

# **Chapter-IV**

## **Data Analysis and Interpretation**

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## **CHAPTER-IV**

### **DATA ANALYSIS AND INTERPRETATION**

#### **4.1 INTRODUCTION:**

Assessment of financial health of co-operative sugar factories is very useful for the evaluating the performance of the sugar factories and make improvement in future on the basis of the past performance. In this chapter the data analysis is made about the topic of "Assessment of Financial Health of co-operative. Sugar factories: A comparative study of Hutatma Kisan Ahir Sahakari Sakhar Karkhana Ltd. Walwa and Kranti Sahakari Sakhar Karkhana Ltd. Kundal." The data analysis is down from year 2005-06 to 2011-12 from year 2005-06 to year 2011-12. The researcher used the financial data which is collected from secondary sources of data collection. The analysis of co-operative sugar factories was made to fulfill the specific objectives of the study which are as follows:

- a) To make a comparative study of selected co-operative sugar factories.
- b) To study the growth of the selected co-operative sugar factories.
- c) To identify the key factors affecting the profitability of co-operative sugar factories.
- d) To examine the efficiency of the selected sugar factories in relation to their turnover.
- e) To test the liquidity position of sugar factories.
- f) To assess long term financial stability of selected sugar factories.

The financial health of selected co-operative sugar factories was assessed by using different parameters, such as solvency position, liquidity position, test the profitability and test the operational efficiency and the growth of the sugar factories. The researcher used the ratio analysis, comparative statement analysis's the simple growth rate and graphical presentational techniques for the data analysis.

The analysis and interpretation of data have been divided into four sections. In the first section, growth and financial performance of HKASSK Ltd. Has been analyzed whereas in second section the similar analysis has been done for KSSK Ltd. Third section deals with the comparative analysis of

performance and growth of HKASSK Ltd. and KSSK Ltd. The hypotheses have been tested in fourth section of this chapter.

## 4.2 ANALYSIS OF HUTATMA KISAN AHIR SAHAKARI SAKHAR KARKHANA LTD. WALWA-

### 4.2.1 Liquidity Ratios:

The liquidity ratio measures the liquidity of the firm and its ability to meet short term obligation. This liquidity ratios shows the firms position in short term payments capacity. The corporate liquidity has two type quantitative and qualitative concepts. It is the ability to meet all present and potential demands of cash. The different liquidity ratios were given as below.

#### 4.2.1.1 Current Ratio:

The current ratio shows the short-term solvency or liquidity position of the firm. This ratio shows that how much current assets are available to paid current liabilities of the firm. The 2:1 current ratio is ideal ratio of liquidity.

**Table No.4.1**  
**Current Ratio of HKASSK Ltd.**

Year	Current assets	current Liabilities	Ratio
2005-06	954123909	465128304	2.05
2006-07	882559975	419188276	2.11
2007-08	951802109	460159314	2.07
2008-09	1599458345	657820268	2.43
2009-10	1516393114	800210901	1.89
2010-11	1793702381	794947370	2.26
2011-12	2308861431	968231839	2.38

(Source- Annual report of HKASSK Ltd. from year 2005-06 to 2011-12)

Table no.4.1 shows the total current assets, current liabilities and current ratio of HKASSK Ltd. from year 2005-06 to 2011-12. The current ratio was 2.05 in year 2005-06 and it was increased in year 2006-07 and reaches to 2.11. In year 2007-08 this ratio was become 2.07 and in year 2008-09. It was increased and become 2.43 but in year 2009-10 the ratio was decreased and goes down to 1.89. In last two years the current ratio were again increased as 2.26 and 2.38 in year 2010-11 and year 2011-12 respectively. The current ratio of HKASSK

Ltd. shows the higher liquidity position of the factory because the ratio was always more than standard current ratio which is 2:1.

#### **4.2.1.2 Quick Ratio:**

The quick ratio shows the company's ability to meet its current obligations. This is ratio of quick assets and quick liabilities. A quick ratio of 1:1 is the standard ratio of liquidity.

**Table No.4.2**  
**Quick Ratio of HKASSK Ltd.**

<b>Year</b>	<b>Quick Assets</b>	<b>Quick Liabilities</b>	<b>Ratio</b>
2005-06	149859792	465128304	0.32
2006-07	109741580	419188276	0.26
2007-08	204226893	460159314	0.44
2008-09	294489305	657820268	0.45
2009-10	138591571	800210901	0.17
2010-11	333806916	794947370	0.42
2011-12	259441796	968231839	0.27

(Source- Annual report of HKASSK Ltd. from year 2005-06 to 2011-12)

Table no. 4.2 denotes the quick ratio of HKASSK Ltd. from year 2005-06 to 2011-12. This ratio shows the relationship of quick assets and quick liabilities. In year 2005-06 the quick ratio was 0.32 and it was reduced in year 2006-07 and became 0.26. This ratio was increased in year 2007-08 and 2008-09 as 0.44 and 0.45 respectively but in year 2009-10 this ratio was gone down and became 0.17. In year 2010-11 the ratio was again increased and reached to 0.42 but in last year 2011-12 the ratio was reduced as 0.27. The standard quick ratio was 1:1 but the quick ratio of HKASSK Ltd. was very low than standard, the liquidity position of the factory was not good in short term. The quick ratio of factory was low because the current assets carry over large volume of stock of sugar.

#### **4.2.1.3 Cash ratio/Super Quick Ratio:**

It is the ratio of absolute liquid assets to quick liabilities. In absolute liquid assets included only cash and cash equivalent items. The standard cash ratio is 1:2.

**Table No.4.3**  
**Cash ratio/Super Quick Ratio of HKASSK Ltd.**

Year	Super Quick Assets	Current Liabilities	Ratio
2005-06	73436140	465128304	0.16
2006-07	22950487	419188276	0.05
2007-08	30924780	460159314	0.07
2008-09	104389060	657820268	0.16
2009-10	13957140	800210901	0.02
2010-11	57712179	794947370	0.07
2011-12	11261322	968231839	0.01

(Source- Annual report of HKASSK Ltd. from year 2005-06 to 2011-12)

Table no.4.3 expresses the cash ratio for the study period of HKASSK Ltd. the cash ratio is the ratio of super quick assets and current liabilities. In year 2005-06 the cash ratio were 0.16 but in year 2006-07 this ratio was reduced as 0.05 and in year 2007-08 ratio were 0.07. The cash ratio was again increased and reach to 0.16 in year 2008-09 and in year 2009-10 the ratio was very low as 0.02. In year 2010-11 the cash ratio was 0.07 and in year 2011-12 the ratio was goes down up to 0.01. The cash ratio of HKASSK Ltd. shows that the factory has very low cash and cash at bank. This ratio shows the poor liquidity position of the factory.

#### 4.2.2 Overall Liquidity Position of HKASSK Ltd.

**Figure 4.1**



(Source- Annual report of HKASSK Ltd. from year 2005-06 to 2011-12)

Figure 4.1 shows the liquidity position of HKASSK Ltd. from year 2005-06 to 2011-12. The current ratio of the factory is always higher than standard 2:1 which shows the good liquidity of the HKASSK Ltd. over the study period. The quick ratio of the sugar factory is very low because the sugar factory has more stock of sugar in current assets. The cash ratio was also at the lowest position in sugar factory. The quick ratio and cash ratio shows that in a very short period of time the liquidity position of HKASSK Ltd. was not good and they should have concern about very short term liquidity position of the factory.

**Cause:** The liquidity ratios of HKASSK Ltd. were low than the standard ratios because the total production of sugar was not sold in that particular year and current assets carry over large volume of stock of sugar. The sugar factory also not able to make payment of sugar cane suppliers in time.

#### 4.2.3 Solvency Ratios:

Solvency means the ability of the firm to meet its long term payment and liability. If the firm can meet its all the long term payments in time the firm is called as solvency firm. These solvent ratios also show the stake of the shareholders and the stake of creditors. The different solvency ratios were as follows.

##### 4.2.3.1 Debt to equity Ratio:

This ratio shows the long term solvency position of the firm. This ratio indicates the relationship between loan funds and net worth of the firm. Generally 1:1 ratio is acceptable to show the good solvency position.

**Table No.4.4**  
**Debt to equity Ratio of HKASSK Ltd.**

Year	Long-Term Debts	Shareholders Fund	Ratio
2005-06	425814508	327806875	1.30
2006-07	654011489	347481583	1.88
2007-08	761679617	376998682	2.02
2008-09	1170243061	403748740	2.90
2009-10	1019796344	424898775	2.40
2010-11	1264321728	460567428	2.75
2011-12	1974461283	533243300	3.70

(Source- Annual report of HKASSK Ltd. from year 2005-06 to 2011-12)

Table no.4.4 given the data relating to the debt to equity ratio of the HKASSK Ltd. This ratio indicates the relationship between loan funds and equity capital of the factory. In year 2005-06 debt equity ratio were 1.30 and it was increased year after year and reach to 2.90 in year 2008-09. The ratio was reduced in year 2009-10 and become 2.40 but after that this ratio was again increased and goes up to 3.70 in year 2011-12. The debt-equity ratio of HKASSK Ltd. shows the higher portion of creditors in total capital provided to the sugar factory. This is not good for the safety of the creditors. The long term financial position of the factory was not satisfactory. The solvency position of the HKASSK Ltd. was poor and not good in future.

#### 4.2.3.2 Shareholders Equity Ratio:

The shareholders equity ratio shows the proportion of shareholders equity in total assets of firm. This ratio shows the long term solvency position of the firm. The higher shareholders equity ratio shows the better solvency position.

**Table No.4.5**  
**Shareholders Equity Ratio of HKASSK Ltd.**

Year	Shareholders' Equity	Total Assets	Ratio
2005-06	327806875	1408766555	0.23
2006-07	347481583	1547954267	0.22
2007-08	376998682	1727277886	0.22
2008-09	403748740	2357467776	0.17
2009-10	424898775	2254383721	0.19
2010-11	460567428	2533414037	0.18
2011-12	533243300	3053422390	0.17

(Source- Annual report of HKASSK Ltd. from year 2005-06 to 2011-12)

Table no.4.5 shows the information about the shareholders equity ratio of the HKASSK Ltd. from year 2005-06 to 2011-12. This ratio shows the proportion of shareholders fund in total assets of the factory. The shareholders equity ratio were 0.23 in year 2005-06 and in year 2006-07 the ratio was 0.22 and it stay constant in year 2007-08 as 0.22. The ratio was reduced in year 2008-09 and become 0.17 and in next year 2009-10 ratio was slightly increased as 0.19. In year 2010-11 and year 2011-12 ratio was reduced and become 0.17 in year 2011-12. The ratio of shareholders equity shows the shareholders contribution

in total assets is very low. This low ratio is shows the bad solvency position of the factory.

#### **4.2.3.3 Debt to Net worth Ratio:**

This ratio compares long term debt to net worth of the firm. This ratio is better than the debt to equity ratio. The equity capital is taken after deducting intangible assets. This ratio gives a factual idea of the assets available to meet the long term liabilities.

**Table No.4.6**  
**Debt to Net worth Ratio of HKASSK Ltd.**

<b>Year</b>	<b>Long-Term Debts</b>	<b>Shareholder Net Worth</b>	<b>Ratio</b>
2005-06	425814508	327580108	1.30
2006-07	654011489	242029859	2.70
2007-08	761679617	376768415	2.02
2008-09	1170243061	403748740	2.90
2009-10	1019796344	403339650	2.53
2010-11	1264321728	460567428	2.75
2011-12	1974461283	533243300	3.70

(Source- Annual report of HKASSK Ltd. from year 2005-06 to 2011-12)

The data relating to the debt to net worth ratio from year 2005-06 to 2011-12 is given in the table no.4.6. Debt to net worth ratio of HKASSK Ltd. in year 2005-06 is 1.30 and in year 2006-07 this ratio was increased and reaches to 2.70. This ratio was 2.02 in year in 2007-08 but it was again increased and become 2.90 in year 2008-09. From year 2009-10 this ratio was increased from 2.53 to 3.70 in year 2011-12. The higher debt to net worth ratio shows the higher claim of the creditors. This ratio of HKASSK Ltd. shows the weak solvency position of the factory.

#### **4.2.3.4 Capital Gearing Ratio:**

This ratio shows the proportion of equity capital and fixed interest bearing funds of the firm. The low gearing ratio indicates that the equity share capital is not paid adequate return because the profit is distributed as fixed charges in form of interest and dividend.



**Table No.4.7**  
**Capital Gearing Ratio of HKASSK Ltd.**

Year	Equity Shareholders Fund	Fixed Interest Bearing Funds	Ratio
2005-06	327806875	613159314	0.53
2006-07	347481583	781284406	0.44
2007-08	376998682	886895134	0.43
2008-09	403748740	1292049500	0.31
2009-10	424898775	1029274044	0.41
2010-11	460567428	1274699560	0.36
2011-12	533243300	1547741860	0.34

(Source- Annual report of HKASSK Ltd. from year 2005-06 to 2011-12)

Table no 4.7 shows the capital gear ng ratio of HKASSK Ltd.from year 2005-06 to 2011-12s. This is the ratio of equity shareholders fund to fixed interest bearing funds of the factory. In year 2005-06 the capital gearing ratio were 0.53 after that it was showing decreasing trend and become 0.31 in year 2008-09. The ratio was slightly increased in year 2009-10 and reaches to 0.41 but in year 2010-11 this ratio was again decreased and become 0.36 and in year 2011-12 ratio was 0.34. The low capital gearing ratio of HKASSK Ltd. shows that equity shareholders has not paid adequate return because the profit has distributed as interest to fixed long term funds. The capital gearing ratio of HKASSK Ltd. shows the week finance and solvency position of the factory.

#### **4.2.3.5 Fixed Assets to long-term fund Ratio:**

This ratio shows the proportion of long term funds in fixed assets. The higher fixed assets to long term fund ratio shows that long term funds was used for the purchase of fixed assets and it shows the higher solvency position.

**Table No.4.8**  
**Fixed Assets to long-term fund Ratio of HKASSK Ltd.**

Year	Fixed Assets	Long-Term Fund	Ratio
2005-06	393981562	753621383	0.52
2006-07	467162455	1001493072	0.47
2007-08	735141165	1138678299	0.65
2008-09	739948132	1573991801	0.47
2009-10	679380092	1444695119	0.47
2010-11	721465715	1724889156	0.42
2011-12	726313183	2507704583	0.29

(Source- Annual report of HKASSK Ltd. from year 2005-06 to 2011-12)

Table no 4.8 provided data relating to the fixed assets to long term fund ratio of the HKASSK Ltd. This is the ratio of fixed assets and long term funds of the particular year. In year 2005-06 this ratio of HKASSK Ltd. was 0.52 and it was reduced in next year and goes down to 0.47. In year 2007-08 this ratio was increased as 0.65 but in next two years it was constant as 0.47. This ratio was reduced in year 2010-11 and become 0.42 and again it was decreased and goes down to 0.29 in years 2011-12. The higher ratio indicated the safer the funds available in case of liquidation. The fixed assets to long term fund ratio of HKASSK Ltd. is very low which shows that long term funds are not used properly in the factory. The lot of long term fund used as working capital in the sugar factory.

#### 4.2.3.6 Proprietary Ratio:

The proprietary ratio shows the relationship between shareholders net worth and total assets of the firm. This ratio shows the contribution of shareholders capital in total assets of firm.

**Table No.4.9**  
**Proprietary Ratio of HKASSK Ltd.**

Year	Shareholder Net Worth	Total Assets	Ratio
2005-06	327580108	1408766555	0.23
2006-07	242029859	1547954267	0.16
2007-08	376768415	1727277886	0.22
2008-09	403748740	2357467776	0.17
2009-10	403339650	2254383721	0.18
2010-11	460567428	2533414037	0.18
2011-12	533243300	3053422390	0.17

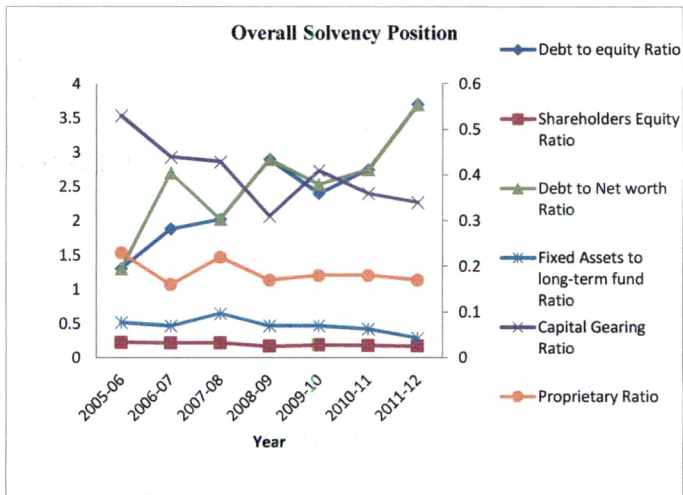
(Source- Annual report of HKASSK Ltd. from year 2005-06 to 2011-12)

Table no. 4.9 explains the information about the proprietary ratio of HKASSK Ltd. The proprietary ratio is the relationship of shareholders net worth and total assets. In year 2005-06 the proprietary ratio is 0.23 and this ratio was reduced and become 0.16 in year 2006-07. This ratio increased in year 2007-08 and reach to 0.22 but in year 2008-09 and 2009-10 the ratio was 0.17 and 0.18 respectively; the ratio was constant in year 2010-11 as 0.18 and in last year the proprietary ratio was 0.17 in year 2011-12. A high proprietary ratio is indicative of strong financial position the higher ratio is better to solvency

position. The proprietary ratio of HKASSK Ltd. is very low which show weak solvency position.

#### 4.2.4 Overall Solvency Position of HKASSK Ltd.

Figure 4.2



(Source- Annual report of HKASSK Ltd. from year 2005-06 to 2011-12)

In figure 4.2 the debt to equity ratio, shareholders equity ratio, debt to net worth ratio and fixed assets to long term, fund ratio were shows on the primary axis and capital gearing ratio and proprietary ratio on secondary axis.

The figure expresses the information about the overall solvency position of HKASSK Ltd. for the study period. The debt to equity ratio shows the sugar factory has used more debt capital as compared to equity capital year after year. So, ratio was increased over the study period. The shareholders equity ratio were shows the contribution of equity capital in total assets of the factory were low and it was decreased year by year. The debt to net worth ratio of sugar factory were also shows the increasing trend, it shows the dependence of sugar factory on debt capital. Capital gearing ratio of HKASSK Ltd. shows the overall decreasing trend in study period, this ratio shows the equity share capital have earned lower return on investment. The fixed assets to long term

fund ratio of factory shows the decreasing trend in study period, it shows that the use of long term capital in fixed assets is lower. It adversely affected the solvency of sugar factory. Proprietary ratio of HKASSK Ltd. is very low it shows that the share of equity capital in total assets lower, this is not good position for the solvency of the sugar factory. The overall solvency position of the HKASSK Ltd. from the above figure is not satisfactory. The all ratios of the solvency of the factory show the average position of the solvency.

**Cause:** The HKASSK Ltd. have more debt capital than the equity share capital because of that all the ratios of solvency does not match the standard ratios. The sugar factory largely depends on outsiders' fund and govt. financial support to run the session.

#### **4.2.5 Profitability Ratios:**

The profitability reflects the find results of business operations. Profitability ratio depict of the capacity of the unit to generate profits and its rate of return. The rate of return ratios on the other hand reflected the relationship between profit and investment. The various profitability ratios were as follows.

##### **4.2.5.1 Gross Profit Margin Ratio:**

The Gross Profit Margin ratio shows the management efficiency in production of each unit. The higher gross profit ratio shows the lower cost of production and good management of the firm.

**Table No.4.10**  
**Gross Profit Margin Ratio of HKASSK Ltd.**

<b>Year</b>	<b>Gross Profit</b>	<b>Sales</b>	<b>Ratio %</b>
2005-06	157960167	877140052	18.00
2006-07	52764330	923911199	5.71
2007-08	179361112	1036064983	17.31
2008-09	239756355	1153017926	20.79
2009-10	270610822	2296715220	11.78
2010-11	231530910	2011889256	11.51
2011-12	359282878	2025872852	17.73

(Source- Annual report of HKASSK Ltd. from year 2005-06 to 2011-12)

Table no. 4.10 provided data relating to gross profit margin ratio. The gross profit is the ratio of gross profit and net sales of the factory. The gross profit of HKASSK Ltd. were 18.00% in year 2005-06 but in year 2006-07 the gross profit ratio was reduced and become 5.71%. This ratio was increased in next

two years and reach to 17.31% in year 2007-08 and 20.79% in year 2008-09. In year 2009-10 the ratio was decreased and become 11.78% and in year 2010-11 the ratio was 11.50%. The gross margin ratio in year 2011-12 was increased and reached to 17.33%. A high gross profit ratio shows the firm produces its product at lower cost. The higher gross profit shows the greater profitability of the factory. The gross profit ratio of HKASSK Ltd. shows fluctuating trend which is not good for the future profitability of sugar factory.

#### 4.2.5.2 Net profit Margin Ratio:

This ratio is the margin of profit from business operations after interest and tax paid. The net profit margin is the proportion of profit which remains to the owners or shareholders of the firm.

**Table No.4.11**  
**Net profit Margin Ratio of HKASSK Ltd.**

Year	Net Profit	Sales	Ratio %
2005-06	1865922	877140052	0.21
2006-07	-108123785	923911199	-11.70
2007-08	32737574	1036064983	3.16
2008-09	624511	1153017926	0.05
2009-10	50530512	2296715220	2.20
2010-11	24758803	2011889256	1.23
2011-12	1005712	2025872852	0.05

(Source- Annual report of HKASSK Ltd. from year 2005-06 to 2011-12)

Table no.4.11 shows the net profit ratio of HKASSK Ltd. from year 2005-06 to 2011-12. The net profit ratio is the ratio of net profit and net sales of the factory. In year 2005-06 the net profit ratio is 0.21% but in year 2006-07 the factory have huge loss because of that the net profit ratio is -11.70% which shows the net loss. In year 2007-08 the net profit is increased and become 3.16% in next year the profitability was reduced and ratio was 0.05% in year 2008-09. The net profit ratio is 2.20% in year 2009-10 and in year 2010-11 ratio is 1.23%. In last year 2011-12 the ratio was again reduced and become 0.05%. The overall profitability of HKASSK Ltd. is not good because the net profit ratio is very low and the trend of ratio is fluctuating which affect the profitability

#### 4.2.5.3 Earnings per share Ratio:

EPS ratio shows how much amount of profit is earned by one equity share of the firm. This ratio is calculated as net profit after tax and preference dividend is divided by no. of equity shares.

**Table No.4.12**

#### **Earnings per share Ratio of HKASSK Ltd.**

<b>Year</b>	<b>N.P. after tax and Pref. Dividend</b>	<b>No.of Equity Share</b>	<b>Ratio</b>
2005-06	1865922	8932	208.90
2006-07	-108123785	8929	-12109.28
2007-08	32737574	8928	3666.84
2008-09	624511	8928	69.95
2009-10	50530512	8926	5661.05
2010-11	24758803	8926	2773.78
2011-12	1005712	8926	112.67

(Source- Annual report of HKASSK Ltd. from year 2005-06 to 2011-12)

Table no 4.2 express the earning per share ratio of HKASSK Ltd. This ratio shows the how much return has earned per share for the investment made in factory. In year 2005-06 the earning per share were 208.90 but in year 2006-07 the year sugar factory have huge loss because of that the ratio was - 12109.28. In year 2007-08 the earning per share ratio was increased highly and become 3666.84, but in year 2008-09 the ratio was decreased and become 69.95. After that in year 2009-10 the ratio was increased and reaches to 5661.05, in next year 2010-11 ratio was 2773.78. In year 2011-12 the ratio was again reduced and become 112.67. The earnings per share ratio of HKASSK Ltd.was not constant; the ratio does not show good profitability.

#### 4.2.5.4 Return on Assets Ratio:

Return on assets ratio express that how much profit is earned on total assets of the firm. The higher return on assets ratio shows the more profitability and better use of assets.

**Table No.4.13**  
**Return on Assets Ratio of HKASSK Ltd.**

Year	N.P.after tax	Total Assets	Ratio %
2005-06	1865922	1408766555	0.13
2006-07	-108123785	1547954267	-6.98
2007-08	32737574	1727277886	1.90
2008-09	624511	2357467776	0.03
2009-10	50530512	2254383721	2.24
2010-11	24758803	2533414037	0.98
2011-12	1005712	3053422390	0.03

(Source- Annual report of HKASSK Ltd. from year 2005-06 to 2011-12)

Table no.4.13 shows the return on assets ratio of HKASSK Ltd. from year 2005-06 to 2011-12s. This ratio is the relationship of net profit and total assets. In year 2005-06 the ratio were 0.13 but in year 2006-07 the ratio was reduced and become -6.98 because the factory have loss on particular year. In year 2007-08 this ratio was increased and reaches to 1.90 this ratio was again reduced and become 0.03 in year 2008-09. The return on assets was increased and become 2.24 in year 2009-10 and in year 2010-11 ratio was 0.98. In last year the ratio goes down and reduced as 0.03. The return on assets ratio of HKASSK Ltd. was very low it shows the poor profitability of the sugar factory.

#### **4.2.5.5 Return on Capital Employed Ratio:**

This ratio shows how much returns were earned on capital employed by the firm. The ratio of return on investment is determined by dividing net profit by the capital employed.

**Table No.4.14**  
**Return on Capital Employed Ratio of HKASSK Ltd.**

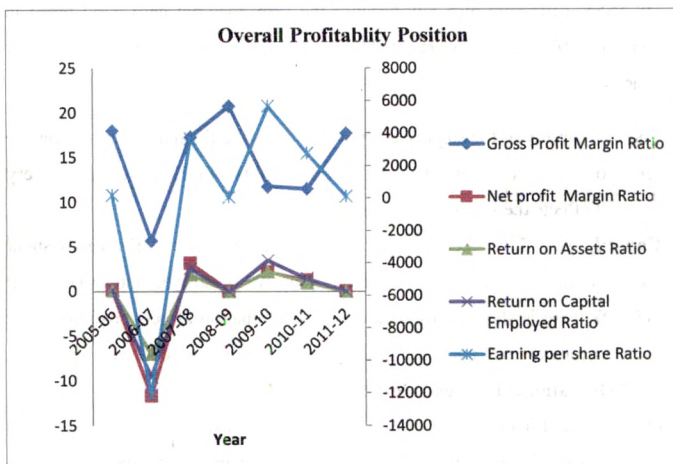
Year	Net Profit	Capital Employed	Ratio %
2005-06	1865922	940966189	0.20
2006-07	-108123785	1128765989	-9.58
2007-08	32737574	1263893816	2.59
2008-09	624511	1695798240	0.03
2009-10	50530512	1454172819	3.47
2010-11	24758803	1735266988	1.43
2011-12	1005712	2080985160	0.05

(Source- Annual report of HKASSK Ltd. from year 2005-06 to 2011-12)

Table no. 4.14 given the data relating to return on capital employed ratio of HKASSK Ltd. from year 2005-06 to 2011-12s. In year 2005-06 the ratio were 0.20 and in next year it was goes down very low as -9.58 because the sugar factory have big loss in year 2006-07. This ratio were increasing and reach to 2.59 in year 2007-08 but in next year 2008-09 the ratio was reduced and become 0.04. In year 2009-10 the return on capital employed ratio were increased again and become 3.47, in year 2010-11 this ratio was reduced and goes down as 1.43 and in year 2011-12 this ratio were 0.05 which shows low profitability of the sugar factory. The return on capital employed ratio of HKASSK Ltd. was very low which shows that the factory was not earned adequate return.

#### 4.2.6 Overall Profitability Position of HKASSK Ltd.

Figure 4.3



(Source- Annual report of HKASSK Ltd. from year 2005-06 to 2011-12)

Figure 4.3 shows the profitability of HKASSK Ltd. over the study period from year 2005-06 to year 2011-12. In above figure the gross profit margin ratio, net profit margin ratio, return in assets ratio and return on capital employed ratio were shows on the primary axis and earnings per share ratio were on secondary axis.



The gross profit ratio of HKASSK Ltd. over the study period shows the fluctuating trend in year 2005-06 it was 18.01% but in next year 2006-07 it was go below up to 5.71% this shows the factory was not earned constant return every year. The net profit ratio of HKASSK Ltd. shows that the sugar factory have very low profitability, this ratio were shows the fluctuating trend over the period of study. In year 2006-07 the factory has net loss as -11.70%. This ratio shows the very poor profitability of the factory. The earnings per share ratio of HKASSK Ltd. were shows the fluctuating trend from year 2005-06 to 2011-12. In year 2006-07 the earnings ratio were negative as -12109.28 and in next year it was goes up to 3666.84, the overall earnings per share ratio of factory were satisfactory. The return on assets ratio of the factory was also shows the fluctuating trend and it was very low. The firm does not have earned good return on total assets. The return on capital employed ratio of HKASSK Ltd. were also low because the firm does not earn good profit in year 2006-07 the ratio were -9.58% which shows the big loss in particular year.

The profitability of the sugar factory were shows the fluctuating trend over the return on their investment. The overall profitability of HKASSK Ltd. was very poor. It affects the future performance.

**Cause:** In year 2005 there is a flood situation in operational area of sugar factory because of that lot of sugarcane crop was destroyed and in next year 2006-07 there is shortage of sugarcane. This situation affects profitability of sugar factories in that particular year and ratio was highly reduced.

#### **4.2.7 Operational Efficiency Ratios:**

Operational efficiency ratio can be used to help measure the effectiveness and cost control. This ratio was used by production managers to show the trends and identify problems. These ratios are very useful to the management to know the efficiency of the factory and increased the efficiency.

##### **4.2.7.1 Material Cost Ratio:**

This ratio shows the proportion of the total material consumed cost and the sales of the firm. This ratio helps in control the material cost and increased profitability.

**Table No.4.15**  
**Material Cost Ratio of HKASSK Ltd.**

Year	Material Cost	Sales	Ratio %
2005-06	737255160	877140052	84.05
2006-07	624659314	923911199	67.61
2007-08	612334566	1036064983	59.10
2008-09	1172906725	1153017926	101.72
2009-10	1713323563	2296715220	74.60
2010-11	1463358174	2011889256	72.74
2011-12	1745088677	2025872852	86.14

(Source- Annual report of HKASSK Ltd. from year 2005-06 to 2011-12)

Table no.4.15 shows that the data relating to the material cost ratio of HKASSK Ltd. for the study period. In year 2005-06 the material cost ratio of HKASSK Ltd. were 84.05% and in next two year this ratio was reduced and become 59.10% in year 2007-08. In year 2008-09 the cost of sugarcane was very high because of that the ratio was reduced and become 74.60% and 72.74% respectively. This ratio was again increased and reaches to 86.14% in year 2011-12. The higher material cost ratio shows that operational efficiency of factory was not good. The material cost ratio of HKASSK Ltd. was high in study period which shows the operational efficiency of the factory was poor and it affect the profitability of the sugar factory.

#### **4.2.7.2 Labour Cost Ratio:**

This ratio shows the relationship between labour cost and sales of the firm. For increasing the profitability firm should control the labour cost ratio. It shows the operational efficiency of the firm.

**Table No.4.16**  
**Labour Cost Ratio of HKASSK Ltd.**

Year	Labour Cost	Sales	Ratio %
2005-06	108150134	877140052	12.33
2006-07	121349413	923911199	13.13
2007-08	125217710	1036064983	12.09
2008-09	155038264	1153017926	13.45
2009-10	209012920	2296715220	9.10
2010-11	201439800	2011889256	10.01
2011-12	240190325	2025872852	11.86

(Source- Annual report of HKASSK Ltd. from year 2005-06 to 2011-12)

Table no.4.16 explains the labour cost ratio of the HKASSK Ltd. This ratio is the percentage of the labour cost to total net sales of the factory. The labour cost ratio of HKASSK Ltd. were 12.33% in year 2005-06 which was increased in year 2006-07 and reach to 13.13%. This ratio was reduced in year 2007-08 and become 12.09% but in year 2008-09 the ratio was again increased and become 13.45%. In year 2009-10 the ratio was goes down to 9.10% and in next two years it was increased and reaches to 11.86% in year 2011-12. The labour cost ratio of HKASSK Ltd. for the study period shows almost constant trend and this ratio shows the operation efficiency of management of HKASSK Ltd. is good.

#### 4.2.7.3 Factory Overhead Ratio:

This ratio shows the proportion of factory overheads means those expenses which are directly related with production. Lower factory overhead ratio shows the more operational efficiency of firm.

**Table No.4.17**  
**Factory Overhead Ratio of HKASSK Ltd.**

Year	Factory Expenses	Sales	Ratio %
2005-06	48861313	877140052	5.57
2006-07	54962706	923911199	5.95
2007-08	65515350	1036064983	6.32
2008-09	88243227	1153017926	7.65
2009-10	94894726	2296715220	4.13
2010-11	86466576	2011889256	4.30
2011-12	119852402	2025872852	5.92

(Source- Annual report of HKASSK Ltd. from year 2005-06 to 2011-12)

The data relating to the factory overhead ratio was given in the table 4.17 of the HKASSK Ltd. The factory overhead ratio of HKASSK Ltd. was 5.57% in year 2005-06 and in year 2006-07 the ratio were 5.95%. This ratio was increased year after year and reaches to 7.65% in year 2008-09 but in year 2009-10 this ratio was reduced and become 4.13%. After the year 2009-10 this ratio was shows increasing trend and become 5.92% in year 2011-12. The factory overhead ratio is the relationship of factory overhead and net sales of the factory. The factory overheads are those expenses which are increased at the time of actual production and directly related to the production. The

factory overhead ratio of HKASSK Ltd. is shows the lower percentage with the net sales which helps to increasing the operational efficiency of the production process.

#### **4.2.7.4 Administrative Expenses Ratio:**

This ratio shows the proportion of administrative expenses and sales of the firm. The lower administrative expenses ratio shows the greater operational efficiency of firm.

**Table No.4.18**  
**Administrative Expenses Ratio of HKASSK Ltd.**

<b>Year</b>	<b>Administrative Expenses</b>	<b>Sales</b>	<b>Ratio %</b>
2005-06	44980090	877140052	5.13
2006-07	45412274	923911199	4.92
2007-08	55629079	1036064983	5.37
2008-09	35817055	1153017926	3.11
2009-10	33415827	2296715220	1.45
2010-11	39603556	2011889256	1.97
2011-12	68111267	2025872852	3.36

(Source- Annual report of HKASSK Ltd. from year 2005-06 to 2011-12)

Table 4.18 shows the data relating to the administrative expenses ratio of the HKASSK Ltd. from year 2005-06 to 2011-12. This ratio is the percentage of the administrative expenses with the net sales of the sugar factory. In year 2005-06 the ratio were 5.13% and in year 2006-07 this ratio was decreased and become 4.92%. From year 2007-08 this ratio was showing increasing trend in year 2007-08 this ratio was 5.37% which goes down to 1.45% in year 2009-10. In last two years this ratio was again increased and reaches to 3.36% in year 2011-12. The administrative expenses ratio of HKASSK Ltd. was lower which shows the higher operational efficiency of the management and office staff.

#### **4.2.7.5 Selling and Distribution Expenses Ratio:**

This ratio is the proportion of Selling and Distribution Expenses and sales of the firm. The lower Selling and Distribution Expenses ratio shows the more operational efficiency of firm.

**Table No.4.19**  
**Selling and Distribution Expenses Ratio of HKASSK Ltd.**

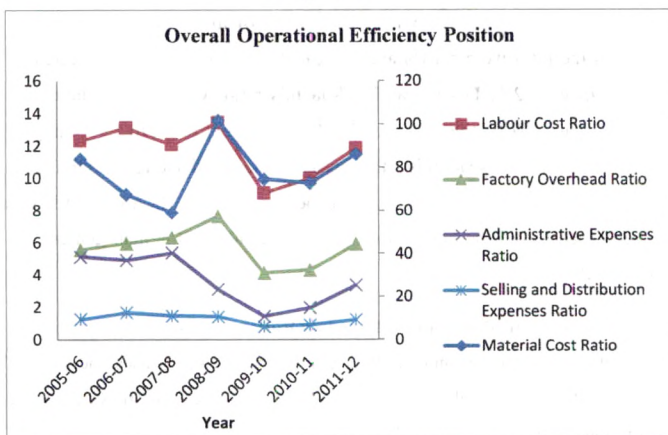
Year	Selling and Distribution Expenses	Sales	Ratio %
2005-06	11091335	877140052	1.26
2006-07	15352199	923911199	1.66
2007-08	15254835	1036064983	1.47
2008-09	16389878	1153017926	1.42
2009-10	18388439	2296715220	0.80
2010-11	18310026	2011889256	0.91
2011-12	24940365	2025872852	1.23

(Source- Annual report of HKASSK Ltd. from year 2005-06 to 2011-12)

Table 4.19 shows the information about the selling and distribution expenses ratio of the HKASSK Ltd. from year 2005-06 to 2011-12. This ratio shows the percentage of net sales and selling and distribution expenses. In year 2005-06 this ratio were 1.26% and in year 2006-07 the ratio was increased and become 1.66%. After the year 2006-07 this ratio was shows the decreasing trend and become 0.80% in year 2009-10. In last two years this ratio was increased and reaches to 1.23% in year 2011-12. The selling and distribution expenses ratio of HKASSK Ltd. was very low percentage with the net sales of the factory.

#### 4.2.8 Overall Operational Efficiency of HKASSK Ltd.

**Figure 4.4**



(Source- Annual report of HKASSK Ltd. from year 2005-06 to 2011-12)

From the figure 4.4 it is understood the overall operational efficiency of the HKASSK Ltd. from year 2005-06 to 2011-12. In above figure the labour cost ratio, factory overhead ratio, administrative expenses ratio and selling and distribution expenses ratio were shown on the primary axis and material cost ratio was shown on the secondary axis.

The material cost ratio of the HKASSK Ltd. high in study period and it shows the fluctuating trend. The higher material cost ratio shows the factory have paid more amount for the raw material. In year 2008-09 this ratio was goes up to 101.72% which adversely affected the operational efficiency. The labour cost ratio of the factory were also shows the fluctuating trend in year 2005-06 it was 12.33% and in year 2009-10 it was 9.10% the labour cost ratio shows the better operational efficiency. The factory overhead ratios of the factory were also fluctuating trend. In first 4 years it was increased and after that it was decreased. The factory overhead ratio shows the satisfactory operational efficiency. The ratio of HKASSK Ltd. of administrative expenses were shows the fluctuating trend, in first few years it was increased and after that it was decreased but in last year 2011-12 it was again increased, it shows the better efficiency of the factory. Selling and distribution expenses ratio of HKASSK Ltd. were below 2% in the study period. It shows the factory does not make more expenses for the selling and distribution process it was increased the efficiency of the factory.

The overall operational efficiency of the HKASSK Ltd. shows the good position of efficiency of the factory only the material cost is adversely affect the operational efficiency of the factory because the material cost were change highly year by year. It affects the operational efficiency of the HKASSK Ltd.

#### **4.2.9 To Assess the Growth of HKASSK Ltd. -**

##### **4.2.9.1 Share Capital:**

Share capital is the owner's capital of the firm, the growth and development of the firm is depends up on the availability of share capital. The share capital is used for establishment and purchase of fixed assets.

**Table No.4.20**

**Share Capital Growth of HKASSK Ltd.**

Year	Share Capital	Growth %
2005-06	42879424	0.19
2006-07	42737881	-0.33
2007-08	43647955	2.13
2008-09	43760948	0.26
2009-10	43251336	-1.16
2010-11	44344897	2.53
2011-12	44447914	0.23

(Source- Annual report of HKASSK Ltd. from year 2005-06 to 2011-12)

(Note- Growth percentage is calculated as compared to last year)

Table no. 4.20 explained the data relating to the growth rate in share capital of HKASSK Ltd. for the study period. The growth rate of share capital in year 2005-06 were 0.19%, but in year 2006-07 the total share capital was reduced and the growth rate were decreased as -0.33%. In year 2007-08 the growth rate were 2.13% but after that the growth rate were decreased and goes down to -1.16% in year 2009-10. In year 2010-11 the growth rate was increased and reaches to 2.53% and in year 2011-12 the growth rate were 0.23%. The growth rate of share capital of HKASSK Ltd. shows the fluctuating trend for the study period.

**4.2.9.2 Sales:**

The growth of any business is mainly depending up on growth in sales of that business. From the sales business can earn profit so increased profit is depend up on sales.

**Table No.4.21**

**Sales Growth of HKASSK Ltd.**

Year	Sales	Growth %
2005-06	877140052	-5.16
2006-07	923911199	5.33
2007-08	1036064983	12.14
2008-09	1153017925	11.29
2009-10	2296715223	99.19
2010-11	2011889255	-12.40
2011-12	2025872852	0.70

(Source- Annual report of HKASSK Ltd. from year 2005-06 to 2011-12)

(Note- Growth percentage is calculated as compared to last year)

Table 4.21 expresses the data relating to the growth in sales of the HKASSK Ltd. The growth rate in sales was -5.16% in year 2005-06 because the sales were reduced as compared to last year. In year 2006-07 and year 2007-08 the sales growth rate were increased and become 5.33% and 12.14% respectively. In year 2008-09 the growth rate were slightly decreased as 11.29% but in next year this rate were highly increased as 99.19%. The growth rate were again decreased and become -12.40% in year 2010-11 but in year 2011-12 the ratio was increased as 0.70%. The sales of the sugar factory were not satisfactory for last few years.

#### **4.2.9.3 Working Capital:**

Working capital is the capital which is required for day to day working of the firm. If there is shortage of working capital business cannot run further. Working capital is very useful in any business.

**Table No.4.22**  
**Working Capital Growth of HKASSK Ltd.**

<b>Year</b>	<b>Working Capital</b>	<b>Growth %</b>
2005-06	488995605	19.40
2006-07	463371699	-5.24
2007-08	491642795	6.10
2008-09	941638077	91.53
2009-10	716182213	-23.94
2010-11	998755011	39.46
2011-12	1340629574	34.23

(Source- Annual report of HKASSK Ltd. from year 2005-06 to 2011-12)

(Note- Growth percentage is calculated as compared to last year)

The growth rate of working capital of the HKASSK Ltd. for study period was given in table 4.22. In year 2005-06 the growth rate of working capital was 19.40% but it was reduced and become -5.24% in year 2006-07. In next two years it was increased and reach to 91.53% growth rate in year 2008-09, but in year 2009-10 the growth rate were again reduced and become -23.94%. In last two years the growth rate were again increased and become 39.46% in year 2010-11 and in year 2011-12 the growth rate were 34.23%. The growth rate of



working capital shows the fluctuating trend, which make the difficult in management of working capital.

#### 4.2.9.4 Profit:

The success of any business is assessed by its profit earning capacity. Profit is the main indicator of financial performances of business. Every business is worked for earning maximum profit.

**Table No.4.23**  
**Profit Growth of HKASSK Ltd.**

Year	Profit	Growth %
2005-06	1865922	131.46
2006-07	-108123785	-5894.66
2007-08	32737574	130.28
2008-09	524511	-98.09
2009-10	50530512	7991.21
2010-11	24758803	-51.00
2011-12	1005712	-95.94

(Source- Annual report of HKASSK Ltd. from year 2005-06 to 2011-12)

(Note- Growth percentage is calculated as compared to last year)

Table 4.23 shows the data relating to the growth of profit of HKASSK Ltd. for the study period. The growth rate of profit were 131.46% in year 2005-06, but in year 2006-07 the factory have huge loss and growth rate become -5894.66%. In year 2007-08 the growth rate were increased and reach to 130.28% in year 2008-09 the profit were again reduced and rate become -98.08%. The growth rate increased highly in year 2009-10 as 7991.21% because the factory earned huge profit as compared to last year. In last two years the profit was reduced and growth rate become -51.00% in year 2010-11 and -95.94% in year 2011-12. The growth of the profit of the sugar factory was fluctuating which is not good for the profitability of the factory.

#### 4.2.9.5 Long Term Investment:

The investment is made from the profit earned by the firm. Long term investment is useful to the firm in future development and given financial stability to the firm.

**Table No.4.24**  
**Long Term Investment Growth of HKASSK Ltd.**

Year	Long-Term Investment	Growth %
2005-06	60434315	272.08
2006-07	92553343	53.15
2007-08	40104343	-56.67
2008-09	18061297	-54.96
2009-10	37051388	105.14
2010-11	18245939	-50.76
2011-12	18274789	0.16

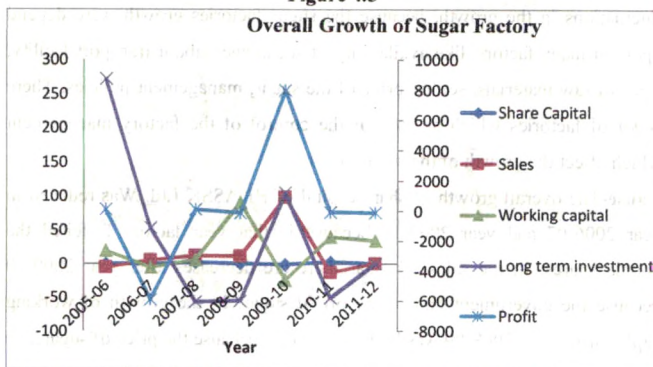
(Source- Annual report of HKASSK Ltd. from year 2005-06 to 2011-12)

(Note- Growth percentage is calculated as compared to last year)

Table 4.24 given the information about the growth in long term investment of HKASSK Ltd. In year 2005-06 the growth rate were 272.08% but in year 2006-07 the long term investment growth rate were reduced and become 53.15%. In year 2007-08 and year 2008-09 the long term investment were reduced and growth were goes down to -56.67% and -54.96% respectively. The growth rate were become 105.14% in year 2009-10 and it was again decreased as -50.76% but in last year 2011-12 the growth rate of long term investment were slightly increased as 0.16%. The overall long term investment growth shows the fluctuating trend because the factory does not earn adequate profit each year.

#### 4.2.10 Overall Growth of HKASSK Ltd.

**Figure 4.5**



(Source- Annual report of HKASSK Ltd. from year 2005-06 to 2011-12)

Figures 4.5 express the overall growth of HKASSK Ltd. from year 2005-06 to 2011-12. The figure shows the share capital, sales and working capital on primary axis and long term investment and sales were taken on secondary axis.

The share capital growth of the HKASSK Ltd. shows the fluctuating trend, there is no large growth in any year in share capital of the factory in year 2006-07 and year 2009-10 the growth were negative. The growth of sales of the HKASSK Ltd. also shows the fluctuating trend over the study period. The sales were slightly increased in first four years but in year 2009-10 the sales were highly increased as 99.19%. In last two years it was again decreased. The growth of working capital also shows the fluctuating trend in year 2005-06 it was 19.40% but in next year it was reduced but in year 2008-09 the working capital was highly increased and became 91.53%. In next year it was again decreased but in last two years it was again increased. The growth in profit of HKASSK Ltd. also shows the huge fluctuating. The growth rate in year 2006-07 was -5894.66% because there is loss but in next year it was increased by 130.28%. The overall growth in profit shows the fluctuating trend. The long term investment of the HKASSK Ltd. shows the first four years it was decreased year by year but in year 2009-10 the growth rate was increased as 105.14% but in last two years the growth was again decreased.

The overall growth of the HKASSK Ltd. was good, but there were so many fluctuations in the growth, because the sugar factories' growth depends upon many factors, like availability of sugarcane, labour transport facility, price of raw materials, selling price of the sugar, management policies. There are many factors which are out of the control of the factory management which affect the growth of the sugar factory.

**Cause-**The overall growth of share capital of HKASSK Ltd. was reduced in year 2006-07 and year 2009-10 because in that year the factory forfeited the unpaid shares. In the sales of sugar there are decreases after year 2009-10 because of the government ban on export of sugar. In the growth of working capital from year 2008-09 was highly increased because the price of sugarcane was increased year after year. In the growth of profit of HKASSK Ltd. in year 2006-07 was highly decreased because in year 2005-06 there was a flood situation.

in western Maharashtra. In year 2008-09 and 2011-12 the requirement of working capital was highly increased and profit was reduced in that particular year. In year 2007-08, 2008-09 and 2010-11 the growth in long term investment was reduced because the factory was used its investment for the purchase of machinery for the production.

#### **4.3 ANALYSIS OF KRANTI SHAKARI SAKHAR KARKHANA LTD. KUNDAL:**

##### **4.3.1 Liquidity Ratio:**

The liquidity ratio measures the liquidity of the firm and its ability to meet short term obligation. This liquidity ratios shows the firms position in short term payments capacity. The corporate liquidity has two type quantitative and qualitative concepts. It is the ability to meet all present and potential demands of cash. The different liquidity ratios were given as below.

##### **4.3.1.1 Current Ratio:**

The current ratio shows the short-term solvency or liquidity position of the firm. This ratio shows that how much current assets are available to paid current liabilities of the firm. The 2:1 current ratio is ideal ratio of liquidity.

**Table No 4.25**  
**Current Ratio of KSSK Ltd.**

<b>Year</b>	<b>Current assets</b>	<b>current Liabilities</b>	<b>Ratio</b>
2005-06	688615932	263476106	2.61
2006-07	570093006	272781281	2.09
2007-08	792798943	453803630	1.75
2008-09	870763432	459988116	1.89
2009-10	1344799056	687096190	1.96
2010-11	1234240643	547385252	2.25
2011-12	1567341188	652975431	2.40

(Source- Annual report of KSSK Ltd. from year 2005-06 to 2011-12)

Table no.4.25 shows the total current assets, current liabilities and current ratio of KSSK Ltd. from year 2005-06 to 2011-12. In the year 2005-06 the current ratio were 2.61 and in year 2006-07 it was 2.09 which was showing good liquidity position but on year 2007-08 the current ratio decreased up to 1.74 after that it was increased year after year and become 2.40 in the year 2011-12. The standard current ratio was 2:1 and the ratio of KSSK Ltd. was near about standard or more than that which shows the good liquidity position of the

sugar factory. The overall current ratio shows the increasing trend from year 2007-08.

#### **4.3.1.2 Quick Ratio:**

The quick ratio shows the company's ability to meet its current obligations. This is ratio of quick assets and quick liabilities. A quick ratio of 1:1 is the standard ratio of liquidity.

**Table No 4.26**  
**Quick Ratio of KSSK Ltd.**

<b>Year</b>	<b>Quick Assets</b>	<b>Quick Liabilities</b>	<b>Ratio</b>
2005-06	55322724	263476106	0.21
2006-07	51891720	272781281	0.19
2007-08	105898471	453803630	0.23
2008-09	187450427	459988116	0.41
2009-10	224397089	687096190	0.33
2010-11	284000923	547385252	0.52
2011-12	297357610	652975431	0.46

(Source- Annual report of KSSK Ltd. from year 2005-06 to 2011-12)

Table no.4.26 shows the total quick assets, quick liabilities and quick ratio from the year 2005-06 to year 2011-12 of KSSK Ltd. The quick ratio in year 2005-06 was 0.21 and in year 2006.07 it was reduced and become 0.19. The trend of quick ratio over the study period shows the fluctuating trend. The ratio was shows increasing as in one year and in next year it was reduced this was happened over the study period from 2005-06 to 2011-12, and in the last year 2011-12 the ratio was 0.45. The standard quick ratio was 1:1 but the KSSK Ltd. quick ratio was very below the standard and which is cause of concern to the management was. The quick ratio of KSSK Ltd. shows the bad or weak liquidity position of the sugar factory. The quick ratio of the KSSK Ltd. was low because of the total current assets have large amount of stock of sugar.

#### **4.3.1.3 Cash ratio/Super Quick Ratio:**

It is the ratio of absolute liquid assets to quick liabilities. In absolute liquid assets included only cash and cash equivalent items. The standard cash ratio is 1:2.

**Table No 4.27**  
**Cash ratio/Super Quick Ratio of KSSK Ltd.**

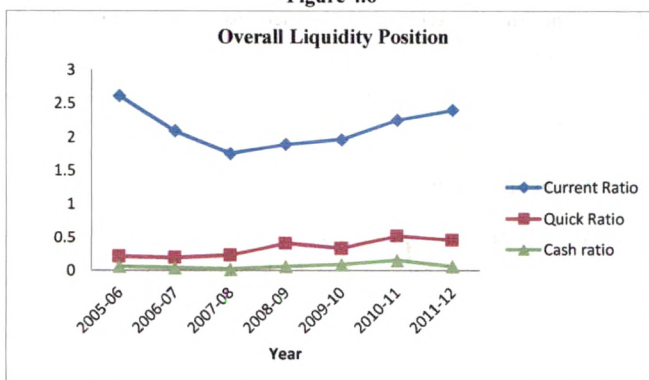
Year	Super Quick Assets	Current Liabilities	Ratio
2005-06	17003750	263476106	0.06
2006-07	10883948	272781281	0.04
2007-08	11056747	453803630	0.02
2008-09	28924911	459988116	0.06
2009-10	62000593	687096190	0.09
2010-11	79499036	547385252	0.15
2011-12	40603171	652975431	0.06

(Source- Annual report of KSSK Ltd. from year 2005-06 to 2011-12)

Table no.4.27 denotes the super quick assets and current liabilities and cash ratio of KSSK Ltd. for the study period from year 2005-06 to 2011-12. The cash ratio of KSSK Ltd. for the year 2005-06 were 0.06 but in next two years 2006-07 and 2007-08 the cash ratio was decreased as 0.04 and 0.02 respectively. From the year 2008-09 the cash ratio was shows increasing trend up to year 2010-11 and become 0.15 but in last year 2011-12 the cash ratio again reduced and become 0.06. The cash ratio of KSSK Ltd. was not satisfactory the factory was not having adequate amount of cash with them to pay super quick liabilities. This was happened because of the govt. restriction on sale of sugar on open market. The cash ratio shows the week liquidity position of the sugar factory.

#### 4.3.2 Overall Liquidity Position of KSSK Ltd.

**Figure 4.6**



(Source- Annual report of KSSK LTD. from year 2005-06 to 2011-12)

Figure 4.6 denotes the overall liquidity position of KSSK Ltd. from year 2005-06 to 2011-12. The current ratio of the KSSK Ltd. in first two years is more than standard which was 2:1 but in next three years the current ratio goes down the standard. In last two years the ratio was again improved and became more than standard. The current ratio shows the overall good liquidity position of the factory. The quick ratio of the factory was very low than standard (1:1) over the study period it shows the poor liquidity position of the KSSK Ltd. The overall cash ratio was also below the standard (2:1) over the study period it is not a good sign for the liquidity position of the factory.

The overall liquidity positions of the KSSK Ltd. were not good. The current ratio shows the good liquidity position in short term, but in very short period the liquidity position was not good because the quick ratio and cash ratio were below the standard.

**Cause:** The liquidity ratios of KSSK Ltd. were low than the standard ratios because the total production of sugar was not sold in that particular year and current assets carry over large volume of stock of sugar. The sugar factory also not able to make payment of sugar cane suppliers in time.

#### **4.3.3 Solvency Ratio:**

Solvency means the ability of the firm to meet its long term payment and liability. If the firm can meet its all the long term payments in time the firm is called as solvent firm. This solvency ratios also show the stake of the shareholders and the stake of creditors. The different solvency ratios were as follows.

##### **4.3.3.1 Debt to equity Ratio:**

This ratio shows the long term solvency position of the firm. This ratio indicates the relationship between loan funds and net worth of the firm. Generally 1:1 ratio is acceptable to show the good solvency position.

**Table No 4.28**

**Debt to equity Ratio of KSSK Ltd.**

Year	Long-Term Debts	Shareholders Fund	Ratio
2005-06	631243419	336789424	1.87
2006-07	514102302	376909436	1.36
2007-08	455421382	429512287	1.06
2008-09	461782894	510567547	0.90
2009-10	870253212	637444911	1.37
2010-11	867777046	750007135	1.16
2011-12	1202808710	821712847	1.46

(Source- Annual report of KSSK Ltd. from year 2005-06 to 2011-12)

The data relating to the debt to equity ratio over 7 year is given in the table 4.28. In this table the amounts of long term debts and shareholders fund are given of the KSSK Ltd. for the study period. In year 2005-06 debt equity ratio were 1.87 and it was reduced in next three years and become 0.90 in year 2008-09. After that the ratio was increased in year 2009-10 as 1.37 and in year 2010-11 it was reduced as 1.16. In the last year 2011-12 the debt equity ratio were increased and become 1.46. The overall debt to equity ratio of the KSSK Ltd. in study period show that the greater claims of the creditors which was lower safety to the creditors. The generally accepted standard of this ratio is 1:1 so the debt to equity ratio of KSSK Ltd. not showing satisfactory position of solvency.

**4.3.3.2 Shareholders Equity Ratio:**

The shareholders equity ratio shows the proportion of shareholders equity in total assets of firm. This ratio shows the long term solvency position of the firm. The higher shareholders equity ratio shows the better solvency position.

**Table No 4.29**

**Shareholders Equity Ratio of KSSK Ltd.**

Year	Shareholders' Equity	Total Assets	Ratio
2005-06	336789424	1231508950	0.27
2006-07	376909436	1163793020	0.32
2007-08	429512287	1340402041	0.32
2008-09	510567547	1434474605	0.36
2009-10	637444911	2203326797	0.29
2010-11	750007135	2184619990	0.34
2011-12	821712847	2698416773	0.30

(Source- Annual report of KSSK Ltd. from year 2005-06 to 2011-12)



Table 4.29 denotes the ratio of shareholders equity to total assets of the KSSK Ltd. from year 2005-06 to 2011-12. The data provided in the table 4.29 depicts that in year 2005-06 the shareholders equity ratio was 0.27 and it was increased up to 0.36 in year 2008-09. In year 2009-10 this ratio was decreased as 0.29 but in year 2010-11 ratio was increased and became 0.34. In last year this ratio was again reduced and became 0.30. This ratio shows the contribution of the shareholders in total assets. The higher the contribution of shareholders fund shows the stronger the financial position of the factory, but the shareholders equity ratio of KSSK Ltd. was lower which shows the weak financial position and poor solvency position.

#### 4.3.3.3 Debt to Net worth Ratio:

This ratio compares long term debt to net worth of the firm. This ratio is better than the debt to equity ratio. The equity capital is taken after deducting intangible assets. This ratio gives a factual idea of the assets available to meet the long term liabilities.

**Table No 4.30**  
**Debt to Net worth Ratio of KSSK Ltd.**

Year	Long-Term Debts	Shareholder Net Worth	Ratio
2005-06	631243419	314073499	2.01
2006-07	514102302	320622617	1.60
2007-08	455421382	429498746	1.06
2008-09	461782894	510567547	0.90
2009-10	870253212	637444911	1.37
2010-11	867777046	731759118	1.19
2011-12	1202808710	821712847	1.46

(Source- Annual report of KSSK Ltd. from year 2005-06 to 2011-12)

Table no 4.30 shows the long term debts to shareholders-net worth ratio of the KSSK Ltd. from year 2005-06 to 2011-12s. The debt to net worth ratio of the KSSK Ltd. in year 2005-06 was 2.00 and it shows a decreasing trend up to year 2008-09 and became 0.90 but after that it was showing an increasing trend in debt to net worth ratio and it was 1.46 in year 2011-12. This ratio shows a better solvency position than debt to equity ratio. The higher ratio denotes the greater claim of the creditors. The debt to net worth ratio of KSSK Ltd. is high which shows an adverse solvency position of the factory.

#### 4.3.3.4 Capital Gearing Ratio:

This ratio shows the proportion of equity capital and fixed interest bearing funds of the firm. The low gearing ratio indicates that the equity share capital is not paid adequate return because the profit is distributed as fixed charges in form of interest and dividend.

**Table No 4.31**  
**Capital Gearing Ratio of KSSK Ltd.**

Year	Equity Shareholders Fund	Fixed Interest Bearing Funds	Ratio
2005-06	336789424	631243419	0.53
2006-07	376909436	514102302	0.73
2007-08	429512287	570243449	0.75
2008-09	510567547	542643673	0.94
2009-10	637444911	949425160	0.67
2010-11	750007135	912558739	0.82
2011-12	821712847	1205588016	0.68

(Source- Annual report of KSSK Ltd. from year 2005-06 to 2011-12)

Table no.4.31 explains the capital gearing ratio of KSSK Ltd. for the study period, from year 2005-06 to 2010-11. Capital gearing ratio is the ratio of equity shareholders funds and fixed interest bearing funds. The capital gearing ratio of KSSK Ltd. in year 2005-06 were 0.53 and which was increasing up to year 2008-09 and become 0.94 in the year 2008-09 but in year 2009-10 the capital gearing ratio were 0.67 which is decreased as compared to last year. In the year 2010-11 the capital gearing ratio was again increased up to 0.82 and at last year 2011-12 this ratio was reduced up to 0.68. The capital gearing ratio of KSSK Ltd. was very high which shows that the greater portion of the fixed interest bearing securities as compared to capital fund.

#### 4.3.3.5 Fixed Assets to long-term fund Ratio:

This ratio shows the proportion of long term funds in fixed assets. The higher fixed assets to long term fund ratio shows that long term funds was used for the purchase of fixed assets and it shows the higher solvency position.

**Table No 4.32**  
**Fixed Assets to long-term fund Ratio of KSSK Ltd.**

Year	Fixed Assets	Long-Term Fund	Ratio
2005-06	511514991	968032843	0.53
2006-07	527323661	891011738	0.59
2007-08	537946456	884933669	0.61
2008-09	553517071	972350441	0.57
2009-10	845978639	1507698123	0.56
2010-11	918492227	1617784181	0.57
2011-12	989991801	2024521557	0.49

(Source- Annual report of KSSK Ltd. from year 2005-06 to 2011-12)

Table no 4.32 provided data relating to the fixed assets, long term fund and fixed assets to long term fund ratio of KSSK Ltd. In year 2005-06 the fixed assets to long term fund ratio were 0.53 and it was showing increasing trend and become 0.61 in year 2007-08. This ratio was 0.57 in year 2008-09 and 0.56 in year 2009-10. The fixed assets to long term fund ratio in year 2010-11 was increased as 0.57 and it was reduced in last year 2011-12 and become 0.49. This ratio indicates the proportion of long term fund deployed in fixed assets. The higher the ratio indicates the safer the funds available in case of liquidation. The fixed asset to long term fund ratio of KSSK LTD. is lower which shows the weak solvency position of the sugar factory.

#### **4.3.3.6 Proprietary Ratio:**

The proprietary ratio shows the relationship between shareholders net worth and total assets of the firm. This ratio shows the contribution of shareholders capital in total assets of firm.

**Table No 4.33**  
**Proprietary Ratio of KSSK Ltd.**

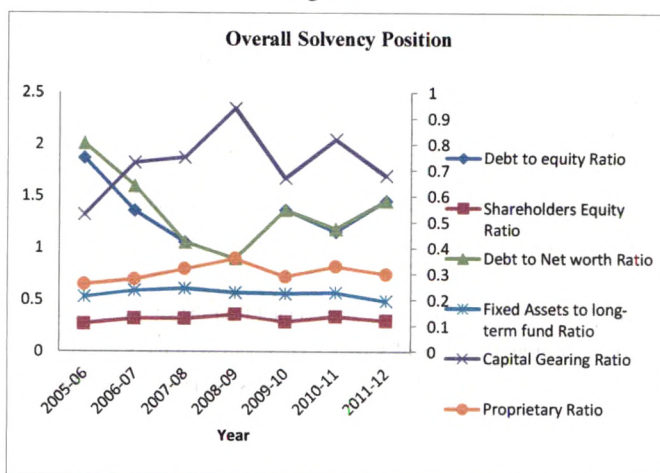
Year	Shareholder Net Worth	Total Assets	Ratio
2005-06	314073499	1231508950	0.26
2006-07	320622617	1163793020	0.28
2007-08	429498746	1340402041	0.32
2008-09	510567547	1434474605	0.36
2009-10	637444911	2203326797	0.29
2010-11	731759118	2184619990	0.33
2011-12	821712847	2698416773	0.30

(Source- Annual report of KSSK Ltd. from year 2005-06 to 2011-12)

Table no 4.33 shows the shareholders net worth and total assets as well as the proprietary ratio of the KSSK Ltd. from year 2005-06 to 2011-12. The proprietary ratio of KSSK Ltd. were 0.26 in the year 2005-06 this ratio was shows increasing trend up to year 2008-09 and become 0.36. After that the ratio was reduced in year 2009-10 as 0.29 but in next year it was increased and become 0.33. In the last year 2011-12 the proprietary ratio were decreased and reach to 0.30. A high proprietary ratio indicative of strong financial position. The proprietary ratio shows the contribution of shareholders net worth in total assets. The proprietary ratio of KSSK Ltd. was very low which shows that the shareholders contribution in total assets is very low. This low ratio is a symptom of under capitalization and excess use of creditor's funds to finance the sugar factory. This was not good for the solvency position of the sugar factory.

#### 4.3.4 Overall Solvency Position of KSSK Ltd.

Figure 4.7



(Source- Annual report of KSSK Ltd. from year 2005-06 to 2011-12)

Figure 4.7 shows the overall solvency position of the KSSK Ltd. for the study period. In figure debt to equity ratio, shareholders equity ratio, debt to net worth ratio and fixed assets to long term fund ratio were shows on primary

axis and capital gearing ratio and proprietary ratio were shown on secondary axis.

The debt to equity ratio of KSSK Ltd. shows the fluctuating trend over the study period. In the first three years it was decreased but in the last three years it was again increased. This ratio shows the debt capital is more used as compared to equity capital in the study period by KSSK Ltd. The shareholders equity ratio of KSSK Ltd. were low, it indicates the shareholders equity in total assets is lower. The overall shareholders equity ratio shows the fluctuating trend. The debt to net worth ratio of KSSK Ltd. shows the fluctuating trend it shows the acquire or particular debt and equity proportion in total capital. The ratio shows the first four years decreasing trend and in the last three years increasing trend in debt to net worth ratio. The capital gearing ratios of KSSK Ltd. show the increasing trend in the first four years but it shows the fluctuating trend in the last three years. This ratio shows the relationship of equity shareholders funds and fixed interest funds. The fixed assets to long term fund ratio of KSSK Ltd. shows fluctuating trend in the first three years it was increased but after that it was decreased this ratio shows the contribution of long term fund in total fixed assets, this ratio of KSSK Ltd. shows the poor solvency. The proprietary ratios of KSSK Ltd. in the first four years was showing increasing trend but in the last three years it shows fluctuating trend. This ratio shows the contribution of shareholders net worth in total assets.

The overall solvency positions of the KSSK Ltd. were not good because the lot of solvency ratios were not around the standard. The long term solvency of the KSSK Ltd. was poor.

**Cause:** The KSSK Ltd. have more debt capital than the equity share capital because of that all the ratios of solvency does not match the standard ratios. The sugar factory largely depends on outsiders' fund and govt. financial support to run the session.

#### **4.3.5 Profitability Ratio:**

The profitability reflects the final results of business operations. Profitability ratio depicts the capacity of the unit to generate profits and its rate of return. The rate of return ratios on the other hand reflected the relationship between profit and investment. The various profitability ratios were as follows.

#### 4.3.5.1 Gross Profit Margin Ratio:

The Gross Profit Margin ratio shows the management efficiency in production of each unit. The higher gross profit ratio shows the lower cost of production and good management of the firm.

**Table No 4.34**  
**Gross Profit Margin Ratio of KSSK Ltd.**

Year	Gross Profit	Sales	Ratio %
2005-06	155716754	391345165	39.79
2006-07	107258882	847776387	12.65
2007-08	200846667	724298200	27.73
2008-09	189280206	1036951684	18.25
2009-10	254055767	1453207215	17.48
2010-11	240160676	1988381856	12.08
2011-12	188393012	1741959288	10.82

(Source- Annual report of KSSK Ltd. from year 2005-06 to 2011-12)

Table no. 4.34 provided data relating to gross profit margin ratio. The gross profit is the ratio of gross profit and net sales of the factory. The above table shows the gross profit of KSSK Ltd. for study period. In year 2005-06 the gross profit ratio of KSSK Ltd. were 39.79% which shows the higher gross profit margin but in year 2006-07 the gross profit ratio was reduced and become 12.65%. In year 2007-08 the gross profit again increased and ratio become 27.73%. But in next year from year 2008-09 to 2011-12 the gross profit ratio was reduced and become 10.82% in year 2011-12. A high gross profit ratio shows the firm produces its production at lower cost; it is a good sign of management. A low gross profit ratio may indicate unfavorable production policy of the management and it adversely affected the profitability. The gross profit margin ratio of KSSK Ltd. was not satisfactory. It shows the lower profitability of sugar factory.

#### 4.3.5.2 Net profit Margin Ratio:

This ratio is the margin of profit from business operations after interest and tax paid. The net profit margin is the proportion of profit which remains to the owners or shareholders of the firm.

**Table No 4.35****Net profit Margin Ratio of KSSK Ltd.**

Year	Net Profit	Sales	Ratio %
2005-06	881166	391345165	0.23
2006-07	-33570893	847776387	-3.96
2007-08	57951561	724298200	8.00
2008-09	471304	1036951684	0.05
2009-10	6396436	1453207215	0.44
2010-11	10918072	1988381856	0.55
2011-12	1469228	1741959288	0.08

(Source- Annual report of KSSK Ltd. from year 2005-06 to 2011-12)

The data relating to the net profit margin ratio over 7 years is given in the table no 4.35. In this table the amount of net profit and net sales of the KSSK Ltd. In year 2005-06 the net profit ratio were 0.23% but in year 2006-07 the sugar factory have high loss as the -3.96%. In year 2007-08 the factory have again high profit the net profit ratio were 8.00% but in the next year 2008-09 the net profit ratio was reduced and become 0.05% but in next two year the profitability was increased and the net profit ratio become 0.55% in year 2010-11. In year 2011-12 the net profit was reduced and become 0.08%. This ratio shows the overall profitability of factory. The higher net profit ratio expressed the greater profitability and efficiency. The net profit ratio of KSSK Ltd. was very low which shows the weak profitability position.

**4.3.5.3 Earnings per share Ratio:**

EPS ratio shows how much amount of profit is earned by one equity share of the firm. This ratio is calculated as net profit after tax and preference dividend is divided by no. of equity shares.

**Table No 4.36****Earnings per share Ratio of KSSK Ltd.**

Year	N.P. after tax and Pref. Dividend	No. of Equity Share	Ratio
2005-06	881166	64315	13.70
2006-07	-33570893	64352	-521.68
2007-08	57951561	64719	895.43
2008-09	471304	46841	10.06
2009-10	6396436	48063	133.08
2010-11	10918072	45809	238.34
2011-12	1469228	45901	32.01

(Source- Annual report of KSSK Ltd. from year 2005-06 to 2011-12)

Table no 4.36 expressed the data relating to the earning per share ratio of KSSK Ltd. from year 2005-06 to 2011-12s. The earnings per share ratio is the ratio of net profit after tax and preference divided and the no. of equity shares. The earnings per share ratio of KSSK Ltd. is 13.70 in year 2005-06, but it was highly decrease in year 2006-07 and become -521.68 because the factory had huge loss in that year. In year 2007-08 the earning per share is 895.43 which show huge profitability, in year 2008-09 the ratio is decreased as 10.06. In year 2009-10 and 2010-11 the ratio was increased and become 238.34 in year 2010-11 but in last year the earning per share were again decreased and become 32.01 the overall trend of earning per share ratio was fluctuating which shows uncertain profitability of KSSK Ltd.

#### 4.3.5.4 Return on Assets Ratio:

Return on assets ratio express that how much profit is earned on total assets of the firm. The higher return on assets ratio shows the more profitability and better use of assets.

**Table No 4.37**  
**Return on Assets Ratio of KSSK Ltd.**

Year	N.P.after tax	Total Assets	Ratio %
2005-06	881166	1231508950	0.07
2006-07	-33570893	1163793020	-2.88
2007-08	57951561	1340402041	4.32
2008-09	471304	1434474605	0.03
2009-10	6396436	2203326797	0.29
2010-11	10918072	2184619990	0.50
2011-12	1469228	2698416773	0.05

(Source- Annual repor. of KSSK Ltd. from year 2005-06 to 2011-12)

Table no. 4.37 shows the net profit after tax, total assets and return on assets ratio of KSSK Ltd. from year 2005-06 to 2011-12s in study period. In year 2005-06 the return on assets ratio were 0.07 but in year 2006-07 the ratio were -2.88 because there is net loss to the factory. In year 2007-08 the return on assets were 4.32 but it was decreased in next year and become 0.03 after that it was increased and become 0.50 in year 2010-11. In last year 2011-12 the ratio



was decreased up to 0.05. The trend of return on assets shows that the profitability of KSSK Ltd. was very poor. The total return on total assets of the factory was not satisfactory.

#### **4.3.5.5 Return on Capital Employed Ratio:**

This ratio shows how much returns were earned on capital employed by the firm. The ratio of return on investment is determined by dividing net profit by the capital employed.

**Table No 4.38**

#### **Return on Capital Employed Ratio of KSSK Ltd.**

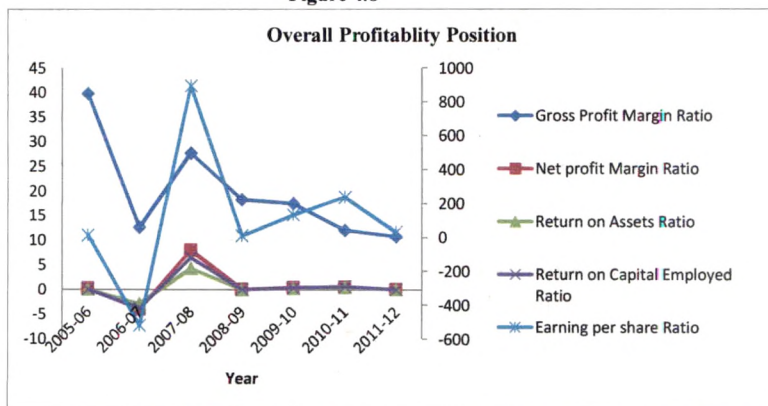
<b>Year</b>	<b>Net Profit</b>	<b>Capital Employed</b>	<b>Ratio %</b>
2005-06	881166	968032843	0.09
2006-07	-33570893	891011738	-3.77
2007-08	57951561	884933669	6.55
2008-09	471304	972350441	0.05
2009-10	6396436	1507698123	0.42
2010-11	10918072	1617784181	0.67
2011-12	1469228	2024521557	0.07

(Source- Annual report of KSSK Ltd. from year 2005-06 to 2011-12)

Table no. 4.38 denote the net profit, capital employed and return on capital employed ratio of KSSK Ltd. from 2005-06 to 2011-12. The return on capital employed ratio of the year 2005-06 were 0.09 and year 2006-07 it was reduced and become -3.77 because that year factory have huge loss. In year 2007-08 the ratio were increased and become 6.55 which show the more profitability but in year 2008-09 ratio was reduced as 0.05. In next two year the return on capital employed ratio was increased and become 0.67 in year 2010-11. In year 2011-12 the ratio were again decreased and become 0.07 which shows less profitability of the sugar factory. This ratio shows how much return was acquired from the capital invested. The return on capital employed ratio of KSSK Ltd. was very low which shows the lower profitability of the sugar factory.

#### 4.3.6 Overall Profitability Position of KSSK Ltd.

Figure 4.8



(Source- Annual report of KSSK Ltd. from year 2005-06 to 2011-12)

Figure 4.8 shows the profitability of KSSK Ltd. for the study period. In figure gross profit margin ratio, net profit margin ratio, return on assets ratio and return on capital employed ratio were shown on the primary axis and earnings per share ratio were on the secondary axis.

The gross profit ratio of KSSK Ltd. over the study period shows the fluctuating trend over the study period, but the overall trends were shows the decreasing trend. The gross profit margin of KSSK Ltd. was good but in last some years it was reduced. Net profit margin ratio of KSSK Ltd. was also shows the fluctuating trend. In year 2006-07 there is net low of -3.96% but in next year there is higher profit as 8%. The overall net profit ratio shows the poor profitability of the sugar factory. The earnings per share ratio shows the fluctuating trend in earning in year 2005-06, it was Rs.13.70 but in next year it was reduced and there was huge loss and ratio were -521.68 after that next year ratio again increased huge and become 895.43. The earnings per share shows the good return but there is very much fluctuating in earning year after year. The return on assets ratio of KSSK Ltd. was very low and it was shows the fluctuating trend over the study period. The return on capital employed

ratio was also low and it shows the fluctuating trend of KSSK Ltd. This ratio reduced over the period of time.

The overall profitability ratio shows the poor profitability position of KSSK Ltd. The all profitability ratio was very low because there is very low profit in every year.

**Cause:**In year 2005 there is a flood situation in operational area of sugar factory because of that lot of sugarcane crop was destroyed and in next year 2006-07 there is shortage of sugarcane. This situation affects profitability of sugar factory in that particular year and ratio was highly reduced.

#### **4.3.7 Operational Efficiency Ratio:**

Operational efficiency ratio can be used to help measure the effectiveness over last cost control. These ratios are of them used by production managers to show the trends and identify problems. These ratios are very useful to the management to know the efficiency of the factory and increased the efficiency.

##### **4.3.7.1 Material Cost Ratio:**

This ratio shows the proportion of the total material consumed cost and the sales of the firm. This ratio helps in control the material cost and increased profitability.

**Table No 4.39**

#### **Material Cost Ratio of KSSK Ltd.**

<b>Year</b>	<b>Material Cost</b>	<b>Sales</b>	<b>Ratio</b>
2005-06	468031368	391345165	119.60
2006-07	461148630	847776387	54.40
2007-08	501442791	724298200	69.23
2008-09	679265251	1036951684	65.51
2009-10	1347084339	1453207215	92.70
2010-11	1287855811	1988381856	64.77
2011-12	1479714687	1741959288	84.95

(Source- Annual report of KSSK Ltd. from year 2005-06 to 2011-12)

Table no.4.39 shows the material cost ratio of KSSK Ltd. for the study period. The ratio of material cost is the ratio of material cost and sales. In year 2005-06 the material cost ratio were 119.60% and in year 2006-07 ratio was 54.40%. In year 2007-08 the ratio was slightly decreased as 65.51% in 2008-09. In year 2009-10 material cost ratio was increased and reach to 92.70% but

it was reduced up to 64.77% in year 2010-11. In year 2011-12 the ratio were increased and become 84.95%. The material cost ratio shows the proportion of total material cost and sales of the particular year. The ratio of KSSK Ltd. was shows higher proportion of material cost because the pricing policy of the sugarcane was not fixed, so it affects the material cost of the sugar factory and adversely affected the profit. This ratio shows that the operational efficiency of KSSK Ltd. was not satisfactory.

#### 4.3.7.2 Labour Cost Ratio:

This ratio shows the relationship between labour cost and sales of the firm. For increasing the profitability firm should control the labour cost ratio. It shows the operational efficiency of the firm.

**Table No 4.40**  
**Labour Cost Ratio of KSSK Ltd.**

Year	Labour Cost	Sales	Ratio
2005-06	47880100	391345165	12.23
2006-07	64186856	847776387	7.57
2007-08	69475241	724298200	9.59
2008-09	81954809	1036951684	7.90
2009-10	107790961	1453207215	7.42
2010-11	146081783	1988381856	7.35
2011-12	202014928	1741959288	11.60

(Source- Annual report of KSSK Ltd. from year 2005-06 to 2011-12)

Table no.4.40 explains the labour cost ratio of the KSSK Ltd. from year 2005-06 to 2011-12. This ratio shows the proportion of total labour cost and sale of the year. The labour cost ratio of KSSK Ltd. is 12.23% in year 2005-06 and 7.57% in year 2006-07. In year 2007-08 this ratio were increased and become 9.59% but in next three years this ratio was reduced and reach to 7.35% in year 2010-11. In year 2011-12 the labour cost ratio were increased and become 11.60%. The lower labour cost ratio shows the higher operational efficiency. The labour cost ratio of KSSK Ltd. is lower which shows the greater efficiency of the management.

#### 4.3.7.3 Factory Overhead Ratio:

This ratio shows the proportion of factory overheads means thus expenses which are directly related with production. Lower factory overhead ratio shows the more operational efficiency of firm.

**Table No 4.41**  
**Factory Overhead Ratio of KSSK Ltd.**

Year	Factory Expenses	Sales	Ratio
2005-06	35921806	391345165	9.18
2006-07	44329955	847776387	5.23
2007-08	53464496	724298200	7.38
2008-09	54320840	1036951684	5.24
2009-10	77433038	1453207215	5.33
2010-11	106064306	1988381856	5.33
2011-12	95718536	1741959288	5.49

(Source- Annual report of KSSK Ltd. from year 2005-06 to 2011-12)

The table denotes the ratio of factory overhead to sales of the factory of KSSK Ltd. The data provided in table 4.41 depicts that in year 2005-06 the factory overhead ratio were 9.18% and in year 2006-07 this ratio was 5.23%. In year 2007-08 this ratio was increased and become 7.38% and this ratio were reduced in year 2008-09 and reach to 5.24%. The factory overhead ratio was slightly increased year after year and reach to 5.49% in year 2011-12. The lower factory overhead ratio of KSSK Ltd. shows the higher operational efficiency of the management of sugar factory.

#### 4.3.7.4 Administrative Expenses Ratio:

This ratio shows the proportion of administrative expenses and sales of the firm. The lower administrative expenses ratio shows the greater operational efficiency of firm.

**Table No 4.42**  
**Administrative Expenses Ratio of KSSK Ltd.**

Year	Administrative Expenses	Sales	Ratio
2005-06	7955833	391345165	2.03
2006-07	11452633	847776387	1.35
2007-08	10655236	724298200	1.47
2008-09	12803193	1036951684	1.23
2009-10	16532040	1453207215	1.14
2010-11	20973378	1988381856	1.05
2011-12	23637231	1741959288	1.36

(Source- Annual report of KSSK Ltd. from year 2005-06 to 2011-12)

Table no.4.42 expressed the administrative expenses ratio of the KSSK Ltd. from year 2005-06 to 2011-12 for the study period. In year 2005-06 the administrative expenses ratio of the KSSK Ltd. were 2.03% and in year 2006-07 this ratio was reduced as 1.35%. The administrative expenses ratio in year 2007-08 was increased and reaches to 1.47%. After year 2008-09 this ratio was reduced and become 1.05% in year 2010-11 but in last year the ratio was increased as 1.36%. The lower administrative expenses ratio shows higher efficiency and the higher ratio shows the lower operational efficiency. The administrative expenses ratio of the KSSK Ltd. shows the management of the factory work more effectively.

#### 4.3.7.5 Selling and Distribution Expenses Ratio:

This ratio is the proportion of Selling and Distribution Expenses and sales of the firm. The lower Selling and Distribution Expenses ratio shows the more operational efficiency of firm.

**Table No 4.43**  
**Selling and Distribution Expenses Ratio of KSSK Ltd.**

Year	Selling and Distribution Expenses	Sales	Ratio
2005-06	8807652	391345165	2.25
2006-07	12300532	847776387	1.45
2007-08	25355775	724298200	3.50
2008-09	13924562	1036951684	1.34
2009-10	19839091	1453207215	1.37
2010-11	20129759	1988381856	1.01
2011-12	21709320	1741959288	1.25

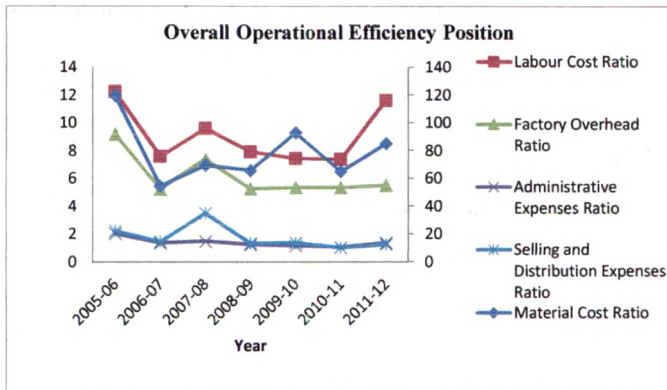
(Source- Annual report of KSSK Ltd. from year 2005-06 to 2011-12)

Table 4.43 shows the data relating to the selling and distribution expenses ratio of the KSSK Ltd. In year 2005-06 selling and distribution expenses ratio were 2.50% and in year 2006-07 this ratio was reduced and become 1.45%. This ratio was increased up to 3.50% in year 2007-08. But after that it was reduced year after year and become 1.01% in year 2010-11. In year 2011-12 the ratio was increased some extend and reach to 1.25% .The selling and distribution expenses ratio shows the relationship between selling and

distribution expenses and sales for the particular year. This ratio of KSSK Ltd. was shows the good operational efficiency of the factory.

#### 4.3.8 Overall Operational Efficiency of KSSK Ltd.

Figure 4.9



(Source- Annual report of KSSK Ltd. from year 2005-06 to 2011-12)

Figure 4.9 shows the overall operational efficiency of the KSSK Ltd. from year 2005-06 to 2011-12. In above figure the labour cost ratio, factory overhead ratio, administrative expenses ratio and selling and distribution expenses ratio were shown on the primary axis and material cost ratio was shown on the secondary axis.

The material cost ratios of the KSSK Ltd. were high in the study period and it shows a fluctuating trend. In year 2005-06 the ratio was higher at 119.60% but in the next year it was lower at 54.40%. This ratio shows the poor operational efficiency in the purchase of material. The labour cost ratio of the factory also shows a fluctuating trend, the overall labour cost ratio was low which shows good efficiency. Factory overhead ratios of KSSK Ltd. in year 2005-06 were 9.18 and after that it was constant in the last four years. The administrative expenses ratio of KSSK Ltd. was very low which shows that the management makes their work at low cost. This ratio was almost constant over the study period. The selling and distribution expenses

ratio were also low, in year 2007-08 it was increased as 3.50% in other years it was constant.

The overall operational efficiency of KSSK Ltd. was good but only the material cost was adversely affected the operational efficiency. The material cost was not constant and it was out of control of the management.

#### **4.3.9 To Assess the Growth of KSSK Ltd. -**

##### **4.3.9.1 Share Capital:**

Share capital is the owner's capital of the firm, the growth and development of the firm is depends up on the availability of share capital. The share capital is used for establishment and purchase of fixed assets.

**Table No 4.44**  
**Share Capital Growth of KSSK Ltd.**

<b>Year</b>	<b>Share Capital</b>	<b>Growth %</b>
2005-06	198426384	2.95
2006-07	211369245	6.52
2007-08	214720704	1.59
2008-09	223911409	4.28
2009-10	235642564	5.24
2010-11	236104046	0.20
2011-12	227626746	-3.59

(Source- Annual report of KSSK Ltd. from year 2005-06 to 2011-12)

(Note- Growth percentage is calculated as compared to last year)

Table no. 4.44 expressed the growth rate in share capital of KSSK Ltd. from year 2005-06 to 2011-12. The table shows the growth rate of share capital as compared to last year. In year 2005-06 the growth rate of share capital is 2.95% and in year 2006-07 the growth rate increased and reaches to 6.52. In year 2007-08 the share capital of the factory was increased but rate of the growth was decreased and become 1.59% but in year 2008-09 the share capital growth ratio were increased and goes up to 4.28% and in year 2009-10 the rate were 5.23%. In year 2010-11 the share capital was slightly increased as 0.19% and in last year the total share capital was decreased and because of that the



growth rate were decreased as -3.59%. The overall growth of share capital shows the increasing trend but in last year the growth was decreased.

#### **4.3.9.2 Sales:**

The growth of any business is mainly depending up on growth in sales of that business. From the sales business can earn profit so increased profit is depend up on sales.

**Table No 4.45**  
**Sales Growth of KSSK Ltd.**

<b>Year</b>	<b>Sales</b>	<b>Growth %</b>
2005-06	391345165	11.13
2006-07	847776387	116.63
2007-08	724298200	-14.56
2008-09	1036951684	43.17
2009-10	1453207215	40.14
2010-11	1988381856	36.83
2011-12	1741959288	-12.39

(Source- Annual report of KSSK Ltd. from year 2005-06 to 2011-12)

(Note- Growth percentage is calculated as compared to last year)

Table shows the growth rate of the sales of the KSSK Ltd. from year 2005-06 to 2011-12. The growth rate of sales in year 2005-06 were 11.13% and in year 2006-07 the sales was increased highly, the growth rate was increased hugely and become 116.63%. In year 2007-08 there is some decrease in total sales of the sugar factory and growth rate was decreased as -14.56%. From the year 2008-09 the total sales were shows the increasing trend but at decreasing trend in year 2008-09 the growth rate were 43.17% and the rate were goes down to 36.83% in year 2010-11. In year 2011-12 the total sale were again decreased and the growth rate was decreased as -12.39% the total sales trend shows the fluctuating trend of the sale of sugar factory.

#### **4.3.9.3 Working Capital:**

Working capital is the capital which is required for day to day working of the firm. If there is shortage of working capital business cannot run further. Working capital is very useful in any business.

**Table No 4.46**  
**Working Capital Growth of KSSK Ltd.**

Year	Working Capital	Growth %
2005-06	425139826	247.88
2006-07	297314725	-30.07
2007-08	338995313	14.02
2008-09	410775316	21.17
2009-10	657702866	60.11
2010-11	686855391	4.43
2011-12	914365757	33.12

(Source- Annual report of KSSK Ltd. from year 2005-06 to 2011-12)

(Note- Growth percentage is calculated as compared to last year)

Table no 4.46 denoted the growth rate of working capital of the KSSK Ltd. from year 2005-06 to 2011-12. In year 2005-06 the growth rate of working capital was 247.88% but it was reduced and become -30.07% in year 2006-07. In year 2007-08 the growth rate were 14.02% and it was increased in next two years it was increased and reach to 60.11% in year 2009-10. The growth rate of working capital was 4.43% and 33.12% in year 2010-11 and year 2011-12 respectively. The working capital growth rate shows the fluctuating trend in growth.

#### **4.3.9.4 Profit:**

The success of any business is assessed by its profit earning capacity. Profit is the main indicator of financial performances of business. Every business is worked for earning maximum profit.

**Table No4.47**  
**Profit Growth of KSSK Ltd.**

Year	Profit	Growth %
2005-06	881166	-97.20
2006-07	-33570893	-3909.83
2007-08	57951561	272.62
2008-09	471304	-99.19
2009-10	6396436	1257.18
2010-11	10918072	70.69
2011-12	1469228	-86.54

(Source- Annual report of KSSK Ltd. from year 2005-06 to 2011-12)

(Note- Growth percentage is calculated as compared to last year)

Table 4.47 expresses the total growth rate in profit earned capacity of KSSK Ltd. for the study period. The growth rate were 97.19% in year 2005-06 as compared to last year but in year 2006-07 the sugar factory have a huge loss and growth rate were decreased up to -3909.82%. In year 2007-08 the factory again earned large profit and the growth rate of profit was increased and reach to 272.62% in year 2008-09 the factory earned profit but growth rate was decreased and become -99.19%. The growth rate of the factory were 1257.18% in year 2009-10 and in year 2010-11 the growth rate was 70.69%. In last year 2011-12 the growth rate was -86.54%. The growth rate of profit shows the fluctuating trend which given the remark about the unstable profitability of the factory.

#### 4.3.9.5 Long Term Investment:

The investment is made from the profit earned by the firm. Long term investment is useful to the firm in future development and given financial stability to the firm.

**Table No 4.48**  
**Long Term Investment Growth of KSSK Ltd.**

Year	Long-Term Investment	Growth %
2005-06	8662100	61.54
2006-07	9092100	4.96
2007-08	9643100	6.06
2008-09	10194100	5.71
2009-10	12549100	23.10
2010-11	13639100	8.69
2011-12	15119100	10.85

(Source- Annual report of KSSK Ltd. from year 2005-06 to 2011-12)

(Note- Growth percentage is calculated as compared to last year)

Table 4.48 given the information about the growth in long term investment of KSSK Ltd. from year 2005-06 to 2011-12. In year 2005-06 the growth rate in long term investment were 61.54 % and in year 2006-07 the growth rate was decreased and become 4.96%. The long term investment growth rate in year 2007-08 were 6.06% and in year 2008-09 the rate were 5.71% but in year 2009-10 the growth rate were increased more and become 23.10%. In last two years the growth rate were decreased but total investment were increased which shows the growth rate were 8.69% in year 2010-11 and 10.85% in year

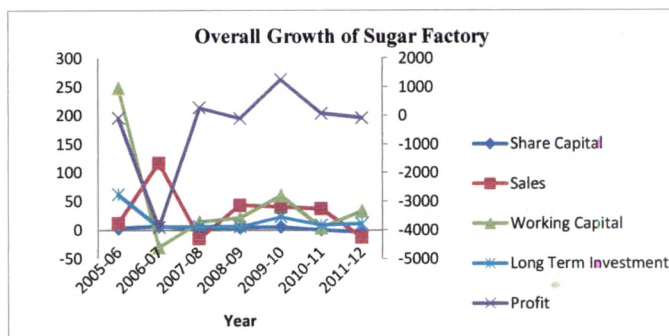
2011-12. The total long term investment growth rate shows the total investment is increased year after year but increasing trend was fluctuating.

#### 4.3.10 Overall Growth of KSSK Ltd.

Figures 4.10 express the overall growth of KSSK Ltd. from year 2005-06 to 2011-12. The above figure shows the share capital, sales, working capital and long term investment on primary axis and profit on secondary axis.

The growth rate of share capital was very low in study period and it shows the fluctuating trend in growth of share capital. The growth in sales were also shows the fluctuating trend, there is huge ups and downs in the growth of the sales. The working capital growth rates of the KSSK Ltd. were very high in year 2005-06 but it was decreased in next year and after that it was again increased.

Figure 4.10



(Source- Annual report of KSSK Ltd. from year 2005-06 to 2011-12)

The growth of profit of the factory was very huge change in growth in year 2006-07 there is huge growth in profit as 1257.18%. The profit growth of the factory was not good. The long term investments were also shows the fluctuating trend of growth. In year 2005-06 growth rate of long term investment were 61.54% but in next year it was very low growth as 4.96%.

The overall the parameters of the growth of the KSSK Ltd. were shows the fluctuating trend. It shows that there is not constant growth in KSSK Ltd. and it was not good position in the growth of sugar factory.

**Cause-**There is overall growth in share capital of KSSK Ltd. but in last year 2011-12 the factory was forfeited unpaid shares and because of that their

reduction in share capital. In year 2007-08 the sales of sugar was reduced because in that year production of sugar was decreased. After year 2009-10 there is decreasing trend of sales because the government ban of export of sugar. In year 2006-07 the working capital requirement was reduced because the production of sugar in that year was reduced because the flood situation. The profit is also reduced in year 2005-06 and 2006-07 because of flood situation and less production. The long term investment of factory was increased but at fluctuating rate because the investment is depends up on profit and the profit of firm was fluctuating year after year.

#### **4.4 Comparative Financial Performance of HKASSK Ltd. and KSSK Ltd.**

In this comparative analysis of HKASSK Ltd. and KSSK Ltd. the researcher compared the liquidity position, solvency position, profitability, operational efficiency and overall growth of this two sugar factories. The researcher has made the comparative study of this two sugar factories from year 2005-06 to year 2011-12. This comparison shows the financial position of both the sugar factories in comparison for the study period. This comparative study given better understanding about the performance of which sugar factory is better than other.

##### **4.4.1 Comparative Liquidity Position:**

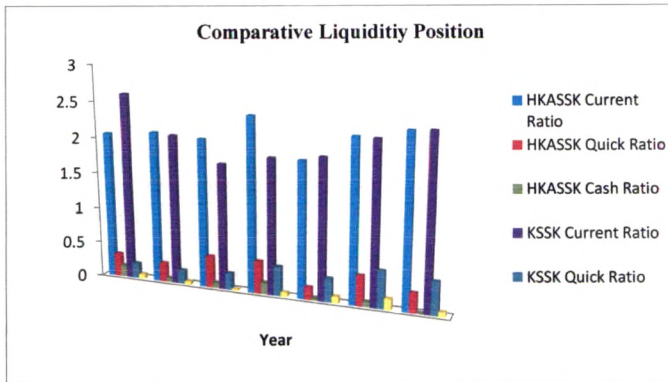
**Table No 4.49**

**Comparative Liquidity Position of HKASSK Ltd. and KSSK Ltd.**

	<b>HKASSK Ltd.</b>			<b>KSSK Ltd.</b>		
<b>Year</b>	<b>Current Ratio</b>	<b>Quick Ratio</b>	<b>Cash Ratio</b>	<b>Current Ratio</b>	<b>Quick Ratio</b>	<b>Cash Ratio</b>
2005-06	2.05	0.32	0.16	2.61	0.21	0.06
2006-07	2.11	0.26	0.05	2.09	0.19	0.04
2007-08	2.07	0.44	0.07	1.75	0.23	0.02
2008-09	2.43	0.45	0.16	1.89	0.41	0.06
2009-10	1.89	0.17	0.02	1.96	0.33	0.09
2010-11	2.26	0.42	0.07	2.25	0.52	0.15
2011-12	2.38	0.27	0.01	2.40	0.46	0.06

(Source-Annual report of HKASSK Ltd .and KSSK Ltd. from year 2005-06 to 2011-12)

**Figure 4.11**



(Source-Annual report of HKASSK Ltd. and KSSK Ltd. from year 2005-06 to 2011-12)

Table 4.49 donates the data relating to the comparative liquidity position of HKASSK Ltd. and KSSK Ltd. for the study period from year 2005-06 to 2011-12. The current ratio of HKASSK Ltd. were always more than standard of 2:1 in study period, which shows the good liquidity position. The current ratio of KSSK Ltd. shows the fluctuating trend over the study period; from 2007-08 to year 2009-10 the ratio were below the standard other than that it was more than standard ratio. The overall current ratio of KSSK Ltd. shows the good liquidity position. There is no significant difference between current ratio of HKASSK Ltd. and KSSK Ltd. but the liquidity position of HKASSK Ltd. was slightly better than the KSSK Ltd.

The quick ratio of both the sugar factories shows the fluctuating trend over the study period. The quick ratio of both the sugar factories was lower; there is no big difference in quick ratio of KSSK Ltd. and HKASSK Ltd. In first four year the Quick ratio of HKASSK Ltd. was higher than the KSSK Ltd. but in last three years the quick ratio of KSSK Ltd. was higher than HKASSK Ltd. The overall quick ratio of both the sugar factories shows the poor short term liquidity position.

The cash ratio of HKASSK Ltd. and KSSK Ltd. shows the fluctuating trend in study period. From year 2005-06 to year 2008-09 the cash ratio of HKASSK Ltd. was higher than KSSK Ltd. but from year 2009-10 to year

2011-12 the cash ratio of KSSK Ltd. was better than the HKASSK Ltd. There is no significant difference in cash ratio of both the sugar factories. The above table shows the almost same liquidity position of HKASSK Ltd. and KSSK Ltd. from year 2005-06 to 2011-12.

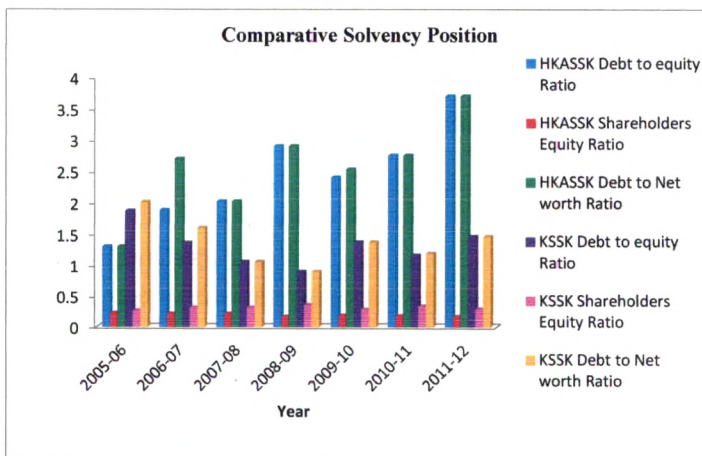
#### 4.4.2 Comparative Solvency Position:

**Table No 4.50**  
**Comparative Solvency Position of HKASSK Ltd. and KSSK Ltd. I**

Year	HKASSK Ltd.			KSSK Ltd.		
	Debt to equity Ratio	Shareholders Equity Ratio	Debt to Net worth Ratio	Debt to equity Ratio	Shareholders Equity Ratio	Debt to Net worth Ratio
2005-06	1.30	0.23	1.30	1.87	0.27	2.01
2006-07	1.88	0.22	2.70	1.36	0.32	1.60
2007-08	2.02	0.22	2.02	1.06	0.32	1.06
2008-09	2.90	0.17	2.90	0.90	0.36	0.90
2009-10	2.40	0.19	2.53	1.37	0.29	1.37
2010-11	2.75	0.18	2.75	1.16	0.34	1.19
2011-12	3.70	0.17	3.70	1.46	0.30	1.46

(Source-Annual report of HKASSK Ltd. and KSSK Ltd. from year 2005-06 to 2011-12)

**Figure 4.12**



(Source-Annual report of HKASSK Ltd. and KSSK Ltd. from year 2005-06 to 2011-12)

Table 4.50 and figure 4.12 shows the comparative solvency position of the HKASSK Ltd. and KSSK Ltd. for the study period from year 2005-06 to year 2011-12. The debt to equity ratio of KSSK Ltd. shows the better solvency position as compared to HKASSK Ltd. because the debt to equity ratio of HKASSK Ltd. is greater than KSSK Ltd. for the study period. The higher ratio shows the more use of the debt capital as compared to equity capital, it shows the solvency position.

The shareholders equity ratio of both the sugar factories shows that the KSSK Ltd. have more equity capital in total assets than the HKASSK Ltd. This ratio also shows the solvency position of the KSSK Ltd. is slightly better than the HKASSK Ltd.

The debt to net worth ratio of HKASSK Ltd. is greater than the KSSK Ltd. from year 2005-06 to 2011-12, which shows that the KSSK Ltd. is having more share of equity capital in total capital as compared to HKASSK Ltd. This ratio expresses more solvency position of KSSK Ltd.

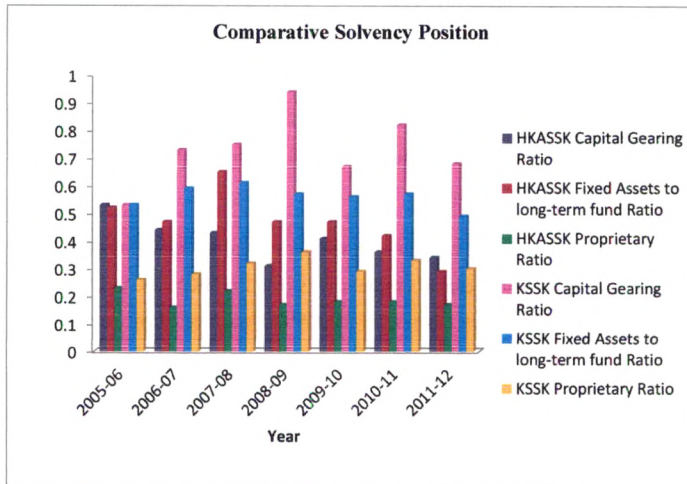
**Table No 4.51**  
**Comparative Solvency Position of HKASSK Ltd. and KSSK Ltd. II**

Year	HKASSK Ltd.			KSSK Ltd.		
	Capital Gearing Ratio	Fixed Assets to long-term fund Ratio	Proprietary Ratio	Capital Gearing Ratio	Fixed Assets to long-term fund Ratio	Proprietary Ratio
2005-06	0.53	0.52	0.23	0.53	0.53	0.26
2006-07	0.44	0.47	0.16	0.73	0.59	0.28
2007-08	0.43	0.65	0.22	0.75	0.61	0.32
2008-09	0.31	0.47	0.17	0.94	0.57	0.36
2009-10	0.41	0.47	0.18	0.67	0.56	0.29
2010-11	0.36	0.42	0.18	0.82	0.57	0.33
2011-12	0.34	0.29	0.17	0.68	0.49	0.30

(Source-Annual report of HKASSK Ltd. and KSSK Ltd. from year 2005-06 to 2011-12)



**Figure 4.13**



(Source-Annual report of HKASSK Ltd. and KSSK Ltd. from year 2005-06 to 2011-12)

Table 4.51 and figure 4.13 express the information about the solvency position of the HKASSK Ltd. and KSSK Ltd. in study period. The comparative capital gearing ratio of HKASSK Ltd. and KSSK Ltd. shows that the KSSK Ltd. is have more capital geared as compared to HKASSK Ltd. This higher capital gearing ratio shows that equity shares have received more return and which shows good solvency position of KSSK Ltd. as compared to HKASSK Ltd. The fixed asset to long-term fund ratio of HKASSK Ltd. and KSSK Ltd. shows that there is no significant difference in this ratio. But the share of fixed assets in long term funds in KSSK Ltd. is slightly higher than HKASSK Ltd. It expresses the higher solvency position of KSSK Ltd. as compared to HKASSK Ltd.

The proprietary ratio also denotes that the solvency position of KSSK Ltd. is slightly greater than the HKASSK Ltd. for the study period. The proprietary ratio of KSSK Ltd. is higher than HKASSK Ltd. it shows that the shareholders capital in total assets is have more contribution.

The all solvency ratio defined that the overall solvency position of the KSSK Ltd. is better than the HKASSK Ltd. for the study period, but there is no significant difference between their solvency positions.

#### 4.4.3 Comparative Profitability Position

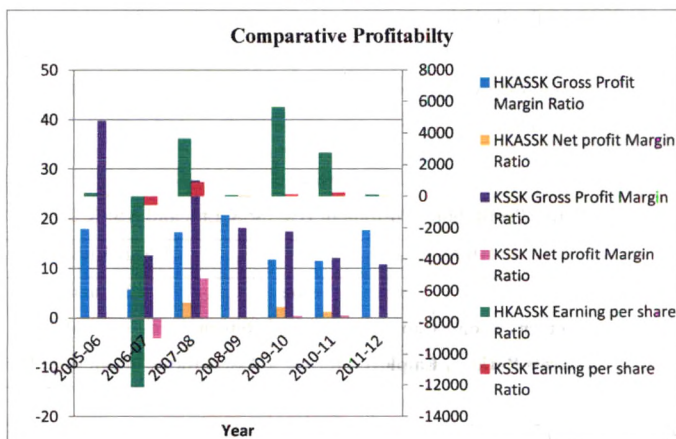
Table No 4.52

Comparative Profitability Position of HKASSK Ltd. and KSSK Ltd. I

Year	HKASSK Ltd.			KSSK Ltd.		
	Gross Profit Margin Ratio	Net profit Margin Ratio	Earnings per share Ratio	Gross Profit Margin Ratio	Net profit Margin Ratio	Earnings per share Ratio
2005-06	18.00	0.21	208.90	39.79	0.23	13.70
2006-07	5.71	-11.70	-12109.28	12.65	-3.96	-521.68
2007-08	17.31	3.16	3666.84	27.73	8.00	895.43
2008-09	20.79	0.05	69.95	18.25	0.05	10.06
2009-10	11.78	2.20	5661.05	17.48	0.44	133.08
2010-11	11.51	1.23	2773.78	12.08	0.55	238.34
2011-12	17.73	0.05	112.67	10.82	0.08	32.01

(Source-Annual report of HKASSK Ltd. and KSSK Ltd. from year 2005-06 to 2011-12)

Figure 4.14



(Source-Annual report of HKASSK Ltd. and KSSK Ltd. from year 2005-06 to 2011-12)

Table 4.52 and figure 4.14 shows the comparative profitable of HKASSK LTD. and KSSK Ltd. for the study period. In above figure gross profit margin

ratio and net profit margin ratio of HKASSK Ltd. and KSSK Ltd. were shows on primary axis and earnings per share ratio of both the sugar factories were shows on secondary axis. The gross profit ratio of HKASSK Ltd. in study period shows the fluctuating trend but the gross profit ratio of KSSK Ltd. shows the decreasing trend. The gross profit of KSSK Ltd. is higher than HKASSK Ltd. over the study period but in last year 2011-12 this ratio is lower than HKASSK Ltd. The gross profit shows that the profitability of KSSK Ltd. is more than HKASSK Ltd. but it was decreasing year after year.

The net profit ratio of both sugar factories shows the fluctuating trend and there is no significant difference between the net profit of HKASSK Ltd. and KSSK Ltd. The both the sugar factories have huge net loss in year 2006-07. But in other years the sugar factories have net profit which was very low. The net profit ratio of HKASSK Ltd. and KSSK Ltd. shows the lower profitability of the sugar factories. The net profit of HKASSK Ltd. is slightly higher than the KSSK Ltd. over the study period.

There is the significant difference in earning per share of the HKASSK Ltd. and KSSK Ltd. for the study period. The earnings per share of HKASSK Ltd. are greater than the KSSK Ltd. from year 2005-06 to year 2011-12. In year 2006-07 the both the sugar factories have huge loss. The earnings per share of both the sugar factories show the fluctuating trend over the study period. The ratio shows that profitability of HKASSK Ltd. is greater than the KSSK Ltd. which earns more return on shares.

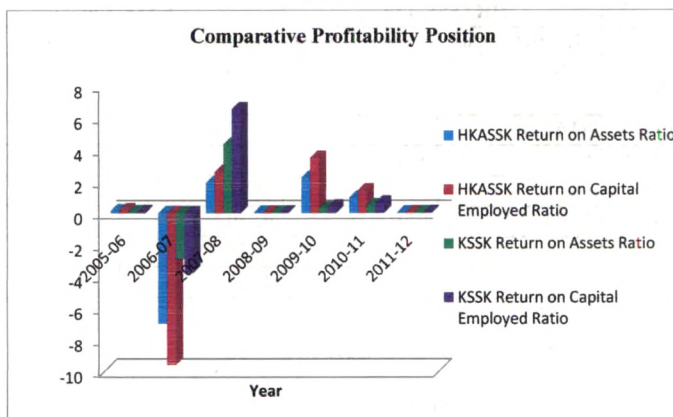
**Table No 4.53**  
**Comparative Profitability Position of HKASSK Ltd. and KSSK Ltd. II**

Year	HKASSK Ltd.		KSSK Ltd.	
	Return on Assets Ratio	Return on Capital Employed Ratio	Return on Assets Ratio	Return on Capital Employed Ratio
2005-06	0.13	0.20	0.07	0.09
2006-07	-6.98	-9.58	-2.88	-3.77
2007-08	1.90	2.59	4.32	6.55
2008-09	0.03	0.03	0.03	0.05

2009-10	2.24	3.47	0.29	0.42
2010-11	0.98	1.43	0.50	0.67
2011-12	0.03	0.05	0.05	0.07

(Source-Annual report of HKASSK Ltd. and KSSK Ltd. from year 2005-06 to 2011-12)

**Figure 4.15**



(Source- Annual report of HKASSK Ltd. and KSSK Ltd. from year 2005-06 to 2011-12)

Table 4.53 and figure 4.15 explain the information about the comparative profitable of HKASSK Ltd. and KSSK Ltd. The return on assets ratio of both the sugar factories shows the fluctuating trend over the study period. There is no big difference in return on assets ratio of the HKASSK Ltd. and KSSK Ltd. In year 2006-07 there is negative return on assets of both the sugar factories. In year 2007-08 the KSSK Ltd. have more return on assets as compared to HKASSK Ltd. but in year 2009-10 the HKASSK Ltd. have earned more return on assets.

The return on capital employed ratio also shows the fluctuating trend over the study period. There is no huge difference in return on capital employed of HKASSK Ltd. and KSSK Ltd. In year 2007-08 the KSSK Ltd. have earned more return on capital employed as compared to HKASSK Ltd. and in year 2009-10 HKASSK Ltd. have earned more return on capital employed.

The overall profitability of HKASSK Ltd. and KSSK Ltd. has not sufficient the profit earned by both the sugar factories have not satisfactory. The overall

profitability of HKASSK Ltd. is slightly greater than the KSSK Ltd. over the period of time.

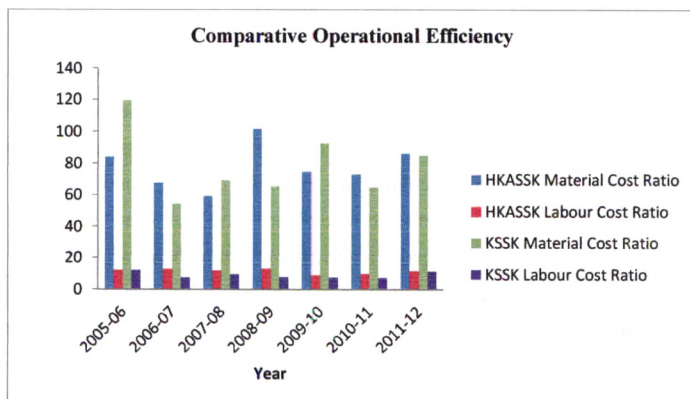
#### 4.4.4 Comparative of Operational Efficiency

**Table No 4.54**  
**Comparative of Operational Efficiency of HKASSK Ltd. and KSSK Ltd.I**

Year	HKASSK Ltd.		KSSK Ltd.	
	Material Ratio	Cost	Material Ratio	Cost
2005-06	84.05	12.33	119.60	12.23
2006-07	67.61	13.13	54.40	7.57
2007-08	59.10	12.09	69.23	9.59
2008-09	101.72	13.45	65.51	7.90
2009-10	74.60	9.10	92.70	7.42
2010-11	72.74	10.01	64.77	7.35
2011-12	86.14	11.86	84.95	11.60

(Source- Annual report of HKASSK Ltd. and KSSK Ltd. from year 2005-06 to 2011-12)

**Figure 4.16**



(Source-Annual report of HKASSK Ltd. and KSSK Ltd. from year 2005-06 to 2011-12)

The comparative operational efficiency of HKASSK Ltd. and KSSK Ltd. were shown in table 4.54 and figure 4.16 from year 2005-06 to 2011-12s. The material cost ratio of HKASSK Ltd. and KSSK Ltd. for the study period shows the fluctuating trend. This ratio of any sugar factory were not constantly higher or lower over the study period in one year HKASSK Ltd. material cost ratio is higher and in next year KSSK Ltd. ratio were higher.



There is difference in material cost of both the sugar factories but both the factories material cost ratio is higher.

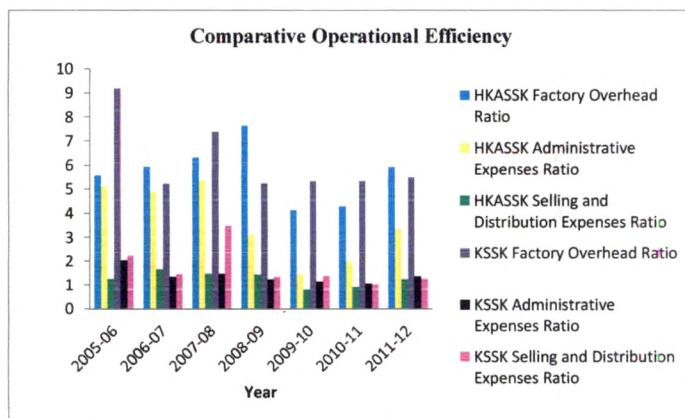
The labour cost ratio of HKASSK Ltd. is higher than the KSSK Ltd. for over the last 7 years. This ratio shows that the operational efficiency is higher of KSSK Ltd. than HKASSK Ltd. The lower labour cost ratio shows the more operational efficiency because the factories can their operation in lower labour cost.

**Table No 4.55**  
**Comparative of Operational Efficiency of HKASSK Ltd. and KSSK Ltd.**  
**II**

Year	HKASSK Ltd.			KSSK Ltd.		
	Factory Overhead Ratio	Administrative Expenses Ratio	Selling and Distribution Expenses Ratio	Factory Overhead Ratio	Administrative Expenses Ratio	Selling and Distribution Expenses Ratio
2005-06	5.57	5.13	1.26	9.18	2.03	2.25
2006-07	5.95	4.92	1.66	5.23	1.35	1.45
2007-08	6.32	5.37	1.47	7.38	1.47	3.50
2008-09	7.65	3.11	1.42	5.24	1.23	1.34
2009-10	4.13	1.45	0.80	5.33	1.14	1.37
2010-11	4.30	1.97	0.91	5.33	1.05	1.01
2011-12	5.92	3.36	1.23	5.49	1.36	1.25

(Source- Annual report of HKASSK Ltd. and KSSK Ltd. from year 2005-06 to 2011-12)

**Figure 4.17**



(Source- Annual report of HKASSK Ltd. and KSSK Ltd. from year 2005-06 to 2011-12)

Table 4.55 and figure 4.17 shows the operational efficiency of HKASSK Ltd. and KSSK Ltd. from year 2005-06 to 2011-12. The factory overhead ratio of HKASSK Ltd. and KSSK Ltd. shows the fluctuating trend in study period. In first year 2005-06 the factory overhead ratio of KSSK Ltd. were greater than HKASSK Ltd. but in next year the ratio of HKASSK Ltd. were greater than KSSK Ltd. There is no significant difference in factory overhead ratio of both sugar factories.

The administrative expenses ratio of KSSK Ltd. was always lower than the HKASSK LTD. over the study period of 7 years. This ratio shows the operational efficiency of KSSK Ltd. were better than the HKASSK Ltd. There is slightly difference in ratio between the two sugar factories.

The selling and distribution expenses ratio of HKASSK Ltd. were lower than the KSSK Ltd. in study period, only in year 2006-07 the ratio of HKASSK Ltd. were slightly higher than KSSK Ltd. This ratio shows the slightly greater operational efficiency of the HKASSK Ltd. than KSSK Ltd. There is no big difference in selling and distribution expenses ratio of two sugar factories.

The overall operational efficiency ratios show that there is no significant difference in operational efficiency of both the sugar factories. The operational efficiency of HKASSK Ltd. and KSSK Ltd. were shows the fluctuating trend of efficiency over the study period.

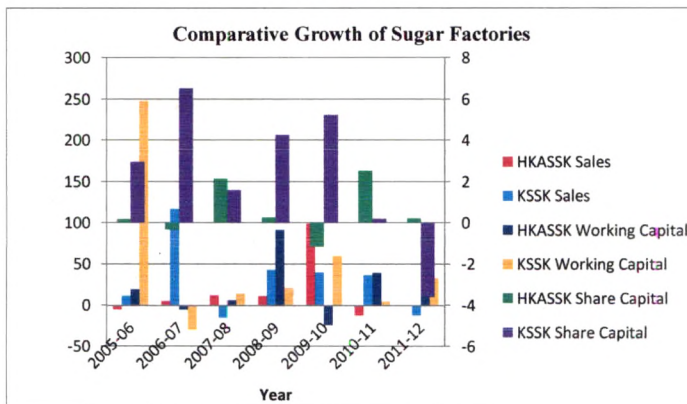
#### 4.4.5 Comparative Growth of Sugar Factories-

**Table No 4.56**  
**Comparative Growth of Sugar Factories of HKASSK Ltd. and KSSK Ltd. I**

Year	HKASSK Ltd.			KSSK Ltd.		
	Share Capital	Sales	Working Capital	Share Capital	Sales	Working Capital
2005-06	0.19	-5.16	19.4	2.95	11.13	247.88
2006-07	-0.33	5.33	-5.24	6.52	116.63	-30.07
2007-08	2.13	12.14	6.10	1.59	-14.56	14.02
2008-09	0.26	11.29	91.53	4.28	43.17	21.17
2009-10	-1.16	99.19	-23.94	5.24	40.14	60.11
2010-11	2.53	-12.4	39.46	0.20	36.83	4.43
2011-12	0.23	0.70	34.23	-3.59	-12.39	33.12

(Source-Annual report of HKASSK Ltd. and KSSK Ltd. from year 2005-06 to 2011-12)

Figure 4.18



(Source- Annual report of HKASSK Ltd. and KSSK Ltd. from year 2005-06 to 2011-12)

Table 4.56 and figure 4.18 express the information about the comparative growth of HKASSK Ltd. and KSSK Ltd. In the above figure sale and working capital of both the sugar factories were shown on the primary axis and share capital of both the factories were noted on secondary axis. The growth in share capital of KSSK Ltd. was in first five years is higher than the growth of HKASSK Ltd. share capital, but in last two years the growth of share capital of HKASSK Ltd. is greater than KSSK Ltd. There is a significant difference in the growth of share capital of both the sugar factories. The overall growth in share capital of KSSK Ltd. is greater than HKASSK Ltd.

The growth in sales of KSSK Ltd. was higher in first two years than HKASSK Ltd. but in year 2007-08 the growth of sales in HKASSK Ltd. was greater than KSSK Ltd. After that in year 2008-09 and 2010-11 the growth in sales of KSSK Ltd. were higher than HKASSK Ltd. and in year 2009-10 and 2011-12 the growth of HKASSK Ltd. were higher than KSSK Ltd. The overall growth of both the sugar factories shows the fluctuating trend and there is significant difference in growth of sales of this two sugar factories.

The working capital growth rate of HKASSK Ltd. were 19.40% in year 2005-06 and in same year the growth rate of KSSK Ltd. were 247.88% but in next year both the sugar factories growth rate were decreased but KSSK Ltd.



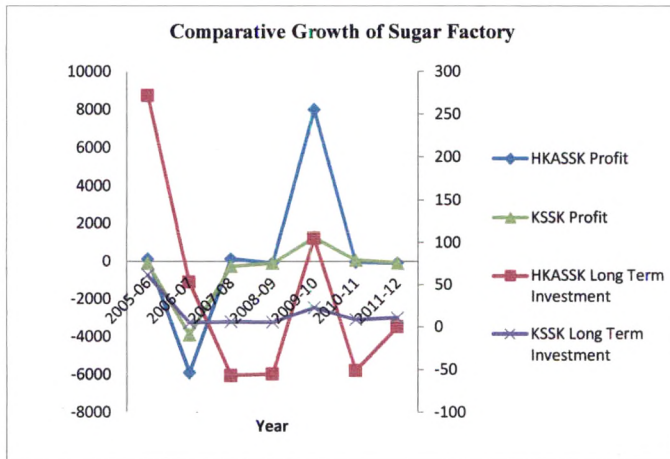
growth rate were highly decreased. In last four years the growth rate of both the sugar factories shows the fluctuating trend. There is significant difference in growth rate of HKASSK Ltd. and KSSK Ltd.

**Table No 4.57**  
**Comparative Growth of Sugar Factories of HKASSK Ltd. and KSSK Ltd. II**

Year	HKASSK Ltd.		KSSK Ltd.	
	Profit	Long Term Investment	Profit	Long Term Investment
2005-06	131.46	272.08	-97.20	61.54
2006-07	-5894.66	53.15	-3909.83	4.96
2007-08	130.28	-56.67	272.62	6.06
2008-09	-98.09	-54.96	-99.19	5.71
2009-10	7991.21	105.14	1257.18	23.10
2010-11	-51.00	-50.76	70.69	8.69
2011-12	-95.94	0.16	-86.54	10.85

(Source-Annual report of HKASSK Ltd. and KSSK Ltd. from year 2005-06 to 2011-12)

**Figure 4.19**



(Source- Annual report of HKASSK Ltd. and KSSK Ltd. from year 2005-06 to 2011-12)

Table 4.57 and figure 4.19 given the data relating to the growth of sugar factories. In figure profit of both the sugar factories shows on the primary axis and growth in long term investment shows on the secondary axis. The growth in profit of HKASSK Ltd. were shows the fluctuating trend. In first year it was increased but in next year there are huge decreases in the growth of profit and it became -5894.66%. After that it was increased in next year but in year 2008-09 it was again decreased. In year 2009-10 the growth in profit was very high but in last two years it was again decreased. The growth rate of KSSK Ltd. also shows the same trend of increases and decreases of growth but in different proportion. In year 2006-07 the growth of profit was very low as -3909.83% and in year 2009-10 the growth rate were huge as 1257.18% there is difference between the growth of profit of both the sugar factories, but the profitability of HKASSK Ltd. were shows the better growth as compared to KSSK Ltd.

The growth in long term investment of both the sugar factories shows the fluctuating trend. In first two years the growth of HKASSK Ltd. is greater than KSSK Ltd. but in next two years the growth rate of HKASSK Ltd. is negative which shows the decreasing investment at the same time the investment of KSSK Ltd. was slightly increased. In year 2009-10 the growth in investment of HKASSK Ltd. was again greater. In last two years the growth in investment of KSSK Ltd. was more than the HKASSK Ltd. The overall growth in investment of KSSK Ltd. is constantly increasing but the growth of HKASSK Ltd. shows the fluctuating trend.

The overall growth parameters show that the comparative growth of both the sugar factories shows the fluctuating trend, no anyone sugar factory shows constantly increasing trend. The growth rates of both the sugar factories were different but it was fluctuating year by year.

#### **4.5 TESTING OF HYPOTHESES-**

Hypotheses are usually considered as the principal investments in research. Its main function is to suggest new experiments and observations. In fact many experiments are carried out with the deliberate object of testing hypotheses. In the present research the researcher used the 't' test for testing the hypotheses.

He used the 0.05 level of significant for test the hypotheses it means there is 5% risk of rejecting the null hypotheses when it is true.

In this research t test is calculated by using the SPSS. In such a situation t-test is very easy to calculate.

In the calculate 'p' value is less than the level of significance i.e. 0.05 reject the null hypotheses. (P value < 0.05) if the calculate 'p' value is greater than the significant level i.e. 0.05 we accept the null hypotheses. (P value > 0.05)

### **HYPOTHESES- 1**

There is significant growth in Share Capital, Sales, Working Capital, Profit and Long Term Investment of Sample Sugar Factories.

For testing this hypothesis it has been divided into two hypotheses with reference to both the Sugar Factories.

**H<sub>01</sub>**- There is no significant growth in Share Capital, Sales, Working Capital, Profit and Long Term Investment of HKASSK Ltd.

**H<sub>a1</sub>**-There is significant growth in Share Capital, Sales, Working Capital, Profitand Long Term Investment of HKASSK Ltd.

**Table No.4.58**  
**Significant Growth in HKASSK Ltd.**

<b>Null Hypotheses</b>	<b>Mean</b>	<b>S.D</b>	<b>df</b>	<b>Table Value</b>	<b>Calculated Value</b>	<b>Decision</b>
Growth in share capital of HKASSK Ltd.	0.55	1.32	6	0.722	0.497	Accepted
Growth in sales of HKASSK Ltd.	15.87	37.77	6	0.738	0.488	Accepted
Growth in working capital of HKASSK Ltd.	23.08	37.40	6	0.260	0.803	Accepted
Growth in profit of HKASSK Ltd.	3.02	4041.95	6	0.112	0.915	Accepted
Growth in long term investment of HKASSK Ltd.	38.31	120.03	6	5.153	0.002	Rejected

(Source- Compiled by Researcher)

Table 4.58 shows the 'P' value for growth in share capital of HKASSK Ltd. is 0.497 which is greater than the alpha value i.e:0.05 hence null hypotheses are accepted.

For growth in sales of HKASSK Ltd. the 'P' value is 0.488 which is greater than the significant value i.e. 0.05, so null hypothesis accepted.

For growth in working capital of HKASSK Ltd. the 'P' value is 0.803 which is greater than the significant value i.e. 0.05('P' value > 0.05) so we accepted the null hypothesis.

For growth in profit of HKASSK Ltd. the 'P' value is 0.915 which is greater than the significant value i.e. 0.05 so null hypotheses is accepted.

For growth in long term investment of HKASSK Ltd. the 'p' value is 0.002 which is less than the significant value i.e. 0.05 hence null hypotheses is rejected.

From the overall hypothesis testing we can say that there is no significant growth in share capital , sales , working capital and profit of HKASSK Ltd. but long term investment there is significant growth in study period.

**H<sub>02</sub>**- There is no significant growth in Share Capital, Sales, Working Capital, Profit and Long Term Investment of KSSK Ltd.

**H<sub>a2</sub>**- There is significant growth in Share Capital, Sales, Working Capital, Profit and Long Term Investment of KSSK Ltd.

**Table No.4.59**  
**Significant Growth in KSSK Ltd.**

Null Hypotheses	Mean	S.D	df	Table Value	Calculated Value	Decision
Growth in share capital of KSSK Ltd.	2.45	3.42	6	0.382	0.715	Accepted
Growth in sales of KSSK Ltd.	31.56	44.62	6	1.211	0.271	Accepted
Growth in working capital of KSSK Ltd.	50.09	91.43	6	5.723	0.001	Rejected
Growth in profit of KSSK Ltd.	-4.48	1610.75	6	0.896	0.405	Accepted
Growth in long term investment of KSSK Ltd.	17.27	20.49	6	5.715	0.001	Rejected

(Source- Compiled by Researcher)

Table 4.59 expresses the 'p' value for growth in share capital of KSAK Ltd. is 0.715. This is greater than the significant value i.e. 0.05. Hence null hypothesis is accepted.

For growth in sales of KSSK Ltd. the 'P' value is 0.271 which is greater than the significant value i.e. 0.05. Hence null hypothesis accepted.

For growth in working capital of KSSK Ltd. the 'P' value is 0.001 which is less than the significant value i.e. 0.05 hence null hypotheses is rejected.

For growth in profit of KSSK Ltd. the 'p' value is i.e. 0.405 which is greater than the significant value i.e. 0.05 so we accepted the null hypothesis.

For growth in the long term investment of KSSK Ltd. the 'p' value is 0.001 which is less than the significant value i.e. 0.05 so null hypotheses is rejected.

The overall hypothesis testing shows that there is no significant growth in share capital, sales, and profit of KSSK Ltd. but there is growth in working capital and long term investment.

## HYPOTHESES-2

**H<sub>0</sub>**-There is no significant difference in liquidity position of two selected sugar factories.

**H<sub>a</sub>**- There is significant difference in liquidity position of two selected sugar factories.

**Table No.4.60**  
**Significant Difference in Liquidity Position of HKASSK Ltd. and KSSK Ltd.**

Null Hypotheses	Mean	S.D	df	Table Value	Calculated Value	Decision
Current Ratio of HKASSK Ltd. and KSSK Ltd.	0.034	0.343	6	0.265	0.800	Accepted
Quick Ratio of HKASSK Ltd. and KSSK Ltd.	-0.002	0.150	6	0.051	0.961	Accepted
Cash Ratio of HKASSK Ltd. and KSSK Ltd.	0.008	0.077	6	0.293	0.779	Accepted

(Source- Compiled by Researcher)

Table no 4.60 given the 'p' value for current ratio, quick ratio and cash ratio difference of HKASSK Ltd. and KSSK Ltd. is 0.800, 0.961 and 0.779 respectively. Which is greater than the significant value i.e. 0.05 ('p' value > 0.05) so we accepted the null hypothesis and we can say that there is no significant difference in the liquidity position of HKASSK Ltd. and KSSK Ltd. over the study period.

### **HYPOTHESES-3**

**H<sub>0</sub>**- The operational efficiency of sample sugar factories do not differ significantly.

**H<sub>a</sub>**- The operational efficiency of sample sugar factories differ significantly.

**Table No.4.61**  
**Significant Difference in Operational Efficiency of HKASSK Ltd. and KSSK Ltd.**

Null Hypotheses	Mean	S.D	df	Table Value	Calculated Value	Decision
Material Cost Ratio of HKASSK Ltd. and KSSK Ltd.	-0.742	23.24	6	0.085	0.935	Accepted
Labour cost Ratio of HKASSK Ltd. and KSSK Ltd.	2.615	2.24	6	3.092	0.021	Rejected
Factory Overhead Ratio of HKASSK Ltd. and KSSK Ltd.	-0.477	1.89	6	0.666	0.530	Accepted
Administrative Exp. Ratio of HKASSK Ltd. and KSSK Ltd.	2.240	1.34	6	4.393	0.005	Rejected
Selling and Distribution Exp. Ratio of HKASSK Ltd. and KSSK Ltd.	0.488	0.80	6	1.621	0.156	Accepted

(Source- Compiled by Researcher)

Table no 4.61 shows the 'p' value for material cost ratio of HKASSK Ltd. and KSSK Ltd. is 0.935, which is greater than the significant value i.e. 0.05 hence the null hypothesis is accepted.

For lab our cost ratio of HKASSK Ltd. and KSSK Ltd. the 'p' value is 0.021 which is less than the significant value so we reject the null hypothesis.

For factory overhead ratio of HKASSK Ltd. and KSSK Ltd. the 'p' value is 0.530. Which is greater than the significant value i.e. 0.05 hence null hypotheses is accepted.

For administrative expenses ratio of HKASSK Ltd. and KSSK Ltd. the 'p' value is 0.005 which is less than the significant value i.e. 0.05 so null hypotheses is rejected.

For selling and distribution expenses ratio of HKASSK Ltd. and KSSK Ltd. the 'p' value is 0.156 which greater than the significant value. So the null hypotheses are accepted.

From the overall hypotheses testing we can say that there is no significant difference in the operational efficiency of HKASSK Ltd. and KSSK Ltd.

#### **HYPOTHESES-4**

**H<sub>0</sub>**-There is no significant difference in solvency position of selected sugar factories.

**H<sub>a</sub>**- There is significant difference in solvency position of selected sugar factories.

**Table No.4.62**  
**Significant Difference in Solvency Position of HKASSK Ltd. and KSSK Ltd.**

Null Hypotheses	Mean	S.D	df	Table Value	Calculated Value	Decision
Debt to Equity Ratio of HKASSK Ltd. and KSSK Ltd.	1.110	0.957	6	3.068	0.022	Rejected
Shareholders Equity Ratio of HKASSK Ltd. and KSSK Ltd.	-0.117	0.0485	6	6.384	0.001	Rejected
Debt to Net Worth Ratio of HKASSK Ltd. and KSSK Ltd.	1.187	0.963	6	3.261	0.017	Rejected
Capital Gearing Ratio of HKASSK Ltd. and KSSK Ltd.	-0.328	0.192	6	4.514	0.004	Rejected
Fixed Assets to Long Term Fund Ratio of HKASSK Ltd. and KSSK Ltd.	-0.090	0.081	6	2.916	0.027	Rejected
Proprietary Ratio of HKASSK Ltd. and KSSK Ltd.	-0.118	0.049	6	6.385	0.001	Rejected

(Source- Compiled by Researcher)

The table no 4.62 shows the 'p' value for debt to equity ratio, shareholder equity ratio, debt to net worth ratio, capital gearing ratio, fixed assets to long term assets ratio and proprietors ratio of HKASSK Ltd. and KSSK Ltd. is 0.022, 0.001, 0.017, 0.004, 0.027 and 0.001 respectively which is less than the significant value i.e. 0.05 ('p' value<0.05) so we rejected the null hypotheses, and we can say that there is significant difference in solvency position of HKASSK Ltd. and KSSK Ltd.

### **HYPOTHESES-5**

**H<sub>a</sub>**-There is significant difference in profitability position of selected sugar factories.

**H<sub>0</sub>**-There is no significant difference in profitability position of selected sugar factories.

**Table No.4.63**

#### **Significant Difference in Profitability of HKASSK Ltd. and KSSK Ltd.**

<b>Null Hypotheses</b>	<b>Mean</b>	<b>S.D</b>	<b>df</b>	<b>Table Value</b>	<b>Calculated Value</b>	<b>Decision</b>
Gross Profit Ratio of HKASSK Ltd. and KSSK Ltd.	-5.138	9.431	6	1.441	0.200	Accepted
Net Profit Ratio of HKASSK Ltd. and KSSK Ltd.	-1.455	3.465	6	1.111	0.309	Accepted
Earnings Per Share Ratio of HKASSK Ltd. and KSSK Ltd.	-5.957	5461.43	6	0.029	0.978	Accepted
Return on Assets Ratio of HKASSK Ltd. and KSSK Ltd.	-0.578	2.014	6	0.760	0.476	Accepted
Return on Capital Employed Ratio of HKASSK Ltd. and KSSK Ltd.	-0.841	3.010	6	0.740	0.488	Accepted

(Source- Compiled by Researcher)

Table 4.63 express the 'p' value for gross profit ratio, net profit ratio, earning per share ratio, return on assets ratio and return on capital employed of



HKASSK Ltd. and KSSK Ltd. is 0.200, 0.309, 0.978, 0.476, and 0.488 is greater than the significant value i.e. 0.05 we accepted the null hypotheses that there is no significant difference in profitability of HKASSK Ltd. and KSSK Ltd.

#### **4.6 CONCLUSION-**

In this chapter the data analysis and interpretation done about the assessment of financial health of co-operative sugar factors. For the data analysis the researcher used the different parameters of ratio analysis about the liquidity, solvency, profitability, operational efficiency and growth of sugar factories. The researchers also used the graphical presentation for better understanding of the data analysis. The bar diagrams and liner diagrams are used in this chapter for make the data analysis very effective. From the data analysis it is understand that there is no huge difference in financial performance of HKASSK Ltd. and KSSK Ltd. in study period. But there is some difference in this two sugar factories about liquidity and growth.