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Impact of Working Capital Management on Firm Profitability: A Case Study of HUL Ltd., India

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Abstract

The efficient management of working capital plays a crucial role in the successful functioning of a firm. . Firm should always keep monitoring the liquidity position as it projects the company's credit image. Lack of liquidity can create a bad image among the parties interested in the firms functioning. Also firm must ensure that there should be a proper balance between current assets and current liabilities , as it can affect the profitability of the firm. For making the analysis of Liquidity-profitability relationship of HUL, ratio analysis techniques of Financial Management have been used.

By observation of this it can be seen that even though the profitability position was strong, the liquidity position of HUL is not up to the ideal level. The short term solvency position of the firm must be strengthened so that it is able to meet its obligations timely. These things facilitate the maximization of the wealth of the firm. From this study it can be concluded that there is no significant difference in the profitability & liquidity position of the company because it has been seen that the profitability position was strong were as the liquidity position was not satisfactory. The risk factor of the firm is high as compared to profitability. The total risk of the firm is also high as compared to the ROCE, which was not worthwhile for the future prospects of the firm.

Keywords: Liquidity, Profitability, Risk, Current Ratio, Net Working Capital, ROCE, Risk-Return Trade Off

Concept

The Management of Fixed assets and Current assets has a great impact on future return and risk of the company. Managing fixed assets will help the concern in long term decisions. The current assets are the assets which can be used by the company to meet their short term obligations. Working capital refers to the firm's investment in short term assets i.e. cash, short-term securities, debtors etc. it is the fund needed to meet the day-to-day expenses. So it is vital ingredient to the business as the blood is to the human body.

There are two concepts of working capital: Gross Working Capital and Net Working Capital. The former means the firm's investment in current assets and later the excess of current assets over the current liabilities. Since the elements of working capital are short term in nature constant monitoring must be done for proper management. Working capital can also be defined as the working expenses that get blocked in current assets along the productive line of an enterprise. The Net Working Capital is that liquidity which takes care of the working expenses.

The working capital requirement of a firm will depend upon its operating cycle. It is a cycle having a continuous series of steps for conversion of sales into cash. The working capital is required maintaining its liquidity in day-to-day operation to ensure it's smooth running and meets its obligation (Eljelly, 2004). Yet, this is not a simple task since managers must make sure that business

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operation is running in efficient and profitable manner. There are the possibilities of mismatch of current asset and current liability during this process. If this happens and firm's manager cannot manage it properly then it will affect firm's growth and profitability. This will further lead to financial distress and finally firms can go bankrupt.

Working Capital Management

A firm should maintain adequate level of working capital to meet the current obligations to maintain uninterrupted business operation. Firm should always keep monitoring the liquidity position as it projects the company's credit image. Lack of liquidity can create a bad image among the parties interested in the firms functioning. Also firm must ensure that there should be a proper balance between current assets and current liabilities , as it can affect the profitability of the firm. Greater investment in idle current assets can result in decrease in profitability.

So the goal of working capital management is to ensure that the firm is able to continue its day-to-day operations and it has the sufficient ability to satisfy its present and future short term expenses. There should be proper proportion between the level of current assets and current liability. So an efficient working capital management will enable the concern to maintain a good balance between the liquidity and profitability. Ezra Solomon states that "liquidity measures a company`s ability to meet expected as well as unexpected requirement of cash to expand its assets, reduce its liabilities and cover up an operating losses".

Risk-Return Trade off

Every financial Decision has different degree of risk. Return and Risk are directly proportional, as a higher degree of risk can lead to higher return and vice-versa. Risk return trade off in an enterprise can be sustained by maintaining a proper balance between liquidity and profitability. Liquidity in a firm represents the amount of investment in current assets and profitability the productivity of these current assets. Higher investment in unproductive current assets can lead to decrease in profitability. Working capital is to achieve desired trade off between liquidity and profitability (Smith 1980; Rehman & Nasr, 2007). Referring to theory of risk and return, Investment with more risk will result to more return. Thus, Firm's with high liquidity of working Capital many have to low risk then low Profitability. Conversely, Firm that has low liquidity of working capital, facing high risk results to high Profitability. The issue here is in managing working capital, Firm must take into consideration all the items in both accounts and try to balance the risk and return. So a proper management of Net Working Capital will ensure a good risk-return proportion.

Justification of the Topic

Proper management of working capital is required to ensure that the firm is able to continue its day-to-day operations and it has the sufficient ability to satisfy its present and upcoming short term expenses. The working capital position helps the investors, creditors, bankers, suppliers, financial institutions, government etc. judge the stability of the enterprise. The financial institutions and individuals may be interested in investing in that company which is financial strong to meet its present and upcoming short term expenses. Well maintained working capital will help to create good creditors image, avoid unwanted borrowing, healthy government support etc. An efficient working capital management will only help a firm to compete in the present global market. Working capital is the life blood and nerve centre of business . Just as circulation of blood is essential in the human body for maintaining life, working capital is very essential to maintain the smooth running of the business. No business can run successfully without an adequate amount of working capital. Working capital plays a vital role in the impact of the business. So there exist a number of implication and gaps for enquiry into working capital management of companies; against this background a study was conducted on the Working Capital position of HUL Limited.

Objectives of Study

This study has the following objectives:-

i. To analyze the Working capital position of HUL Ltd.
ii. To analyze the effect of liquidity on profitability
iii. To analyze the effect of risk on profitability.
iv. To give suggestions on the basis of findings of the study.

Hypotheses of the Study

This study is based on the following null hypotheses (H_0):

i. There is no significant difference between liquidity and profitability of HUL during the period of study.

ii. There is no significant difference between risk and profitability of HUL during the period of study.

Company Profile

HUL was incorporated on August 24, 1910 under the name Imperial Tobacco Company of India Limited. As the Company's ownership progressively Indianised, the name of the Company was changed from Imperial Tobacco Company of India Limited to India Tobacco Company Limited in 1970 and then to I.T.C. Limited in 1974. In recognition of the Company's multi-business portfolio encompassing a wide range of businesses - Cigarettes & Tobacco, Hotels, Information Technology, Packaging, Paperboards & Specialty Papers, Agri-business, Foods, Lifestyle Retailing, Education & Stationery and Personal Care - the full stops in the Company's name were removed effective September 18, 2001. The Company now stands rechristened 'HUL Limited'.

The office on Radha Bazar Lane, Kolkata, was the centre of the Company's existence The Company's headquarter building, 'Virginia House', which came up on that plot of land two years later, would go on to become one of Kolkata's most venerated landmarks. Though the first six decades of the Company's existence were primarily devoted to the growth and consolidation of the Cigarettes and Leaf Tobacco businesses,

In 1975 the Company launched its Hotels business with the acquisition of a hotel in Chennai which was rechristened 'HUL-Welcom group Hotel Chola'. In 1979, HUL entered the Paperboards business by promoting HUL Bhadrachalam Paperboards Limited, which today has become the market leader in India. In 1985, HUL set up Surya Tobacco Co. in Nepal as an Indo-Nepal and British joint venture. Since inception, its shares have been held by HUL, British American Tobacco and various independent shareholders in Nepal.In 1990, HUL acquired Tribeni Tissues Limited, a specialty paper manufacturing company and a major supplier of tissue paper to the cigarette industry. In 1990, leveraging its agri-sourcing competency, HUL set up the Agri Business Division for export of agri-commodities.

In 2000, HUL forayed into the Greeting, Gifting and Stationery products business with the launch of Expressions range of greeting cards. A line of premium range of notebooks under brand "Paperkraft"was launched in 2002. In 2008, HUL repositioned the business as the Education and Stationery Products Business and launched India's first environment friendly premium business paper under the "Paperkraft" Brand. HUL also entered the Lifestyle Retailing business with the Wills Sport range of international quality relaxed wear for men and women in 2000. The Wills Lifestyle chain of exclusive stores later expanded its range to include Wills Classic formal wear (2002) and Wills Clublife evening wear (2003). HUL also initiated a foray into the popular segment with its men's wear brand, John Players, in 2002.

With all these achievements HUL is the biggest FMCG player with a turnover of Rs. 29605.58 Crores in the financial year 2012-13

Review of Literature

Smith (1973) stated that the profitability and liquidity are the dual financial goals for and firm and a balance between the same needs to be maintained. Gitman et al., (1979) with time and technology however, more and more sophisticated techniques are available to make the working capital cycle more efficient. Richards and Laughlin (1980) provided us the operating cycle concept which took into consideration both cash inflows and outflows that occur in the realm of working capital management.

Gentry et al (1985) innovated on the concept of weighted cash conversion cycle (WCC) which measures the weighted number of days funds are tied up in receivables, inventories, and payables, less the weighted number of days cash payments are deferred to Suppliers. Arcelus & Srinivasan (1993) integrated the main components of working capital management within a discounted cash flow framework. To study the interplay amongst inventory, procurement, cash discounts, accounts payable and accounts receivable. Ball,et at., (1993)has established that the cash flows of the components of working capital are better predictors of growth and future earnings than the traditional cash flows.

Moss and Stine, 1993) Corpopate liquidiy is examined from two distinct dimentions :static or dynamic views. The static view is based on commomly used traditional ratios such as current ratio and quick ratio,calculated from the balance sheet amounts. These ratios measure liquidity at a given point in time whereas dynamic views measures on going liquidity from the firm`s operations. As a dynamic measures of the time it takes a firm to go from cash outflow to cash inflow which is measured by cash converstion cycle.

Burgstahler & Dichev (1997) found the evidence that the two components of earnings, viz, cash flow from operations and working capital changes can be used effectively to mange earnings and to increase them. Andrew & Sirkin (2003) highlights the importance of innovating through working capital management and the operations to generate cash rather than simply product development. Ward (2004) calculates the operating capital (cash) is out of reach for use by your business. The speedier your cash – to-cash cycle, the fewer days your cash is available for the use in propelling your value stream. You can use this metric to gauge whether you are operating "lean" with regard cash. Also, good performance on the cash-to-cash measurement has been associated with improved earnings per share.

Bonamyong (2005) highlighted that a company with a lower cash conversion cycle is more efficient because it turns its working capital over more times in a year, which means it generated more sales per unit of money invested in working capital management.

Garcia-Teruel and Martinez-Solano (2007) in their Study demonstrated that managers can create value by reducing their inventories and shortening the number of days for which their accounts are outstanding. Gupta (2010) observed that better working capital can significantly help companies improve their growth rates vis-à-vis competitors and ultimately increase the wealth of their share holders.

Research Design & Methodology

In this study the sample company named HUL has been taken for analysis of Working Capital position. Present study is based on secondary data i.e. published annual reports of the company. These financial data's are edited, classified and tabulated as per the requirements of the study. This study has covered 10 years data's from 2004 to 2013 for analyzing the Working Capital position of HUL Ltd.

The Liquidity and Profitability position have been measured to analyze the Working Capital position of HUL. The collected data have been analyzed by the various ratios for finding liquidity and profitability. For assessing the behavior of above ratios, Arithmetic Mean, Spearman's Rank Correlation Co-efficient and Student t-test has been used.

Limitation of the Study

The following are the limitation of the study:

1. The study covers only 12 years period i.e. 2003-2004 to 2012-2013 for the Working Capital analysis of HUL Ltd.
2. The secondary data's used in this study have been taken from published annual reports only.
3. As per the requirement and necessarily some data's have been grouped and sub-grouped.
4. For making the analysis of Working Capital position of HUL Ltd, some ratio analysis techniques of financial management have been used.

Analysis of Working Capital Management of HUL Ltd

Liquidity

Working Capital Position

Gross Working Capital and Net Working Capital. The former means the firm's investment in current assets and later the excess of current assets over the current liabilities. The excess of current assets over the current liabilities provides measures of safety margin available against uncertainty in realization of current assets and flow of funds.

Table 2: Shows the working capital position of the concern. During the period of study working capital showed a fluctuating tendency. The highest value of working capital `1548.78 Crores was in year 2011-12 and least of `-1355.30 Crores in 2005. During the final years 2012 & 2013 working was positive with value of ` 1548.78 Crores and 110.14 Crores respectively. The Gross Working capital of the firm had a mean value of

` 5017.83Crores. Gross Working Capital was highest in 2011-12 and least in 2005 with values of ` 8250.68 Crores and `2773.02 Crores. The Current liability of the firm was highest in 2012-13 with ` 8005.52 Crores and least in 2004 with `3714.26 Crores. The Gross working capital had an average annual growth rate of 13.18% and standard deviation of 2077.40. The Net working capital of the firm had an average annual growth rate of 12.90% and a high standard deviation of 988.25.

Table 1: Statement Showing Net Working Capital Position

(₹ In Crores)			
Year	Current Assets(₹)	Current Liabilities (₹)	Net Working Capital (₹)
2003	3501.79	3870.6	-368.81
2004	3304.96	3714.26	-409.30
2005	2773.02	4128.32	-1355.30
2006	3169.65	4523.06	-1353.41
2007	3419.58	5195.04	-1775.46
2008-2009	5786.78	5883.93	-97.15
2009-2010	5539.27	6816.01	-1276.74
2010-2011	6316.89	7508.93	-1192.04
2011-2012	8250.68	6701.9	1548.78
2012-2013	8115.66	8005.52	110.14
Arithmetic Mean	5017.83	5634.76	-616.93
Avg Annual Growth Rate (%)	13.18	10.68	12.90
S.D (σ)	2077.40	1571.57	988.25

Source: Annual reports of HUL from 2002-03 to 2012-13

Current Ratio

Liquidity ratio is defined as the ratio if current assets to current liabilities. It is an index of technical solvency and an index of the strength of the working capital. A high current ratio is an assurance that a firm will have adequate funds to pay current liabilities and other current payments. It can be calculated as follows:

$$= \frac{\text{Currrent Assest}}{\text{Current liabilities}}$$

Table II: Shows the current ratio as a measure of liquidity position.

Table 2: Statement Showing Current Ratio

(₹ in Crores)			
Year	Current Assets (₹)	Current Liabilities (₹)	Current Ratio (Times)
2003	3501.79	3870.6	0.90
2004	3304.96	3714.26	0.89
2005	2773.02	4128.32	0.67
2006	3169.65	4523.06	0.70
2007	3419.58	5195.04	0.66
2008-2009	5786.78	5883.93	0.98
2009-2010	5539.27	6816.01	0.81
2010-2011	6316.89	7508.93	0.84
2011-2012	8250.68	6701.9	1.23
2012-2013	8115.66	8005.52	1.01
Arithmetic Mean	5017.828	5634.757	0.87
Avg Annual Growth Rate	13.18	10.68	1.22
S.D (σ)	2077.40	1571.57	17.71

Source: Annual reports of HUL from 2002-03 to 2012-13

During the period of study it was observed that current ratio of the firm was below 1 for the first eight years of study, The Highest ratio of 1.23 times was observed in the year 2011-12 and the

Least of 0.67 in the 2005. The current assets and current liabilities showed an increasing trend throughout the study. The Average annual Growth rate of Current assets and Current liabilities was 13.18% and 10.68% respectively. The Current Ratio showed an increasing trend with an average ratio of 0.87 times with an average annual growth rate of 1.22%. The standard deviation of the ratio was high with a value of Rs. 17.71.

Liquid Ratio or quick ratio:

It is the ratio which shows the relationship between liquid assets and current liabilities. It firm's capacity to pay its obligation at time of emergency situation. The ideal ratio is 1:1 Times. The ratio can be expressed as given below:

$$= \frac{\text{Liquid Assets}}{\text{Current liabilities}}$$

Where Liquid Assets= Current Assets - (Stock +Prepaid Expenses)

Table 3: Statement of Liquid Assets to Current liabilities (₹ in Crores)

Year	*Liquid Assets (₹)*	*C L (₹)*	*Liquid ratio (Times)*
2003	2109.16	3870.6	0.54
2004	1834.52	3714.26	0.49
2005	1451.25	4128.32	0.35
2006	1621.94	4523.06	0.36
2007	1415.81	5195.04	0.27
2008-2009	3206.25	5883.93	0.54
2009-2010	3312.86	6816.01	0.49
2010-2011	3443.12	7508.93	0.46
2011-2012	5583.31	6701.9	0.83
2012-2013	5409.69	8005.52	0.68
A.M	2938.791	5634.757	0.50
Avg Annual Growth Rate	15.65	10.68	2.59
S.D (σ)	1554.16	1571.57	16.38

Source: Annual reports of HUL from 2002-03 to 2012-13

Table 4. Statement of Cash to Total Assets

(₹ in Crores)			
Year	*Cash & Equivalents (₹)*	*TA(₹)*	*Cash position Ratio (Times)*
2003	806.48	3843.03	0.21
2004	698.05	3563.82	0.20
2005	355.03	2362.57	0.15
2006	416.94	2796.09	0.15
2007	262.42	1615.80	0.16
2008-2009	1864.12	2579.39	0.72
2009-2010	2012.38	2690.23	0.75
2010-2011	1787.26	2726.59	0.66
2011-2012	1996.43	11407.25	0.18
2012-2013	1900.71	12091.84	0.16
A.M. (x)	1209.98	4567.66	0.33
Avg Annual Growth Rate	13.57	21.46	-2.38
S.D (σ)	758.89	3837.07	26.12

Source: Annual reports of HUL from 2002-03 to 2012-13

Interpretation

The Above table shows the liquidity ratio of the firm during the period of study. The ratio had the highest value of 0.83 times in the year 2011-12 and the least of 0.27 times in 2007. During the period of study this ratio also observed a fluctuating tendency. The liquid assets of the firm were highest in 2011-12 and least in 2007 with values of `5583.31 Crores and `1415.81 Crores respectively. The liquid assets had an average value of `2938.80 Crores with an average annual growth rate of 15.65%. The liquidity ratio had an average value of 0.50 times with an average annual growth rate of 2.59%. The standard deviation of the ratio was high with a value of 17.71.

Cash Position Ratio

It shows how much of total assets is kept in the form of cash is revealed through this ratio. How much per rupee of total assets is kept in the form of cash. Higher the ratio shows less risk, but lower rate of return as cash by itself does not earn profit. The ratio can be denoted as given below:

$$= \frac{\text{Cash + Cash Equivalents}}{\text{Total Assets}}$$

Interpretation

The above table shows the cash generating capacity of the total assets of the firm. Cash position ratio also showed similar fluctuating tendency like the above ratios. It had a mean value of 0.33 times with a negative average annual growth rate of -2.38%. The highest ratio of 0.75 times was observed in 2009-10 and least of 0.15 in 2005 & 2006. The firm maintained the highest cash of `2012.38 Crores in 2009-10 and the least of `262.42 in 2007. Cash had an average value of `1209.98 Crores with an average annual growth rate of 13.57%. The Total Assets of the firm had a mean value of `4567.66 Crores with an average annual growth rate of 21.46%. Total Assets of the firm was highest in 2012-13 and least in 2007 with values of `12091.84crores and `1615.80 Crores. The ratio had a high degree of standard deviation with value of 26.12.

Working Capital Turnover ratio

This ratio reveals the overall picture of the operational capital necessary for maintaining a level of its sales. Higher ratio indicates quick conversion of working capital into sales. Also greater the ratio, shorter is the working capital cycle and better is working capital management. It can be expressed as follows:

$$= \frac{\text{Annual Sales}}{\text{Average Working Capital}}$$

Table 5: Statements of Annual Sales to Working Capital

(₹ in Crores)

Year	COGS(₹)	Working Capital (₹)	Working Capital Turnover ratio (Times)
2003	5287.39	-368.81	-14.34
2004	5433.89	-409.30	-13.28
2005	6189.81	-1355.30	-4.57
2006	6488.78	-1353.41	-4.79
2007	7297.34	-1775.46	-4.11
2008-2009	10879.6	-97.15	-111.99
2009-2010	8916.88	-1276.74	-6.98
2010-2011	10094.8	-1192.04	-8.47
2011-2012	12499.1	1548.78	8.07
2012-2013	14077.3	110.14	127.81
A.M. (x)	8716.50	-616.93	-3.26
Avg Annual Growth Rate	16.62	12.90	99.2
S.D (σ)	3083.30	988.25	57.15

Source: Annual reports of HUL from 2002-03 to 2012-13

Interpretation

The above table shows the sales generated per amount of working capital of the firm. This Ratio also showed a fluctuating tendency during the period of study. The Ratio had an average value of -3.26 times with a average annual growth rate of 99.2%. Net Working Capital turnover ratio observed the highest value of 127.81 times in 2012-13 and least of -111.99 times in 2008-09. The highest COGS of `14077.30 Crores was in 2012-13 and the least of `5287.39 Crores in 2003. COGS had a mean value of `8716.50 Crores with an average annual growth rate of 16.62%. The Ratio had a high standard deviation of 57.15.

Analysis of Liquidity, Profitability and Risk Using Spearman's Rank Correlation And Student T-Test

Spearman's rank correlation is the relationship between different rankings of the same set of items. A rank correlation coefficient measures the degree of similarity between two rankings, and can be used to assess its significance.

$$r = 1 - \frac{6\sum D^2}{n(n^2-1)}$$

Where D= R1-R2, R= Rank

Student t – Distribution is a small test used for testing of hypotheses of sample size less than 30. If the calculated value of t is less than the table value. The null hypotheses will be accepted and vice-verse; for a given significance level. It can be calculated as follow:

$$t = \frac{r}{\sqrt{1-r^2}} x\sqrt{n-2}$$

Where r = Spearman's Rank Coefficient of Correlation

n = No. Observation

Liquidity & Profitability Analysis of HUL using Student t-test

Profitability

It indicates the percentage of return in the business. A high Return on Investment shows the company is having a higher rate of profit as percentage of capital employed. It is calculated as follows:

$$= \frac{\text{Operating Profit}}{\text{Net Sales}} \times 100$$

Table 6: Statement Showing Operating Profit Ratio (` In Crores)

Year	Operating Profit(`)	Net Sales (`)	Ratio(%)
2003	1815.89	10138.35	17.91
2004	1316.47	9926.95	13.26
2005	1318.88	11060.55	11.92
2006	1517.91	12103.39	12.54
2007	1755.00	13871.08	12.65
2008-2009	2502.92	20501.10	12.21
2009-2010	2383.97	17764.24	13.42
2010-2011	2147.80	19691.02	10.91
2011-2012	3252.59	23436.33	13.88
2012-2013	3963.76	27003.99	14.68
Arithmetic Mean	2197.52	16549.7	13.34
Avg Annual Growth Rate (%)	11.83	16.64	-1.80
S.D (σ)	863.77	6015.87	192.36

Source: Annual reports of HUL from 2002-03 to 2012-13

The above table shows the earning capacity of the firm. Operating ratio also showed similar fluctuating tendency like the above ratios. It had a mean value of 13.34% times with a negative average annual growth rate of -1.80%. The highest ratio of 17.91% was observed in 2003 and least of 10.91 in 2010-11. The firm maintained the highest operating profit of `3963.76 Crores in 2012-13 and the least of `1318.88 in 2005. Operating profit had an average value of `2197.52 Crores with an average annual growth rate of 11.83%. The Total sales of the firm had a mean value of `16549.7 Crores with an average annual growth rate of 16.64%. Total sales of the firm was highest in 2012-13 and least in 2003-04 with values of `27003.99crores and `9926.95 Crores. The ratio had a high degree of standard deviation with value of 192.36.

Relation between Liquidity and Profitability

Testing of Ist Null Hypothesis

Table 7: Statement for Calculation of Rank Correlation Between Liquidity and Profitability

Year	*Liquidity Ratio*	*R1*	*Profitability*	*R2*	*D=(R1-R2)*	*D2*
2003	0.90	4	17.91	1	3	9
2004	0.81	6	13.26	5	1	1
2005	0.67	9	11.92	9	0	0
2006	0.70	8	12.54	7	1	1
2007	0.66	10	12.65	6	4	16
2008-2009	0.98	3	12.21	8	- 5	25
2009-2010	0.81	7	13.42	4	3	9
2010-2011	0.84	5	10.91	10	- 5	25
2011-2012	1.23	1	13.88	3	- 2	4
2012-2013	1.01	2	14.68	2	0	0
						90

Source: Annual reports of HUL from 2002-03 to 2012-13

Interpretation

The current ratio is used as an indicator of liquidity and ROCE as for measuring profitability. The Spearman's rank coefficient of correlation(r) between Current Ratio and ROCE has been shown for which the relevant formula has been used. The test used for determining significance of r is "t" test. The Spearman's rank coefficient of correlation (r) between ROCE & Risk Factor has been calculated. The "t" test is applied for determining significance of r. Then computed value of 't' has been compared with the tabulated value of 't'.

In the above table r= 0.46 and value of t = 1.47. The table value of 't' at 5% level of significance for 8 degrees of freedom (Where n=10) is equal to 1.86. Since the computed value of t is less than the table value the null hypothesis (Ho) is accepted.

Profitability & Risk analysis of HUL

The risk associated with the concern can be calculated by the following method:

$$Rk = \frac{(E + LTL) - FA}{CA}$$

Where Rk = risk

E = Equity + Reserve % Surplus

L = Long term loan

FA = Fixed Assets

CA = Current assets

In the aggressive approach the current assets are financed by short term sources and in case of conservative approach the current assets are financed by both long term and short term sources. The risk faced by the firm can be measured with the above formula

Interpretation

Table 5 shows the measure of liquidity. During the period of Study concern's highest risk of 73% generated a return of 17.91% and the least risk of 12.65% generated a return of 1.5%. The risk taken by the company showed a decreasing tendency from 2004-05 onwards. The average risk taken by the company was 82.55% with a negative average annual growth rate of -0.62. The standard deviation of the risk taken by firm during the period of the study was 15.93.

Testing of IInd Null Hypothesis

Interpretation

The Spearman's rank coefficient of correlation (r) between ROCE & Risk Factor has been calculated. The "t" test is applied for determining significance of r. Then computed value of 't' has been compared with the tabulated value of 't'.

Table 8: Statement Showing Risk

(Rs in Crores)

Year	Equity + Reserve & Surplus (E)Rs	Long term Loans (L) Rs	Fixed Assets (FA) Rs	Current Assets (CA) Rs	Risk (Rk) %
2003	2138.73	1704.30	1295.63	3501.79	73
2004	2092.71	1471.11	1423.14	3304.96	64
2005	2305.63	56.94	1385.50	2773.02	35
2006	2723.48	72.60	1400.75	3169.65	44
2007	1508.16	102.15	1558.90	3419.58	1.5
2008-2009	2137.47	434.13	1657.99	5786.78	15.7
2009-2010	2668.93	10.84	2214.36	5539.27	8
2010-2011	2709.35	2.66	2223.45	6316.89	7.7
2011-2012	3681.08	1005.97	2273.18	8250.68	29
2012-2013	2864.77	1200.69	2441.75	8115.66	20
A.M. (x)	2483.03	606.14	1787.47	5017.83	29.79
Avg Annual Growth Rate	3.39	-2.95	8.85	13.18	-7.26
S.D (σ)	586.59	671.31	446.11	2077.40	24.32

Source: Annual reports of HUL from 2002-03 to 2012-13

In the above table r= 0.36 and value of t = 1.09. The table value of 't' at 5% level of significance for 8 degrees of freedom (Where n=10) is equal to 1.86. Since the computed value of t is more than the table value the null hypothesis (Ho) is rejected.

Findings and Suggestions

- The Net working Capital of HUL during the period of study was not satisfactory as it showed frequent fluctuations in its values. It was negative during the first eight years of study, which is dangerous for the firm. HUL must try to keep regular check, whether its current liabilities are exceeding the gross working capital of the firm.
- Liquidity position of the firm was not adequate because the average value of this Current Ratio was only 0.87 times which is well below the ideal ratio of 2:1 times. Which indicates that, even though it is in a position to meet its short term obligations with

Table 9: Statement for Calculation of Rank Correlation Between Profitability and Risk

Year	Profitability Ratio	R1	Risk	R2	D=(R1-R2)	D2
2003	17.91	1	73	1	0	0
2004	13.26	5	64	2	3	9
2005	11.92	9	35	4	5	25
2006	12.54	7	44	3	4	16
2007	12.65	6	1.5	10	- 4	16
2008-2009	12.21	8	15.7	7	1	1
2009-2010	13.42	4	8	8	- 4	16
2010-2011	10.91	10	7.7	9	1	1
2011-2012	13.88	3	29	5	- 2	4
2012-2013	14.68	2	20	6	- 4	16
						106

Source: Annual reports of HUL from 2002-03 to 2012-13

the existing current assets, but it is in the verge of break even. So the firm must increase the position of its current assets to maintain a current ratio of at least the ideal value.

- The Liquid ratio of the firm was also not up to the level due to a lower amount of liquid assets during the period of study. The arithmetic mean of the liquid ratio was 0.50 times which is well below the ideal value of 1:1 times. So the firm should increase the portion of the liquid assets to stabilize the short solvency position.
- The cash position ratio of the firm was also not satisfactory as it was not able to generate adequate amount of cash from its assets. The average value of the ratio was only 0.33 times. The firm must try to keep regular check on its assets to identify whether they are staying idle or obsolete. Only the liquid cash will help the firm to face any uncertainties at the times of depression.
- Working capital turnover ratio of the firm was not satisfactory as it was able to generate on an average -3.26 times the amount of working capital deployed. It should try to improve this situation or to increase its sales turnover.
- The profitability position of the firm was not satisfactory because it operating profitability position was 13.34% of its turnover, which is near the risk free bank rate. The capital employed in the firm was not appropriately used. It should stabilize the present profitability position. It should increase the earning capacity of its idle assets.
- Applying of student's t test between Current Ratio and ROCE, it showed that the calculated value of t is less than the table value of t. Hence the null hypothesis is accepted and alternate hypothesis was rejected. It says that there was no significant difference between liquidity and profitability of the firm during the period of research study.
- When student's t test was applied between ROCE and Risk, it showed that the calculated value of t is less than the table value of t. Hence the null hypothesis is accepted and alternate hypothesis was rejected. It says that there was no significant difference between liquidity and profitability of the firm during the period of research study.

Since the amount and risk involved in capital investment decision are very high, the firms give little importance to the issues related with working capital. But from the above study we can say that HUL should give due consideration to its working capital management policies. The company must improve its present liquidity position to remain stable at the time of discrepancies or recession. It should also try to generate higher returns from its assets. The company must keep an optimum balance between liquidity and profitability for efficient use of its working capital. At the same time it should not stop formulating certain policies to keep a well-monitored working capital for better profitability, stability, reliability, growth and consistency.

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