Working Capital Management of Market Leaders

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Abstract

Considering the significance of working capital management, the current study attempts to examine various aspects of working capital management, i.e., current asset structure, liquidity, working capital policy and working capital management efficiency as represented by working capital ratios of the BSE Listed firms for a period of twelve years from 2000 to 2012. The analysis revealed that market leaders pursue a moderate working capital investment policy whereas an aggressive working capital financing policy. Loans and Advances had the highest share in their current assets structure. Market leaders enjoy sound liquidity position and manage their inventories and receivables in an efficient manner. They effectively utilize their current assets investment. The results of time trend analysis revealed a significant uptrend in CATAR, CLTAR, CLTDR, CASR, ALR, CBBTCAR, ITR and DTR whereas a significant downtrend in ITCAR, DTCAR, OC and NTC.

Keywords:

Working Capital Policy, Working Capital Management, Working Capital Leverage, Liquidity, Working Capital Risk.

Introduction

"A lot of emphasis is placed on working capital management (WCM) as it is closely related to the operations management of a firm and plays a key role in creating stock- holder value due to its two dimensions viz, profitability and the liquidity which has deep implications for any business" **(Kantawala and Shroff, 2013[1])**."While long-term decisions, involving plant and equipment or market strategy, may well determine the eventual success of the firm, short-term decisions on working capital determine whether the firm gets to the long term" **(Block and Hirt, 1992[2])**. "Surveys indicate that largest portion of a financial manager's time is devoted to day to day internal operations of a firm, i.e. working capital management" **(Weston and Brigham, 1962[3])**. "In earning a reasonable rate of return, the working capital plays a vital role" **(Misra, 1975[4])**. "The management of working capital plays an important role in maintaining the financial health of the firm during the normal course of the business" **(Bhalla, 1997[5])**. "In practice, WCM has become one of the most important issues in the organizations where many financial executives are struggling to identify the basic working capital drivers and the appropriate level of working capital" **(Lamberson, 1995[6])**. Thus, "WCM could vitally affect the health of the firm" **(Sagan, 1955[7])**. **"**Efficient WCM is necessary for achieving both liquidity and profitability of a company. A poor and inefficient WCM leads to tie up of funds in idle assets and reduces the liquidity and

profitability of a company" **(Reddy and Kameswari 2004[8])**.

In the said context, the present study is organized as follows: Section – I presents a review of previous studies on WCM. Section – II states the objectives of the study; Section – III discusses the methodology; Data analysis and interpretations are discussed in Section – IV and Section – V concludes the results and gives suggestions based on findings.

Review of Previous Studies

A range of studies have been carried out by various researchers on different aspects of working capital management. Selected studies are reviewed and presented.

Yucel and Kurt[9] (2002) investigated the relationship of profitability with working capital management of 167 firms listed on the Istanbul Stock Exchange (ISE) for the period of 1995-2000 and they concluded that CCC is positively related to liquidity ratios and negatively related to ROTA and RONW. High leverage ratio affected the liquidity and profitability of the firms adversely.

Janakiramudu[10] (2010) attempted to study the working capital structure, liquidity position and working capital turnover position of selected sample of five companies in Indian Commercial Vehicles Industry for a period of ten years from 1998 to 2007 and found that, of all the current assets, inventories formed highest percentage in two firms and trade receivables formed the highest percentage in the three firms. The study also revealed that variation between CATR and WCTR was very high indicating that the sample firms achieved higher level of sales with less working capital.

Nassirzadeh and Rostami[11] (2010) studied the relationship between measures of WCM and profitability of 108 companies listed on Tehran Stock Exchange for a nine year period from 2002-2010 using correlation and regression analysis and found that CR, CCC and Leverage had a significant negative impact whereas WCR, NLB, QR and Size had positive impact on all the measures of profitability.

Khan, Akash, Hamid and Hussain[12] (2011) investigated the impact of WCM on profitability along with Leverage, Firm Size and Fixed Financial Assets to TA Ratio taking a sample of 92 Textile Sector Pakistani firms for the period 2001-2008 through correlation and regression analysis and found that ACP, IHP, FFA/TA had negative impact whereas APP, CR and TDTAR had positive impact on NOP and concluded that sample firms can create value for shareholders by reducing the ACP and IHP and increasing APP.

Quayyum[13] (2012) investigated the relationship between WCM and profitability of 28 Bangladeshi firms belonging to Food, Pharmaceuticals, Cement and Engineering industry listed on Dhaka Stock Exchange for the period 2005-2009 using simple linear regression. They found that profitability-liquidity relationship varied from industry to industry with different WCM variables affecting profitability in different industry at different significance levels.

Shroff[14] (2013) examined the structure of current assets, efficiency of current asset management, the nature of current asset investment – financing policy and the overall working capital policy and working capital leverage of ITC Limited belonging to Indian Food and Beverages Industry over a period of 11 years from 2000-01 to 2010-11. It was found that the inventory management deteriorated whereas debtors' management improved over the study period. Further it was found that ROTA was not very sensitive to change in current asset investment policy measured by WCL.

All the above research studies focused on listed firms across the globe as well as various industries belonging to manufacturing sector. However, it was difficult to find a specific study on WCM of market leaders. Also, these studies have focused on analyzing only the impact of WCM on profitability. But it was difficult to find a study focusing on the nature of WCM, *i.e.*, Working Capital Policy, Working Capital Structure, Liquidity and Efficiency. Also, the time frames of the studies reviewed ranged between 5 to 11 years. In context of the above, the current study examines all the important dimensions of WCM over a period of 12 years of the market leaders in the Indian context.

Objectives of The Study

In the light of literature reviewed, the objectives of the present study are as follows:

a. To examine working capital policy of market leaders.

b. To examine the structure of current assets of market leaders

c. To analyze the liquidity position of the market leaders.

c. To analyze the efficiency of WCM of the market leaders.

d. To analyze trends, if any, in various ratios related to WCM over the selected time frame.

e. To examine the impact of sales on working capital.

f. To measure the working capital leverage, examine trends and its impact on ROTA.

Methodology of The Study

Time Frame: A period of twelve years from 1999-2000 to 2011-12 is selected for the study.

Data Source: Financial data is collected from "PROWESS" – the database of Centre for Monitoring Indian Economy (CMIE).

Sample Selection: The companies comprising the Bombay Stock Exchange's SENSEX are identified as market leaders. Considering the same it would be interesting to find the ways in which their working capital is managed. Hence, all the 30 companies forming part of BSE SENSEX is the population of study. However, of these 30 companies the data for the entire study period is not available for 3 companies and are eliminated due to data unavailability. Also, 4 banking companies are not considered for studying the WCM due to the specific nature of their business. Hence, final sample is a set of 23 companies which are market leaders in the Indian Stock Market and are listed in Table – 1.

TABLE – 1
List of Sample comprising Market Leaders

S. N.	Name of Company	S. N.	Name of Company
1	Bharat Heavy Electricals Limited	13	Mahindra & Mahindra Ltd.
2	Cipla Ltd.	14	Maruti Suzuki India Ltd.
3	Coal India Ltd.	15	N T P C Ltd.
4	Dr. Reddy's Laboratories Ltd.	16	Oil & Natural Gas Corpn. Ltd.
5	G A I L (India) Ltd.	17	Reliance Industries Ltd.
6	Hero Motocorp Ltd.	18	Sterlite Industries (India) Ltd.
7	Hindalco Industries Ltd.	19	Sun Pharmaceutical Inds. Ltd.
8	Hindustan Unilever Ltd.	20	Tata Motors Ltd.
9	I T C Ltd.	21	Tata Power Co. Ltd.
10	Infosys Ltd.	22	Tata Steel Ltd.
11	Jindal Steel & Power Ltd.	23	Wipro Ltd.
12	Larsen & Toubro Ltd.	(Source: www.bseindia.com)	

1. **Ratios Used:** For the purpose of analyzing the WCM, 24 ratios are selected divided into 4 groups to fulfil the objectives of the study.

   a. **Working Capital Policy Ratios:** Current Asset to Total Asset Ratio (CATAR); Current Assets to Sales Ratio (CASR), Current Liabilities to Total Assets Ratio (CLTAR); Current Liabilities to Current Assets Ratio (CLCAR); Net Working Capital to Current Assets Ratio (NWCCAR); Current Liabilities to Total Debt Ratio (CLTDR); Working Capital Leverage (WCL).

   b. **Current Asset Structure Ratios:** Inventory to CA Ratio (ITCAR); Debtors to CA Ratio (DTCAR); Cash & Bank Balances to CA Ratio (CBBTCAR); Loans and Advance to CA Ratio (LATCAR).

   c. **Liquidity Ratios:** Current Ratio (CR); Quick Ratio (QR); Absolute Liquidity Ratio (ALR)

   d. **Efficiency Ratios:** Current Asset Turnover Ratio (CATR); Inventory Turnover Ratio (ITR); Debtors' Turnover Ratio (DTR); Creditors Turnover Ratio (CTR); Cash and Bank Turnover Ratio (CBTR); Average Collection Period (ACP); Inventory Holding Period (IHP); Operating Cycle (OC); Average Payment Period (APP); Net Trade Cycle (NTC)

2. **Statistical Tools Used:** For the purpose of analysis various statistical tools have been applied to the above mentioned financial ratios. They are: Arithmetic Mean (referred to as Mean now on); Standard Deviation (SD); Coefficient of Variance (CV); Time Series Analysis using the Least Squares Method; R^2; t-test; p- value; Simple Linear Regression; F-test.

3. **Specification of Model:** For the purpose of time series analysis, the model adopted is:

   $$\mathbf{Y = \alpha + \beta_1 X + u_t.} \quad \ldots\ldots\ldots\ldots\ldots \mathbf{(1)}$$

   In time series analysis, "Y" represents the trend value of the ratios of WCM, "X" variable represents time in number of years, β_1 represents the slope of the trend line, α is the computed intercept of Y variable, when X = 0.

   Taking the same, the model adopted to examine if Working capital requirement is affected by Sales is:

   $$\mathbf{NWC = \alpha + \beta\ Sales + u_t} \quad \ldots\ldots\ldots\ldots\ldots \mathbf{(2)}$$

   Taking the same, the model adopted to examine if ROTA is being affected by WCL is:

   $$\mathbf{ROTA = \alpha + \beta\ WCL + u_t} \quad \ldots\ldots\ldots\ldots\ldots \mathbf{(3)}$$

4. **Hypothesis of the Study:** Six research hypotheses have been examined which are listed as follows:

i. *Null Hypotheses (H_{01}):* There is no significant linear trend in the working capital policy ratios of the selected sample.

   Alternate Hypotheses (H_{a1}): There is a significant linear trend in the working capital policy of the selected sample.

ii. *Null Hypotheses (H_{02}):* There is no significant linear trend in the structural ratios of the selected sample.

   Alternate Hypotheses (H_{a2}): There is a significant linear trend in the structural ratios of the selected sample.

iii. *Null Hypotheses (H_{03}):* There is no significant linear trend in the liquidity ratios of the selected sample.

   Alternate Hypotheses (H_{a3}): There is a significant linear trend in the liquidity ratios of the selected sample.

iv. *Null Hypotheses (H_{04}):* There is no significant linear trend in the efficiency ratios of the selected sample.

   Alternate Hypotheses (H_{a4}): There is a significant linear trend in the efficiency ratios of the selected sample.

v. *Null Hypotheses (H_{05}):* There is no significant impact of sales on net working capital of the selected sample.

   Alternate Hypotheses (H_{a5}): There is a significant impact of sales on net working capital of the selected sample.

vi. *Null Hypotheses (H_{06}):* There is no significant impact of WCL on the ROTA of the selected sample.

   Alternate Hypotheses (H_{a6}): There is a impact of WCL on the ROTA of the selected sample.

The source of data presented in Table number 2 to 12 are computed, compiled and presented. Hence, source is not mentioned each time.

Data Analysis & Interpretations

As mentioned in Para III, for the purpose of analyzing 4

categories of WCM ratios, *i.e.*, Working Capital Policy, Current Assets Structure, Liquidity and Efficiency ratios, the descriptive statistical techniques and regression analysis are applied.

A. Working Capital Policy Analysis

The outcome of computations on working capital policy analysis is presented in Table – 2 and 3.

TABLE – 2
Yearly Mean of Working Capital Policy Ratios

Year	CATAR	CLTAR	CLTDR	CLCAR	NWCCAR	CASR	WCL
Mar-01	0.429	0.250	0.569	0.637	0.363	0.515	
Mar-02	0.433	0.252	0.572	0.690	0.310	0.546	0.486
Mar-03	0.440	0.266	0.594	0.765	0.235	0.552	0.490
Mar-04	0.416	0.287	0.598	0.843	0.157	0.531	0.439
Mar-05	0.420	0.293	0.599	0.801	0.199	0.527	0.464
Mar-06	0.451	0.296	0.616	0.740	0.260	0.559	0.517
Mar-07	0.475	0.292	0.632	0.655	0.345	0.548	0.543
Mar-08	0.460	0.286	0.629	0.660	0.340	0.561	0.519
Mar-09	0.447	0.287	0.627	0.694	0.306	0.559	0.500
Mar-10	0.445	0.294	0.644	0.710	0.290	0.631	0.488
Mar-11	0.455	0.298	0.655	0.720	0.280	0.649	0.500
Mar-12	0.469	0.290	0.644	0.700	0.300	0.659	0.514
Mean	**0.450**	**0.282**	**0.615**	**0.718**	**0.282**	**0.570**	**0.496**
SD	**0.019**	**0.017**	**0.028**	**0.061**	**0.061**	**0.049**	**0.028**
C.V.	**4.150**	**5.965**	**4.622**	**8.503**	**21.641**	**8.537**	**5.697**

Findings based on Descriptive Statistics (Refer Table – 2)

- The market leaders maintain an average of 45% current assets in their total assets structure and 57% of current assets against sales which indicates that market leaders pursue moderate current asset investment policy and have liquid asset structure.
- The current liabilities form 28% of the total assets but finance 71.8% of current assets on an average whereas net working capital finances only 28.2% of current assets which indicates an aggressive current asset financing policy pursued by market leaders. Also, the proportion of current liabilities in total debt is also high at 61.5% which also shows that market leaders rely more on short term debt.

Working capital leverage is 0.49 on an average and is less than one which indicates that change in level of current assets causes less than proportionate change in ROTA and that ROTA of market leaders is not sensitive to current asset investment policy.

TABLE – 3
Time Trend Analysis of Working Capital Policy Ratios

Sr. No.	Ratio	R^2	Intercept	Slope $ß_1$	t-statistics	p-value	Null Hypothesis
1	CATAR	0.443	0.423	0.003	2.822*	0.018	**Rejected**
2	CLTAR	0.592	0.259	0.004	3.812*	0.003	**Rejected**
3	CLTDR	0.929	0.565	0.008	11.480*	0.000	**Rejected**
4	CLCAR	0.019	0.733	-0.002	-0.443	0.667	Accepted
5	NWCCAR	0.019	0.267	0.002	0.443	0.667	Accepted
6	CASR	0.731	0.495	0.012	5.201*	0.000	**Rejected**
7	WCL	0.183	0.470	0.004	1.340	0.217	Accepted

Degrees of Freedom = 10 Table Value t = 3.169 (1%)
* Results significant at 1% level of significance

Findings based on Inferential Statistics (Refer Table – 3)

- On examining the results of regression analysis, a significant positive trend is observed for CATAR, CLTAR, CLTDR and CASR at 1% level of significance and hence null hypothesis is rejected. However, no significant trend is found for remaining 3 ratios indicating that over the study period, WCL, CLCAR and NWCCAR have remained more or less same.
- A significant positive trend in CATAR and CASR indicates that over the study period, the market leaders have shifted to more liquid asset structure by investing more in current assets. Also, positive trend in CLTAR and CLTDR both indicate that over the study period, there has been increased use of short term debts by market leaders to finance their assets.

B. Current Asset Structure Analysis:

The outcome of computations on current asset structure analysis is presented in Table – 4 and 5.

Findings based on Descriptive Statistics (Refer Table – 4)

- Loans and Advances had the highest share in the current assets structure of Market Leaders with 31.4% on an average followed by Debtors – 25.4%, Inventories – 23.3%, and Cash and Bank Balance – 19.8% which is an unusual finding. Generally, inventories or debtors are observed to have highest share in the current assets structure which is not so in the case of market leaders and is a revelation.
- The mean share of 19.8% of cash and bank balance indicates a good liquidity position of the market leaders which can further be substantiated by the analysis of liquidity ratios.
- The changes in structural ratios have been progressive and with lower volatility throughout the study period as evidenced by the values of SD and CV except in case of CBBTCAR.

TABLE – 4
Yearly Mean of Current Asset Structure Ratios

Year	ITCAR	DTCAR	CBBTCAR	LATCAR
Mar-01	0.264	0.278	0.122	0.337
Mar-02	0.246	0.306	0.134	0.315
Mar-03	0.235	0.320	0.149	0.295
Mar-04	0.239	0.302	0.161	0.298
Mar-05	0.238	0.266	0.213	0.283
Mar-06	0.244	0.242	0.249	0.265
Mar-07	0.234	0.229	0.250	0.287
Mar-08	0.239	0.230	0.227	0.304
Mar-09	0.232	0.221	0.221	0.326
Mar-10	0.215	0.206	0.239	0.340
Mar-11	0.206	0.215	0.218	0.360
Mar-12	0.206	0.237	0.198	0.360
Mean	**0.233**	**0.254**	**0.198**	**0.314**
SD	**0.017**	**0.039**	**0.045**	**0.031**
C.V.	**7.208**	**15.302**	**22.903**	**9.798**

Findings based on Inferential Statistics (Refer Table – 5)

- On examining the outcome of regression analysis, it is observed that both ITCAR and DTCAR have declined significantly whereas CBBTCAR has increased significantly at 1% level of significance over the study period. Hence, null hypothesis is rejected.
- A declining trend observed in DTCAR & ITCAR reflects a possibility of measures taken by the market leaders to reduce their investments in debtors and inventories which is a positive sign and can be further substantiated by analyzing the turnover ratios.

TABLE – 5
Time Trend Analysis of Current Asset Structure Ratios

Sr. No.	Ratio	R^2	Intercept	Slope ß$_1$	t-statistics	p-value	Null Hypothesis
1	ITCAR	0.775	0.260	-0.004	-5.846*	0.000	**Rejected**
2	DTCAR	0.709	0.314	-0.009	-4.941*	0.000	**Rejected**
3	CBBTCAR	0.509	0.139	0.009	3.221*	0.009	**Rejected**
4	LATCAR	0.243	0.287	0.004	1.790	0.10	Accepted
Degrees of Freedom = 10					Table Value t = 3.169 (1%)		
* Results significant at 1% level of significance							

- Cash and Bank Balance as share of current asset has shown a rising trend indicating that over the study period there has been rise in cash assets of the market leader which may be due to efficient management of inventories and debtors.
- No significant trend has been observed for LATCAR indicating that the market leaders have not changed their investment policy with respect to Loans and Advances over the study period.

C. Liquidity Analysis:

The computations of liquidity ratios are presented in Table – 6 and 7 respectively.

TABLE – 6
Yearly Mean of Liquidity Ratios

Year	CR	QR	ALR
Mar-01	2.027	1.524	0.267
Mar-02	2.029	1.561	0.301
Mar-03	1.978	1.546	0.334
Mar-04	1.666	1.281	0.265
Mar-05	1.717	1.340	0.403
Mar-06	1.909	1.497	0.565
Mar-07	1.952	1.539	0.579
Mar-08	1.895	1.488	0.480
Mar-09	1.823	1.441	0.446
Mar-10	1.921	1.576	0.498
Mar-11	1.970	1.631	0.474
Mar-12	2.018	1.666	0.484
Mean	**1.909**	**1.507**	**0.425**
SD	**0.119**	**0.111**	**0.110**
CV	**6.209**	**7.347**	**25.877**

- The industry CR ranged between 1.717 and 2.029; QR ranged between 1.281 and 1.666; ALR ranged between 0.267 and 0.579. The mean CR is very close to the thumb rule in all the years whereas the mean quick ratio is above the thumb rule in all the years. As quick ratio is considered to be a more rigorous test of liquidity when compared with current ratio, it can be concluded that the market leaders enjoyed sound liquidity position for the selected time frame.
- The ALR is less than thumb rule, *i.e.*, 0.50 in 10 of 12 years indicating that market leaders are maintaining only reasonable level of cash assets as per the thumb rule which is in synchronization with the principles of finance. **(Refer Table – 6)**
- The null hypothesis is accepted for CR and QR indicating no significant linear trend over the study period indicating that the proportion of current assets and quick assets against current liabilities have remained more or less same. However, there is a significant linear trend in the ALR indicating that the absolute short term liquidity has increased over the study period. **(Refer Table – 7)**

TABLE – 7
Time Trend Analysis of Liquidity Ratios

Sr. No.	Ratio	R^2	Intercept	Slope ß$_1$	t-statistics	p-value	Null Hypothesis
1	CR	0.001	1.901	0.001	0.111	0.913	Accepted
2	QR	0.175	1.423	0.013	1.461	0.175	Accepted
3	ALR	0.514	0.283	0.022	3.252*	0.008	**Rejected**
Degrees of Freedom = 10					Table Value t = 3.169 (1%)		
* Results significant at 1% level of significance							

D. Efficiency Analysis:

The outcome of computations on efficiency analysis is presented in Table – 8 and Table – 9.

Findings based on Descriptive Statistics (Refer Table – 8)

- Current assets have been turned over 2.561 times on an average which indicates effective utilization of current assets.
- ITR ranged between 9.654 and 14.998. Mean ITR is 13.536 times and mean IHP is 41 days indicating that on an average the inventories of market leaders get converted into sale in 41 days.

TABLE – 8
Yearly Mean of Efficiency Ratios

Year	CATR (Times)	ITR (Times)	IHP (Days)	DTR (Times)	ACP (Days)	OC (Days)	CBTR (Times)	CTR (Times)	APP (Days)	NTC (Days)
Mar-01	2.443	9.654	47	13.928	61	108	57.140	18.506	44	64
Mar-02	2.388	10.615	44	11.674	101	145	42.201	13.572	46	99
Mar-03	2.409	12.115	44	10.593	119	163	27.952	16.614	46	117
Mar-04	2.772	13.147	40	12.726	85	125	52.423	14.277	46	79
Mar-05	3.014	14.153	39	15.878	78	117	55.458	13.428	44	73
Mar-06	2.795	14.500	40	14.699	62	102	26.427	16.185	42	60
Mar-07	2.717	14.971	38	15.235	60	98	23.479	16.299	41	57
Mar-08	2.649	14.535	39	14.946	58	97	25.832	15.874	44	53
Mar-09	2.611	14.876	39	15.364	60	99	27.135	13.848	45	54
Mar-10	2.213	14.486	43	16.422	62	105	17.633	12.859	50	55
Mar-11	2.253	14.387	42	18.475	60	102	28.895	12.760	47	55
Mar-12	2.465	14.998	41	16.223	69	110	47.542	27.320	45	65
Mean	**2.561**	**13.536**	**41**	**14.680**	**73**	**114**	**36.010**	**15.962**	**45**	**69**
SD	**0.239**	**1.801**	**2.71**	**2.179**	**20**	**20.63**	**13.980**	**3.993**	**2.335**	**20.13**
CV	**9.351**	**13.308**	**6.552**	**14.843**	**26.81**	**18.01**	**38.824**	**25.017**	**5.190**	**29.07**

- DTR ranged between 10.593 (2003) and 18.475 (2011) whereas, ACP ranged between 119 days (2003) and 58 days (2008). Mean DTR is 14.68 times with mean ACP of 73 days. Overall the DTR has increased from whereas ACP has declined. However, a better understanding on receivables management can be gauged through trend analysis.
- Operating cycle of market leaders has ranged between 97 days to 163 days. On an average, market leaders' working capital investments remains blocked for 114 days. However, with improvement in receivables management, the operating cycle can be further improved.
- CTR has been turned over 15.962 times on an average with mean APP being 45 days. This indicates that the market leaders are prompt in payment of their dues.
- The NTC of market leaders is 69 days indicating the net time period in which the working capital investments are realized in cash.

Findings based on Inferential Statistics (Refer Table – 9)

- On examining the outcome of regression analysis, it is observed that ITR and DTR has increased significantly at 1% level of significance over a period of time with 70% and 63.9% increase in ITR and DTR respectively being explained by change in time. Hence, null hypothesis is rejected. The results indicate that over the study period there has been increase in ITR and DTR. Hence, it is concluded that the inventory and debtors' management of the market leaders has improved. However a further improvement will help increase the WCM efficiency of market leaders. They need to focus on collection efforts to ensure quick collection of receivables thereby making them more liquid and enhance the overall efficiency of WCM.

TABLE – 9
Time Trend Analysis of Efficiency Ratios

Sr. No.	Ratio	R^2	Intercept	Slope $ß_1$	t-statistics	p-value	Null Hypothesis
1	CATR	0.052	2.659	-0.015	-0.740	0.476	Accepted
2	ITR	0.700	10.818	0.418	4.835*	0.000	**Rejected**
3	DTR	0.639	11.539	0.483	4.209*	0.002	**Rejected**
4	CBBTR	0.216	47.733	-1.804	-1.661	0.127	Accepted
5	CTR	0.047	14.401	0.240	0.702	0.499	Accepted
6	ACP	0.313	92.621	-3.031	-2.132	0.058	Accepted
7	IHP	0.208	43.560	-0.343	-1.621	0.136	Accepted
8	OC	0.348	136.18	-3.374	-2.309**	0.043	**Rejected**
9	APP	0.051	44.045	0.147	0.736	0.479	Accepted
10	NTC	0.398	92.136	-3.521	-2.569**	0.028	**Rejected**

Degrees of Freedom = 10
Table Value t = 3.169 (1%) **Table Value t = 2.228 (5%)**
* Results significant at 1% level of significance ** Results significant at 5% level of significance

- No significant trend is observed for CATR, CBBTR, CTR, ACP, IHP and APP indicating that there has been no significant change in the management efficiency of cash and payables.
- On examining the outcome of regression analysis for OC and NTC, a significant downward trend at 5% level of significance is observed for both of them and hence the null hypothesis is rejected, thereby indicating reduced investment in current assets and quick realization of working capital investments over the study period. Thus WCM efficiency of market leaders has improved over the study period.

E. Impact of Sales on Working Capital Requirements

The results of simple linear regression of sales on working capital requirements are presented in Table – 10. From the outcome it can be concluded that sales explain 51.9% variation in working capital requirements at 1% level of significance and the null hypothesis is rejected.

TABLE – 10
Results of Simple Linear Regression of Sales on NWC

Predictor	R^2	Intercept	Slope $ß_1$	t statistic	p value	Null Hypothesis
Sales	0.519	1151.68	0.1406	4.757*	0.000	**Rejected**
Table Value t = 2.831 (1%)						

F. Impact of WCL on ROTA

The results of simple linear regression of WCL on ROTA are presented in Table – 11. From the outcome it can be concluded that there is no significant change in ROTA due to WCL at 1% or 5% levels of significance and hence the null hypothesis is accepted. Thus, the ROTA of market leaders is not sensitive to working capital risk measured by WCL.

TABLE – 11
Results of Simple Linear Regression of WCL on ROTA

Predictor	R^2	Intercept	Slope $ß_1$	t statistic	p value	Null Hypothesis
WCL	0.005	16.780	2.923	0.343	0.735	Accepted
Table Value t = 2.080 (5%)			Table Value t = 2.831 (1%)			

Conclusions and Suggestions

- ✓ From the analysis, it is concluded that market leaders pursue aggressive current asset financing policy whereas moderate current asset investment policy.
- ✓ Market leaders' ROTA is not sensitive to change in current asset investment policy.
- ✓ Loans and advances have the highest share in current assets structure of market leaders.
- ✓ The short term solvency of market leaders is satisfactory and they enjoy sound liquidity position.
- ✓ Market leaders are prompt in payment of their dues.
- ✓ Market leaders are moving towards liquid asset structure over the study period.
- ✓ Market leaders have increased their reliance on short term funds to finance their assets.
- ✓ There has been improvement in Inventory and Debtors' management of market leaders over the study period.
- ✓ The absolute short term solvency position of the market leaders has improved over the study period.
- ✓ There has been decline in the length of OC and NTC indicating improvement in WCM efficiency of the market leaders over the study period.
- ✓ Sales are found to be an important determinant of NWC of the market leaders.

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