

Study completed for Comptroller & Auditor General of India

“Assessment of Performance of State Level Public Sector Undertakings for improving their competitiveness”

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Indsearch was commissioned by the Comptroller & Auditor General of India to conduct a systematic study of the performance of State level Public sector Undertakings (PSUs) to help identify the reasons for their poor performance and suggest necessary corrective steps to improve the same so that they become competitive.

IndSearch, took up this massive study during 2000-2001, based on the input data made available by the office of The Comptroller & Auditor General of India and the various offices of the Accountants General located across the country. The data mainly consisted of Profit & Loss Account, Balance Sheet and other relevant additional information. The performance of the PSUs were analyzed against specified criteria developed by the IndSearch study team which was led by Prof. Sham Wagh. The Study Report submitted to the CAG also included appropriate recommendations in all cases, classified both state-wise and sector-wise.

The PSUs were divided into following sectors:

1. Manufacturing
2. Service & Trading
3. Term Lending & Promotional
4. Agro Based
5. Transport
6. Electricity
7. Welfare

As the focus of the study was financial performance analysis, relevant ratios and parameters were used to judge the financial health of the PSUs.

The Analysis included both sector-wise and individual PSU wise and adopted the following methodology.

Firstly, all PSUs were grouped under appropriate sectors to enable sector specific comparison as well as evaluation. Further, the PSUs were analyzed individually, using following significant parameters:

- Total Capital Employed (Tangible Assets)
- Total Sales and Other Income

PBDIT  
PBT / PAT  
Asset Utilization  
Gross Value Added per Rupee Wages paid  
Network  
Contribution to the Exchequer  
Implied Subsidy

Based on the performance in respect of the above parameters, the individual PSUs were rated using a 7 point scale, with P1 to P5 on the positive scale and N1 & N2 on the negative scale. Scores were assigned to these ratings on the following basis:

P1 = +0.20. This score increased in multiples 0.20.

N 1 = - 0.20 and N 2= - 0.40.

Recommendations were made on the basis of the cumulative scores assigned to the individual PSUs on the following basis:

A PSU getting a score of -1.00 and below on the negative scale meant that the PSU has fared very poor on all fronts and hence classified under “Priority Close Down”.

A PSU getting a score in the range of -0.20 to -0.80 meant that it must be “Closed Down”.

A PSU with a score of 0.00 has been classified as “Must Improve” indicating that improvement in operations is required urgently, else it will invite closure.

A PSU getting a score in the range of +0.20 to +0.80 would mean it has “Scope for Improvement”.

A PSU getting a score of +1.00 and above indicates that it has been performing satisfactorily and hence is classified as “ Good”.

Also, some PSUs which provide core / essential services (e.g. health care, backward class upliftment, etc) were included under “must improve” category even though these received ratings justifying closure.

### Overall Findings

A total 815 PSUs in 27 States were analysed as part of the study.

Major findings were:-

1. Overall profitability before Interest, Depreciation and Tax (PBIDT) was Rs. 15391.30 crores with slow but upward trend.
2. Gross Value Added (GVA) per Rupee Wages Paid, an indicator of value addition done by the PSUs besides covering direct costs and salaries and wages, was at 2.01. A 2 + GVA was considered as indicator of operational efficiency while a GVA below 2 was considered as indicative of poor physical and financial performance.
3. The Assets utilization, indicative of efficiency of utilization of assets, was poor at 0.39 as against the standard norm of 3.

4. Contribution to the exchequer through taxes, excise duty etc was Rs. 2501.40 crores.
5. Total Network of all the PSUs taken together stood at Rs. 41494.70 crores.
6. Implied subsidy figure stood at Rs. 21363.90 crores. Implied subsidy has always been a point of concern as far as State level PSUs are concerned since this indicates the burden created by the PSUs on the exchequer. (Implied subsidy is calculated as follows:  
Cash Loss + Fiscal Benefits + 15% (Paid up Capital + Reserves & Surplus) – Dividend Paid)
7. Total Capital Employed by all the PSUs was Rs. 225685.10 crores. Major share of capital employed pertained to developed states like Maharashtra, Andhra Pradesh, Tamil Nadu, Gujarat, Karnataka & Uttar Pradesh.
8. Total Sales figure was Rs. 87482.20 crores with the Electricity sector accounting for more than 50% of the total revenue of all the state level PSUs.
9. Salaries and wages paid out were Rs. 15265.30 crores.
10. Cash Loss incurred by all the PSUs totaled to Rs. 20931.10 crores.

### Units Recommended for closure

Out of the 815 PSUs studied, 320 PSUs have been recommended for closure, which will not only result in a saving of Rs. 1207.70 crores of cash loss per year but, more importantly, also release Rs. 18209.20 crores blocked in these nonviable units

### Sector-wise Observations

#### Manufacturing sector

Under this category, 313 units with a turnover of Rs. 11799.36 crores and capital employed of Rs. 17899.70 crores, had a Network of Rs. 2013.55 crores only and showed a cash loss of Rs. 541.89 crores (4.59% of sales). The leading states were Andhra Pradesh, Gujarat & Tamil Nadu.

#### Service & Trading sector

This sector comprised of 136 PSUs with Total Sales at Rs. 9366.28 crores as against capital employed of Rs. 39694 crores and showing Total Network of Rs. 1967.45 crores and cash loss of Rs. 179.76 crores. Out of Rs. 570 crores of contribution to exchequer, Rs. 544.85 came from state of Kerala alone. Units which fared as Good were mainly in Andhra Pradesh, Gujarat, Karnataka, Madhya Pradesh & Tamil Nadu.

#### Term Lending & Promotional sector

This sector constituted of 109 units generating total revenue of Rs. 4444.59 crores with Total capital

employed of Rs. 40069.34 crores. Overall network stood at Rs. 5939.06 crores and cash loss of Rs. 337.03 crores. Leading states in this sector were Jammu & Kashmir, Karnataka, Tamil Nadu.

#### Agro Based Sector

Agro Based sector comprised of 110 PSUs, having a total turnover of Rs. 3084.05 crores as against total Capital Employed Rs. 2781.21 crores. Total Network for these units together was 259.71 crores and total cash loss was Rs. 58.23 crores. Leading states in this sector were Maharashtra, Uttar Pradesh, Tamil Nadu & Karnataka.

#### Electricity Sector

Unlike other sectors, this sector had no competition from private sector. The 26 units in this category accounted for a turnover of Rs. 51719.36 crores and capital employed worth Rs. 155662.76 crores. This sector showed a good profitability (PBIDT) of Rs. 13589.14 crores besides providing maximum employment to 743034 persons. Against a Total Network of Rs. 30345.96 crores, the Cash loss was Rs. 616.49 crores only. Maharashtra led in all parameters with a cash loss at just 0.13 crores.

#### Transport Sector

This sector had total 47 PSUs, out of which 22 were from Tamil Nadu alone. Total turnover was at Rs. 10094.14 crores on capital employed of Rs. 6754.45 crores. Total profit was Rs. -0.89 crores, with Gujarat incurring the maximum loss of Rs.193.02 crores. This sector was second largest in providing employment to 511239 persons.. Network of all the Units in this category was negative at Rs. -447.24 crores with cash losses at Rs. 539.02 crores.

#### Welfare Sector

The Welfare sector had a total of 38 units. Total sales were at Rs. 64.58 crores as against capital employment of Rs. 2828.96 crores. Total Net Worth of Rs. 1429.57 crores and cash losses of Rs. 60.24 crores.

### Conclusion

If State governments were to use the methodology and the parameters used in this study to monitor the performance of their respective PSUs and take appropriate measures for improving the performance of some of them which show promise, it will be a step in the right direction for relieving the huge burden on their exchequers, improve the competitiveness of the PSUs and thereby contribute to developing a better economy.

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# Research Newsletter of IndSearch



#### Chairperson's Message

IndSearch, true to its name and objectives, has a long tradition of research. Right from its inception, IndSearch has undertaken several research projects and studies, both suo-motto and commissioned, on various disciplines of social sciences, economics and management. The array of themes of research is variegated, ranging from rural development, small scale industries, public sector to business research. Post/Graduate students enrolled for Ph.D. programmes as well as those pursuing Master's programmes in management including Information Technology and IndSearch faculty have made significant contributions to IndSearch's research output.

Research, per se, has limited utility unless the research output is widely publicized through newsletters such as this, abstracts and reviews. Dissemination of the research output spurs further and future research. It is with this laudable objective that IndSearch is bringing out this newsletter in quarterly editions, beginning with this edition for the quarter ending December 2006.

It is hoped that this service of IndSearch in the cause of research and researchers will be received with interest by all concerned.

Dr. Ashok Joshi

Newsletter

## Monitoring of Economic Offences: A Management Control Systems Perspective

by Dr. Sadanand Date

(Ph.D. thesis approved by University of Pune – Feb 2000)



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Economic Offences are offences relating to economic activities, wherein a breach of trust or cheating is used as modus operandi to cause pecuniary or material loss to the victims. Economic offences are a matter of concern for the common man, academicians and professional police officers alike. They are a threat to financial systems, economy and society at large.

These offences are investigated by a plethora of police investigating agencies, using procedures such as registration of complaint, First Information Report, (FIR) collection of evidence, appreciation of evidence, and preferring charges against the accused in courts of law. The process of investigation is followed by a judicial assessment of evidence collected and at the end, the case is decided. The conviction of the accused is the primary objective of the investigating agencies.

Various systems are devised by the Investigating agencies with various degrees of success / failures. Hence, a comparative study of different investigating agencies to throw light on the causes of the success or failures is attempted in this thesis.

### The Objectives of the study were

- 1) To make an inventory of and describe the various economic offences.
- 2) To ascertain the incidence and magnitude of economic offences, and to ascertain the incidence of reporting of economic offences to enforcement agencies by the victims.
- 3) To study the existing Management Control Systems (MCS) used by enforcement agencies investigating economic offences.

### The researcher formulated the following hypothesis

- 1) Economic offences are on the rise.
- 2) A significant proportion of economic offences goes unreported.
- 3) Economic Offences have lower conviction rates.
- 4) The better the MCS in an enforcement agency, the higher will be the conviction rate.

### Research Design

A time duration of 10 years (1993-2002) was selected after a careful consideration of factors such as the incidence of major economic offences, and functioning of the criminal justice system. The metropolitan city of Mumbai is chosen as the place for the study since Mumbai is the commercial capital of India, Zone I of the Mumbai Police, Economic Offences Wing of the Mumbai Police, Mumbai Branch of the Anti-Corruption Bureau of Maharashtra and CBI Branches carrying out investigation of economic offences were selected as units of the study. The census survey method was followed in view of the limited number of investigating officers working in the units under study. A questionnaire was designed to conduct the survey. A comparative study of Management Control Systems obtained in the units under study was carried out.

After a detailed review of the functioning of the various enforcement agencies noted above, the concept of Management Control Systems (MCS) has been discussed along with a Model of MCS for Enforcement Agencies.

### Major Conclusions, Findings and Recommendations

1. There is a need to rigorously define the term Economic Offense.
2. The statistical data compiled does not indicate any significant rise in registration of Economic Offences during the period.
3. A significant proportion of Economic Offences appears to go unreported.
4. The conviction rates in Economic Offences are lower compared to the conviction rates in the other Indian Penal Code offences.
5. The conviction rates secured by Enforcement Agencies have a positive and strong correlation with Management Control Systems prevalent in these agencies. In other words, the better the MCS in an Enforcement Agency, the higher is the conviction rate.

The study invites attention to the fact that the term Economic Offences has not been rigorously defined so far in our country. For the purpose of improving the functioning and efficacy of Enforcement Agencies, it is recommended that Management Control Systems prevailing in these agencies need to be improved.

## Environmental Management in Small Scale Industry – Study on the enablers of improved performance

by Dr. L. Ramakrishnan

(Ph.D. thesis approved by University of Pune – Feb 2000)



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There is a wide-spread view that the Small Scale Industries (SSIs), which contribute significantly to the economic development of India, also contribute to the ever increasing environmental degradation of the country.

Although a systematic study on the environmental performance of SSIs is considered difficult because of their wide dispersal all over the country, the researcher has systematically studied the environmental management in a set of SSIs from all over India to assess their environmental performance in different dimensions and to identify enablers of improved performance.

In the researcher's view, it is important to identify enablers of improved environmental performance of SSIs as these contribute to the SSIs being competitive within and outside India.

Twenty five samples, meeting the criteria for SSIs as laid down by the Development Commissioner, Ministry of Industry, Government of India, were selected from all over India for this study. The researcher has also carried out face-to-face interviews / discussions with the owner/director/partner of the SSI to collect the information required using a pre-tested questionnaire...

The information was used in assessing the environmental performance of SSIs in the following dimensions:

- a) compliance with law,
- b) efficient use of resources,
- c) eco-efficiency initiatives and
- d) environmental management systems initiatives.

Guidance provided by the International Standards Organisation (ISO) and World Business Council for Sustainable Development (WBCSD) have been used for assessing the environmental performance in (b) and (c) mentioned above

### Major conclusions drawn from the study are:

- a) There is a poor awareness among the SSIs about the environmental legal requirements to be met by them,
- b) Compliance of the SSIs with the legal requirement is poor,
- c) Improvement of awareness of legal SSIs with requirements in the case of respect to efficient use resources is as good as environmentally sound multinational companies,
- d) SSIs have taken many eco-efficiency improvement initiatives which will help them to sustain their environmental performance,
- e) there is hardly any systems approach to environmental management in SSIs,
- f) "Cost Reduction" is one of the major enablers of improved environmental performance in the resource productivity dimension.
- g) there is hardly any stakeholder or market pressure for improved environmental performance in SSIs.

One of the recommendations that comes out of this study is that the implementing authorities should become more proactive and enable the SSIs to understand their obligations and improve their performance in areas which need attention.

## An evaluation and assessment of influence of cost management information for business strategies

by Dr. Netra Apte

(Ph.D. thesis approved by University of Pune – 2003)



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Globalization has demolished the walls of protection of Indian industry. Consequently, the companies from world over are opening shops in India resulting in severe competition for Indian companies. As globalization demands organizations to be extremely cost effective, it is useful to know how companies are using the available tools and techniques for sustainability through competitive cost advantages. Hence this thesis.

Cost management information includes financial as well as non-financial information. Strategic cost management techniques such as Activity Based Costing, Life Cycle Costing, Value Chain Analysis, Target Costing, Transfer Pricing, Value Engineering etc. are already in place. New concepts like Balance Score Card have also emerged which takes into account many non-financial information and tries to integrate them which financial results. The thesis attempts to find out how the cost management information is used for formulating strategies, its implementation and evaluation. The study also tries to seek answers to:

- a) What is the level of awareness or understanding of different aspects in the area of cost management information ?
- b) How the performance of companies differs with the use of different strategic cost management methods and techniques ?
- c) What type of cost management information do companies collect and how the same is used?

### The following major hypothesis were formulated

1. The companies using Strategic Cost Management information are able to perform better in competitive environment
2. Most of companies consider cost as a predominant factor in developing business strategies.

3. To exist in the sustainable market, successful companies, by and large, consider price sensitivity and cost competence as critical success factors.

A structured questionnaire was prepared to collect the data for testing the hypothesis formulated which was sent to 60 companies, out of which 34 companies, compressing 12 industrial product companies, 3 in Automobile Sector, 4 Pharmaceuticals, 9 in Consumer Products, 3 Consumer Durables, 3 in Service Sector, responded.

### The major conclusions, findings and recommendation are

1. Companies using Strategic cost management information are able to perform better in competitive environment in term of sales and profit.
2. The total potential of cost management technique is not fully used in formulating business strategies and where it is used, it is not effectively used.
3. On the basis of information of Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis, companies having strategic cost management information and techniques have considered globalization as "opportunity"
4. In order to overcome the problems in designing and implementing the ABC system, organizations should try to overcome problems relating to behavioral aspects.
5. Due to information technology, like ERP systems, it will be easier to integrate strategic cost management information with the organization's information system.