CHAPTER - 6
ANALYSIS OF WORKING CAPITAL

6.1 INTRODUCTION
Each Economical Activity done by human being for finance. The finance is pivot around which all activities are cluster. Finance is one the impotent vitamins required for running any organization, it is just like blood, without which there is no human being similarly without finance there is no organization. A business concern requires finance for its survival and growth. Finance invested in business is broadly divided into two types that are fixed capital and working capital. Fixed capital is the fund invested in permanent assets such as land, building, Machinery, furniture and fixtures etc. while working capital is the fund locked up in current assets such as materials, work in progress, finished goods, receivables, cash etc. fixed capital required for establishment of business, while working capital required to utilized fixed assets. Working capital plays an important role in business enterprise. The working capital rates to that part of total capital which is available and used for day-to-day expenses. Such as purchase of new materials, payment to employees, investment in stock, credit sale etc. current assets are those assets which can be converted into cash within a period of one year or less and cash received is again invested into current assets. Hence it constantly revolving or circulating. Thus working capital is also known as ‘circulating capital or floating capital.

6.2 CONCEPT OF WORKING CAPITAL
Normally the working capital has two broad concepts. Those are

(1) Gross working capital.
(2) Net working Capital.

6.2.1 Gross working Capital
This concept refers to the total current assets termed as gross working capital. According to Gersternbeg, “circulating capital means current assets a company that is changed in ordinary course of business from one from to
Analysis of Working Capital

another.”

Gross working capital to firms’ investment in short term assets such as cash, short term securities, account receivables and inventories thus Gross working capital is the total of all current assets these includes:

- Stock of raw material/ finished goods/work in progress.
- Cash
- Marketable Securities
- Account receivable
- Prepaid expenses
- Trade debtors
- Spare parts

6.2.2 Net Working Capital

Net working capital refers to the difference between current assets and current liabilities According to Mcmullen, “Working capital is excess of current assets over current liabilities” In the words of Lincoln “Working capital equals the aggregate value of current assets minus aggregate value of current liabilities.”

Thus net working capital represents the amount of current assets, which would remain after all current liabilities were paid. Current liabilities includes sundry creditors, Bills payable, Bank over draft, provision for tax, short term loans, unpaid dividend, proposed dividend and outstanding expenses. The net working capital may be either positives or negative. It will be positive if current assets are more than the current liabilities and negative if the current liabilities are more than current assets. In short:

Gross Working Capital = Total Current Assets

Net Working Capital = Current Assets – Current Liabilities

Both concept of working capital, gross working capital and net working capital are equally importance for the efficient use of working capital. Gross working capital concept focuses on two aspects of current assets, one is optimum investment in current assets and another is financing current assets. The Net working concept measures the liquidity position and suggests the how much
working capital is needed by permanent sources of funds. In the words of Roy Chowdary, “Net working capital indicates the liquidity of business while gross working capital denotes the quantum of working capital with which business has to operate.” For the purpose of working capital analysis of APMCs of Saurashtra Region in this chapter Net working capital concept has been used.

6.3 REQUIREMENT OF WORKING CAPITAL

There is no fixed rule to determine the working capital requirement of a business organization. But it should be satisfactory level to conduct business operations efficiently and effectively. According to Mcmullen, “working capital should be sufficient in amount to enable the company to conduct its business on the most economical basis and without financial stringency and to meet emergencies and losses without of financial disaster.”

The requirement of working capital defers one unit to on other unit. Number of factors affect the requirement of working capital such as nature and size of industry, credit policy, stage of economy rate of growth, rate of turnover of stock, seasonal fluctuation etc. thus there are so many factors influence the working capital requirements.

According to John L.O.Donnell, the following factors which determine the requirement of working capital of an enterprise

- Profit level
- Taxation policy
- Dividend policy
- Reserve policy
- Depreciation policy
- Expansion programmes
- Price level changes
- Operating efficiency

All the above factors have different importance in different enterprise. “A growing public enterprise with long operating cycle and Marketing its product
in the country would require more working capital as compared to trading concern.”

6.4 IMPORTANCE OF WORKING CAPITAL
The objective of working capital Management is ensuring adequate funds for current operation by striking a balance between liquidity and profitability. The firm should maintained adequate level of working capital there are excess investment in working capital then it becomes idle investment and adversely effect on profitability of the enterprise. In the words of walker, “A form’s profitability is determined in part by the way its working capital is managed. That is when working capital is varied relative to sale without a corresponding change in production, the profit position is affected. It is important, therefore, for management to pay particular attention to the planning and control of working capital.” Thus working capital management has great Importance for the enterprise, as it affect directly liquidity, solvency and profitability.

6.5 ANALYSIS OF WORKING CAPITALS OF APMCS
With a view to study working capital and liquidity position of APMCs of Saurashtra Region the following analysis have been made

- Analysis of current assets
- Analysis of current Liabilities
- Analysis of Current Ratio
- Analysis of Current Ratio Trend
- Analysis of Acid -test Ratio

6.5.1 Analysis of Current Assets
Current assets of sampled APMCs showed in table No. 6.1

APMC Amreli
Investment in current assets in APMC Amreli was 1455 thousands in 1999-00. There is fluctuation in investment in current assets during the study period. Average investment in current assets of this APMC was 4065 thousands.
### Table 6.1

**Current Assets of APMCs from 1999-00 to 2008-09 (Rs. In thousands)**

<table>
<thead>
<tr>
<th>Year</th>
<th>APMC Amreli</th>
<th>APMC Bhavnagar</th>
<th>APMC Junagadh</th>
<th>APMC Hapa</th>
<th>APMC Rajkot</th>
<th>APMC Wadhwan</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999-00</td>
<td>1455</td>
<td>1430</td>
<td>3535</td>
<td>5120</td>
<td>52376</td>
<td>1565</td>
</tr>
<tr>
<td>2000-01</td>
<td>1297</td>
<td>1715</td>
<td>7869</td>
<td>6613</td>
<td>12888</td>
<td>721</td>
</tr>
<tr>
<td>2001-02</td>
<td>1372</td>
<td>7919</td>
<td>2961</td>
<td>7309</td>
<td>34606</td>
<td>1983</td>
</tr>
<tr>
<td>2002-03</td>
<td>3558</td>
<td>10789</td>
<td>26716</td>
<td>8929</td>
<td>17518</td>
<td>2930</td>
</tr>
<tr>
<td>2003-04</td>
<td>3287</td>
<td>16669</td>
<td>5136</td>
<td>16649</td>
<td>60078</td>
<td>3566</td>
</tr>
<tr>
<td>2004-05</td>
<td>4658</td>
<td>13754</td>
<td>6937</td>
<td>15417</td>
<td>36559</td>
<td>5387</td>
</tr>
<tr>
<td>2005-06</td>
<td>5929</td>
<td>14457</td>
<td>14217</td>
<td>10107</td>
<td>68280</td>
<td>7324</td>
</tr>
<tr>
<td>2006-07</td>
<td>5322</td>
<td>18078</td>
<td>21786</td>
<td>14462</td>
<td>90000</td>
<td>9301</td>
</tr>
<tr>
<td>2007-08</td>
<td>7438</td>
<td>22198</td>
<td>25325</td>
<td>21779</td>
<td>108396</td>
<td>11353</td>
</tr>
<tr>
<td>2008-09</td>
<td>6333</td>
<td>27631</td>
<td>2775</td>
<td>14151</td>
<td>114952</td>
<td>11306</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>4065</strong></td>
<td><strong>13464</strong></td>
<td><strong>11726</strong></td>
<td><strong>12054</strong></td>
<td><strong>59565</strong></td>
<td><strong>5544</strong></td>
</tr>
</tbody>
</table>

**Average of all APMCs under study 17736.20**

**Source:** Computed and Compile from the Annual Reports of Sampled APMCs

### Chart 6.1

**Current Assets of APMCs from 1999-00 to 2008-09**

**Source:** Computed and Compile from the Annual Reports of Sampled APMCs
During 1999-00 to 2003-04 APMC has invested in current assets less than average investment and during last five years of study period this APMC has invested more than the average investment. Highest investment in current assets is seen in the year 2007-08 when it was 7438 thousands. The average investment of this APMC was much lower than the sampled APMCs as they were 17736 thousands.

**APMC Bhavnagar**

APMC Bhavnagar has continuously increased the investment in current assets during first five years of the study period. It was 1430 thousands and in 1999-00 and it increased 16669 thousands in 2003-04. The investment in the year, current assets was 13754 thousands in the year 2004-05 and then APMC has again continuously increased investment in current assets and it reached to 27631 thousands in the final year of study period which was highest level. Average investment of this APMC was 13464 thousands which was lower than the average ratio (17736 thousands) of APMCs under review.

**APMC Junagadh**

The APMC Junagadh showed fluctuating trend in investment in current assets from 1999-00 to 2002-03. The investment in current assets was 5136 thousands in 2003 -04 then it was continuously increased till year 2007-08 and it was decreased in the year 2008-09 when it was 2775 thousands which was the lowest investment in current assets. The APMC has invested highest amount in the year 2002-03 when it was 26716 thousands. The average investment in this APMC was 11726 thousands .which was lower than the average capital investment in current assets of sampled APMCs.

**APMC Hapa**

The range of capital investment in APMC Hapa, in current assets was 5120 thousands in 1999-00 and 21779 thousands in 2007-08. The average investment of this APMC was 12054 thousands. The investment in current assets was lower than the average capital investment from 1999-00 to 2002-03 and in the year 2005-06 was higher than average capital investment during
2003-04, and 2004-05 and from 2006-07 to 2008-09. The average capital investment in this APMC was less than average ratio of sampled APMCs.

APMC Rajkot
The capital investment in current assets in APMC Rajkot was more than the average capital investment (17736 thousands) of all APMCs under study during study period except year 2000-01 and 2003-04. The lowest investment was 12888 thousands in the year 2000-01 and highest investment in this APMC was 114952 thousands in the year 2008-09. The average capital investment in current assets was 59565 thousands in this APMC that was highest average of all APMCs under study. Therefore it can be said that the APMC has invested comparatively more investment in current assets.

APMC Wadhwan
Capital investment in current assets in APMC Wadhwan was 1565 thousands in 1999-00 which decreased to 721 thousands in 2000-01. The investment in current assets have been continuously increased from 2001-02 to 2007-08. The current assets was 1983 thousands in 2001-02 which reached to 11353 thousands in 2007-08 with little change the current assets decreased to 11306 in 2008-09. The average current assets in this APMC was 5544 thousands which was much lower than average of sampled APMCs.

In the basis of above discussion it can be said that highest investment made in current assets by APMC Rajkot and lowest by APMC Amreli.

Hypothesis:
H₀: There is no significant difference in the total current assets of sampled APMCs during study period.

H₁: There is significant difference in the total current assets of the sampled APMCs during study period.

H₀: There is no significant difference in the total current assets in between the years among the sampled APMCs during study period.
H<sub>1</sub>: There is significant difference in the total current assets in between the years among the sampled APMCs during study period.

### Table – 6.2

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>P-value</th>
<th>F Critical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Year</td>
<td>4633428525</td>
<td>9</td>
<td>514825391.7</td>
<td>2.61</td>
<td>0.0160</td>
<td>2.10</td>
</tr>
<tr>
<td>Between APMC</td>
<td>2171913902</td>
<td>5</td>
<td>4343826780</td>
<td>22.05</td>
<td>4.2513</td>
<td>2.42</td>
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<tr>
<td>Error</td>
<td>8866760886</td>
<td>45</td>
<td>197039130.8</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Total</td>
<td>35219323313</td>
<td>59</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It is evident from the table No. 6.2 that there was significant difference in the total current assets of sampled APMCs because the calculated value of ‘F’ (22.05) was greater than that of the table value (2.42) at 5% level of significance. Hence, the null hypothesis was rejected and alternative hypothesis is accepted. The difference in total current assets in between the years was significant, because the calculated value of ‘F’ (2.61) was greater than that of the Table value (2.10) at 5% level of significance. Hence, the null hypothesis was rejected and alternative hypothesis is accepted.

Therefore, it is concluded that there was a significant difference in the total current assets of sampled APMCs during study period. It is also concluded that there is the significant difference in the total current assets in between the years of sampled APMCs during study period.

### 6.5.2 Current Liabilities

Current liabilities of sampled APMCs showed in table no. 6.3

**APMC Amreli**

The range of current liabilities in APMC Amreli was 4122 thousands in 2008-09 and 9414 thousands in 2006-07 with an average of 7022 thousands which was lower than average (13782 thousands) of all APMCs under study. The
Table 6.3
Current Liabilities of APMCs from 1999-00 to 2008-09 (Rs. in thousands)

<table>
<thead>
<tr>
<th>Year</th>
<th>APMC Amreli</th>
<th>APMC Bhavnagar</th>
<th>APMC Junagadh</th>
<th>APMC Hapa</th>
<th>APMC Rajkot</th>
<th>APMC Wadhwan</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999-00</td>
<td>6417</td>
<td>5542</td>
<td>3609</td>
<td>3072</td>
<td>26918</td>
<td>6399</td>
</tr>
<tr>
<td>2000-01</td>
<td>6830</td>
<td>5203</td>
<td>3827</td>
<td>3896</td>
<td>26526</td>
<td>6696</td>
</tr>
<tr>
<td>2001-02</td>
<td>7856</td>
<td>6208</td>
<td>5665</td>
<td>4897</td>
<td>31361</td>
<td>7114</td>
</tr>
<tr>
<td>2002-03</td>
<td>5401</td>
<td>6831</td>
<td>9992</td>
<td>6058</td>
<td>37207</td>
<td>6345</td>
</tr>
<tr>
<td>2003-04</td>
<td>6554</td>
<td>7062</td>
<td>7757</td>
<td>8304</td>
<td>40482</td>
<td>3548</td>
</tr>
<tr>
<td>2004-05</td>
<td>6829</td>
<td>7449</td>
<td>7033</td>
<td>6025</td>
<td>45148</td>
<td>3626</td>
</tr>
<tr>
<td>2005-06</td>
<td>7720</td>
<td>8324</td>
<td>7427</td>
<td>8990</td>
<td>50509</td>
<td>3651</td>
</tr>
<tr>
<td>2006-07</td>
<td>9414</td>
<td>9373</td>
<td>7925</td>
<td>11357</td>
<td>56007</td>
<td>4213</td>
</tr>
<tr>
<td>2007-08</td>
<td>9076</td>
<td>10326</td>
<td>8375</td>
<td>13202</td>
<td>71096</td>
<td>5407</td>
</tr>
<tr>
<td>2008-09</td>
<td>4122</td>
<td>10508</td>
<td>8981</td>
<td>13834</td>
<td>80131</td>
<td>17454</td>
</tr>
<tr>
<td>average</td>
<td>7022</td>
<td>7683</td>
<td>7059</td>
<td>7944</td>
<td>46538</td>
<td>6445</td>
</tr>
</tbody>
</table>

Average of All APMCs Under Study 13782

Source: Computed and Compile from the Annual Reports of Sampled APMCs

Chart 6.2
Current Liabilities of APMCs from 1999-00 to 2008-09

Source: Computed and Compile from the Annual Reports of Sampled APMCs
current liabilities were continuously increased during first three years of study period. It was 6417 thousands in 1999-00 and reached to 7856 thousands in 2001-02. It decreased to 5401 thousands in the year 2002-03. Once again the liabilities continuously increased from 2003-04 to 2006-07. It was 6554 thousands in 2003-04 and reached to 9414 thousands in 2006-07 and decreased during last two years of the study period. It was 9076 thousands and 4122 thousands in 2007-08 and 2008-09 respectively.

APMC Bhavnagar
The current liabilities in APMC Bhavnagar, increased during study period, except the year 2001-02. The current liabilities were 5542 thousands in the year 1999-00 and decreased to 5203 in the year 2000-01. The current liabilities were 6208 thousands in 2001-02 which continuously increased to 10508 in 2008-09. The average of current liabilities of this APMC was 7683 thousands.

APMC Junagadh
The current liabilities in APMC Junagadh, increased during first four years of the study period. It was 3609 thousands in the year 1999-00 that was lowest level during study period and 9992 thousands in the year 2002-03 which was the highest level. The average current liabilities of this APMC was 7059 thousands. Moreover the current liabilities was more the average liabilities 2002-2003, 2003-04 and from 2005-06 to 2008-09.

APMC Hapa
The current liabilities in APMC Hapa were 3072 thousands in the year 1999-00 which was lowest in this APMC as well as all APMCs under study during period. It was continuously increased and reached to 8304 thousands in the year 2003-04. The current liabilities decreased to 6025 thousands in 2004-05. Once again current liabilities were continuously increased during the rest of the study period. It was 8990 thousands in the year 2005-06 and reached to 13641 thousands in the year 2008-09. The average of this APMC was 7944 thousands.
APMC Rajkot
In APMC Rajkot the total current liabilities showed increasing trend during study period. It was 26918 thousands in the year 1999-00 the lowest during study period and reached to 80131 thousands in the year 2008-09, the highest during the study period. The average liabilities in this APMC were 46538 thousands which was highest among all APMCs under study. Moreover the current liabilities were more than the average current liabilities of sampled APMCs during throughout the study period.

APMC Wadhwan
The current liabilities in APMC Wadhwan witnessed mixed trend during the study period. The current liabilities showed increasing trend during first three years of study period. It was 6399 thousands in the year 1999-00 and reached to 7114 thousands in the year 2001-02. Then the current liabilities showed decreasing trend from the year 2002-03 and 2003-04 when it was 6345 thousands and 3548 thousands, (the lowest during the study period) respectively. Then with ups and downs it reached to 17454 thousands in the year 2008-09 the highest during the study period. The average current liabilities of this APMC were 6445 thousands which was lowest average liabilities among all APMCs under study. Moreover the current liabilities were less than the average liabilities of sampled APMCs except the year 2008-09 during the study period.

As a whole it can be concluded that the highest capital investment in current liabilities was in APMC Rajkot and lowest in APMC Wadhwan.

Hypothesis:
\( H_0: \) There is no significant difference in the Total current liabilities of sampled APMCs during study period.

\( H_1: \) There is significant difference in the Total current liabilities of the sampled APMCs during study period.
H₀: There is no significant difference in the Total current liabilities in between the years among the sampled APMCs during study period.

H₁: There is significant difference in the Total current liabilities in between the years among the sampled APMCs during study period.

Table 6.4
F – TEST (ANOVA TABLE) – Total current liabilities

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>P-value</th>
<th>F Critical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Year</td>
<td>1106882748</td>
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<td>122986972</td>
<td>2.46</td>
<td>0.0224</td>
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</tr>
<tr>
<td>Between APMC</td>
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<td>2577961491</td>
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<td>1.5983</td>
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<tr>
<td>Error</td>
<td>2247934043</td>
<td>45</td>
<td>49954089.85</td>
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<td></td>
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<tr>
<td>Total</td>
<td>16244624245</td>
<td>59</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It is evident from the table 6.4 that there was significant difference in the Total current liabilities of sampled APMCs because the calculated value of ‘F’ (51.61) was greater than that of the Table value (2.42) at 5% level of significance. Hence, the null hypothesis was rejected and alternative hypothesis is accepted. The difference in Total current liabilities in between the years was significant, because the calculated value of ‘F’ (2.46) was greater than that of the Table value (2.10) at 5% level of significance. Hence, the null hypothesis was rejected and alternative hypothesis is accepted.

Therefore, it is concluded that there was a significant difference in the Total current liabilities of sampled APMCs during study period. It is also concluded that there is the significant difference in the Total current liabilities in between the years of sampled APMCs during study period.

6.5.3 Current Ratio
Current ratio also called as working capital ratio is the most widely used of all analytical devices based on the balance sheet. It established the relationship between total current assets and current liabilities. It is the barometer of
general measure of liability and state of trading. The following formula is used to calculate ratio.\(^9\)

\[
\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}
\]

The current ratio throws light on the short term financial position and policy. It is an indicator of a firm's ability to promptly meet its short term liabilities. A relatively high current ratio indicates that firm is liquid has the ability to meet its current liabilities. On other hand, a relatively low current ratio indicates that firm will find it difficult to pay its bills.

The current ratio is calculated by dividing current assets to current liabilities. Current assets include cash and which assets can be concerted into cash within one year such as marketable securities, debtors, inventories and prepaid expenses. Current assets included all obligations those are matured within a year such as creditors, bills payable, outstanding expenses, bank overdraft etc.

Generally a current ratio of 2:1 is considered satisfactory, in other words, current assets should be twice the amount of current liabilities. The Tondon committee has recommended that the ideal current ratio for the financing is 1.33:1. However, the satisfactory ratio depends on nature of business and the characteristics of its current assets and liabilities. But it could not be ignore because it measures of firm's liabilities. The current ratio of all APMCs under study is showed in table no. 6.5

**APMC Amreli**
The current ratio of APMC Amreli registered decreasing trend during the first three years of study period it was 0.23 times in the year 1999-00 and reached to 0.17 in the year 2001-02 and it increased to 0.66 times in the year 2002-03. Then with ups and down trends, it stopped with 1.54 times in the year 2008-09. The average ratio of this APMC was 0.61 times which was lower than average ratio (1.28 times) among all APMCs under study. Moreover it is lower
than the average ratio of all APMCs under study during study period except the year 2008-09. It indicates that the APMC was succeeding to meet their current obligations.

**APMC Bhavnagar**

In APMC Bhavnagar the current ratio revealed upward trend during the first five years of study period. It was 0.26 times, the lowest during study period in the year 1999-00 and reached to 2.36 times in the year 2003-04 and it was decreased during the year when it was 1.85 times and 1.74 times in the year 2004-05 and 2005-06 respectively. Then with increasing trend it reached to 2.63 times, the highest during study period in the year 2008-09. The average ratio of this APMC was 1.61 times which was highest among all APMCs under study. In from the creditor point of view the solvency position of this APMC was almost sound except the first two years of study period.

**APMC Junagadh**

The current ratio in APMC Junagadh witnessed highly fluctuating trend. It ranged between 0.31 times in the year 2008-09 and 3.02 times (the highest among all APMCs under study) in the year 2007-08 with an average ratio of 1.59 times. The ratio was 0.98 times in the year 1999-00 and it increased with rocket jump and reached to 2.06 times in the year 2000-01 and with ups and downs it reached to 0.31 times in the year 2008-09. The ratio was lower than the average ratio during the years 1999-00, 2001-02 2003-04, 2004-05 and 2008-09. The average ratio of this APMC was higher than the average ratio (1.28 times) of all APMCs under study.

**APMC Hapa**

The range of current ratio in APMC Hapa was 1.04 times in the year 2008-09 and 2.56 times in the year 2004-05. The average of current ratio of this APMC was 1.60 times which was higher than the average current ratio of all APMCs under study. It indicated high liquid position in this APMC. Moreover the ratio was higher than average ratio (1.28 times) of all APMCs under study during the study period except the years 2005-06, 2006-07 and 2008-09.
### Table 6.5
Current Ratio (In Times) of Sampled APMCs from 1999-00 to 2008-09

<table>
<thead>
<tr>
<th>Year</th>
<th>APMC Amreli</th>
<th>APMC Bhavnagar</th>
<th>APMC Junagadh</th>
<th>APMC Hapa</th>
<th>APMC Rajkot</th>
<th>APMC Wadhwan</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999-00</td>
<td>0.23</td>
<td>0.26</td>
<td>0.98</td>
<td>1.67</td>
<td>1.95</td>
<td>0.24</td>
</tr>
<tr>
<td>2000-01</td>
<td>0.19</td>
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<td>0.11</td>
</tr>
<tr>
<td>2001-02</td>
<td>0.17</td>
<td>1.28</td>
<td>0.52</td>
<td>1.49</td>
<td>1.10</td>
<td>0.28</td>
</tr>
<tr>
<td>2002-03</td>
<td>0.66</td>
<td>1.58</td>
<td>2.67</td>
<td>1.47</td>
<td>0.47</td>
<td>0.46</td>
</tr>
<tr>
<td>2003-04</td>
<td>0.50</td>
<td>2.36</td>
<td>0.66</td>
<td>2.00</td>
<td>1.48</td>
<td>1.01</td>
</tr>
<tr>
<td>2004-05</td>
<td>0.68</td>
<td>1.85</td>
<td>0.99</td>
<td>2.56</td>
<td>0.81</td>
<td>1.49</td>
</tr>
<tr>
<td>2005-06</td>
<td>0.77</td>
<td>1.74</td>
<td>1.91</td>
<td>1.12</td>
<td>1.35</td>
<td>2.01</td>
</tr>
<tr>
<td>2006-07</td>
<td>0.57</td>
<td>1.93</td>
<td>2.75</td>
<td>1.27</td>
<td>1.61</td>
<td>2.21</td>
</tr>
<tr>
<td>2007-08</td>
<td>0.82</td>
<td>2.15</td>
<td>3.02</td>
<td>1.65</td>
<td>1.52</td>
<td>2.10</td>
</tr>
<tr>
<td>2008-09</td>
<td>1.54</td>
<td>2.63</td>
<td>0.31</td>
<td>1.04</td>
<td>1.43</td>
<td>0.65</td>
</tr>
<tr>
<td>average</td>
<td>0.61</td>
<td>1.61</td>
<td>1.59</td>
<td>1.60</td>
<td>1.22</td>
<td>1.05</td>
</tr>
</tbody>
</table>

**Source:** Computed and compiled from the Annual Reports of Sampled APMCs

### Chart 6.3
Current Ratio of APMCs from 1999-00 to 2008-09

**Source:** Computed and compiled from the Annual Reports of Sampled APMCs
APMC Rajkot
During the period under study the current ratio of APMC Rajkot showed fluctuating trend. It varied between 0.47 times in the year 2002-03 and 1.95 times in the year 1999-00 with an average ratio of 1.22 times which was near the average ratio of all APMCs under study. The ratio was 1.95 times in the year 1999-00; it was sharply decreased to 0.49 times in the year 2000-01 again it increased to 1.10 times in the year 2001-02. Then with ups and down it was reached to 1.35 times in the year 2005-06, during last three years of study period the ratio witness decreasing trend when it was 1.61 times, 1.52 times 1.43 times in the year 2006-07, 2007-08 and 2008-09 respectively. Liquidity position was sound in the APMC during the years 1999-00, 2003-04, 2005-06, 2006-07, 2007-08 and 2008-09 because the ratio was higher than the average ratio of all APMCs under study.

APMC Wadhwan
The current ratio in APMC Wadhwan was 0.24 times in the year 1999-00 and it declined and reached to 0.11 times the lowest ratio among all APMCs under study during the year 2000-01. Then the ratio started increasing trend from the year 2001-02 to 2006-07. It was 0.28 times in the year 2001-02 and reached to 2.21 times the highest ratio, in the year 2006-07. The ratio was declined to 2.10 times and 0.65 times during the years 2007-08 and 2008-09 respectively. The average ratio of this APMC was 1.05 times which is lower than average ratio (1.28 times) of all APMCs under study. Liquid position was poor of this APMC during the years 1999-00 to 2003-04 and 2008-09.

As a whole it can be said that liquidity position is sound in the APMC Bhavnagar, Junagadh, Hapa while poor in Amreli, Rajkot and Wadhwan because the current average ratio was below the average ratio of all APMCs under study.

Hypothesis:

H₀: There is no significant difference in the Current ratio of sampled APMCs during study period.
**H₁:** There is significant difference in the Current ratio of the sampled APMCs during study period.

**H₀:** There is no significant difference in the Current ratio in between the years among the sampled APMCs during study period.

**H₁:** There is significant difference in the Current ratio in between the years among the sampled APMCs during study period.

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>P-value</th>
<th>F Critical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Year</td>
<td>7.2695</td>
<td>9</td>
<td>0.8077</td>
<td>1.89</td>
<td>0.0785</td>
<td>2.10</td>
</tr>
<tr>
<td>Between APMC</td>
<td>8.0424</td>
<td>5</td>
<td>1.6084</td>
<td>3.76</td>
<td>0.0062</td>
<td>2.42</td>
</tr>
<tr>
<td>Error</td>
<td>19.2619</td>
<td>45</td>
<td>0.4280</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34.5739</strong></td>
<td><strong>59</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It is evident from the table No. 6.6 that there was significant difference in the current ratio of sampled APMCs because the calculated value of ‘F’ (3.76) was greater than that of the table value (2.42) at 5% level of significance. Hence, the null hypothesis was rejected and alternative hypothesis is accepted. The difference in Current ratio in between the years was not significant, because the calculated value of ‘F’ (1.89) was greater than that of the Table value (2.10) at 5% level of significance. Hence, the null hypothesis was accepted and alternative hypothesis is rejected.

Therefore, it is concluded that there was a significant difference in the current ratio of sampled APMCs during study period. It is also concluded that there is no significant difference in the current ratio in between the years of sampled APMCs during study period.
6.5.4 Current Ratio Trend Analysis

For the purpose of trend analysis of working capital the year 1999-00 has been selected as the base year and the amount of working capital in the base year has been taken equal to 100 per cent. Table No 6.7 indicated trend of current ratio in all APMCs under study.

**APMC Amreli**

The trend of current ratio of APMC Amreli witnessed decreasing trend during the first three years of study period. It was 100 per cent in the 1999-00 and it declined and reached to 77.01 per cent lowest per cent in the year 2001-02. Then with rocketing Jump it increased to 290.64 per cent in the year 2002-03 and it was declined to 221.24 per cent in the year 2003-04 and increased to 300.90 per cent and 338.78 per cent in the year 2004-05 and 2005-06 respectively. From the year 2006-07 to 2008-09 showed increasing trend. It was 249.37 per cent in the year 2006-07 and reached to 677.76 per cent the highest during study period in the year 2008-09. The average trend current ratio of this APMC was 270.10 per cent which was near to average trend of current ratio (274.35 per cent) of all APMCs under study.

**APMC Bhavnagar**

In APMC Bhavnagar the current ratio trend showed increasing trend during the first five years of study period. It was 100 per cent in the year 1999-00 and reached to 915.04 per cent in the year 2003-04. It was decreased 715.81 per cent and 673.25 per cent in the year 2004-05 and 2005-06 respectively. And again it increased to 747.68 per cent in the 2006-07. It was increased and reached to 833.40 per cent and 1019.42 per cent (the highest) trend during the year 2007-08 and 2008-09. The average trend of this APMC was 623.91 per cent that was much higher than average trend (274.35 per cent) of all APMCs under study. Moreover the trend was higher than the average trend of all APMCs under study during the study period except year 1999-00 and 2000-01.
Table 6.7
Current Ratio Trend Analysis of APMCs from 1999-00 to 2008-09

<table>
<thead>
<tr>
<th>Year</th>
<th>APMC Amreli</th>
<th>APMC Bhavnagar</th>
<th>APMC Junagadh</th>
<th>APMC Hapa</th>
<th>APMC Rajkot</th>
<th>APMC Wadhwan</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999-00</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>2000-01</td>
<td>83.78</td>
<td>127.76</td>
<td>209.89</td>
<td>101.84</td>
<td>24.97</td>
<td>44.03</td>
</tr>
<tr>
<td>2001-02</td>
<td>77.01</td>
<td>494.47</td>
<td>53.36</td>
<td>89.56</td>
<td>56.71</td>
<td>114.03</td>
</tr>
<tr>
<td>2002-03</td>
<td>290.64</td>
<td>612.30</td>
<td>272.94</td>
<td>88.45</td>
<td>24.20</td>
<td>188.86</td>
</tr>
<tr>
<td>2003-04</td>
<td>221.24</td>
<td>915.04</td>
<td>67.59</td>
<td>120.30</td>
<td>76.27</td>
<td>411.17</td>
</tr>
<tr>
<td>2004-05</td>
<td>300.90</td>
<td>715.81</td>
<td>100.69</td>
<td>153.54</td>
<td>41.62</td>
<td>607.76</td>
</tr>
<tr>
<td>2005-06</td>
<td>338.78</td>
<td>673.25</td>
<td>195.42</td>
<td>67.46</td>
<td>69.47</td>
<td>820.61</td>
</tr>
<tr>
<td>2006-07</td>
<td>249.37</td>
<td>747.68</td>
<td>280.60</td>
<td>76.41</td>
<td>82.59</td>
<td>903.03</td>
</tr>
<tr>
<td>2007-08</td>
<td>361.50</td>
<td>833.40</td>
<td>308.66</td>
<td>98.99</td>
<td>78.36</td>
<td>858.90</td>
</tr>
<tr>
<td>2008-09</td>
<td>677.76</td>
<td>1019.42</td>
<td>31.54</td>
<td>62.25</td>
<td>73.73</td>
<td>264.96</td>
</tr>
<tr>
<td>Average</td>
<td>270.10</td>
<td>623.91</td>
<td>162.07</td>
<td>95.88</td>
<td>62.79</td>
<td>431.34</td>
</tr>
</tbody>
</table>

Average of All APMCs Under Study 274.35

Source: Computed and Compile from the Annual Reports of Sampled APMCs

Chart 6.4
Current Ratio Trend Analysis of APMCs from 1999-00 to 2008-09

Source: Computed and Compile from the Annual Reports of Sampled APMCs
APMC Junagadh
In APMC Junagadh trend of current ratio revealed the fluctuating trend during the study period. It ranged between 31.54 per cent in the year 2008-09 and 308.66 per cent in the year 2007-08. With an average ratio of 162.07 per cent which was lower then current ratio trend (274.35 per cent) of all APMCs under study. The trend showed was more than the base year except the 2001-02, and 2008-09 during study period.

APMC Hapa
The trend of current ratio in APMC Hapa showed increasing trend during the first two years of study period. It was 100 per cent and 101.84 per cent in the years 1999-00 and 2000-01 respectively. The trend was declined to 89.56 per cent and 88.45 per cent during the year 2001-02 and 2002-03 respectively. Further the trend was increased to 120.30 per cent and 153.54 per cent (the highest) in the years 2003-04 and 2004-05 respectively. It was sharply declined to 67.46 per cent in the year 2005-06. Then with ups and down the trend it reached to 62.25 per cent. The average trend of this APMC was 95.88 per cent which was lower than average trend of all APMCs under study; moreover the trend of this APMC was almost below the average trend of all APMCs under study during study period.

APMC Rajkot
The trend of current ratio in APMC Rajkot witnessed fluctuating trend during the study period. It ranged between 24.20 per cent the lowest trend among all APMCs under study in the year 2002-03 and 100 per cent in the year 1999-00 with an average trend of 62.79 per cent, the lowest average trend of all APMCs under study. The trend was less than 100 (base year) during study period.

APMC Wadhwan
The current ratio trend in APMC Wadhwan was 100 per cent in the year 1999-00 and it declined to 44.03 per cent (the lowest) in the year 2000-01 showed increasing trend from the year 2001-02 to 2006-07. The trend was 114.03 per cent in the year 2001-02 and reached to 903.03 per cent in the year 2006-07.
Further it declined to 858.90 per cent and 264.96 per cent in the years 2007-08 and 2008-09 respectively. The average trend of this APMC was 431.34 per cent which was highest average trend among all APMCs under study.

6.5.5 Acid Test Ratio/Quick Ratio

The Acid test ratio measures absolute liquidity position of the firm. It indicates a relation between absolute liquid assets to quick liabilities. The acid test ratio is calculated by dividing absolute liquid assets by quick the formula of the ratio is as under:

\[
\text{Acid Test Ratio} = \frac{\text{Absolute Liquid Assets}}{\text{Liquid Liabilities}}
\]

The Ratio is also known as Quick ratio, absolute liquid ratio and Acid test ratio. Liquid Assets includes cash, and bank balance, marketable securities and temporary investment while losing stock prepaid expenses, outstanding income, sundry debtors and bills receivable are not included in absolute liquid assets.

The liabilities which become payable within a short period of time (within one year) is known as quick assets. Quick liabilities include all current liabilities exclude bank over draft and cash credit as they constitute permanent arrangement and renewed periodically. Generally a quick ratio of 0.5:1 is satisfactory in other words, absolute liquid assets showed be half the amount of liquid liabilities some writers calls this ratio as absolute liquidity ratio quick ratio or cash position ratio the ratio of all APMCs under study, is calculated in table No 6.8.
Table 6.8
Acid-test Ratio of APMCs from 1999-00 to 2008-09

<table>
<thead>
<tr>
<th>Year</th>
<th>APMC Amreli</th>
<th>APMC Bhavnagar</th>
<th>APMC Junagadh</th>
<th>APMC Hapa</th>
<th>APMC Rajkot</th>
<th>APMC Wadhwan</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999-00</td>
<td>0.10</td>
<td>0.25</td>
<td>0.88</td>
<td>0.26</td>
<td>0.44</td>
<td>0.19</td>
</tr>
<tr>
<td>2000-01</td>
<td>0.03</td>
<td>0.32</td>
<td>1.97</td>
<td>0.17</td>
<td>0.42</td>
<td>0.07</td>
</tr>
<tr>
<td>2001-02</td>
<td>0.04</td>
<td>1.27</td>
<td>0.44</td>
<td>0.16</td>
<td>0.63</td>
<td>0.24</td>
</tr>
<tr>
<td>2002-03</td>
<td>0.38</td>
<td>1.56</td>
<td>2.63</td>
<td>0.27</td>
<td>0.13</td>
<td>0.42</td>
</tr>
<tr>
<td>2003-04</td>
<td>0.44</td>
<td>2.31</td>
<td>0.64</td>
<td>0.89</td>
<td>0.46</td>
<td>0.90</td>
</tr>
<tr>
<td>2004-05</td>
<td>0.12</td>
<td>1.75</td>
<td>0.96</td>
<td>0.81</td>
<td>0.66</td>
<td>1.36</td>
</tr>
<tr>
<td>2005-06</td>
<td>0.57</td>
<td>1.70</td>
<td>1.88</td>
<td>0.13</td>
<td>1.20</td>
<td>1.87</td>
</tr>
<tr>
<td>2006-07</td>
<td>0.42</td>
<td>1.91</td>
<td>2.72</td>
<td>0.30</td>
<td>1.10</td>
<td>2.08</td>
</tr>
<tr>
<td>2007-08</td>
<td>0.66</td>
<td>2.13</td>
<td>3.00</td>
<td>0.62</td>
<td>1.13</td>
<td>2.00</td>
</tr>
<tr>
<td>2008-09</td>
<td>1.24</td>
<td>2.57</td>
<td>0.25</td>
<td>0.25</td>
<td>0.94</td>
<td>0.62</td>
</tr>
<tr>
<td>average</td>
<td>0.40</td>
<td>1.58</td>
<td>1.54</td>
<td>0.39</td>
<td>0.71</td>
<td>0.97</td>
</tr>
</tbody>
</table>

Average of All APMCs Under Study 0.93

Source: Computed and Compile from the Annual Reports of Sampled APMCs

Chart 6.5
Acid-test Ratio of APMCs from 1999-00 to 2008-09

Source: Computed and Compile from the Annual Reports of Sampled APMCs
APMC Amreli
The Acid-test ratio in APMC Amreli showed fluctuating trend during study period. It ranged between 0.03 times in the year 2000-01 as lowest ratio among all APMCs under study and 1.24 times in the year 2008-09 with an average ratio of 0.40 times. The ratio was 0.10 times in the year 1999-00 and went down to 0.03 times in the year 2000-01. Then it was increased from the year 2001-02 to 2003-04. It was 0.04 times in the year 2001-02 and reached to 0.44 times in the year 2003-04. The ratio was sharply decreased to 0.12 times in the year 2004-05 and with high Jump it reached to 0.57 times in the year 2005-06. Further the ratio was decreased to 0.42 times in the year 2006-07. The ratio was increased to 0.66 times and 1.24 times (the highest) in the year 2007-08 and 2008-09. The average ratio of all APMCs under study was 0.93 times. The average ratio of this APMC was lower then the average ratio of all APMCs under study. The absolute liquid position of this APMC was not satisfactory during study period except the year 2008-09.

APMC Bhavnagar
In APMC Bhavnagar Acid-test ratio witnessed increasing trend during the first five years of study period. It was 0.25 times (the lowest) in the year 1999-00 and reached to 2.31 times in the year 2003-04. It was decreased 1.75 times and 1.70 times in the year 2004-05 and 2005-06 respectively. Further it started increasing trend from the year 2006-07 to 2008-09; it was 1.91 times in the year 2005-06 and 2.57 times in the year 2008-09. The average acid-test ratio of this APMC was 1.58 times which was the highest average ratio among all APMCs under study. The absolute liquid position of this APMC was much satisfactory (with creditors point of view) except the years 1999-00 and 2000-01. But it is shows poor utilization of its absolute liquid assets.

APMC Junagadh
The Acid test ratio in APMC Junagadh witnessed fluctuating trend. The ratio was 0.88 times in the year 1999-00 and increased with high Jump and reached to 1.97 times in the year 2000-01. The ratio was sharply declined to 0.44 times in the year 2001-02 and further it was increased with rocket speed and reached to 2.63 times in the year 2002-03. The ratio falls down to 0.64
times in the year 2003-04 than after from the year 2004-05 to 2007-08 the ratio started progressive trend. It was 0.96 times in the year 2004-05 and reached to 3.00 times the highest among all APMCs in the year 2007-08. The ratio fell down and reached to 0.25 times in the final year of the study period. The average Acid-test ratio of this APMC was 1.54 times. It indicates satisfactory liquid position with the point of view creditor but not beneficial for the firm because it shows the mismanagement of cash in the firm.

**APMC Hapa**

The Acid-test ratio in APMC Hapa showed decreasing during the first three years of study period. It was 0.26 times in the year 1999-00 and reached to 0.16 times in the year 2001-02. The ratio was increased during next two years of study period; it was 0.27 times and 0.89 times (the highest) during study period, in the years 2002-03 and 2003-04 respectively. The ratio decreased 0.81 times and 0.13 times, (the lowest) in the years 2004-05 and 2005-06 respectively. Then the ratio again increased to 0.30 times and 0.62 times in the years 2006-07 and 2007-08 respectively. In last of year of study period It was decreased to 0.25 times. The average ratio of this APMC was 0.39 times which was the lowest among all APMCs under study. Moreover the absolute liquid position of this APMC was not satisfactory because the ratio was almost lower than the average ratio of sampled APMCs.

**APMC Rajkot**

The Acid-test ratio in APMC Rajkot revealed fluctuating trend during study period. It was 0.44 times in the year 1999-00 and decreased to 0.42 times in the year 2000-01. Again it increased to 0.63 times in the year 2001-02. The ratio was declined to 0.13 times in the year 2002-03. Then the ratio showed increasing trend during next three years of study period. It was 0.46 times in the year 2003-04 and reached to1.20 times (highest) in the year 2005-06. Again the ratio was declined to1.10 times in the year 2006-07 and it increased to 1.13 times in the year 2007-08. The ratio decreased to 0.94 times in the year 2008-09. The average ratio of this APMC was 0.71 times which less than the average ratio of sampled APMCs is. The absolute liquid position of this
APMC was satisfactory during last four years of study period and poor during first six years of study period.

**APMC Wadhwan**

The ratio of Acid-test in the APMC Wadhwan was 0.19 times in the year 1999-00 and it declined to 0.07 times (lowest) in the year 2000-01. Then it started progressive trend till the year 2006-07. It was 0.24 times in the year 2001-02 and reached to 2.08 times (highest level) in the year 2006-07. It was decreased to 2 times and 0.62 times in the years 2007-08 and 2008-09 respectively. The average ratio of this APMC was 0.97 times which was higher than average ratio (0.93 times) of all APMCs under study. The ratio was satisfactory during the year 2004-05 to 2007-08. While poor liquid position was found during the year 1999-00 to 2003-04 and 2008-09.

Thus it can be concluded that absolute liquid position was most satisfactory in APMC Bhavangar followed by Junagadh and Wadhwan and poor in APMC Hapa followed by Amreli and Rajkot.

**Hypothesis:**

\( H_0: \) There is no significant difference in the Acid-test ratio of sampled APMCs during study period.

\( H_1: \) There is significant difference in the Acid-test ratio of the sampled APMCs during study period.

\( H_0: \) There is no significant difference in the Acid-test ratio in between the years among the sampled APMCs during study period.

\( H_1: \) There is significant difference in the Acid-test ratio in between the years among the sampled APMCs during study period.
Table – 6.9
F – TEST (ANOVA TABLE) – Acid-test ratio

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>P-value</th>
<th>F Critical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Year</td>
<td>9.0766</td>
<td>9</td>
<td>1.0085</td>
<td>3.10</td>
<td>0.0055</td>
<td>2.10</td>
</tr>
<tr>
<td>Between APMC</td>
<td>14.1222</td>
<td>5</td>
<td>2.8244</td>
<td>8.68</td>
<td>8.0820</td>
<td>2.42</td>
</tr>
<tr>
<td>Error</td>
<td>14.6450</td>
<td>45</td>
<td>0.3254</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>37.8439</td>
<td>59</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It is evident from the table No. 6.9 that there was significant difference in the acid-test ratio of sampled APMCs because the calculated value of ‘F’ (8.68) was greater than that of the table value (2.42) at 5% level of significance. Hence, the null hypothesis was rejected and alternative hypothesis is accepted. The difference in acid-test ratio in between the years was significant, because the calculated value of ‘F’ (3.10) was greater than that of the table value (2.10) at 5% level of significance. Hence, the null hypothesis was rejected and alternative hypothesis is accepted.

Therefore, it is concluded that there was a significant difference in the acid-test ratio of sampled APMCs during study period. It is also concluded that there is significant difference in the acid-test ratio in between the years of sampled APMCs during study period.
6.6 REFERENCES

1. Gersternberg- Financial Organization and Management p.33


9. M.E.Thukaram Rao. New age international (p) Limited Publisher, p.75