1.1 The Preliminary Remarks

India’s industrial economy consists of both public and private sectors. Public sector units are mainly engaged in the production of certain items like steel and various types of machinery and transport equipment. The remaining part of the manufacturing sector is, of course, the private sector.

The Small Scale Industry (SSI) sector is a key driver of economic growth and contributes substantially to India’s total industrial production, exports and employment generation. As a result, 3.6 million SSI units in the country produce over 8000 items and provide employment to about 20 million people. The importance of the small-scale sector in India can be gauged from the fact that this sector contributes to over 40 percent of the gross turnover in the manufacturing sector and 33 percent of the total exports. Thus, they are the engine of growth. As regards the output and employment generation, the progress has been so impressive that in international forums, it has become customary to talk of the, Indian Model, for the development of SSI. Indeed, many developing countries are trying to adopt Indian Programmers, to fulfill their respective requirements and are looking forward to Indian Model as guides in this respect. But the role and growth of SSI sector should not lead one to think that this sector is free from all the problems. The problems are severe and consequences are disastrous which in some cases lead to the closure of the units. It is rather disheartening to note that one out of every thirteen units is said to be sick and four – fifth of the sick units are not viable. Of the various problems the SSIs face, there is one problem, which frequently overshadows the rest, particularly in certain stages of growth and that is the problem of finance. Put at its simplest, the financial problem of small firm is that of finding funds at the right time, of the right type and in the right quantities at right cost at the various stages of development. Lack of adequate finances and credit has always been a major problem of SSIs. Small Scale Industrial units have weak capital base of their own because they are mostly organized on proprietary or partnership basis and are usually of very small in size. They are poorly placed in the matter of capital formation.

In spite of the fact that many entrepreneurs are highly motivated to work for long hours, but their business concerns often collapse because, they spend much time on performing non – management tasks and neglect the essential, more difficult and very challenging task of management, which brings the firm to a desired shape. For a small industrial unit, with a
low withstanding power, it is highly important to have a close look on the management of finance. It is the fact that the success or failure of an enterprise to a large extent depends upon the efficiency and effectiveness with which financial resources of the firm is applied and managed. It mainly depends upon a firm's ability of management of its resources. Among all the resources, there is a direct relationship between a firm's growth and working capital needs. Working capital is pivotal and is assumed to be on one side of a coin, while fixed capital is on the other side. The traditional approach dominated the scope of financial management and limited the role of financial manager simply to raising funds. It was during the major events, such as promotion, reorganization, expansion or diversification in the firm that the financial manager was called upon to raise funds. In those days, the financial manager's only significant duty was to see that the firm has enough cash to meet its obligations. The traditional approach outlived its utility in the changed business situation since the mid – 1950s. The development of number of management skills and decision-making techniques facilitated the implementation of a system of optimum allocation of the firm's resources. The emphasis shifted from episodic financing to the managerial financial problems, from rising of funds to efficient and effective use of funds. In addition to management of long – term assets, current assets management or working capital management is yet another important finance function, because excess amount of working capital or inadequate working capital is hazardous to the interests of the firm.

In modern time's efficient management of working capital has been recognized as one of the basic functions of arrangement for successful conduct of business operations. It not only influences profit-earning capacity of business undertaking but also determines largely, their scope and content of operation. Prudent management of working capital acts as a key for the successful operations of a business undertaking. To have adequate, healthy and efficient circulation of working capital, it is necessary that working capital should be properly determined and regularly reviewed. Efficient utilization of working funds leads to the maximization of returns on investment. The efficacy of working capital management is determined by the efficient administration of its various components such as cash, trade, credit and inventory etc. The management of working capital is concerned with the problems that arise in attempting to manage the current assets, the current liabilities and the inter relationship that exist between them. But, in the case of current assets, the
management goes on revising the policies keeping in view the profitability, competition, seasonal varieties etc. The financing of current assets requires prudent decision making on the part of management. It is, thus, the adequacy of cash and other current assets, together with their efficient handling, virtually determines the survival or extinction of a business concern. Thus, management of working capital is said to be the life-blood and nerve centre of an enterprise. It is one of the most important facets of the firm’s overall financial management.

This study provides some guidelines to the good management of working capital. This chapter takes a brief look at the financial management reform programme and the legislative requirements for working capital management.

Later chapters offer an overview of working capital management; describe specific strategies for managing the various components of working capital. The booklet focuses on practical management techniques, providing an indication of what may be required for good management in each area.

The present study further aims at giving an insight to the management of working capital in SSI units in and around.

1.2 The Definition of Terms

In this thesis it is proposed to study the management of working capital in small-scale industries in and around the city of Pune. It is necessary to define the different terms used in this thesis to determine the exact scope of the study.

1.2.1 Working Capital – working capital is pivotal and is assumed to be on one side of a coin, while fixed capital is on the other side. Working capital refers to the flow of ready funds necessary for the working of an enterprise. Apart from investments in fixed assets, every enterprise has to arrange for adequate funds for meeting day-to-day expenditure to maintain it as a going concern. According to Lincon, Doris, Stevens and Saliers, working capital is the excess of current assets over current liabilities. According to Hoagland, “Working capital is descriptive of that capital which is not fixed. But the more common use of the working capital is to consider it as the difference between the book value of the current assets and current liabilities.”

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According to Shubin, “Working capital is the amount of funds necessary to cover the cost of operating the enterprise. Working capital in a going concern is a revolving fund; it consists of cash receipts from sales which are used to cover the cost of current operations.”

According to Gerstenberg, “Circulating capital means current assets of a company that are changed in the ordinary course of business from one form to another, as for example, from cash to inventories, inventories to receivables, receivables to cash.”

Working capital is defined in the Annual survey of Industries to include,

“Stocks of raw materials, stores, fuels, semi-finished goods, including work-in-progress and finished products and by-products; cash in hand and cash at bank and amount of sundry creditors as represented by outstanding factor payment, e.g., rent, wages, interest, dividend; Purchase of goods and services; Short-term loans and advances and sundry debtors comprising amounts due to the factory on account of sale of goods and services and advances towards tax payments.”

After taking into consideration all these definitions, it is considered that the definition of working capital means “excess of current assets over current liabilities.”

The term working capital refers to the amount of capital, which is readily available to an organization. That is, working capital is the difference between resources in cash or readily convertible into cash (Current Assets) and organizational commitments for which cash will soon be required (Current Liabilities).

Current Assets are resources, which are in cash or can soon be converted into cash in "the ordinary course of business".

Current Liabilities are commitments, which can soon require cash settlement in "the ordinary course of business".

Thus:  WORKING CAPITAL = CURRENT ASSETS - CURRENT LIABILITIES

The term working capital refers to the amount of capital, which is readily available to an organization. That is, working capital is the difference between resources in cash or readily

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onvertible into cash (Current Assets) and organizational commitments for which cash will soon be required (Current Liabilities).\textsuperscript{5}

Managing working capital is a matter of balance. A department must have sufficient cash on hand to meet its immediate needs while ensuring that idle cash is invested to the organization’s best possible advantage. To avoid tipping the scale, it is necessary to have clear and accurate reports on each of the components of working capital and an awareness of the potential impact of outside influences.\textsuperscript{6}

1.2.2 Management of Working Capital – the basic aims of management of working capital are to spend up the rate of turnover, to reduce the idle periods of excess current assets and to ensure availability of adequate funds to meet commitments on purchases and other recurring payments and to minimize the costs of working funds. It is the fundamental responsibility of management to guide the circular flow of working capital in suitable proportion. It is an art to manage assets in such a manner, as to ensure a smooth flow from one stage to another over a normal period.

Circular flow – The initial inflow of funds comes from the shareholders. Arrangements for further funds soon follow in the form of bank loans or credit facilities from suppliers of goods and services. With the resources thus mobilized, the enterprise commences its operations. The shareholders, who provide the initial funds, receive dividends as reward. The long-term creditors provide loans and in return receive interest in addition to the installments of repayments of the principal. The fixed assets cycle covers a wider time span as the re-flow of the cash outlay for acquisition of fixed assets has to come in through the annual depreciation charges recovered in sales, the time span depending upon the type of assets, taxation policies, and other factors, raw materials that are purchased stay for a while as inventories and then move into the production streams. Labour and other manufacturing expenses enter the conversion process. The raw materials pass through the interim stage of work-in-process to finished goods. Finished goods pass through the phase of book debts until the collection of outstanding dues causes the reappearance of cash at the completion

\textsuperscript{5} \url{www.treasury.govt.nz/publicsector/workingcapital}

\textsuperscript{6} \url{www.treasury.govt.nz/publicsector/workingcapital/chap3.asp}
of the cycle. The difference between the cost of production and the sales is called profit margin. From revenue the entrepreneur has to give Government taxes and accounts payable. The entrepreneur also invests money at various places. This cyclical process, which repeats, is illustrated in the figure (1-1).

![Circular Flow Diagram]

**Figure (1-1) Circular Flow**

1.2.3 Small Scale Industries – According to: Guidelines for industries, 2004-2005, Government of India, Department of Industrial Development, Ministry of Industrial and Civil Supplies, New Delhi, “Small Industrial houses are those which by themselves or in interconnection with other undertakings have Investment in Plant and Machinery less than one Crore at original value.” As has already been mentioned the S.S.I play a very significant role for the development of any economy. For further substantiating this aspect some more detail of the importance of S.S.I is given in the following paragraphs;

Small – scale industries play a key role in the industrialization of a country like India and hence the promotion of small – scale industries has been regarded as an important element of five-year plans. The rationale behind such an approach is that these industries provide immediate large-scale employment and have a comparatively higher labour – capital ratio;
they need a shorter gestation period and can easily be set up in rural and backward areas. They need relatively smaller market to be economical. They promote growth of entrepreneurship, promote a more decentralized pattern of ownership, diversification of economic activities, and introduce new products to enrich living standards of people and equitable dispersal of industries throughout the country. Thus they are the engine of growth; small is beautiful, efficient, innovative, and creative where pursuit for progress is endless and growth is the way of life. Japan is the outstanding example of those who have achieved rapid industrialization through the small and medium industries. Likewise, Taiwan has produced 90% of its industrial output, coming out of small – scale industries employing not more than 15 workers each. In India this sector contributes 45% of industrial production, 80% of industrial employment and 35% of total export.

1.2.3.1 Definition and Classification of Small – Scale Industries

The use of “small” as a designation in industry differentiates one set of industries from others. The definition of small industry is an important aspect of government policy as it identifies the target groups. The operational definition is based on investment criterion and according to these criteria small – scale industries are defined in terms of the value of fixed assets, excluding land and building, although the initial definition was based on number of workers. The cut off investment limit for defining a small – scale industry was Rs. 5.00 lacks in 1960 and this limit has been changed periodically and at present it is Rs.1.00 crore. Ancillary units and tiny units also come under the umbrella of small – scale industry. A tiny unit is one whose investment in fixed pant and machinery does not exceed Rs.5.00 lacks. An ancillary industry is one whose investment in plant and equipment does not exceed Rs.75.00 lacks and engaged in the manufacturing of parts, components, sub assemblies, tooling or intermediate goods. Most of their product is supplied to order industries for the production of other articles. This operational definition is considered relevant for discussion in academic circles as well as policy decisions.

While classifying the small – scale industries, is including cottage and village industries, ancillary industries and tiny units under the broad category of small – scale industries. One classification, though not exclusive, may be as follows:
Figure (1-2) Classification of Small-Scale Industries

1.2.3.2 Performance of small – scale industries during pre and post reform periods:

With a view to protect, support and promote small – scale industries and to facilitate balanced growth of small and large sector, a number of policy measures have been taken by government. The government has announced new industrial policy in 1991 and some other measures in later years, which had their impact on the performance of small – scale industries being evaluated in this section. The primary objective of the Small Scale Industries policy during the nineties has been to impact more vitality and growth-impetus to the sector to enable it to contribute its mite fully to the economy, particularly in terms of growth of output, employment and export. The main provisions of Government policy are as follows:

- The sector has been substantially deli censed. Further efforts would be made to deregulate and debureaucratise the sector with a view to remove all fetters on its growth potential, reposing greater faith in small and young entrepreneurs.
- All statutes, regulations and procedures would be reviewed and modified, wherever necessary, to ensure that their operations do not militate against the interests of the small scale and village enterprises.
- Government have already announced increase in the investment limits in plant and machinery of small scale industries, ancillary units and export – oriented units to Rs. 6 million, Rs. 7.5 million, and Rs.200 thousand respectively.
- All Industry-related service and business enterprises, recognized as small scale industries and their investment ceiling would correspond to those of tiny enterprises. It has also been decided to widen the scope of the National Equity Fund Scheme to cover projects upto Rs. 1 million for equity support (upto 15 percent).
- Single Window Loan Scheme has also been enlarged to cover projects upto Rs. 2 million with working capital margin upto Rs. 1 million.
- A special monitoring agency would be set up to oversee that the genuine credit needs of the small scale sector are fully met. It has been decided to allow equity participation by other industrial undertaking in the SSI, not exceeding 24 percent of the total shareholding.
• A beginning has been made towards solving the problem of delayed payments to small industries by setting up of ‘factoring’ services through Small Industries Development Bank of India (SIDBI).

• A Technology Development Cell (TDC) would be set up in the Small Scale Industries Development Organization (SIDO), which would provide technology inputs to improve productivity and competitiveness of the products of the small-scale sector.

• The SIDO has been recognized as the nodal agency to support the small-scale industries in export promotion. An Export Development Centre would be set up in SIDO to serve the small-scale industries through its network of field offices to further augment export activities of this sector in recent years.

• Government has dereserved many items, which were earlier reserved only for Small Scale Industries in later years.

To evaluate and analyze the performance of small-scale industries this part study covers the period of 22 years 1980-81 to 2001-2002. The whole time span has been divided into two sub periods, first from 1980-81 to 1990-91, designated as per reform period and second, from 1991-92 to 2001-2002, designated as the post reform period. The performance has been evaluated for these two sub-periods on the basis of four main indicators. They are:

1. Number of units
2. Number of workers employed
3. Value of output
4. Value of exports

Number of units: the progress of small-scale industries on the basis of number of units has been shown in table N0. 1.
Table (1-1) progress of small-scale industries (No. of units)\textsuperscript{7}

<table>
<thead>
<tr>
<th>Year</th>
<th>Pre-Reform period</th>
<th>Year</th>
<th>Post-Reform period</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of Units (in lacks)</td>
<td>Growth Rate (%)</td>
<td>No. of Units (in lacks)</td>
</tr>
<tr>
<td>1983-84</td>
<td>11.50</td>
<td>9.00</td>
<td>1994-95</td>
</tr>
<tr>
<td>1984-85</td>
<td>12.42</td>
<td>8.00</td>
<td>1995-96</td>
</tr>
<tr>
<td>1985-86</td>
<td>13.56</td>
<td>9.18</td>
<td>1996-97</td>
</tr>
<tr>
<td>1986-87</td>
<td>14.64</td>
<td>7.96</td>
<td>1997-98</td>
</tr>
<tr>
<td>1987-88</td>
<td>15.86</td>
<td>8.33</td>
<td>1998-99</td>
</tr>
<tr>
<td>1989-90</td>
<td>18.26</td>
<td>6.66</td>
<td>2000-01</td>
</tr>
<tr>
<td>1990-91</td>
<td>19.48</td>
<td>6.68</td>
<td>2001-02</td>
</tr>
</tbody>
</table>

** Compound Growth Rate

If carefully examine the table, certain points would be emerged. First, there has been a continuous increase in the number of small-scale industries over the period of study. Second, this number has been more than doubled during the pre reform period, that is, from 8.75 lacks in 1980-81 to 19.48 lacks in 1990-91, while it could not be doubled but less than double in post-reform period. Third, if evaluate this performance on the basis of growth rate, the situation becomes more dissatisfactory, as can be shown graphically:

Graph (1-1) Growth of Units of Small-Scale Industries (Pre and Post Reform Period)

The graph is showing the time behavior of the growth rate of the number of small-scale industries and thus it gets clear that the performance on this basis is not satisfactory. The graph is showing that the growth period than the pre reform period. The most concerning fact, which should be noted here, is that the growth rate of units of small-scale industries has reached to its minimum level of 3.11 in 2000-2001 and this is the minimum rate not only during the post reform period but also during the whole five decades of planning from 1951-2002. Various reasons can be attributed for the low level of growth rate of small-scale industries. After implementation of new industrial policy small-scale industries had at threat for their survival due to stiff competition from foreign companies as the government liberalized the entry of foreign goods into the Indian market. Even some big industries could not stand in face of this competition what to say about small-scale industries. Thus the growth rate of the units of small-scale industries has been low during post reform period. The policy of dereservation has also been responsible for this slow growth rate.
Table (1-2) Progress of small-scale industries (Employment)\(^8\)

<table>
<thead>
<tr>
<th>Year</th>
<th>Pre-Reform period</th>
<th>Post-Reform period</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Employment (in lacks)</td>
<td>Growth Rate (%)</td>
</tr>
<tr>
<td>1980-81</td>
<td>7.1</td>
<td>1.43</td>
</tr>
<tr>
<td>1981-82</td>
<td>7.5</td>
<td>5.63</td>
</tr>
<tr>
<td>1982-83</td>
<td>7.9</td>
<td>5.33</td>
</tr>
<tr>
<td>1983-84</td>
<td>8.4</td>
<td>6.33</td>
</tr>
<tr>
<td>1985-86</td>
<td>9.6</td>
<td>6.67</td>
</tr>
<tr>
<td>1986-87</td>
<td>10.1</td>
<td>5.21</td>
</tr>
<tr>
<td>1987-88</td>
<td>10.7</td>
<td>5.94</td>
</tr>
<tr>
<td>1988-89</td>
<td>11.3</td>
<td>5.81</td>
</tr>
<tr>
<td>1989-90</td>
<td>12.0</td>
<td>6.19</td>
</tr>
<tr>
<td>1990-91</td>
<td>12.5</td>
<td>4.17</td>
</tr>
</tbody>
</table>

** Compound Growth Rate

The table shows the continuous increase in the number of percent employed in small-scale industries. The table also reveals that, if leave the exceptionally lowest rate of 1.43 % in 1980-81, then the growth rate of employment has been varied within the range of 5 to 7 percent approximately during pre reformed period, on the other hand this range has been 3 to 5 percent approximately during post reform period. This trend cannot be welcomed in a country like India where the problem of unemployment is already very severe. More over this growth rate has touched the minimum level of 2.62 during the whole 22 years of study. These trends can also be depicted graphically:

The graph is showing that during post reform period the small-scale industries have not performed well in terms of employment, as the growth rate of employment has been higher in pre-reform period, than that of post reform period. As far as reasons for this situation are concerned, one of the reasons is the slow growth of the number of units of small-scale industries during post reform period. Another very important reason responsible for this poor performance is that new policy provides for equity participation by other industrial units in the small industrial units not exceeding 24 percent of the total shareholding. Large units are also known to take care of working capital and quality problems of small-scale units but at the same time they also use that technology which is generally capital intensive and thus, have a negative impact on employment generation. Besides, government has also allowed importing export-promoting capital goods at a very nominal rate of tariffs. It has also increased capital intensity in small sector and this tendency has been responsible for dismal performance on employment front during post reform period.

1.2.3.3 Value of production: the value of output of small – scale industries has been shown in the following table:
Table (1-3) Progress of Small- Scale Industries (Value of Production)\(^9\)

<table>
<thead>
<tr>
<th>Year</th>
<th>Value of Production (in crores)</th>
<th>Growth Rate (%)</th>
<th>Year</th>
<th>Value of Production (in crores)</th>
<th>Growth Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980-81</td>
<td>28060</td>
<td>29.70</td>
<td>1991-92</td>
<td>178699</td>
<td>15.04</td>
</tr>
<tr>
<td>1982-83</td>
<td>35000</td>
<td>7.36</td>
<td>1993-94</td>
<td>241648</td>
<td>15.46</td>
</tr>
<tr>
<td>1983-84</td>
<td>413000</td>
<td>18.00</td>
<td>1994-95</td>
<td>298886</td>
<td>23.69</td>
</tr>
<tr>
<td>1984-85</td>
<td>50520</td>
<td>22.32</td>
<td>1995-96</td>
<td>362656</td>
<td>21.34</td>
</tr>
<tr>
<td>1986-87</td>
<td>72250</td>
<td>18.00</td>
<td>1997-98</td>
<td>462641</td>
<td>12.33</td>
</tr>
<tr>
<td>1987-88</td>
<td>87300</td>
<td>20.83</td>
<td>1998-99</td>
<td>520650</td>
<td>12.54</td>
</tr>
<tr>
<td>1989-90</td>
<td>132320</td>
<td>24.36</td>
<td>2000-01</td>
<td>639024</td>
<td>11.54</td>
</tr>
<tr>
<td>1990-91</td>
<td>155340</td>
<td>17.40</td>
<td>2001-02</td>
<td>690316</td>
<td>8.03</td>
</tr>
</tbody>
</table>

** Compound Growth Rate

The same increasing trends regarding the absolute value of production of small-scale industries during pre and post reform period. But after examining carefully can assert certain points. For example, during the pre-reform period the value of production of small-scale industries has increased four times while in the post reform period it could not increase by the same magnitude. Also it has a view over the growth rate of production of small-scale industries through a graph:

The graph shows that situation is also not satisfactory on this front. The growth rate of output during the post reform period has been much lower in comparison to pre-reform period particularly after 1994-95 it has generally a declining trend. One of most important reasons for this dissatisfactory performance is that during last few years Government has dereserved certain number of goods, which were earlier reserved only for small-scale industries. As a result big industries with the foreign collaboration also started producing and making these goods. It is needless to say these large-scale industries are in a position to produce these goods more efficiently at a lower cost as these industries enjoy benefits of the scale of the economy in all aspects-from production to marketing. In this situation it is very natural that the growth rate of the production of small-scale industries has been fallen down during post reformed period.

**1.2.3.4 Value of Exports:** as far as value of exports is concerned there has been a continuous increase in absolute value of exports during the whole study period as shown in the table 4. If want to analyze the growth rate of exports there has not been any clear-cut trend. The rate has been fluctuating very much over the period of study.
Table (1-4) Progress of Small-Scale Industries (value of Export)\textsuperscript{10}

<table>
<thead>
<tr>
<th>Year</th>
<th>Value of Export (in crores)</th>
<th>Growth Rate (%)</th>
<th>Year</th>
<th>Value of Export (in crores)</th>
<th>Growth Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980-81</td>
<td>1643</td>
<td>34.0</td>
<td>1991-92</td>
<td>13883</td>
<td>42.20</td>
</tr>
<tr>
<td>1982-83</td>
<td>2095</td>
<td>1.21</td>
<td>1993-94</td>
<td>22764</td>
<td>28.00</td>
</tr>
<tr>
<td>1983-84</td>
<td>2350</td>
<td>12.17</td>
<td>1994-95</td>
<td>29068</td>
<td>27.69</td>
</tr>
<tr>
<td>1984-85</td>
<td>2563</td>
<td>9.06</td>
<td>1995-96</td>
<td>36470</td>
<td>25.46</td>
</tr>
<tr>
<td>1985-86</td>
<td>2785</td>
<td>8.66</td>
<td>1996-97</td>
<td>39248</td>
<td>7.62</td>
</tr>
<tr>
<td>1986-87</td>
<td>3631</td>
<td>30.38</td>
<td>1997-98</td>
<td>44442</td>
<td>13.23</td>
</tr>
<tr>
<td>1987-88</td>
<td>4373</td>
<td>20.44</td>
<td>1998-99</td>
<td>48979</td>
<td>10.21</td>
</tr>
<tr>
<td>1988-89</td>
<td>5490</td>
<td>25.54</td>
<td>1999-2000</td>
<td>54200</td>
<td>10.66</td>
</tr>
<tr>
<td>1989-90</td>
<td>7626</td>
<td>38.91</td>
<td>2000-01</td>
<td>69797</td>
<td>28.78</td>
</tr>
<tr>
<td>1990-91</td>
<td>9763</td>
<td>28.02</td>
<td>2001-02</td>
<td>N. A.</td>
<td>N. A.</td>
</tr>
</tbody>
</table>

\textbf{** Compound Growth Rate**}

In terms of growth rate of exports, the situation looks somehow satisfactory, as can be seen in the following graph. This may be due to various boosting measures regarding exports of small-scale industries taken by the government. But the graph shows that in the initial years of reforms exports responded in a very satisfactory manner but in the later years this high rate of exports could not be maintained and it has been lower in the later years of post reform period in comparison to the pre-reform period.

Till now the performance of small-scale industries has been evaluated on the basis of absolute quantities and on the basis of year-to-year growth rates. If want to analyze the overall performance of small-scale industries then it would be more important and fruitful to know that what has been average annual growth rate of various indicators during pre and post-reform periods. For this purpose the annual compound growth rates for each indicator for pre and post-reform periods have been computed and these rates have been shown in the following diagram:

**Graph (1-5) Overall Performance**

This diagram gives an overview of the overall performance of small-scale industries during the pre and post reform period. With the help of this diagram it is very easy to
evaluate the performance of SSI at one glance and on the basis of these rates can finally conclude that during post-reform period the number of small-scale industries unit, employment, value of production and exports have increased in absolute terms, but the annual compound growth rates of all these four indicators have been comparatively low in post reform period. Through specific reasons have already been mentioned while evaluating the performance of small scale industries on the basis of each indicator but lack of financial facilities is one common and one of the most important reasons which has always influenced the overall performance of small scale industries. Most of the state governments are not in a position to sanction adequate grants for the development of small-scale industries. Even at the national level scene is not different. Data available on budgetary allocations for small-scale industries reveal except first and second plans, this sector has never received more than 1.5 percent of the total plan outlay of central government. After examining carefully the budgetary allocations by Central Government to this sector, one thing gets very much clear that during the whole planning period, the share of this sector in total plan outlay of central government has been not only low but has been reducing with the passage of time.

As a result, totally the Indian industry is at the crossroads where one the one hand it has to integrate with the global markets, while on the other hand, it has to face competition in the domestic market from international suppliers. Technology, product quality, factor productivity and competitive marketing techniques and management practices, alone seem to hold the key for the future of small-scale industry. On moving from a protected economy to market oriented economy, some amount of transitional problems seems unavoidable. But during this transitional period the role of the government becomes much more important. It is high time that the policy makers, statesmen, administrators should pay a proper attention to this sector and to allocate a high percentage of budgetary allocations in plans for the development of these industries. Through this sector has played a very important role in the development of the country and has very significant role to play in the years to come even then this sector has never been able to get needed attention for its continuous development from policy makers and administrators. It is therefore, concluded that the economic reforms should not make the government to neglect this vital sector and allow it die a natural death.
On the other hand, the government should make all efforts to revitalize the small-scale industries for a rapid economic development of the country.

1.2.4 In and Around Pune of Maharashtra State— Pune city is administered by the Pune Municipal Corporation. Kirkee and Pune Cantonments are administered by the respective cantonment Boards. Pimpri, Bhosari and Chinchwad are administered by Municipal council and in some areas like Loni, Grampanchayats look after local affairs.\(^\text{11}\) (IDP, 12).
This area has developed as an industrial area during the last fifty years. Most of the industries are modern and quite a few of them fall in the category of Engineering Industry. This is the main reason for selecting this area for the purpose of study.

1.2.5 Coverage – In order to make the study intensive and useful, it is decided to delimit the period of its coverage. The period covered in this thesis is 2005-06 to 2007-08.

1.3 Significance of the Study
The management of current assets and current liabilities occupies the largest portion of a financial manager’s time. It is reliably estimated that the finance manager spends between 80% and 90% of his time in day-to-day financial decisions involving short term assets and liabilities. Although current assets vary from industry to industry, they constitute between 50% and 60% of the total assets of manufacturing concern.
Working capital management is particularly very important for small firms to manage their current assets and current liabilities very carefully. A small firm may not have much investment in fixed assets and it can minimize its investment in fixed assets by acquiring these assets through renting or leasing plant and machinery. However, there is no way it can avoid an investment in current assets such as cash, accounts receivables and inventories. Therefore, current assets are particularly very significant for the financial management of small firms. Further, because a small firm has relatively limited access to the long-term capital markets, it must necessarily rely heavily on trade credit and short-term bank loans, both of which affect net working capital by increasing current liabilities.

\(^{11}\) Industrial Directory of Poona, p.12.
A survey of literature on SSI reveals that some empirical studies dealing with working capital management of SSI have been conducted in India. Most of these research studies revealed either the inadequacy of working capital or the inefficient management of working capital among the units of SSI. A number of studies have been carried out to examine the incidence and the reasons of sickness amongst small-scale industrial units in India. Most of these studies also revealed that shortage and untimely receipt of working capital was considered as the most important cause of sickness. DCSSI (1984)\textsuperscript{12}, FICCI (1988).\textsuperscript{13}

For small companies, current liabilities are the principal source of external financing. These firms do not have access to the long-term capital markets, other than to acquire a mortgage on a building. The fast-growing and larger company also makes use of current liability financing. For these reasons, the financial manager and staff devote a considerable portion of their time for the management of working capital. The management of cash, marketable securities, accounts receivable, accounts payable, accruals, and other means of short-term financing are the direct responsibility of the finance manager, instead of the management of inventories only. Moreover, these management responsibilities require continuous and day-to-day supervision. Unlike dividend and capital structure decision, decision on the issue of working capital decision can not be waited, and set the matter aside for many months to come. Thus, working capital management is important, if for no other reason than the proportion of the financial manager’s time that must be devoted to it. More fundamental, however, is the effect that working capital decisions have on the company’s risk, return, and share price.

A study of Working Capital is of major importance to internal and external analysis because of its close relationship with the current day-to-day operations of a business. So working capital management may be regarded as lifeblood of a business.\textsuperscript{14}

Working Capital is considered as the central nervous system of a business enterprise. The presence of an adequate amount of working capital in a business is an indication of its liquidity. In other words, it is the extent of cushion or margin of safety available to meet the current obligations in the ordinary course of business without any difficulty. Working

\textsuperscript{12} Development Commissioner of Small Scale Industry

\textsuperscript{13} Federation of India Chamber of Commerce and Industry

capital management is nothing but to manage the firm’s current assets and current liabilities in such a way that a satisfactory level of working capital is maintained. This is so because if the firm cannot maintain satisfactory level of working capital, sooner or later it will topple down.\(^\text{15}\)

Working capital constitutes part of the Crown's investment in a department. Associated with this is an opportunity cost to the Crown. (Money invested in one area may "cost" opportunities for investment in other areas.) If a department is operating with more working capital than is necessary, this over-investment represents an unnecessary cost to the Crown.\(^\text{16}\)

1.4 Need of the Study
The working capital plays a very significant role for the success of any business organization. The need for Working Capital is very important because it is used for the capital needed for day-to-day operations. There is hardly any business firm, which does not require any amount of working capital.
A firm aims at maximizing the wealth of its shareholders. In its endeavor to do so, a firm should earn sufficient return from its operations. Earning a steady amount of profit requires successful sales activity. The firm has to use enough funds in current assets for generating sales. Current assets are needed because sales do not convert in to cash instantaneously. There is always an operating cycle involved in the conversion of sales in to cash. Technically, this is called as operating cycle or working capital cycle, which is the heart of need for working capital.
The basic objective of financial management is maximizing the wealth of shareholders. This can be achieved when a firm earns sufficient returns from its operations. The amount of such earning largely depends upon the magnitude of sales. The firm has to invest enough funds in current assets for accelerating its sales activity. There is always time gap between sale of goods and the final realization of cash. Current assets are required during this time gap in order to sustain the sales activity. Adequate working capital is required during this

\(^\text{16}\) \url{www.treasury.govt.nz/publicsector/workingcapital/chap3.asp/govt.nz}
period for purchase of raw materials, payment of wages and other inevitable expenses required for the manufacturing of goods to be sold.

If the company has certain amount of cash, it will be required for purchasing the raw material though some raw material may be available on credit basis. Then the company has to spend some amount for labour and factory overheads to covert the raw material in work in progress, and ultimately finished goods when sold on credit basis get converted in the form of sundry debtors. Sundry debtors are converted to cash only after the expiry of credit period. Thus, there is a cycle in which the originally available cash is converted in the form of cash again but only after following the stages of raw material, work in progress, finished goods and sundry debtors. Thus, there is a time gap for the original cash to get converted in the form of cash again. Working capital needs of the company arise to cover the requirement of funds during this time gap, and the quantum of working capital needs varies as per the length of this time gap.

Figure (1-3) shows Working Capital Cycle

Thus, some amount of funds is blocked in raw materials, work in progress, finished goods, sundry debtors and day-to-day cash requirements. However, some part of these current assets may be financed by the current liabilities also. E.g. Some raw material may be
available on credit basis, all the expenses need not be paid immediately, workers are also to be paid periodically etc., but still the amounts required to be invested in these current assets is always higher than the funds available from current liabilities. This is the precise reason why the needs for working capital arise.17

The need for working capital management will become greater in the future. Part of the problem arises out of the total supply of money and credit available to companies and in recent years, the Government uses the supply of credit as a method of regulating the economy. In particular, the restriction of credit is now a primary weapon in the struggle to control inflation.

The procurement of adequate funds and the application of these funds is a general management’s responsibility. It cannot be left to the company’s accountant or finance department, since it involves policy decisions affecting all the management functions such as production, marketing and administration. Skilful working capital management requires an overall plan approved and applied by all the senior management.

In a period of tight money supply and credit restrictions, the amount of finance required for efficient operations, planned expansion and profitable investment is a critical factor in the management of company funds.

The management’s task is to strike a balance between the retention of liquid funds and a minimum investment in working capital in accordance with the following objectives:

1. To keep stocks and debtors at the lowest possible level consistent with the efficient operation of the business. A chronic shortage of stock or unwillingness to extend the usual credit terms to customers, which could seriously hinder the running of the company.

2. To obtain the largest possible amount of credit that the suppliers are willing to grant, consistent with optimum buying principles.

The management of working capital involves major policy decisions, not only in the finance department but also in the production and marketing areas. Hence, it is essential for the company’s senior executives as well as line managers and their staff to become actively involved in the control of working capital and to understand the effects of major change in the company’s stock, debtors and creditors.

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Management can determine the level of working capital by planned changes in its component parts or in the total funds employed in the concern. When the company proposes to increase its liquidity by raising additional loans or issuing more share capital; its ability to do so depends on various factors, such as the securities available and the prospects of earning profits. It should be recognized that – Both methods are costly. Share capital is permanent. Loans may be for any length of time.

One of the main objectives of management in the control of the company’s liquidity is to maintain the lowest possible ratio of working capital to turnover. In the absence of significant changes in the nature of a business, turnover will invariably be the major determinant of the level of working capital. This relationship is less stable in the short-term than in the long-term.

There are a number of reasons why working capital need not very directory with turnover. The level of work-in-progress depends on the length of the manufacturing time cycle and therefore on the products and the product mix. Finished stock levels depend on commercial factors. Debtors depend on credit terms and liquidity of customers. Contract debtors and creditors can vary with the incidence of subcontract problems, retentions and export finance facilities. Creditors are geared to purchases rather than turnover and can depend on the degree of vertical integration as well as terms.

Advance payments can vary according to the mix of the order book between prime contracts and subcontracts and if they are geared to anything, it is future turnover, usually turnover after a considerable period of delay, such as the year after next. Capital expenditure is not likely to be closely correlated with turnover, so that creditors for capital expenditure might also show a poor correlation with turnover. Management efficiency in the control of working capital is liable to fluctuates. Work-in-progress is geared to output at manufacturing cost, not turnover. Work-in-progress is geared to future rather than past output.
1.5 Purpose of the Research

The purpose of this research project is to make a survey regarding the management of working capital. The research contemplates to undertake a comprehensive study of working capital among the small industrial organizations. A sincere attempt is made in this study to find answers to the following questions:

- What should be the criteria for the efficient management of working capital in an industry?
- What is the attitude of management with regard to working capital?
- What are the basic problems faced by small-scale industries in and around Pune in the management of working capital?

1.6 Statement of the Problem

Although small-scale industries comprise the backbone of any programme of industrialization in any developing country, they seem to be suffering from absence of appropriate decision-making. This applies to both long term or fixed assets management and the short term or current assets management areas.

The situation with regard to current assets management has been different. In view of this, working capital management or current financial decision-making assumes a critical significance. In any way, there are always the problems in the firms such as under-utilization of the available resources, unpredictable environmental situations, irregular supply of materials, lack of control on investment etc., that the management should be considering the measures for solution. For instance, determination of optimal levels for different items of inventories, and for inventory control, motives for holding inventory, credit policies, controlling inflow and outflow of cash, optimal investment of surplus cash and assessment of cash requirement in relation to the level of operations and other related aspects are very significant. Thus, to increase the velocity of working capital flows, various aspects like management; planning and control have to be accorded a high priority. All this is subsumed under the generic theme known as working capital management. It helps in greasing the wheels of industrial progress of any entity because the growth of any industry largely depends upon the ability of prudent management of lowest possible cost in proper time.
1.7 The Research Question
With regard to the aforementioned problems, a set of questions are emerged considering the present study such as; whether any kind of under-utilization of the available resources and issues of unpredictable environmental situations, lack of authority and lack of regular supply of materials and lack of control on investment in inventory are caused improper implementations in the firm and will be increased the costs associated with working capital? In other word, the researcher would like to survey its effects on the working capital.

1.8 Variables – Dependent and Independent
\[ E = F(X, Y \ldots) \]
There are always relations among variables any theme according to the research topic, in this study, decision objective is called dependent variable and other effective variables are called independent variables. In fact, attainment of degrees of dependent variable is functional from independent variables, and purpose of independent variables is both the controllable variables and the non-controllable variables. In this study, management of working capital is a dependent variable and other cases, are termed as independent variables that are as follows;

1) Utilization of the available resources includes;
   - Application of managerial skills, for holding cash,
   - Creation of motivating behavior in manpower,
   - Application of economic order quantity (EOQ) in the firm,
   - Coordination of operations in the firm,
   - Application of credit policy in the firm,

2) Unpredictable environmental situations, lack of authority encompasses;
   - The effect of business cycle on the firm,
   - Derange at assigned planning of the firm,
   - The effect of current decision making of the firm,
   - Improper flows of current operation of the firm,
   - Attempt to reduce uncertainly of the firm
3) Lack of regular supply of materials comprises;
   • The effect of insufficient supply of materials in the firm,
   • The effect of irregular supply of materials in the firm
4) Lack of control on investment in inventories includes;
   • The disorder at ordering costs, storage costs in the firm,
   • The effect of opportunity cost with regard to working capital,
   • The effect of control of inventories with regard to the direct-indirect costs,
   • The effect of control of investment in inventories,
   • The effect of efficient control on investment with regard to liquidity and profitability of the firm
Also efficient management in order to reduce costs and increase profitability is called as moderator variable. In other words, it would be conducted as the second independent variable in this study.

1.9 The Research Hypotheses
A hypothesis struggles to set up a relationship between two or more variables. Observation, concepts, and proposition are the basis of a hypothesis. In other words, a hypothesis is a proposition that is put to test in research. The following four hypotheses were been considered for this research work.

1. Any under-utilization of the available resources related to working capital is detected due to mismanagement.
2. Unpredictable environmental situations, lack of authority may cause improper implementation and increase of costs of working capital.
3. Lack of regular supply of materials would cause increase of costs related to working capital.
4. Lack of control of investment in inventories, would cause to increase the costs associated with working capital.
1.10 Research Analytical Method

![Research Analytical Model Diagram]

Figure (1-4) Research Analytical Method
1.11 The Contribution to Knowledge

The findings and suggestions for sound management of working capital evolved by this study will, besides contributing to knowledge in the field, be of practical utility to industrialists and entrepreneurs, particularly those engaged in industry. Due to the detailed field study, the present analysis has been able to bring to light the various deficiencies that generally prevail in small-scale units. As a result of the detailed field study, which is very significant contributions to the body of knowledge in the S.S.I units, certain recommendations have been made to improve upon the existing practices. While some of the significant findings have been highlighted would be very much helpful to the management of SSI units for taking various decisions. Through the present study has certainly contributed to the body of knowledge, at this point it is important to consider that further studies would no doubt bring to light many more aspects of working capital management. Hence, the present study would positively be very much essential for further study and research. In addition, based on the results achieved during the course of study various findings have been presented in detail, which would be certainly helping the management of SSI units to take various decisions including strategic decisions in a better manner.

With the present age of high competition under liberalization, privatization and globalization (LPG) the management of SSI units have to develop cost consciousness in order to achieve desired productivity and profitability. Various observations and recommendations of this study would undoubtedly be very much useful for the management of SSI units to face different challenges in general and working capital management in particular. As this detailed study has brought out many crucial aspects of working capital management which have top bearing on the key decision making areas, this present study is an useful document for SSI entrepreneurs for successful management, bankers for taking current decision while financing and researchers for undertaking further research in the SSI sector.
1.12 Nature of the Study
The emphasis in this study has been on the financial and environmental aspects. This study is made in two parts. In the first part an attempt is made to study the principles of working capital management with special reference to small-scale industry. This study is concluded by laying down the criteria of efficient management of working capital in industry.

In the second part, an attempt is made to carry out a survey of working capital management in small-scale industry in and around Pune on the basis of the criteria laid down. The actual position of working capital management in this industry is described. On the basis of the study of the principles and the existing position, at the end, suggestions for improving the management of working capital in small-scale industry in and around Pune are made. It is hoped that these suggestions will be found useful to those engaged in industry.

1.13 Scope of the Study
The present study confined to small-scale industrial units in the MIDC (Maharashtra Industrial Development Corporation), Pune city.

The segment of study consists of:
- (a) Manufacturing units, (b) Service units (c) Trading units
- Small Scale units who run firms with under fifty (50) employees (with full time/part time; skilled/unskilled labourers).
- In and around Bhosari, Mumbai-Pune

The present study has focused on examining regional and intra-regional practices of small-scale industries relating to the financing and control management of working capital. In particular, the working capital management practices have been related to the location characteristics of the enterprises comprising the sample. The study analyses questionnaire responses to draw inferences about the manner in which the working capital practices emerge in the sample units.

This study is based on data collected from specified small enterprises, located within a delimited geographical boundary of the state of in and around Pune. It excludes from its purview the study of other financial areas like fixed assets management; cost of capital and capital structure problems. It is, therefore, only logical to expect certain limitations which
1.14 Limitations of the Study

The study is likely to have following limitations in spite of the best efforts:

Generally speaking, every research activity is, more or less, accompanied with some limitations and this one is not an exception. Therefore, those limitations, which have been incurred over this research project, can be outlined in the following:

- A limitation of the present research work is that the methodology used could not gauge all the factors influencing the responses, such as the moral standing and social beliefs of managers. The impact of these considerations on working capital management and reporting practices, limit the internal and external validity of the study.

- The sampling and data collection methodologies employed, inevitably impose limitations on interpretation of the results of this study. The accuracy and completeness of the data collected relied heavily on the ability and skills of interviewers and also the co-operation of managers interviewed.

- Sample size has been selected from registered SSI units under Mahrratta Chamber of Commerce, Industries and they are representative of the whole of SSI units in and around Pune.

- The researcher does not have any control over the environment in which the research is performed.

- The findings are based on the ability of respondents to answer of the researcher and if the respondents are not given their true information it leads marginal error.

1.15 Outline of the Study

The first chapter, "Introduction" deals with the general introduction of the study in terms of the need, objective, scope, limitations etc. After a general introduction, various topics and issues related to the theme of this study are detailed in the following chapters.

The second chapter "Review of Literature" deals in detail about the survey of literature on the subject to indicate the extent of work already done by earlier researchers and an analysis of expert opinions by eminent authors on working capital management concepts.
The related areas not covered by earlier studies and the extent to which the present study fulfils this requirement is also explained in this chapter.

The third chapter, "Research Methodology" talks about the methodology of the present study. The sample size, methodology for collection of primary data, quantitative techniques applied on the empirical data for analysis to draw conclusion on the findings is detailed in this chapter.

The fourth chapter, "Structure of Working Capital" is devoted to discuss the inventory, debtors, marketable securities, trade creditors and cash, are dealt in detail.

The fifth chapter, "Management of Various Aspects of Working Capital" reveals on the inventory management, receivables management, cash management, credit management, management of working finance and other related are detailed in this chapter.

The sixth chapter, "Analysis of Data Interpretation" includes the detailed analysis of data in respect of overall working capital management practices followed by the sample units. The data is analyzed by applying appropriate qualitative and quantitative techniques and presented with conclusions on various aspects of working capital management in the sample units.

The seventh chapter, "Findings, Conclusion, Recommendations and Summary" presents the major findings of the study on the overall working capital management in the sample units. Recommendations are given by the researcher, for working capital management in small scale industries in general, based on the study carried out on the sample units.