The issues to be addressed in this chapter include:

- Statement of the Problem
- Survey of Literature
- Objective of the Study
- Hypotheses
- Scope, Data and Methodology
- Limitation of the Study
- Chapter Scheme
Chapter - 1  Working Capital Management of Public Enterprises

I STATEMENT OF THE PROBLEM

Since Independence, the Government of India extended its helping hands to regulate the inadequate resources with an objective of drawing up a unified and co-ordinated industrial infrastructure for achieving a balanced and speedy economic growth in the country. Accordingly, public enterprises emerged as a major instrument in the Indian economy in the process of improving its productive performance and to fulfil other social objectives. Articles of 39(b) and (c) of the Indian Constitution, the various Industrial Policy Resolutions and the Five Year Plans all attached added importance to the establishment of public enterprises in the country. The public sector has, no doubt, risen to commanding heights over the period and contributed significantly to the diversification of India's industrial structure. However, its contribution in terms of generating internal resources for further expansion has fallen far short of expectations and its inability to do so has by now become a major constraint on economic growth of the country. The performance of the public sector has progressively deteriorated year after year and, hence, the Eight Five Year Plan (1992-97) proposed to narrow down the scope of the public sector in the national economy. In view of this, the share of the proposed investment in the public sector was slashed down to 45.2 percent of the total investment as against 45.7 percent realised in the penulti-

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mate Seventh Five Year Plan. So the logic of commitment to privatisation, which had justified the non-reliance of public enterprises on decreasing budgetary support and plan allocation, seems to have assumed a new meaning and purpose in recent years. In addition to this, the present economic liberalisation policy (since July 1991) of the Government of India has also opened up the flood gates for multinationals to participate in the domestic market of the country. The changes are likely to bring in a vast change from a erstwhile near monopoly to a highly competitive environment around the public enterprises, making them to accept change, carry out change and to develop competitive capabilities to meet the changes and challenges.

In such a changed economic scenario, it is, indeed, imperative for all industries, whether public or private, to timely tighten their belts and check their financial stability frequently to face and stand in the forthcoming competitive days. This is because enterprise funds management has both profitability and liquidity implications. Experience tells that the financial soundness ensures continuity of the enterprise. Hence, working capital management assumes distinct importance in the overall financial management of an enterprise. In short, working capital management includes the short term investment and financial decision of the enterprise.

In India, working capital management in the public sector has been a hotly debated topic since the emergence of the public sector as an
independent discipline of study. For a long time, the Committee on Public Undertaking, the Comptroller and Auditor General of India and the Press have highlighted the excessive current assets carried by most public sector enterprises, the value of which often rose to as much as seven times than the normal standard level. Let some facts speak.

Ram Kumar Mishra\(^2\) in his study of six Government enterprises found that their main problems associated with inventory, cash, receivable and working finance. J. Satyanarayanan\(^3\) in his study of twenty six loss earning public enterprises found that the locking up of a substantial portion of current assets in inventories was the leading cause of their continuous losses. In his study, K. Rajeshwar Rao\(^4\) reports that a well developed working capital management technique which is a *Sin - qua - non* for the liquidity and profitability did not exist in the public enterprises. S.P. Vijayasaradhi\(^5\) emphasises that due to the lack of rational approaches at the middle management level, there is a diverse working capital problems in public enterprises. Chhabi Mazumder\(^6\) observes that conservative policy of working capital management in public enterprises leads to the problem of idle capital. In his opinion, this is one of the

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concerns why the enterprises have been showing increasing losses figures in the Profit and Loss Account year after year. Chattapadhyay\textsuperscript{7}, in his study of six large public enterprises, indicated certain road blocks in stream-lining credit management.

In its study on the general and important issues relating to public sector management and performance an Expert Committee\textsuperscript{8} was constituted by the Department of Public Enterprises (D.P.E.), previously known as Bureau of Public Enterprises, highlighted that one of the reasons of the poor performance of the public sector undertakings in our country has been the large amount of funds locked up in their working capital.

The general scenario of the public enterprises as delineated above, goes from bad to worse in case of particular public enterprise. This holds good for the paper industry also. However, paper industry seems a peculiar one in the sense of its cyclical and fluctuating nature, capital intensiveness price sensitiveness and increasing global linkages. These have posed real challenges before it to exist on its own in a highly competitive market without any tangible support from outside.

As mentioned earlier, adequate working funds, say, working capital management ensure profitability and liquidity and in turn, survival of

\textsuperscript{7} P. Chattopadhyay; "Credit Management in Public Enterprises", \textit{Commerce Pamulet}, 1980.

an enterprises. We think that our knowledge about working capital management of public enterprises will better be facilitated if we study the working capital management of individual public enterprise. With this view in mind, the present study proposes to study the various aspects of working capital management of the Hindustan Paper Corporation Limited (HPC) and its subsidiaries during the pre and post economic liberalisation period. This is a topic on which no empirical research work has so far been undertaken particularly in the North-Eastern Region of India. Hence, it is hoped that the study would serve as a pioneering one for developing efficient working capital management in public enterprises, in general, and paper industry, in particular.

II SURVEY OF LITERATURE

Seen in quick retrospect, the origin and evolution of the concept of working capital has evidently been concommitant with the birth and development of industrialization, reflections on its implications and applications have been a primordial exercise. Nevertheless, its academically researched representations, especially those relevant to this study in the context of the paper industry, seem to have started coming in smooth succession since the middle of the sixties. The revelent reasearches so far undertaken on the working capital management of public enterprises has been reviewed by classifying into three broad categories: i) By Expert Committees, ii) By Organisation / Institutions, and iii) Individual Re-
searcher.

The National Council of Applied Economic Research, New Delhi, was the first to present the volume: *Structure of Working Capital* in 1996. The study was devolved mainly to the analysis of the composition of the working capital in the Indian economy with special reference to some selected industries. The worth merit of the work is mentionable but is not without its distinctive limitations in terms of the growing complex problems and prospects of industrial finance of the decade that followed till date. Moreover, the focal point that make the work rather far from the scope of this study is that it fails to touch the paper industry, which with the special aspects, problems and prospects, is an exclusive area that this work purports to cover within its perview. Theoretically, however, this pamphlet may safely be referred to as a starting point.


Although there were some strides made in the direction of applied studies on working capital in Indian industries, but V.A. Chandran's
exploratory work *Productivity and Miles to Go*, Bombay, Institute of Public Administration, 1967, can be said to be the referable one. This work did carry on the endeavour of financial analysis within the Indian industrial scenario but dwelt largely on greater theorizing than specific application. In nevertheless does stand as a helpful source for sustaining the thrust of the academic effort at the opening of new vistas of insight and inference in the area in view.

lic Enterprises in India, Delhi, S. Chand, 1980; J. Prakash's Public Enterprises in India, Allahabad, Central Book, 1980; R. R. Bari's Cash Planning and Management, New Delhi, Triveni Publications, 1980, to name the major few. Interestingly, a striking indenticality in the titles of these works is remarkable, which suggests a certain broad similarity in perspective and purpose. The intricate difference however in their shades and focal points do make them referable sources in the variously flood-lighting research on the subject in hand. Yet, for the purpose of this enterprise, these volumes, not having much to relate directly, leave some room for virginal work in the area of the paper industry.

Natrajan's *Working Capital Management and Finance*, Economic and Political Weekly, Vol., XV, No. 6, February 23, 1980. These studies, howsoever rudimentary, did serve as progressive experimental models for pithy and prolific work to follow. However, relating to this study, these elementary exercises hardly had much to offer, wanting almost entirely a special approach. Concomitantly, the room for much research on the management of working capital of paper industry remained wide open.

By this time, three reports: *Dehejia Committee Report* (1969), *Tandon Committee Report* (1975) and the *Chore Committee Report* (1980), need special reference. All these reports were aimed to suggest some guidelines for allocation of Bank Credit and its best use. Although such a step towards substantial restraints or financial discipline in lending and borrowing as working capital had become imperative at that time, but these seminal documents after suffering at the hands of the several writers and committees, attained the status of mentionable records only.

With the eighties, some substantial steps towards this field also noticeable. One such work that represents the trend of the early eighties is Prasanna Chandra's *Financial Management - Theory and Practice*, New Delhi, Tata McGraw Hill, 1984. Although the work is not much different from those of earlier works but its freshness of approach and case reference has make it a fairly recent referable source. As a timely turn in the trend, B. L. Mathur's *Financial Management in Public Enterprises*, Jaipur, R.B.S.A. Publishers, 1987, makes a striking departure.
from mere theorizing to a more pinpointedly applied and specialised work. Following subsequently, R.M. Srivastava's creditable work *Financial Decisions Making: Text, Problems and Cases*, New Delhi, Sterling Publishers, 1989 emerged as the epitome of the latest trend of exposition through a systematic synchronisation of theoretical postulation and practical application.

More subject specific and specialised work referable among are A.K. Mukherji's *Management of Working Capital in Public Enterprises*, Allahabad, Vohra Publications and Distributors, 1988; P.K. Mitra and S.N. Bidani's *Bank Finance for Industry - Working Capital and Term Loans*, New Delhi, Vision Book Company, 1984; N.K. Agarwal's *Management of Working Capital*, New Delhi, Sterling Publishers Pvt. Ltd., 1983. Beginning with the enunciation of the conceptual framework and methodology, all these studies brought out a detailed analysis of the basic essentials such as current assets, current liabilities and net working capital so as to ascertain their magnitude. Most of these volumes have not been basically very different except that they have considerably evoked a newer views and thinking towards a greater concritisation of finance fundamentals both in theory and application.

Relevant for this survey, one more practical orientation is Ravi K. Jain's *Working Capital Management of State Enterprises in India*, Jaipur, National Publishing House, 1988. This book delineates the problems of working capital management which is considered as the problem of
national resource allocation and its effective and proper utilisation in order to subserve the micro-enterprises and the macro-national objectives. Suggestions of practical significance for the improvement in the working capital management has been given at the end of the last chapter.

Another ingenious work with much wider, sharper and more singular focus on working capital management is V.P. Joshi's *Working Capital Management Under Inflation*, New Delhi, Anmol Publications Pvt. Ltd., 1995. The seminal worth of the book spring from its valid claim as "This decade had experienced inflation as well as recession which has affected the management of working capital very much resulting in uncertainty in working capital" (Preface). The work has been done in the area of capital intensive industries i.e., cement, chemicals and engineering covering sixty four medium and large private and public enterprises. The study brought out the problem of inefficiency in the management of current assets in the cement industry while highlighting the dominant position of the inventories in total working capital the study rightly called for maximum efficiency in the management of current assets.

A searching study of the management of working capital in a single industrial enterprises is N.K. Sharma's *Working Capital Management in Private Sector*, Jaipur Prateeksha Publications, 1988. The study points out that a very important reason for the failure or sickness of the textile
mills is mismanagement of working capital and misuse of bank credit in unauthorised and undesirable channels. The study also offers suggestions for the optimum use of bank credit at the disposal of borrowing textile mills through efficient management of working capital.


A key work that requires a brief review is A. Verma's *Managing Working Capital*, Jaipur, Arihant Publishing House, 1994, a survey of the India Petroleum Industry. The book entails a sustained study of working capital management of the petroleum industry in India incorporating two companies of national repute i.e., Oil and Natural Gas Commission and Oil India Limited. The study analyses the comparative working capital position of the enterprises objectively with a view to suggest measures for their efficient management. The key components of working capital viz., inventory, receivables, cash and financing are systematically de-
veloped from their theoretical grounding to their case-specific application. Based on well conceived inferences the study offers substantial suggestions towards conducive improvisations and improvements to conclude, and qualifies to be one of such referable models for similar studies.

Chapter - 1  Working Capital Management of Public Enterprises

: An Empirical Analysis, Finance India, Vol. X, No. 1, March 1996. All these studies, by and large highlighted the problem of working capital management and pinpointed the managerial aspects of selected enterprises. Despite their pre-eminently souvenir value, such publications have by now become a common genre and do provide timely information on the position and development of their represented units.


All, these studies reported above conducted and produced well through a systematic coverage of key concepts, components and the position of working capital and its role in the specific industrial enterprises, these works are however, unable to reflect on the comparative behaviour of working capital in a liberalised economy. Nevertheless, these works are significant in suggesting the wide and almost virginal scope for much more specialised full length studies on the phenomenal dimensions and dynamics of the industry's working capital management, which this ongoing endeavour precisely purports to present.
Along with the wealth of material on working capital management related directly or indirectly to this study, as reviewed above, some seminal work on the paper industry, however scarce, may also be referred to conclude this sub-survey of the complete record of relevant literature.

Perhaps the first research attempt which is comprehensive and detailed in various aspects in respect of Pulp & Paper Industry has been the one by J.C. Eddison, *A Case Study in Industrial Development - The Growth of the Indian Pulp & Paper Industry*, Massachusetts, Cambridge, 1959. The focal point of this study was to bring out the scope for increasing efficiency of operations, as the Indian paper industry to be expanded to meet the basic needs in a developing economy. One of the most important work during sixties is J.F. Pierce's *Some Large Scale Production Scheduling Problems in Paper Industry*, New Jersy, Prentice Hall, 1964. Another major landmark during this period is ESRF's publication *Pulp and Paper Prospects for 1975*, New Delhi, Economic and Scientific Research Foundation, 1969. The study outlines a number of measures to improve the resource utilisation and development.

A fairly comprehensive, wider ranged and referable work during seventies is A. Banerjee's *Capital Intensity and Productivity in Industry*, New Delhi, Macmillan Co. of India Ltd. 1975. The work entails
a sustained study of relationship between productivity and cost ratios covering the aggregate manufacturing sector as well as some of the selected Indian industries like cotton, jute, paper etc. Another pioneer work during this period is K. Krishnamurty and D.V. Sastry's published work *Investment and Financing in the Corporate Sector in India*, New Delhi, Tata MacGraw Hill Pub. Co., 1975. They use the flexible accelerator model with financial variables for estimation of factors determining fixed investment and inventory investment over the period in paper industry taking firm level data. It has been found that in the paper and paper board industries impact of accelerator on fixed investment is significant and positive in the case of changes in current assets.

In line with the task envisaged by Krishnamurty and Sastry, a full length later work that requires special review, is R. Metha's *Pooling of Time Series and Cross Section Data for the Estimation of Econometric Models*, Delhi, University of Delhi, 1984. Using the data of pulp and paper industry, for estimating investment function in the framework of flexible accelerator model, the study came to the conclusion that there is significant co-efficient for sales change, external finance and internal finance. Closest to this, another unpublished referable work is R.S. Khandelwal's *Analysis of Capital Structure - Paper Industry of India*, Rajkot, Surashtra University, 1987. The study concluded that the majority of small paper and a few large paper mills have a defective and inappropriate capital structure with low rate of return.
on investment. Recognising it the study felt that it is essential to im-
prove the capital structure of the paper industry so as to generate in-
come.

Apart from these, relating to our specific study mention may be
made about the Eighty-Fifth Report of the Committee on Public Under-
takings (H.P.C. Ltd.), Dept. of Industrial Development, New, Delhi, 1975-
76. Report of the Expert Committee on Public Undertakings, New Delhi,
Bureau of Public Enterprises, 1980-82. Comptroller and Auditor Gen-
eral Report (Part II) (H.N. Ltd.), New Delhi, Comptroller and Auditor
General of India, 1992-93.

In addition, some other significant contributions are: M. Singh's
Organisation and Finance in Paper Industry - A case study of Shree Gopal
Paper Mills, Meerut, Meerut University, 1988, K.V. Achapalapathi's Sickness
on Paper Industry in India and the Role of BIFR as Policy Instrument,
in Public Limited Companies of Paper Industries of Haryana and Madhya
Pradesh, Jiwaji, Jiwaji University, 1988. N. Agarwal's Management of
Working Capital : A Study of Selected Paper Manufacturing Units in India,
Meerut, Meerut University, 1986. K.C. Goel's Management of Working
Capital - A Case Study of Star Paper Mills Ltd. Meerut, Meerut Univer-
India : A Comparative Study of Selected Paper Mills, Meerut, Merrut
University, 1992, to mention only cursorily for minute reference. Such research work however fragmentary, are full of far reaching findings on new economic era, which can adequately be exploited as figments of insight for finer research.

The conclusive sum of this retrospective review of relevant literature produced till date on the offered subject, reveals wide room for the validity and originality of this work and reflects some crucial clues that affirm its viability, as may be marked here itself. No study has incorporated the working capital management practices of the public enterprises in paper industry in general and Hindustan paper Corporation Limited and its subsidiaries in particular. Nor has any previous research examined the impact of liberatisation policy on working capital management of public enterprises. Moreover, since the derivations done in applied researches on most units referred in this review do not carry much in common following the variously natured and determining operative factors of working capital from enterprise to enterprise, this work should be concrete turnover. And lastly, having every step ahead, this research work is most expected to be a definite advancement on the previous ones.

III OBJECTIVE OF THE STUDY

It is said that the liberalisation and globalisation policy on the Indian economy has given an added advantage to the corporate sector to
manage their working capital more efficiently in the various ways: One, liberalisation of imports reduced the need for storing huge inventories of imports. Earlier, uncertainty of acquiring import licence on time, industrialists kept at least six months import inventories. Two, companies were allowed to expand their capacities, which brought down the cost of production. Three, the increased competition made the companies realise that they will have to cut down costs and use resources more economically. Four, liberalisation enabled companies to have easy access to cheap credit through the GDR route. As a result, the efficiency in managing working funds should be increased year after year in the post reform period. Now, while it is claimed that five years of liberalisation has made the Indian economy more efficient, an awe-inspiring question arises, along with own identity and problems, whether the public enterprises had really been kept their space on the road?

Naturally, the study of working capital management in public enterprises with particular reference to paper industry in India has assumed relatively more important during the post liberalisation period because the conventional sources of concessional finance from Government as well as International Aid Agencies are fast drying up and the new thrust is on making both the public sector and private sector efficient, competitive and productive in their operations. Also the reduction in the import duty from 65 percent to 20 percent on paper and paper boards has led to an anomaly in the duty structure, with the duty on
raw materials and other intermediates exceeding the duty on finished goods. The result of all these have been an impact on the working fund of the enterprises.

In view of above backdrop, the present study has attempted to evaluate the overall efficiency of working capital management of the Hindustan Paper Corporation Limited and its subsidiaries, i.e., the public enterprises in paper industry, during the pre- and post-liberalisation period. So the broad objective of the study is to analyse and bring out the trends and pattern of working capital management in sample enterprises with reference to pre and post economic reforms period and to identify the impact of liberalisation and economic reforms on the working capital of the public enterprises under reference. However, this broad objective will be subdivided into:

1. Examine the working capital management practices at aggregate level and to distinguish between the variance, if any, among the enterprises under study.
2. Identify the specific problem areas in the management of working capital and to explore the key variable involved therein.
3. Evaluate the key variables and to observe their effect on profitability and liquidity, in particular, and on the growth of the enterprises, in general.
4. Examine the relative management practices for the whole period under study and to distinguish between the diversities, if any, in
5. Frame some strategies that may be required for managing the existing affairs and also to suggest measures for ensuring the effective utilisation of working capital under liberalised and reform conditions.

IV HYPOTHESES

The selection of the topic has been made with a view to evaluating, analysing and examining the prevailing working capital management practices of the Hindustan Paper Corporation Limited and its subsidiaries with special reference to pre- and post-economic reforms period. Though the industry has a high capital employment ratio, yet its development has not reached to the desired level. Viewed against the cloistered status of public enterprises, in general, and the specific nature of paper industry, in particular, the present study puts forth the following two hypothetised premises:

1. The leading factor which has been obstructing and preventing the growth of the Hindustan Paper Corporation Limited and its subsidiaries in India is improper and inefficient management of working capital.

2. The efforts for monitoring changes in business environment are
expectedly weak in public enterprises and so in paper industry also. The administration of current assets and current liabilities within policy guidelines is an extempore.

V SCOPE, DATA AND METHODOLOGY

In this research work, purposive sampling is used to represent the universe. The reason of adopting this sampling is that the universe contains only two units and one of them is unitary unit. Accordingly, the other unit, comprising of four central public enterprises in paper industry (three of them are in the form of subsidiaries) are taken to represent the universe.

The study covers the following four enterprises:

1. Hindustan Paper Corporation Limited, Nehru Place, New Delhi.

The study is based on the secondary data obtained from the audited Balance Sheets and Income Statements of the representative enterprises and also the Annual Reports of the Bureau of Public Enterprises, Ministry of Industry, Government of India. Besides, the facts, figures and findings advanced in similar earlier research studies and the Government Publications are also used to supplement the secondary data.
The methodology followed in this study includes the different tools and techniques of Financial Management and Statistics. To evaluate different aspects of working capital management performance, different techniques of financial management like common size analysis, trend analysis, ratio analysis, cash flow analysis, fund flow analysis, discriminant analysis and several statistical tools such as mean, standard deviation, co-efficient of variation, co-efficient of correlation (both simple and multiple), variance analysis and F-test etc., have been used. In addition, graphs and figures are also used, wherever necessitated.

Due to the phenomenal change in the policy of the Government of India from a controlled economy to a liberal competitive economy particularly since 1991, the study, therefore, covers a period of ten years from 1986-87 to 1995-96 i.e., five years each for pre- and post-economic reforms period.

VI LIMITATIONS OF THE STUDY

The study suffers from certain limitations. Inspite of our best efforts, we could not avoid them because of many practical constraints. Hence, we could not but accept the possibility of a certain degree of error. Since the study solely depends on the published financial data, so it is subjected to all the limitations that are inherent in the condensed published financial statements. We have selected for our study only four
enterprises in the public sector of the paper industry group as sample which may leave some ground for error. Again our study is based primarily on the data and information relating to the year 1986-87 to 1995-96 i.e., five year each for pre- and post-liberalisation period. But, even these data and information do not seem comprehensive. We are fully conscious that many more data and information would have made our study more exhaustive. Also, inspite of being fully aware of the fact that inflation is so certain a factor, it could not be taken into consideration in the present study. It was not possible to convert the relevant financial data into their present values primarily because of non-availability of sufficient information required for the purpose.

VII CHAPTER SCHEME

The present study has been broadly organised into seven chapters as follows:

Chapter I includes the nature, objective, scope and methodology of the enquiry. It, therefore, serves as an introduction of the study. It also describes how the study has been organised into different chapters and sections.

Chapter II has been organised into three sections. The first section gives an overview about the public enterprises indicating their scope, objectives, product profile and present status with special emphasis on
its role in India. Section two throws light on significance, behaviour, financing and decisions involved in working capital management in PEs. The last section deals with the review of theoretical literature of working capital for a conceptual framework to facilitate the study.

Chapter III includes three sections. The first one is devoted to bring out the importance and historical background of Indian paper industry. While section two analyse the problems and issues relating to the paper industry, a brief review of the enterprises under study is presented in the last section.

Chapter IV consists of two sections. The first one seeks to focus attention on the working capital trends over the years among the enterprises by applying different tools and techniques. In the second section, the short-term financial liquidity and the comparative position of the enterprises is assessed in terms of liquidity ratios and discriminant analysis.

Chapter V has been organised into three sections. An attempt has been made to evaluate inventory management performance and cash management performance in the sections one and two respectively. The last section three is devoted to develop an alternative ratio model for adjudging the overall performance of working capital components.

Chapter VI has been divided into two sections. In section one, the policy followed by the enterprises for working capital finance has
been described by applying the risk-return trade-off approach. Analysis of various sources and uses of funds and the control procedures adopted by the enterprises under study has been dealt with in the second and last section.

Last Chapter VII consists of two sections. While the main conclusions derived from the study are given in section one, the seminal suggestions with appended remarks and remedies form the subject matter of the second section.