

Liquidity Trend of Selected Dyes and Pigment Industrial Units

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I. INTRODUCTION

The liquidity position of a firm would be satisfactory if it is able to meet its current obligations when they become due. With the help of ratio analysis conclusions can be drawn regarding the liquidity position of a firm. In the ever changing world, corporate governance has its own importance. Successful liquidity management of company give certain benefits like increase in profitability, raising share prices, regular dividend to the shareholders, attractive remuneration to the employees, Scientific management, provision of adequate finance, effective marketing.

The Indian economy is mixed economy. Private and public sectors have played a greater role in overall development of the country. The basic objective of this study is to analyze the liquidity of selected dyes and pigment industrial units.

Liquidity Ratios-- Liquidity refers to ability of a company to meet its short-term liability. Liquidity ratios are generally based on relationship between current assets and current liability. There is need for evaluating liquidity position to find out whether the company is capable of paying all its current obligations. The important liquidity ratios are as follows.

1. Current Ratio
2. Liquid Ratio
3. Cash Ratio

A. Current Ratio

a. Meaning

Current ratio expresses relationship between current Asset and current liabilities. The current ratio measures the ability to meet its current liabilities and working capital available at a particular time. It is a measure short-term financial strength of the business. This ratio is most commonly used to perform the short term financial analysis. Also known as the working capital ratio, this ratio matches the current assets of the firm to its current liabilities.

b. Formula

Formula of Current ratio is given below.

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

c. Components

Components of current ratio are given as under.

Sr. No.	Current Assets	Current Liabilities
1	Cash Balance	Creditors
2	Bank Balance	Bills Payables
3	Debtors	Bank Overdraft
4	Bill Receivable	Expenses Outstanding
5	Prepaid Expenses	Interest Payables
6	Stock or Inventory	Provisions
7	Short Term Investments	Short Term Loans
8	Loans and Advances	Unclaimed Dividend

d. Ideal Current Ratio

An ideal current ratio In India is 1.33:1 and internationally it is 2:1. In other word, current asset should be twice the amount of current liabilities. The current ratio should be more than 1:1. A very high current ratio is also not desirable because it indicates idleness of the fund.

B. Quick Ratio

a. Meaning

The quick ratio is also known as liquid ratio, acid test ratio and near money ratio. This ratio establishes the relationship between quick/liquid assets and current/liquid liabilities. The acid test ratio is more severe and stringent measure of company's ability to meet current obligations. We do not consider stock or inventory for the purpose of computing the quick ratio because stock or inventories require more time to become liquid asset.

b. Formula

Formula of quick ratio is given below

$$\text{Quick (Liquied) Ratio} = \frac{\text{Quick or Liquid Assets}}{\text{Quick or Liquid Liabilities}}$$

$$\text{Liquid Assets} = \text{Current Assets} - \text{Stock}$$

$$\text{Liquid Liabilities} = \text{Current liabilities} - \text{Bank}$$

overdraft

It is a measurement of firm's ability to convert its current assets quickly into cash in order to meet its current liabilities.

c. Components

Components of quick ratio are given as under.

Sr. No.	Liquid Assets	Liquid Liabilities
1	Cash Balance	Creditors
2	Bank Balance	Bills Payables
3	Debtors	Provisions
4	Bill Receivable	Expenses Outstanding
5	Prepaid Expenses	Interest Payables
7	Short Term Investments	Short Term Loans
8	Loans and Advances	

d. Ideal Quick Ratio

Quick ratio is more rigorous test of liquidity than current ratio. An ideal quick ratio is 1:1. If this ratio is 1:1 the company has quick assets equivalent to 100 % of its quick liabilities.

C. Cash or Super Quick Ratio

a. Meaning

This ratio is also known as super quick ratio or cash ratio or cash reservoir ratio. This ratio considers only the absolute liquidity available with the firm. It is a measure of absolute

liquidity. Cash, bank balance and rapidly marketable securities are most liquid assets of a company.

b. Formula

Cash ratio may be calculated by using the following formula.

$$\text{Cash Ratio} = \frac{\text{Cash and Bank Balance} + \text{Marketable Securities}}{\text{Liquid Liabilities}}$$

Thus, the cash ratio is the most stringent measure of liquidity. Components of quick ratio are as under.

c. Components

Sr. No.	Most Liquid Assets	Liquid Liabilities
1	Cash Balance	Creditors
2	Bank Balance	Bills Payables
3	Marketable Securities	Provisions
		Expenses Outstanding
		Interest Payables
		Short Term Loans

d. Ideal Cash Ratio

Cash ratio is more rigorous test of liquidity than liquid ratio. An ideal cash ratio 1:2. If this ratio is 1:2 the company has cash, bank balance and marketable securities equivalent to 50% of its liquid liabilities.

II. MEANING OF DYES

Dyes are a coloured substance that can be applied in solution or dispersion to a substrate, giving it a coloured appearance. Dyes or Dyestuffs are coloured substance capable of imparting their colours fast to the fibers. Thus, a substance may be called dyes, if it satisfies the following conditions.

1. It must have a suitable colour. It must be capable of being fixed to the fabric directly or indirectly.
2. When fixed, it must not be fugitive and it must be resist soap and water. Colour cannot be removed by rubbing and washing.
3. The colours used to make cloth, paper, plastic, heir, leather, edible etc. colourful are called dyes. Dyes mixed with the threads of the cloth through strong chemical connection and give fast colour to the fabric. This fast colour is not affected either by soap detergent or bleaching.

III. MEANING OF PIGMENT

Pigments are various organic and inorganic insoluble substances, which are widely used in surface coatings. They are used in the paints, ink, rubber, plastic, ceramic, paper and other material to impart colour. Pigment is a powdery substance that gives colour to other materials. In paint, the pigment is a powdered substance. When it is mixed in the liquid vehicle, imparts colour to a painted surface. The pigments used in paints are nearly all-metallic compounds, but organic compounds are also used. Paints are mechanical mixtures of one or more pigments. Most black pigments are organic.

IV. OBJECTIVES OF THE STUDY

The basic objective of the present study is to analyze the past and present financial performance of dyes and pigment industry.

However, the major objectives of this study are outlined as follows.

1. To know the origin and growth of selected dyes and pigment industrial units
2. To evaluate the liquidity of selected dyes and pigment industrial units
3. To compare the liquidity position with help of ratio analysis
4. To derive conclusions and suggest the measures for improving financial performance

V. HYPOTHESIS OF THE STUDY

The hypotheses of the study are as under.

1. There is no significant difference between current ratio of selected dyes and pigment industrial units.
2. There is no significant difference between liquidity ratio of selected dyes and pigment industrial units.

VI. PERIOD OF THE STUDY

The period for study is selected seventeen (15) consecutive years which are from the financial year from 2000-01-00 to 2015-16. The study is mainly based on published annual reports of selected dyes and pigment industrial units.

VII. SAMPLE DESIGN

Systematic sampling method was used for sample selection. In Gujarat, there are 49 numbersof industrial units are engaged in manufacturing and sales of dyes, dyes intermediate and pigment industry in the business form of public limited. Out of these 804 Industrial units, 49 industrial units are public limited companies that are registered under Indian Companies Act 1956. The researcher has selected 8 (eight) units out of 49 units, which comprises of 16.33% of total dyes and pigment industrial units of public limited company for the study. The selected dyes and pigment industrial units are given below.

Aarti Industries Limited	Dynemic Product Limited
Asian Paints Limited	Meghmani Organics Limited
Atul Limited	Sudarshan Chemical Industries Limited
Bhageria Dye- Chem. Limited	

VIII. LIMITATIONS OF THE STUDY

The present study is limited to the liquidity of dyes and pigment industry. It does not include other performance of the company. The study is restricted to only eight dyes and pigment public limited company and not all the dyes and pigment companies. The researcher is aware of following limitations.

1. This study is mainly based on secondary data from published annual reports, websites and literature.
2. This study is mainly based on ratio analysis, comparison, and trend analysis.
3. There are many different aspects to measure liquidity and different expert views on liquidity.
4. This study is limited to financial liquidity only.

5. The research study is based on a fixed time span and does not cover a long time period.
6. The outcome of the study is largely based on availability of required data. No web sites of selected units offer internal data and all data. Hence, it becomes very difficult to find out exact liquidity of selected dyes and pigment industrial units. The collection of secondary data may possess certain drawbacks.

Table 1: Current Ratio of Selected Dyes and Pigment Industrial Units during the Period from 2000-01 to 2015-16

Year	Asian Paints Ltd.		Atul Ltd.		Bhageria Ind. Limited		Meghmani Organics Ltd.		Dyemic Products Limited		Aarti Industries Ltd.		Sudarshan Chemical Ind. Ltd.	
	Current Ratio	Index	Current Ratio	Index	Current Ratio	Index	Current Ratio	Index	Current Ratio	Index	Current Ratio	Index	Current Ratio	Index
2000-01	1.87	100.00	3.49	100.00	2.34	100.00	3.15	100.00	1.64	100.00	3.02	100.00	3.37	100.00
2001-02	1.42	75.94	3.54	101.43	2.57	109.83	2.99	94.92	1.54	93.90	3.01	99.67	2.54	75.37
2002-03	1.4	74.87	3.05	87.39	2.57	109.83	2.6	82.54	1.57	95.73	3.63	120.20	2.52	74.78
2003-04	1.16	62.03	2.88	82.52	4.17	178.21	3.22	102.22	2.04	124.39	4.76	157.62	2.34	69.44
2004-05	1.23	65.78	2.38	68.19	2.57	109.83	2.99	94.92	2.65	161.59	2.89	95.70	2.5	74.18
2005-06	1.26	67.38	2.45	70.20	3.42	146.15	3.57	113.33	2.52	153.66	2.91	96.36	2.49	73.89
2006-07	1.33	71.12	2.48	71.06	4.35	185.90	6.00	190.48	3.70	225.61	3.13	103.64	2.81	83.38
2007-08	1.1	58.82	2.53	72.49	2.98	127.35	4.96	157.46	3.25	198.17	3.58	118.54	2.5	74.18
2008-09	1.28	68.45	2.55	73.07	2.43	103.85	3.72	118.10	2.88	175.61	3.78	125.17	1.78	52.82
2009-10	0.89	47.59	1.85	53.01	2.22	94.87	3.69	117.14	2.55	155.49	2.30	76.16	1.62	48.07
2010-11	1.22	65.24	1.82	52.15	1.01	43.16	3.45	109.52	0.71	43.29	0.96	31.79	1.2	35.61
2011-12	1.16	62.03	1.04	29.80	1.27	54.27	1.27	40.32	0.71	43.29	0.88	29.14	1.21	35.91
2012-13	1.18	63.10	1.14	32.66	1.24	52.99	0.97	30.79	0.73	44.51	0.71	23.51	1.15	34.12
2013-14	1.18	63.10	1.26	36.10	0.89	38.03	0.91	28.89	0.78	47.56	0.74	24.50	1.06	31.45
2014-15	1.09	58.29	1.39	39.83	1.14	48.72	0.96	30.48	0.79	48.17	0.78	25.83	1.03	30.56
2015-16	0.95	50.80	1.19	34.10	1.29	55.13	0.89	28.25	0.81	49.39	0.81	26.82	1.13	33.53
Average	1.23	65.91	2.19	62.75	2.28	97.38	2.83	89.96	1.80	110.02	2.37	78.41	1.95	57.96

Source: Computed from Annual Reports of Selected Dyes and Pigment Industrial Units & web site.

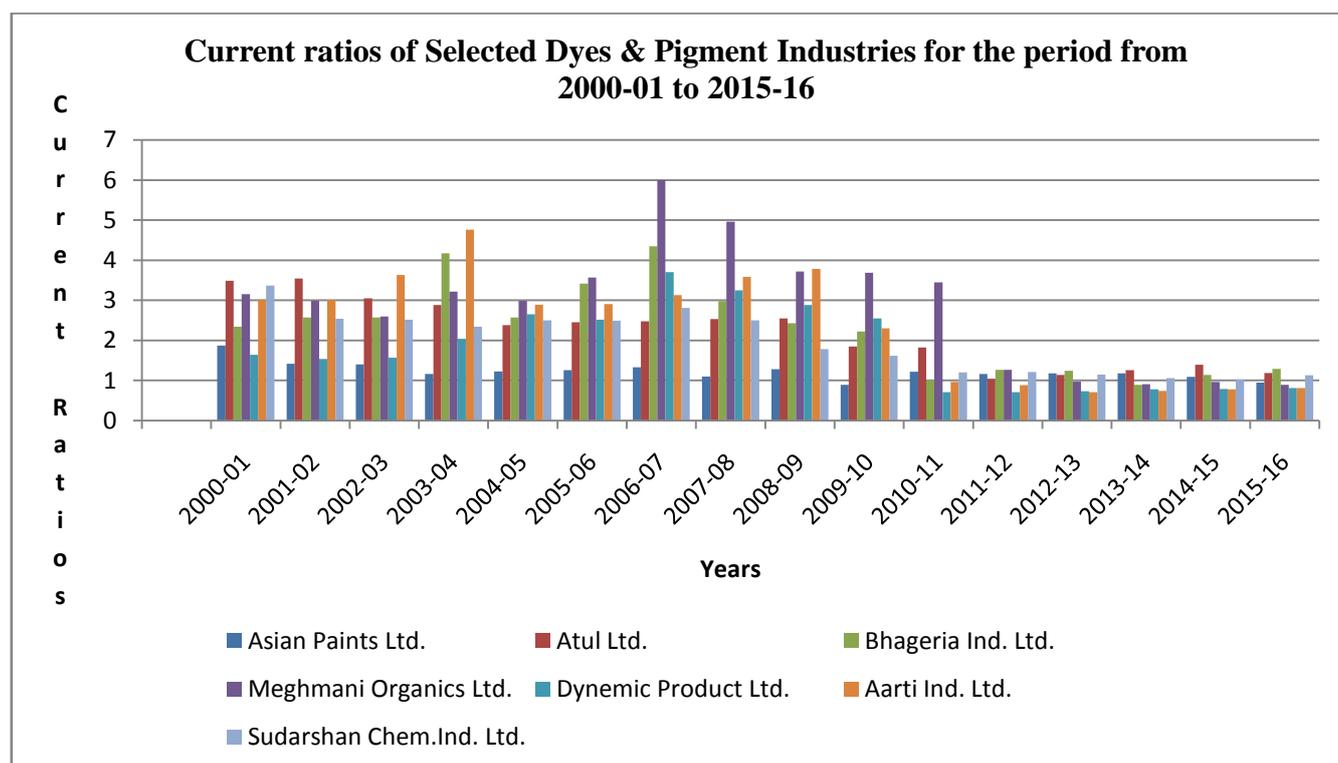


Figure 1:

Table 1 shows current ratio of selected dyes and pigment industrial units in Gujarat during the year from 2000-01 to 2015-16. Comparatively, it is notable that the highest current ratio was 6:1 in Meghmani Organics Limited in the year 2006-07. The lowest current ratio was 0.71:1 in Dynamic Products Limited in the year 2010-11 and 2012-13 and in Aarti Industries limited in 2012-13. The highest average current ratio was 2.83:1 in Meghmani Organics Limited. The lowest average current ratio was 1.23:1 in Asian Paints Limited during the study period. As per average current ratio, liquidity of Meghmani Organics Limited is better than other selected units whereas liquidity of Asian Paints Limited is weaker than other selected units.

The highest current ratio index was 225.61 in Dynamic Product Limited in the year 2006-07. The lowest current ratio index was 23.51 in Aarti Industries Limited in the year 2012-13. The highest average current ratio index was 110.02 in

Dynamic Product Limited. The lowest average current ratio index was 57.96 in Sudarshan Chemical Industries Limited.

Normally, a current ratio of 2:1 is considered ideal and satisfactory, though this not applicable to all the cases. The current ratio of the selected dyes and pigment industrial units are quite satisfactory because most of the current ratios are higher than the ideal current ratio except Meghmani Organics Limited, Dynamic Product Limited and Aarti Industries Limited. The selected companies are providing higher protection for its current creditors. Very high current ratio is found in Meghmani Organics Limited and Aarti Industries Limited. It indicates idleness of funds which is not a good sign of efficient financial management. The current ratio of Asian Paints Limited and Dynamic Product Limited are below the ideal current ratio. But, this is not a signal of liquidity problem but this company had applied rigid or strict liquidity policy.

Table 2: Quick Ratio of Selected Dyes and Pigment Industrial Units during the Period from 2000-01 to 2015-16

Year	Asian Paints Ltd.		Atul Ltd.		Bhageria Ind. Limited		Meghmani Organics Ltd.		Dynamic Products Limited		Aarti Industries Ltd.		Sudarshan Chemical Ind. Ltd.	
	Quick Ratio	Index	Quick Ratio	Index	Quick Ratio	Index	Quick Ratio	Index	Quick Ratio	Index	Quick Ratio	Index	Quick Ratio	Index
2000-01	1.06	100.00	2.28	100.00	2.07	100.00	2.66	100.00	1.12	100.00	2.34	100.00	1.83	100.00
2001-02	0.92	86.79	2.22	97.37	2.17	104.83	2.55	95.86	1.16	103.57	2.25	96.15	1.28	69.95
2002-03	0.73	68.87	1.78	78.07	2.19	105.80	2.13	80.08	0.92	82.14	2.55	108.97	1.21	66.12
2003-04	0.63	59.43	1.81	79.39	3.45	166.67	2.64	99.25	1.48	132.14	3.38	144.44	1.38	75.41
2004-05	0.55	51.89	1.48	64.91	1.9	91.79	2.4	90.23	1.90	169.64	2.07	88.46	1.33	72.68
2005-06	0.62	58.49	1.44	63.16	2.85	137.68	2.75	103.38	1.78	158.93	2.09	89.32	1.47	80.33
2006-07	0.66	62.26	1.69	74.12	3.89	187.92	4.37	164.29	2.68	239.29	2.10	89.74	1.66	90.71
2007-08	0.53	50.00	1.69	74.12	2.67	128.99	4.01	150.75	2.12	189.29	2.34	100.00	1.48	80.87
2008-09	0.71	66.98	1.65	72.37	2.20	106.28	2.98	112.03	1.92	171.43	2.61	111.54	1.27	69.40
2009-10	0.39	36.79	1.23	53.95	1.96	94.69	2.93	110.15	1.88	167.86	1.49	63.68	1.23	67.21
2010-11	0.63	59.43	1.18	51.75	3.13	151.21	2.76	103.76	1.52	135.71	1.68	71.79	1.45	79.23
2011-12	0.67	63.21	1.21	53.07	4.56	220.29	2.49	93.61	1.54	137.50	1.56	66.67	1.37	74.86
2012-13	0.61	57.55	1.24	54.39	1.73	83.57	2.11	79.32	1.56	139.29	1.46	62.39	1.40	76.50
2013-14	0.64	60.38	1.29	56.58	2.49	120.29	1.52	57.14	1.61	143.75	1.21	51.71	1.07	58.47
2014-15	0.49	46.23	1.30	57.02	1.48	71.50	1.69	63.53	2.15	191.96	1.29	55.13	1.08	59.02
2015-16	0.47	44.34	1.21	53.07	1.21	58.45	1.95	73.31	1.68	150.00	1.32	56.41	1.25	68.31
Average	0.64	60.79	1.54	67.71	2.50	120.62	2.62	98.54	1.69	150.78	1.98	84.78	1.36	74.32

Source: Computed From Annual Reports of Selected Dyes and Pigment Industrial Units & Web site.

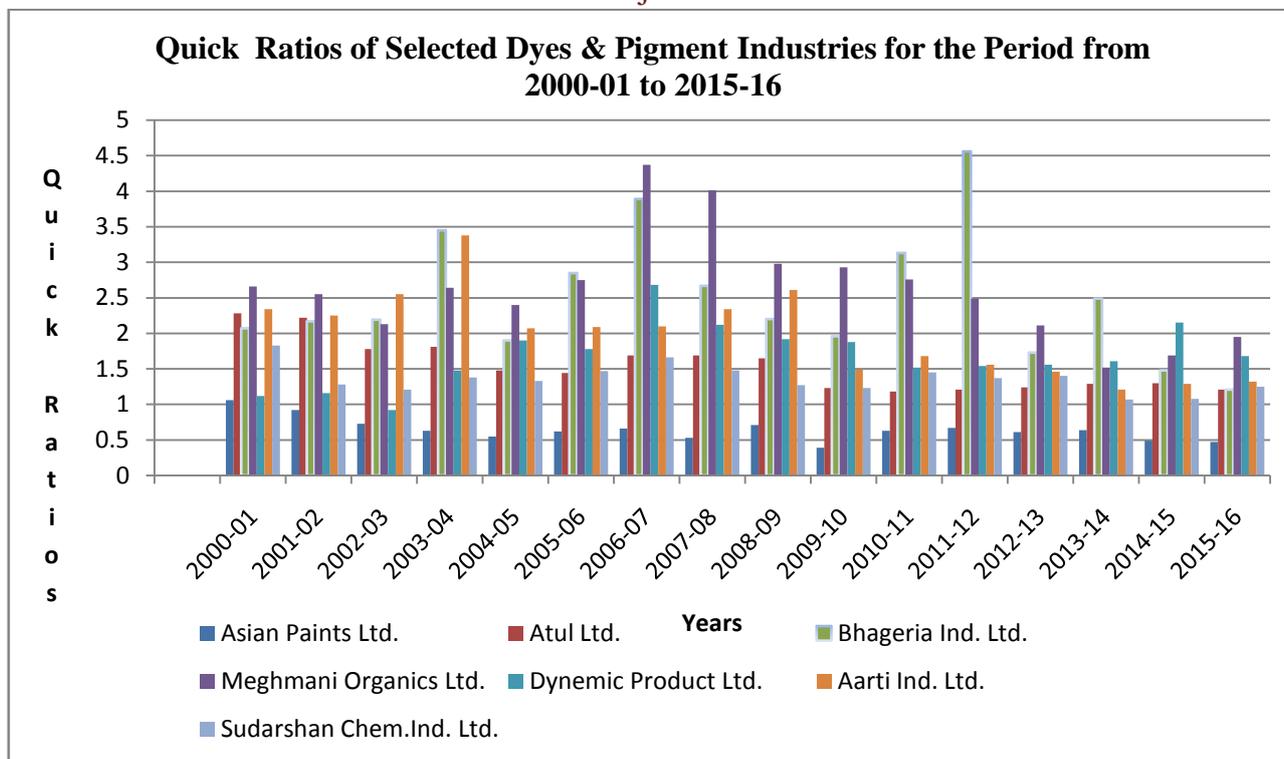


Figure 2:

Table 2 shows quick ratio of selected dyes and pigment industrial units in Gujarat during the year from 2000-01 to 2015-16. It indicates the followings. The comparative study indicates that the highest quick ratio was 4.56:1 in Bhageria Industries Limited in the year 2011-12 whereas lowest 0.39:1 in Asian Paints Limited in the year 2009-10. The highest average quick ratio was 2.62:1 in Meghmani Organics Limited and lowest 0.64:1 in Asian Paints Limited. The quick ratio of selected dyes and pigment industrial units shows fluctuating trend.

The highest quick ratio index was 239.29 in Dynamic Product Limited in the year 2006-07. The lowest quick ratio index was 36.79 in Asian Paints Limited in the year 2009-10. The highest average quick ratio index was 150.78 in Dynamic Product Limited. The lowest average quick ratio index was 60.79 in Asian Paints Limited.

Generally, a quick ratio of 1:1 is considered ideal and satisfactory, though this not applicable to all the cases. The quick ratio performance of selected dyes and pigment industrial units are quite satisfactory because most of the quick ratios are higher than the ideal current ratio except Asian Paints Limited. Very high quick ratio found in Bhageria Ind. Limited, Meghmani Organics Limited and Aarti Industries Limited. It indicates idleness of investment in quick assets which is not a good sign of efficient financial management. The quick ratio performance of Asian Paints Limited is poor than other selected industrial units. But, this is part of rigid or strict liquidity policy.

A. Major Findings

Following findings are incorporated after analyzing data with appropriate tools, inferences and observations.

1. The overall trend of current assets was in mixed trend during the study period. It was also observed that the overall trend of current ratio was in fluctuating during the study period. The current ratio performance of the seven selected dyes and pigment industrial units are

quite satisfactory because most of the current ratio is higher than the ideal current ratio.

2. The quick ratio of selected dyes and pigment industrial units shows fluctuating trend. The quick ratio of 1 time or 1:1 is considered satisfactory as per international standards. The quick ratio of Bhageria Ind. Limited (Average 2.50), Meghmani Organics Limited (Average 2.62), and Aarti Industries Limited (Average 1.98), were very high. It shows that excessive investment made in quick assets in above said companies. The above said companies have not made recovery earlier from debtors, therefore, this was resulted in additional investment in debtors.

IX. SUGGESTIONS

The following suggestions are given to improve the liquidity of selected dyes and pigment industrial units and also to make efficient for achieving the goals which they have been set up.

1. It was observed by the researcher that excessive investment found in quick assets in Bhageria Dye-chem. Limited, Meghmani Organics Limited and Aarti Industries Limited. The researcher, therefore, strongly suggests that these companies should try to reduce the investment in liquid current assets and early recovery from debtors to reduce the investment in debtors.
2. Dyes and pigment industrial units should make maximum utilization of its resources. It will decrease the cost of production cost and directly turn in to increase in profit.
3. The top management should implement new innovative features in products, modernization and new techniques of financial management for better performance in future.

CONCLUSION

After study, it can be concluded that liquidity is one of the important segments of profit making. They should implement comprehensive strategies to reduce employee's cost, manufacturing, administrative and overhead expenses. Employees should be given different type of training for

increasing production and quality. The industry in the dyes and pigment field should accept healthy competition with each other and undertake proper time management regarding different marketing matters. It has been strongly suggested that the top management should review periodically the liquidity of the company and take necessary steps before the situation gets out of control. Management should develop managerial, conceptual and technical skills and implement them in the industry. In the current economic and financial crises, company should prepare themselves for such adverse condition. The companies should review its liquidity policy and constant improvement of their productivity and competitiveness in a fast and changing global economy to increase profit. The industry in the dyes and pigment field should accept healthy competition with each other and undertake proper time management of working capital.

References

- [1] Agrawal, A. N., Indian Economy, Problems of Development and Planning, Vishwa Prakashan, New Delhi, 2000.
- [2] Arora, M. N., Cost & Management Accounting, Himalaya Publishing House, New Delhi, 2004.
- [3] Khan, M. Y. and Jain, P. K., Financial Management Text and Problems, Tata McGraw- Hill Publishing Company Limited, New Delhi.
- [4] Kothari, C. R., Research Methodology, New Age International Publication, 2006.
- [5] Made, Govda J., Management Accounting, First Edition, Himalaya Publishing House, New Delhi.
- [6] Nirmal, Bhalerao & Desai, S. S. M., Industrial Economy of India, Himalaya Publishing House, Delhi.
- [7] Pandey, I. M., Financial Management, Ninth Edition, Vikas Publishing House Pvt. Ltd. Delhi.
- [8] Phophalia, A. K., Sharma, Sarita & Basotia, G. R., Financial Management – Function, Planning & Policy, Kanishka Publishers Distributors, New Delhi, 2008.
- [9] Prasanna Chandra, Financial Management Theory & Practice, Tata McGraw-Hill Publishing Company Limited, New Delhi.
- [10] Shah, Hetal Arunbhai, Chemistry Darpan, Part II, Kumar Publication Centre, Navrangpura, Ahmedabad, 2006.
- [11] Sharma, B. K., Industrial Chemistry, Goel Publishing House, Meerut, 2004.
- [12] www.aartigroup.com
- [13] www.asianpaints.com
- [14] www.atul.com
- [15] www.bhageriagroup.com
- [16] www.dynemic.com
- [17] www.gidc.org
- [18] www.gidonline.com/detail search result
- [19] www.indiainfo.com/
- [20] www.meghmani.com
- [21] www.sudarshan.com