion of the variations in profitability *within* firms than *between* firms.

IV. CONCLUSION

This study has shown that the thesis and Cipla Ltd. has been able to achieve high scores on the various components of working capital and this has positively impact on its profitability. On this premise this industry may be referred as the 'hidden champions' and could thus be used as best practice among the Indian Pharmaceutical Industry.

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