

A Study on Working Capital Management of Housing and Urban Development Corporation Limited

Ankita Jain

Abstract

The present study is basically an evaluative study in the field of working capital management of Housing and Urban Development Corporation Limited (HUDCO), The study is undertaken with a view to evaluate the objectives of HUDCO and also to judge as to how far these objectives are fulfilled. The second and major purpose is to assess the working capital management in context of working capital, liquidity and profitability – a triangle. The working capital management has examined the activities of HUDCO on the different parameters through ratio analysis. It is hoped that the result would be helpful to the HUDCO in decision making and financial institution, business class, research scholar and every class of the society.

Introduction

With the emergence of globalization, changing business culture, rapid technological advancements and reduced shelf life of products it has become more relevant and mandatory to take effective measures to manage the capital in the business effectively. Therefore, application of working capital management has shown significant value.

Working capital management is to manage the working capital which constitutes the major part of the business and closely linked with the overall operations of a business. Working capital management consist that portion of the asset of a business which are related to or used in current operations. It refers to all aspects of administration of both current assets and current liabilities. It is an integral part of overall financial management. The management of current assets and current liabilities and the inter-relationship that exists between them may be termed as working capital management.

Working capital management has been looked upon as the driving seat of a financial manager. It is like a warm blood passing through the arteries and veins of the business. If there is some difficulties in circulation of working capital, business faces problems in running the daily operations. New business may wind up due to improper working capital. According to R. D. Kennedy and S.Y. McMullen, a study of working capital is of major importance for internal and external analysis because of its close relationship with current day-to-day operations of business.

Working Capital Management in HUDCO

Working capital management is an attempt to manage and control the current assets and the

current liabilities, to maximize profitability and to maintain proper and sound liquidity position in a business. In HUDCO, working capital has been analyzed in two context i.e. gross working capital and net working capital.

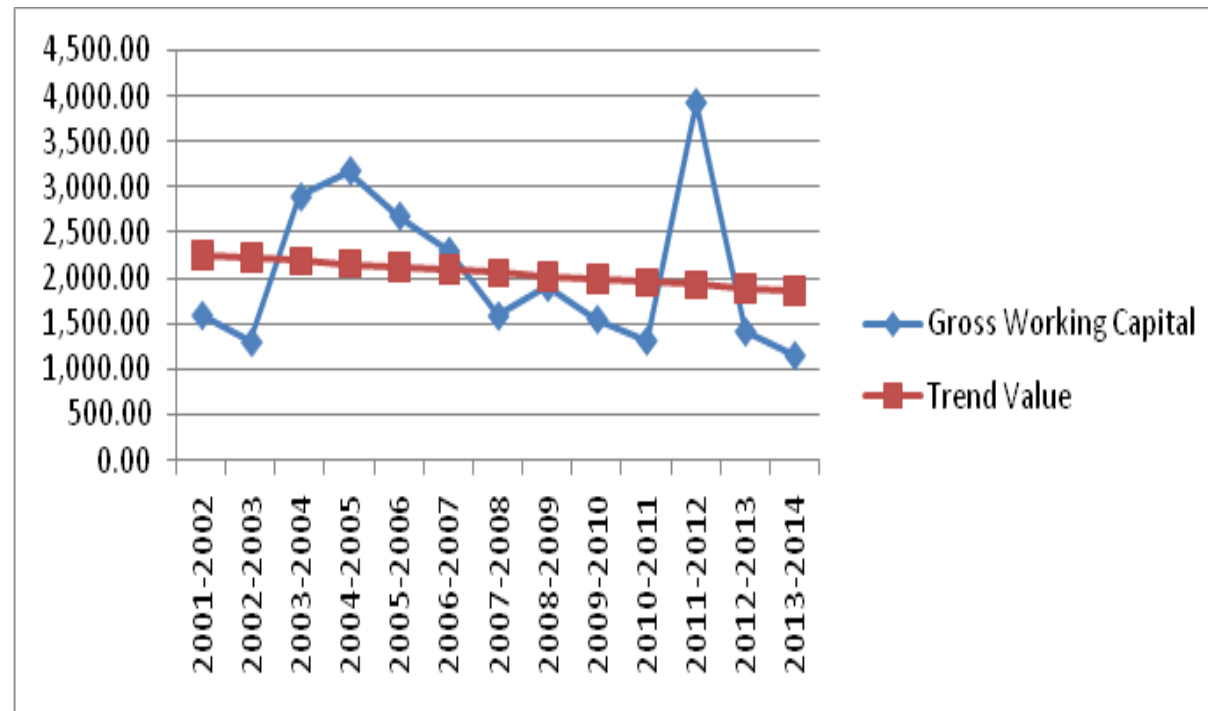
1. Gross Working Capital

“Gross working capital refers to the firm's investment in current assets.” It includes all those assets which, in the ordinary course of business, can be converted into cash within a short period of time. Generally it is expected that these assets will change their shape during an accounting period i.e. one year. In HUDCO, gross working capital marked fluctuating trend. In the year 2001-2002 it was Rs. 1,591.85 crores which fluctuates every year and decreased to Rs. 1,152.90 crores in the year 2013-2014. It was highest in the year 2011-2012 i.e. Rs. 3,917.19 crores and lowest in the year 2013-2014 i.e. Rs. 1,152.90 crores with an average of Rs. 2,057.83 crores. The standard deviation and coefficient of variation is 828.09 and 40.24% respectively. The fluctuation is occurred due to variation in current assets.

Year	Gross Working Capital	Trend Value	Indices (Base Year: 2001 - 2002=100)
2001-2002	1,591.85	2,261.24	100.00
2002-2003	1,299.72	2,227.34	81.65
2003-2004	2,887.83	2,193.44	181.41
2004-2005	3,172.68	2,159.54	199.31
2005-2006	2,677.19	2,125.63	168.18
2006-2007	2,292.20	2,091.73	144.00
2007-2008	1,584.39	2,057.83	99.53
2008-2009	1,899.10	2,023.93	119.30
2009-2010	1,548.41	1,990.03	97.27
2010-2011	1,314.14	1,956.13	82.55
2011-2012	3,917.19	1,922.23	246.08
2012-2013	1,414.22	1,888.33	88.84
2013-2014	1,152.90	1,854.42	72.43
Total	26,751.82		
Average	2,057.83		
Standard Deviation	828.09		
Coefficient of Variation	40.24%		

Sources: Annual Reports of Housing and Urban Development Corporation Limited from 2001-2002 to 2013-2014

Gross Working Capital and Trend Value



The linear least square trend values of gross working capital in HUDCO registered increasing trend. The deviations are positive in the years 2003-2004, 2004-2005, 2005-2006, 2006-2007 and 2011-2012 while the deviations are negative in the remaining years. Higher deviation is because of increase in cash and bank balance and the current assets that are available in the business are just sufficient to fulfill the need and requirements of the business. HUDCO should maintain optimum level of current assets for smooth functioning.

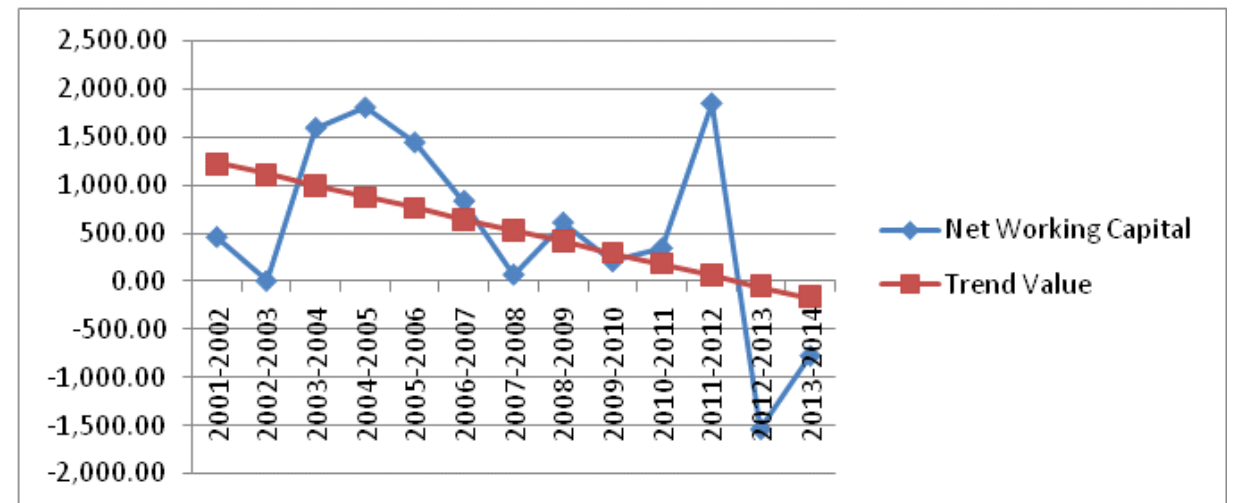
2. Net Working Capital

Net working capital means current assets less current liabilities. Current liabilities refer to the claims of outsiders. In HUDCO, in the year 2001-2002 it was Rs. 457.84 crores which fluctuates every year and reached to Rs. (777.94) crores in the year 2013-2014. Although it was recorded Rs. 2 crore in the year 2002-2003 but remain positive throughout the study period except last two years. In the last two years working capital deficit was recorded due to decrease in current assets and increase in current liabilities. Its average is Rs. 529.64 crores. The standard deviation and coefficient of variation is 963.50 and 181.92% respectively.

Table 2					
Net Working Capital of Housing and Urban Development Corporation Limited					
(From 2001-2002 to 2013-2014) Rs. in Crores					
Year	Current Assets	Current Liabilities	Net Working Capital	Trend Value	Indices (Base Year: 2001 - 2002=100)
2001-2002	1,591.85	1,134.01	457.84	1,228.59	100.00
2002-2003	1,299.72	1,297.72	2.00	1,112.09	0.44
2003-2004	2,887.83	1,294.48	1,593.35	995.60	348.01
2004-2005	3,172.68	1,367.37	1,805.31	879.11	394.31
2005-2006	2,677.19	1,235.36	1,441.83	762.62	314.92
2006-2007	2,292.20	1,458.90	833.30	646.13	182.01
2007-2008	1,584.39	1,517.15	67.25	529.64	14.69
2008-2009	1,899.10	1,289.60	609.50	413.14	133.13
2009-2010	1,548.41	1,344.47	203.93	296.65	44.54
2010-2011	1,314.14	972.33	341.81	180.16	74.66
2011-2012	3,917.19	2,068.43	1,848.76	63.67	403.80
2012-2013	1,414.22	2,955.90	(1,541.68)	(52.82)	(336.73)
2013-2014	1,152.90	1,930.84	(777.94)	(169.32)	(169.92)
Total			6,885.26		
Average			529.64		
Standard Deviation			963.50		
Coefficient of Variation			181.92%		

Sources: Annual Reports of Housing and Urban Development Corporation Limited from 2001-2002 to 2013-2014

Net Working Capital and Trend Value



The linear least square trend values of net working capital in HUDCO registered decreasing trend. The deviations are clearly positive in the years 2003-2004, 2004-2005, 2005-2006, 2006-2007, 2008-2009, 2011-2012 and 2013-2014. During these years the value of net working capital is more than trend values, while the deviation is negative in the remaining years. The negative deviations were due to the high current assets that caused low working capital in comparison to other years.

Objectives of the Study

The present study is undertaken with an objective of in-depth analysis of HUDCO. This study also aims at identifying ways and means for strengthening the financial strength of the corporation. The following are the prominent objectives of the study:

- To measure and analyze the working capital management aspects of HUDCO to indicate how corporation's resources are financed.
- To compare the size of working capital of HUDCO and measure the deficiency of working capital using the ratio analysis.
- To identify the responsible factors which are affecting the working capital position of HUDCO.
- To evaluate the working efficiency of HUDCO and interpret the liquidity position of HUDCO.

Hypothesis

To study these objectives following hypothesis is “Whether working capital management is successful to maintain adequate liquidity for the smooth functioning of the HUDCO or not”

Collection and analysis of Data

For the present study both primary and secondary data were used. Primary quantitative data was obtained through personal visits, interviewed and discussions with senior officials of the concern while the secondary data was collected from the records, reports, websites etc. The data so collected are analyzed by using ratio analysis.

Findings of the study

The present study indicates that the working capital and liquidity are concerned with day-to-day affairs of the business whereas profitability is comparatively, a long-period affair. Working capital requirement is constantly affected by the crises-crossing economic currents flowing about the business. The nature of business activities, the economic health of a country, the availability of materials, the ease or tightness of the money market are all part of influencing forces. As such,

an increase in working capital requirement may reduce the profitability but at the same time an increase in working capital followed by increase in stock of raw materials, work-in-progress and stock of finished goods in anticipation of hike in prices may fetch more profit and in turn profitability.

The current ratio marks fluctuating trend throughout the study period. In the year 2001-2002 it is 1.40:1 which fluctuates every year and reached to 0.60:1 in the year 2013-2014. The ratio was above to the standard norms in the years 2003-2004, 2004-2005 and 2005-2006 due to substantial increase in the current assets and decrease in current liabilities. In the remaining years, the ratio remained below the idle ratio 2:1 due to decrease in current assets and increase in current liabilities. The average of current ratio too displayed a figure of 1.44 which is not good from the management's point of view. It exposes that current ratio did not come up to the mark. The standard deviation of the current ratio is 0.57 and the coefficient of variation is 39.63% which shows less stability. The company should be careful and try to improve the liquidity position regarding the payment of the short-term obligations because in the last two years of the study, this ratio is very low. On the whole the ratio is not liberal towards their creditors as shown in table given below -

Table 3					
Current Ratio of Housing and Urban Development Corporation Limited					
From 2001-2002 to 2013-2014 (Rs. in Crore)					
Year	Current Assets	Current Liabilities	Current Ratio	Trend Value	Indices (Base Year: 2001-2002=100)
2001-2002	1,591.85	1,134.01	1.40:1	1.90	100.00
2002-2003	1,299.72	1,297.72	1.01:1	1.82	71.95
2003-2004	2,887.83	1,294.48	2.23:1	1.74	158.92
2004-2005	3,172.68	1,367.37	2.32:1	1.67	165.29
2005-2006	2,677.19	1,235.36	2.17:1	1.59	154.38
2006-2007	2,292.20	1,458.90	1.57:1	1.51	111.93
2007-2008	1,584.39	1,517.15	1.04:1	1.44	74.40
2008-2009	1,899.10	1,289.60	1.47:1	1.36	104.91
2009-2010	1,548.41	1,344.47	1.15:1	1.29	82.04
2010-2011	1,314.14	972.33	1.35:1	1.21	96.28
2011-2012	3,917.19	2,068.43	1.89:1	1.13	134.91
2012-2013	1,414.22	2,955.90	0.48:1	1.06	34.08
2013-2014	1,152.90	1,930.84	0.60:1	1.80	42.54
Total			18.69		
Average			1.44		
Standard Deviation			0.57		
Coefficient of Variation			39.63%		

Sources: Annual Reports of Housing and Urban Development Corporation Limited from 2001-2002 to 2013-2014

The liquid ratio of HUDCO has fluctuated during the period of study. In the year 2001-2002 the ratio was probable to be standard norms. The ratio was lower than the standard norms 1:1 in the year 2002-2003, 2007-2008, 2009-2010, 2010-2011, 2012-2013 and 2013-2014 due to substantial decrease in current assets, deposits and increase in prepaid expenses. In the remaining years the ratio was higher than the standard norm which means company may be able to meet its short-term obligations in time. It can be concluded that the short-term creditor's position regarding their claims is safe because it had sufficient funds to meet their claims. The average of this ratio 1.01 times is likely to be above the standard norms but the standard deviation and coefficient of variation, shows a variation.

Table 4

Liquid Ratio of Housing and Urban Development Corporation Limited					
From 2001-2002 to 2013-2014 (Rs. in Crore)					
Year	Liquid Assets	Current Liabilities	Liquid Ratio	Trend Value	Indices (Base Year: 2001-2002=100)
2001-2002	1,049.15	1,134.01	0.93:1	1.29	100.00
2002-2003	638.38	1,297.72	0.49:1	1.25	53.17
2003-2004	1,841.41	1,294.48	1.42:1	1.20	153.79
2004-2005	2,262.10	1,367.37	1.65:1	1.15	178.82
2005-2006	2,178.17	1,235.36	1.76:1	1.10	190.58
2006-2007	1,863.70	1,458.90	1.28:1	1.05	138.08
2007-2008	1,052.04	1,517.15	0.69:1	1.01	74.95
2008-2009	1,354.06	1,289.60	1.05:1	0.96	113.49
2009-2010	958.97	1,344.47	0.71:1	0.91	77.10
2010-2011	957.24	972.33	0.98:1	0.86	106.41
2011-2012	3,067.64	2,068.43	1.48:1	0.81	160.30
2012-2013	942.33	2,955.90	0.32:1	0.76	34.46
2013-2014	563.78	1,930.84	0.29:1	0.72	31.56
Total			13.07		
Average			1.01		
Standard Deviation			0.47		
Coefficient of Variation			47.04%		

Sources: Annual Reports of Housing and Urban Development Corporation Limited from 2001-2002 to 2013-2014

Thus, on the basis of average, it can be said that the short-term solvency position of the HUDCO was good, liberal towards their creditors and full security of the creditors but the ratio of last two years shows that company should formulate such policy which can improve its liquidity position. The absolute liquidity ratio of HUDCO has fluctuated during the period of study and fluctuated between 1.58:1 in the year 2005-2006 and 0.14:1 in the year 2013-2014. The ratio was always in a good shape and remained higher than the standard norms of 0.50:1, due to substantial increase in cash and bank balance excluding the year 2002-2003, 2012-2013 and 2013-2014 due to decrease in absolute liquidity (cash and bank balance). It shows inability to pay its absolute obligations.

Table 5

Absolute Liquidity Ratio of Housing and Urban Development Corporation Limited					
From 2001-2002 to 2013-2014 (Rs. in Crore)					
Year	Cash and Bank Balances	Current Liabilities	Absolute Liquidity Ratio	Trend Value	Indices (Base Year: 2001-2002=100)
2001-2002	947.81	1,134.01	0.84:1	1.14	100.00
2002-2003	497.36	1,297.72	0.38:1	1.41	45.24
2003-2004	1,645.66	1,294.48	1.27:1	1.05	152.10
2004-2005	2,074.50	1,367.37	1.52:1	1.01	181.52
2005-2006	1,957.67	1,235.36	1.58:1	0.96	189.60
2006-2007	1,607.24	1,458.90	1.10:1	0.91	131.81
2007-2008	746.70	1,517.15	0.49:1	0.87	58.89
2008-2009	1,052.39	1,289.60	0.82:1	0.82	97.64
2009-2010	755.86	1,344.47	0.56:1	0.78	67.26
2010-2011	791.20	972.33	0.81:1	0.73	97.36
2011-2012	3,188.84	2,068.43	1.54:1	0.69	184.45
2012-2013	696.77	2,955.90	0.24:1	0.64	28.20
2013-2014	271.89	1,930.84	0.14:1	0.60	16.85
Total			11.30		
Average			0.87		
Standard Deviation			0.48		
Coefficient of Variation			55.39%		

Sources: Annual Reports of Housing and Urban Development Corporation Limited from 2001-2002 to 2013-2014

Current assets turnover ratio has registered a fluctuating trend in current assets turnover ratio varying between 2.55 times in the year 2013-2014 and 0.70 times in the year 2011-2012. In the year 2002-2003, 2007-2008, 2009-2010, 2010-2011, 2012-2013 and 2013-2014, ratio was above the average due to decrease in current assets which indicates reduced lock-up of funds in current assets. In the residual years the ratio was below the average due to substantial increase in current assets. It means stagnation in the flow of current assets and low turnover of current assets which is not good for the corporation. The standard deviation is 0.53 and the coefficient of variation is 36.22% which shows stability of the results. As whole, the ratio is not in a better condition because a low ratio indicates stagnation in the flow of current assets while high ratio shows inadequate current assets which affect the liquidity of the company.

Table 6					
Current Assets Turnover Ratio of Housing and Urban Development Corporation Limited					
From 2001-2002 to 2013-2014 (Rs. in Crore & Ratio in Times)					
Year	Sales/Turnover	Current Assets	Current Assets Turnover Ratio	Trend Value	Indices (Base Year: 2001-2002=100)
2001-2002	2,085.98	1,591.85	1.31	1.08	100.00
2002-2003	2,531.73	1,299.72	1.95	1.14	148.85
2003-2004	2,743.51	2,887.83	0.95	1.20	72.52
2004-2005	2,777.19	3,172.68	0.88	1.27	66.80
2005-2006	2,298.77	2,677.19	0.86	1.33	65.53
2006-2007	2,610.26	2,292.20	1.14	1.39	86.90
2007-2008	2,728.95	1,584.39	1.72	1.45	131.44
2008-2009	2,713.18	1,899.10	1.43	1.51	109.02
2009-2010	2,528.35	1,548.41	1.63	1.57	124.61
2010-2011	2,263.46	1,314.14	1.72	1.64	131.44
2011-2012	2,738.36	3,917.19	0.70	1.70	53.35
2012-2013	2,864.55	1,414.22	2.03	1.76	154.57
2013-2014	2,945.03	1,152.90	2.55	1.82	194.94
Total			18.87		
Average			1.45		
Standard Deviation			0.53		
Coefficient of Variation			36.22%		

Sources: Annual Reports of Housing and Urban Development Corporation Limited from 2001-2002 to 2013-2014

Working capital turnover ratio of HUDCO shows fluctuating trend and it was highest in the year 2002-2003 i.e. 1,265.87 times due to very low working capital and lowest in the year 2013-2014 i.e. (3.79) times during the period of study. In the last two years negative working capital turnover ratio was due to negative working capital. A very high ratio is not a good indication for any business, which may be result of over trading and decrease in current liabilities. Turnover and working capital of HUDCO remained highly fluctuating throughout the study period which affected the ratio in same direction. Its average is 102.95 times. The standard deviation and coefficient of variation is 335.88 and 326.26% respectively that shows greater variability.

Table 7					
Working Capital Turnover Ratio of Housing and Urban Development Corporation Limited					
From 2001-2002 to 2013-2014 (Rs. in Crore & Ratio in Times)					
Year	Sales/Turnover	Working Capital	Working Capital Turnover Ratio	Trend Value	Indices (Base Year: 2001-2002=100)
2001-2002	2,085.98	457.84	4.56	312.33	100.00
2002-2003	2,531.73	2.00	1265.87	277.44	27783.76
2003-2004	2,743.51	1,593.35	1.72	242.54	37.79
2004-2005	2,777.19	1,805.31	1.54	207.64	33.76
2005-2006	2,298.77	1,441.83	1.59	172.74	34.99
2006-2007	2,610.26	833.30	3.13	137.84	68.75
2007-2008	2,728.95	67.25	40.58	102.95	890.65
2008-2009	2,713.18	609.50	4.45	68.05	97.70
2009-2010	2,528.35	203.93	12.40	33.15	272.12
2010-2011	2,263.46	341.81	6.62	(1.75)	142.34
2011-2012	2,738.36	1,848.76	1.48	(36.65)	32.51
2012-2013	2,864.55	(1,541.68)	(1.86)	(71.54)	(40.78)
2013-2014	2,945.03	(777.94)	(3.79)	(106.44)	(83.09)
Total			1338.30		
Average			102.95		
Standard Deviation			335.88		
Coefficient of Variation			326.26%		

Sources: Annual Reports of Housing and Urban Development Corporation Limited from 2001-2002 to 2013-2014

Thus, it may be concluded that the triangular position of working capital, liquidity, and profitability shows that these three terms are interdependent because object of achieving one thing depends upon each other. Working capital and liquidity are concerned with day-to-day affairs of the business whereas profitability is comparatively, a long-period affair. At the same time, achieving sufficiency, up to the expectation, of these three terms simultaneously at a given point of time is also much difficult due to several internal and external factors. Besides these factors, tendency of these three terms also tends to move according to their different nature. Analysis of working capital management of HUDCO exhibits that working capital management plays a significant role in maintaining adequate liquidity that affects the profitability to a great extent. Although liquidity and profitability have inverse relationship yet both these can be maintained simultaneously by taking specific steps according to the situations. Hence, it is proved that working capital management significantly affects the profitability.

Research Scholar, UOR, Jaipur

References

1. Agrawal M. R. and Agrawal M. K., Management of Working Capital, Garima Publications, Jaipur, 2009, Page 2.1.

2. Agrawal & Agrawal, Financial Management, R.B.D. Publishing House, New Delhi, 2014-15 Page No. 4.29.
3. Agarwal N. P. Jain Sujan C., Finance and International Accounting Issues, Indus Valley Publications, Jaipur, 2002, Page No. 2.
4. Chandra Prasanna, Financial Management Theory & Practice, Tata McGraw Hill Publishing Co. Ltd., New Delhi, 2008, Page No. 656.
5. Goyal Santosh, Financial Appraisal of Housing Finance Institution of India (A Study of Selected Housing Finance Companies in India), University of Rajasthan, Jaipur, 2002, Page No.180.
6. Gupta Shashi k. and Sharma R. K., Management Accounting Principal and Practice, Kalyani Publishers, New Delhi, 2012, Page No. 23.50.
7. Hyderabad R. L., Management of Liquidity and Profitability, Rao P. Mohan and Pramanik Alok Kumar, Working Capital Management, Deep & Deep Publications Pvt. Ltd., New Delhi, 1999, Page No. 13.
8. Jain Ankur, Operational Efficiency of Housing Finance Industry in India, University of Rajasthan, Jaipur, 2009, Page No. 93.
9. Kishor Ravi M., Financial Management, Taxman's Allied Services (P) Ltd., New Delhi, 2005, Page no.302.
10. Kuchhal S. C., Financial Management, Chaitanya Publishing House, Allahabad, 1973, Page No. 161.
11. Narayanaswamy R., Financial Accounting, A Managerial Perspective, Prentice Hall of India Private Limited, New Delhi, 2005, Page No. 518.
12. Tandon J. K., Mathur, T. N., Gupta V. K. & Jain C. P. Financial Management, Shivam Book House (P) Ltd. Jaipur, 2006, Page No. RA-27.
13. Study of Working Capital, National Council of Applied Economic Research, July 1966. Page No. 8.
14. Sharma R. K. and Gupta Shashi K., Management Accounting Principal and Practice, Kalyani Publishers, New Delhi, 2003, Page No. 21.4.
15. Vijay Manju, Operational Efficiency of Selected Commercial Bank in India, University of Rajasthan, Jaipur, 2002, Page No.153.
16. Venketeswar P., Inventory Management & Control, Wide Vision, Jaipur, 2007, Page No. 12-13.

Websites

1. www.hudco.org
2. www.nbccindia.com
www.nbo.nic.in
3. www.nhb.org.in,
4. www.rbi.org.in
5. www.mhupa.gov.in