

Working Capital Management Practices of Selected Sugar Companies

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Abstract: Sugar industry is the second largest industry of India. The purpose of present study is to evaluate the working capital management practices of three listed sugar companies of India which included Sakthi Sugars Limited, Thiru Arooran Sugars Limited and The Andhra Sugars Limited. Ratio analysis has been used in this research to evaluate components of working capital management and bar-chart is also used in research to comparison easy. The research period is for five years covering from year 2012-13 to year 2016-17. The results show that 1. The Andhra Sugars Limited maintain high current ratio in compare of remaining two companies. 2. Thiru Arooran Sugars Limited practices conservative policy for trade receivables in compare of other two companies. 3. Thiru Arooran Sugars Limited take too much time to convert its' inventory into sales and Sakthi Sugars Limited take so less time for same purpose. 4. Thiru Arooran Sugars Limited enjoy more credit facilities from their suppliers in compare of remaining two companies. 5. Sakthi Sugars limited have negative cash conversion cycle while Andhra Sugars Limited have long cash conversion cycle. 6. Sakthi Sugars Limited maintain more trade receivables in their current assets in compare of other two companies. 7. The Andhra Sugars limited invest in inventory more than half of their current assets in current assets.

Key Words: Sugar Industry, Working Capital Management, Sakthi Sugars Limited, Thiru Arooran Sugars Limited, The Andhra Sugars Limited

INTRODUCTION

Working Capital is the difference between company's current assets and current liabilities. Current assets include inventories, trade receivables, cash and cash equivalents, short term loans and short-term advances etc. Current liabilities include trade payables and short-term borrowings etc. Working capital shows the company's operating efficiency and short-term financial health. It is so important for any business to manage working capital because business uses working capital in its daily operations. Working capital management indicates that how a business manages its money for daily operations and immediate debt obligation. (7)

LITERATURE REVIEW

Dr. Ashvin R. Dave and Ms. Payal Thakar compare working capital management practices of Indian Tobacco Company Ltd and Dabur India Ltd in their research paper titled "A Comparative Study on Working Capital Management Practices of Selected Companies in FMCG Industry". For this purpose, they consider current ratio, creditors ratio, debt to current assets ratio, inventory to current assets ratio and cash to current assets ratio. They analyze both companies five years data covering from year 2012 to 2016. They conclude that Indian Tobacco Company follows conservative policy for debtors and liberal policy for holding inventories. Dabur India Ltd possess liberal policy for both debtors and for holding inventories. They also reported that Dabur India Ltd enjoys more credit form their suppliers in compare of Indian Tobacco Company Ltd and both companies are comfortable position for their working capital requirement on basis of cash holding.

Yuvaraj D and Perumal R studied the working capital management of Sakthi Sugars Limited in their research titled "A Study on Working Capital Management with Special Reference to Sakthi Sugars Erode". They analyzed five years data of Sakthi Sugar Limited which include data of from year 2007 to year 2012. They analyzed data using ratio analysis. Their research conclude that Sakthi Sugars Limited current ratio is below the satisfactory level and quick ratio is up to the satisfactory level. The debtors turnover ratio is up to satisfactory level and there is fluctuation in inventory turnover ratio. Sakthi Sugars Limited possess a positive working capital which show good position of company to pay its' short-term obligations. By examine the cash conversion of company, they conclude that Sakthi Sugars Limited have an inefficient cash management and company have a poor working capital management.

OBJECTIVES

1. To evaluate working capital management practices of Sakthi Sugars Limited.
2. To evaluate working capital management practices of Thiru Arooran Sugars Limited.
3. To evaluate working capital management practices of The Andhra Sugars Limited.
4. To compare working capital management practices of these three companies.

RESEARCH METHODOLOGY

The purpose of present study is to evaluate working capital management practices of three listed sugar companies. These three companies are 1. Sakthi Sugars Limited 2. Thiru Arooran Sugars Limited and 3. The Andhra Sugars Limited. To fulfil the purpose of study Ratio Analysis has been used in this research and all data collected from companies' annual reports which are

available on companies' website. Current ratio, working capital turnover ratio, numbers of days account receivables, days of inventory held, numbers of days account payable, cash conversion cycle, trade receivables to current assets ratio and inventory to current assets ratio has been used in this research to evaluate companies working capital management practices. All three companies' five-year data is used in this research covering form year 2012-13 to 2016-17. Bar chart is used in this research to compare ratios of companies. Calculation formulas to calculate ratios are shown in Table:1.

Table:1 Formulas of ratio calculations

Ratio	Formula
Current Ratio	Current Assets / Current Liabilities
Working Capital Turnover Ratio	Net Sales / Working Capital
Numbers of Days Account Receivables (DAR)	Trade Receivables / Net Sales \times 365
Days of Inventory Held (DIH)	Inventory / Cost of Material Consumed \times 365
Numbers of Days Account Payable (DAP)	Trade Payables / Purchase \times 365
Cash Conversion Cycle (CCC)	DAR + DIH – DAP
Trade Receivables to Current Assets Ratio	Trade Receivables / Current Assets
Inventory to Current Assets Ratio	Inventory / Current Assets

PROFILES OF SELECTED COMPANIES

India is the largest sugar consumer and second largest producer of sugar in the world according to USDA Foreign Agricultural Service. Sugar industry is also second largest agro-processing industry of India after the Textile Industry.

Sakthi Sugars Limited

Sakthi Sugars Limited is part of Sakthi Group. Sakthi Sugars Limited was established in the year 1961 and commenced its' production of sugar on commercial basis in the year 1964 at Sakthinaragar Sugar plant. At present, it has a four sugar plants in which three plants situated in Tamil Nadu located at Sakthinaragar, Sivaganga and Modakurichi and one plant situated in Orissa at Dhenkanal. Total capacity of these plants is 19,000 tonnes of cane crush per day. Sakthi Sugars Limited start manufacturing of Industrial Alcohol at Sakthinaragar and Dhenkanal in year 1972 and year 1996 respectively. Sakthi Sugars Limited also manufactured Soya Products. Sakthi Sugars Limited also installed three co-generation power plants at Tamil Nadu with combined capacity of 92 Mega Watt. During the year 2016-17, 1.76 lakh MT of sugar and 290.19 lakh litres industrial alcohol was produced by the company. 21,497 tonnes soya bean was crushed by the company in the same year. 2715.09 lakh units power generated in three co-generated power plants of the company. (3)

Thiru Arooran Sugars Limited

Thiru Arooran Sugars Limited was founded by late Mr. V. S. Tyagaraja in 1954 as a Public Limited Company at Vadapathimangalam. Company commenced its' production on commercial basis in year 1956 with the crushing capacity of 1200 tonnes of cane per day (TCD). Thiru Arooran Sugars Limited expanded its' capacity to 2000 TCD in the year 1974. In 1990, company set up new mill at Tirumandangudi, Tamil Nadu with crushing capacity of 2500 TCD. Company set up a Distillery with capacity of 60 kilo litres per day at Tirumandankudi to process the molasses in the year 1993. Vadapathimangalam mill was relocated at Kollumangudi in the year 1997 and crushing capacity expanded from 2000 TCD to 2500 TCD. Tirumandangudi mill capacity was expanded in the year 1998 from 2500 TCD to 5000 TCD. Kollumangudi mill relocated at A. Chittur in the year 2003 and capacity of same plant was expanded from 2500 TCD to 3500 TCD in the year 2008. 6.00 lakh MT sugarcane crushed by both the factories during the year 2016-17 and during the same year company produce 9719 kilo litre alcohol. (4)

The Andhra Sugars Limited

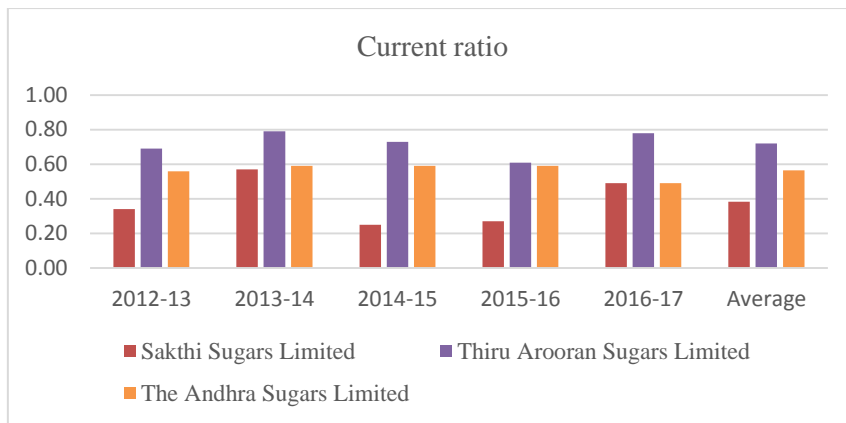
The Andhra Sugars Limited was founded in the year 1947. This company manufacture and sale sugar, organic and inorganic chemicals, edible & non-edible vegetable oils and non-conventional power. Company have plants at Tanuku (sugar plant), Kovvur (caustic potash plant), Guntur, Taduvi (sugar plant), Saggonda (caustic soda plant) and Bhimadole (sugar plant) in Andhra Pradesh. Non-conventional wind power is generated by company at Veerannam and Kundadam in Tamil Nadu and at Ramagiri in Andhra Pradesh. The capacity of Tanuku plant and Taduvai plant are 5000 TCD and 2500 TCD respectively. Tanuka plant also produced molasses at capacity of 30 kilo litre per day. Sales volume of company grew by 65% in financial year 2017 over financial year 2016. (5,6)

DATA ANALYSIS AND FINDINGS

Current Ratio

Table:2 Comparative current ratio analysis.

Year	Sakthi Sugars Limited	Thiru Arooran Sugars Limited	The Andhra Sugars Limited
2012-13	0.35	0.81	1.78
2013-14	0.22	0.78	1.78
2014-15	0.34	0.57	1.70
2015-16	0.42	0.73	1.98
2016-17	0.30	0.71	2.30
Average	0.33	0.72	1.91



1.31 is the standard current ratio for agriculture-based industry (1). Table:2 shows current ratios of selected sugar companies during year 2012-13 to 2016-17. When average current ratio for these companies are compare with standard current ratio, it found that only The Andhra Sugar Limited possess more current ratio more than standard current ratio. Other two sugar companies have low current ratio than standard current ratio which indicates that these two companies are maintain more current liabilities in compare of their currant assets. Table also indicates that The Andhra Sugars Limited have sound position to pay its' current liabilities from its' current assets in compare of remaining two companies.

Working Capital Turnover Ratio

Table:3 Comparative working capital turnover ratio analysis.

Year	Sakthi Sugars Limited	Thiru Arooran Sugars Limited	The Andhra Sugars Limited
2012-13	-2.25	-5.23	3.91
2013-14	-0.91	-2.20	2.95
2014-15	-1.10	-1.54	3.51
2015-16	-1.54	-2.91	3.75
2016-17	-1.81	-2.31	3.38
Average	-1.52	-2.84	3.50

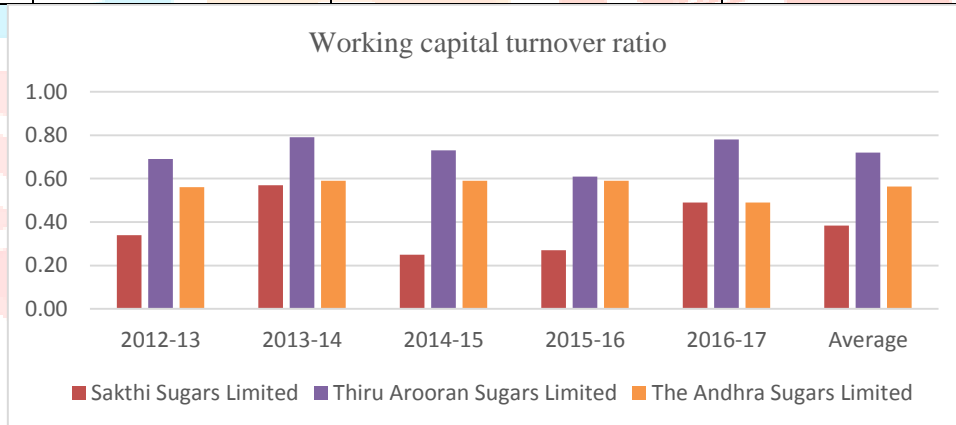


Table:3 shows Working Capital Turnover Ratio of three sugar companies. Sakthi Sugars Limited and Thiru Arooran Sugars Limited possess negative working capital turnover ratio and The Andhra Sugars Limited possess positive value for same ratio. Working capital turnover ratio cannot be compared across companies when company possess a negative working capital turnover ratio (2). So, here it's meaningless to compare position of companies based on this ratio because here two companies have negative ratio.

Numbers of Days Account Receivables

Table:4 Comparative analysis of numbers of days account receivables.

Year	Sakthi Sugars Limited	Thiru Arooran Sugars Limited	The Andhra Sugars Limited
2012-13	34.02	21.53	37.31
2013-14	23.31	21.92	42.38
2014-15	56.65	11.17	42.43
2015-16	52.91	22.74	35.77
2016-17	8.44	12.36	35.26
Average	35.07	17.95	38.63

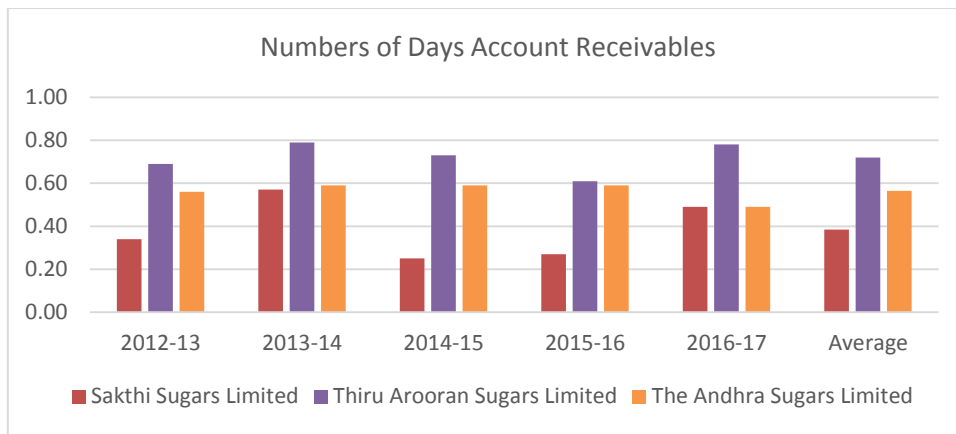


Table:4 shows that how many days company take to collect amount for their credit sales from their debtors. During the research period Sakthi Sugars Limited averagely gave 35 days credit to their customers, Thiru Arooran Sugars Limited averagely gave 18 days credit and The Andhra Sugars Limited averagely gave 39 days credit to their customers. Thiru Arooran Sugars Limited gave less credit time to their customers to pay in compare of remaining two companies. The Andhra Sugars Limited is more liberate toward their customers for this purpose.

Days of Inventory Held

Table:5 Comparative analysis of days of inventory held

Year	Sakthi Sugars Limited	Thiru Arooran Sugars Limited	The Andhra Sugars Limited
2012-13	40.88	245.11	335.44
2013-14	83.00	580.03	424.55
2014-15	79.75	471.55	398.28
2015-16	72.55	333.69	336.51
2016-17	64.23	487.21	367.57
Average	68.08	423.52	372.47

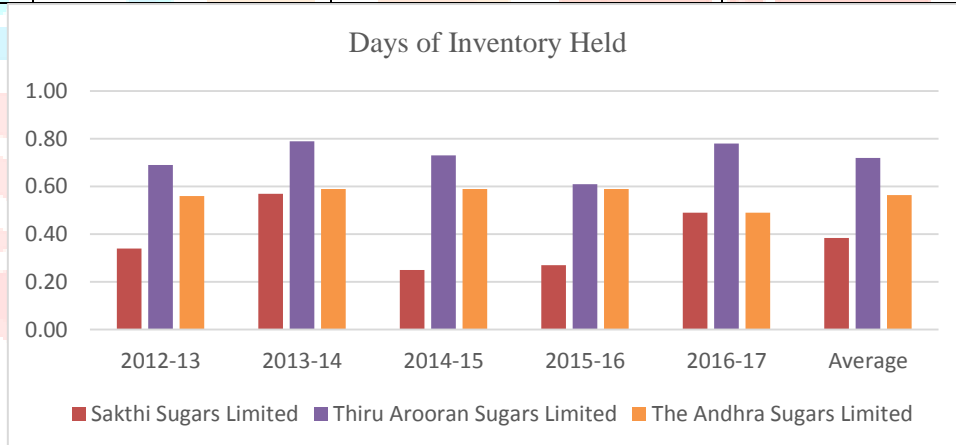


Table:5 indicates that how many days company takes to convert its' inventory into sales. Sakthi Sugars Limited averagely takes only 68 days to convert inventory into cash during the research period while Thiru Arooran Suragars Limited takes 423 to 424 days for the same purpose. The Andhra Sugars Limited converts its' inventory into sales into 372 days during research period. When these three companies compare on basis of this ratio, it's found that Thiru Arooran Sugars limited highest time and Sakthi Sugars Limited take so less time for this purpose.

Numbers of Days Account Payable

Table:6 Comparative analysis of numbers of days account payable

Year	Sakthi Sugars Limited	Thiru Arooran Sugars Limited	The Andhra Sugars Limited
2012-13	117.60	139.76	11.36
2013-14	175.42	279.25	13.67
2014-15	197.65	355.56	19.54
2015-16	196.28	396.45	17.99
2016-17	145.40	336.34	57.43
Average	166.47	301.47	24.00

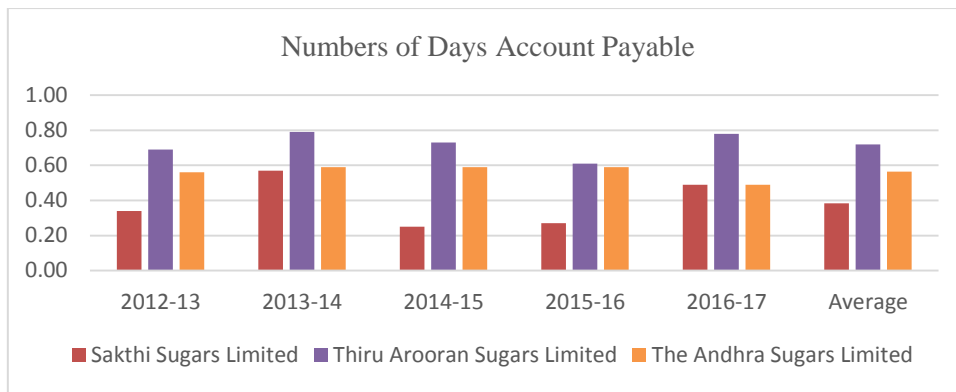


Table:6 shows that how many days company takes to pay for their credit purchase. The Andhra Sugars limited pay their trade receivables only in 24 days which means The Andhra Sugars Limited does not enjoy too much credit facilities from their suppliers. Thiru Arooran Sugars Limited averagely takes 301 days which is nearly a 10-month time which means Thiru Arooran Sugars Limited enjoy full credit facilities but take too much time for this purpose is not good for companies' long-term reputation. Sakthi Sugars Limited averagely takes 166 days to pay their suppliers. The Andhra Sugars Limited takes too much less time to pay their trade receivables in compare of other two companies.

Cash Conversion Cycle

Table:7 Comparative analysis of cash conversion cycle

Year	Sakthi Sugars Limited	Thiru Arooran Sugars Limited	The Andhra Sugars Limited
2012-13	-42.70	126.88	361.39
2013-14	-69.11	322.70	453.26
2014-15	-61.24	127.17	421.17
2015-16	-70.82	-40.02	354.30
2016-17	-72.73	163.23	345.40
Average	-63.32	139.99	387.10

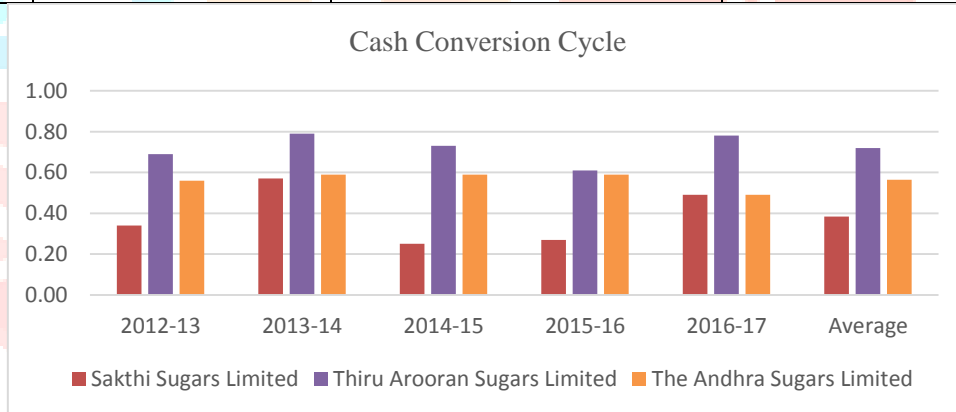


Table:7 shows that how many days company takes to convert cash on hand into inventory and payables, through sales and trade receivables, and then back into cash. Sakthi Sugars Limited average cash conversion cycle (-63.32 days) is negative which is good sign for company which also shows that company generating revenue from customers before company has pay its' suppliers for purchase. The Andhra Sugars limited averagely takes 387 days for this purpose which more than one year and it is not good for company to take that much of time to convert cash on hand into inventory and payables, through sales and trade receivables, and then back into cash. Thiru Arooran Sugars Limited takes averagely 140 days for the same purpose. Sakthi Sugars Limited have a advantage on basis of this ration in compare of Thiru Arooran Sugars Limited and The Andhra Sugars Limited.

Trade Receivables to Current Assets Ratio

Table:8 Comparative analysis of trade receivables to current assets ratio

Year	Sakthi Sugars Limited	Thiru Arooran Sugars Limited	The Andhra Sugars Limited
2012-13	0.38	0.07	0.17
2013-14	0.20	0.04	0.15
2014-15	0.34	0.03	0.17
2015-16	0.31	0.07	0.18
2016-17	0.10	0.03	0.18
Average	0.27	0.05	0.17

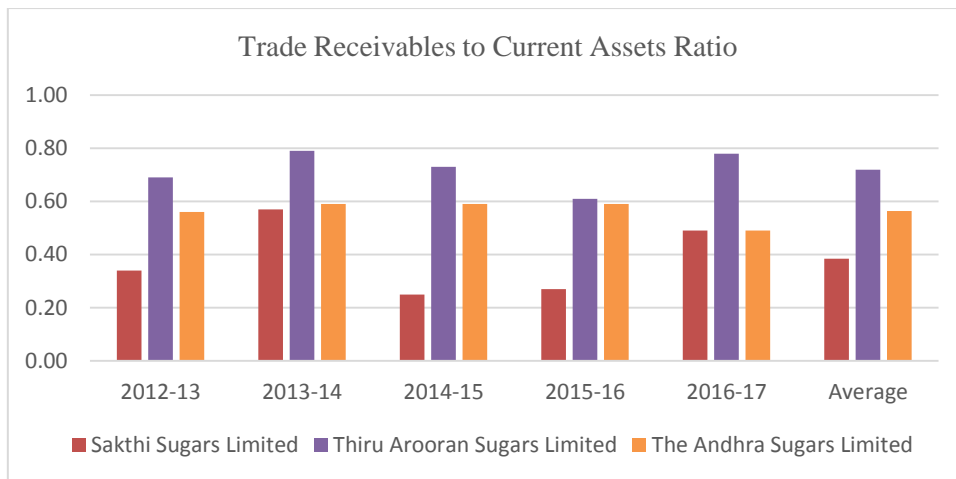


Table:8 shows that how much portion of current assets is cover by trade receivables. Sakthi Sugars Limited averagely maintain 27% of their current assets in trade receivables while Thiru Arooran Sugars Limited and The Andhra Sugars Limited averagely maintain 5% and 17% of their current assets in trade receivables. Thiru Arooran Sugars Limited hold less amount in trade receivables in compare of other two companies.

Inventory to Current Assets Ratio

Table:9 Comparative analysis of inventory to current assets ratio

Year	Sakthi Sugars Limited	Thiru Arooran Sugars Limited	The Andhra Sugars Limited
2012-13	0.34	0.69	0.56
2013-14	0.57	0.79	0.59
2014-15	0.25	0.73	0.59
2015-16	0.27	0.61	0.59
2016-17	0.49	0.78	0.49
Average	0.39	0.72	0.56

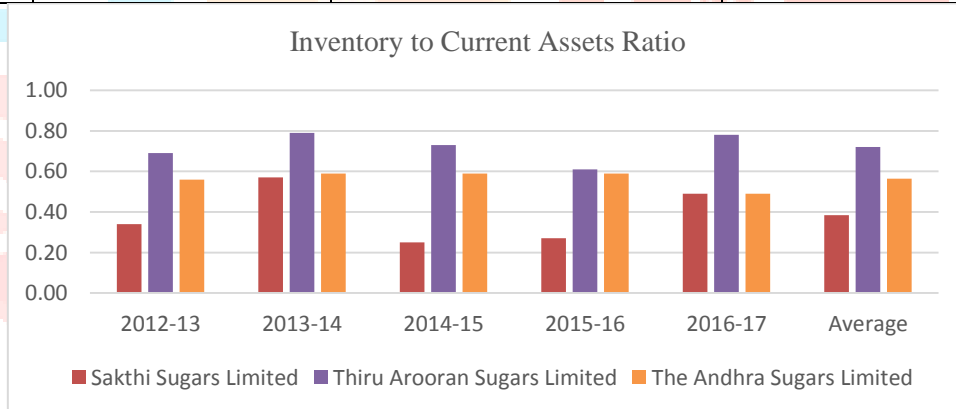


Table:9 shows that how much portion of current assets is hold by inventory. Thiru Arooran Sugars Limited maintain high inventory in their current assets which is averagely 72% for research period. Sakthi Sugars Limited maintain 39% of their current assets in inventory and The Andhra Sugar Limited maintain 56% of current assets in inventory.

CONCLUSION

Current Ratio: The Andhra Sugars Limited maintain averagely 1.91 current ratio during research period which high in compare of Sakthi Sugars Limited and Thiru Arooran Sugars Limited. Sakthi Sugars Limited averagely maintain current ratio at 0.33 level while Thiru Arooran Sugars Limited maintain 0.72 current ratio.

Working Capital Turnover Ratio: Sakthi Sugars Limited and Thiru Arooran Sugars Limited possess negative working capital turnover ratio so it is not meaningful to compare companies' performance on basis of this ratio.

Numbers of Days Account Receivables: Thiru Arooran Sugars limited follows conservative policy for their customers while The Andhra Sugars Limited possess liberal policy for their customers.

Days of Inventory Held: Thiru Arooran Sugar limited take too much time to convert its' inventory in compare of Sakthi Sugars Limited and The Andhra Sugars Limited. Sakthi Sugars Limited less time for the same purpose in compare of remaining two companies.

Numbers of Days Account Payable: Thiru Arooran Sugars Limited enjoy more credit facilities from their suppliers and creditors which 301 days while The Andhra sugars limited take less time for pay their credit purchases which is 24 days.

Cash Conversion Cycle: Sakthi Sugars Limited have an advantage in point of view cash conversion cycle in compare of Thiru Arooran Sugars Limited and The Andhra Sugars Limited because it has a negative cash conversion cycle.

Trade Receivables to Current Assets Ratio: Sakthi Sugars Limited maintain more of their current assets in trade receivables in compare of Thiru Arooran Sugars Limited and The Andhra Sugars Limited.

Inventory to Current Assets Ratio: Thiru Arooran Sugars limited invest more than 70% current assets in inventory which is high in compare of Sakthi Sugars Limited and The Andhra Sugars Limited.

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