ECONOMICS OF THE POWER SECTOR

- Proposed Amendments in the Electricity Act: May Not Be Good Enough to Lift the Sector
- Tariff Fixation in India: A Case Study of NCT of Delhi
- The Critical Balance: Power Supply, Environment and the Economy
THE EMERGENCE OF THE INDIAN CAPITAL MARKET as an attractive avenue for international investors has been an important financial story of recent times. The entry of world players has revolutionized Indian capital markets, largely for the better. But problems of understanding the management systems and behaviour of the capital market scientifically are vastly ignored by general investors and good times for investors may not last long without proper and scientific vision.

This book has been written keeping the above mentioned aspects and the basic subject matter of capital markets in mind. The book provides a comprehensive idea about the role and functioning of the capital market in India and will be a great help to students of business management, economics, business journalism and cost & management accountants in understanding the scientific parameters of the capital market mechanism in India.

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1. Capital Markets and Stock Exchanges and their History
2. Different Instruments of the Indian Capital Market
3. Investment, Trading and Transactions in Share Scrips
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6. Laws and Regulations Affecting the Capital Market
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8. Role of Derivatives, Futures and Options
9. Computer Screen Based Trading
10. Security of Investors

Appendix: Investment Terminology Glossary

For further information about the book, please mail at research@icmai.in
The Institute of Cost Accountants of India

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA (erstwhile The Institute of Cost and Works Accountants of India) was first established in 1944 as a registered company under the Companies Act with the objects of promoting, regulating and developing the profession of Cost Accountancy.

On 28 May 1959, the Institute was established by a special Act of Parliament, namely, the Cost and Works Accountants Act 1959 as a statutory professional body for the regulation of the profession of cost and management accountancy.

It has since been continuously contributing to the growth of the industrial and economic climate of the country.

The Institute of Cost Accountants of India is the only recognised statutory professional organisation and licensing body in India specialising exclusively in Cost and Management Accountancy.

MISSION STATEMENT
The CMA Professionals would ethically drive enterprises globally by creating value to stakeholders in the socio-economic context through competencies drawn from the integration of strategy, management and accounting.

VISION STATEMENT
The Institute of Cost Accountants of India would be the preferred source of resources and professionals for the financial leadership of enterprises globally.

IDEALS THE INSTITUTE STANDS FOR
- to develop the Cost and Management Accountancy profession
- to develop the body of members and properly equip them for functions
- to ensure sound professional ethics
- to keep abreast of new developments

Behind every successful business decision, there is always a CMA
Inside

COVER STORY
ECONOMICS OF THE POWER SECTOR

February 2014

The Management Accountant, official organ of The Institute of Cost Accountants of India, established in 1944 (founder member of IFAC, SAFA and CAPA)

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Greetings!

India is steadily gaining importance in the world energy scenario. It is already the fifth largest economy and a major energy importer. Even import of coal, the mainstay of the nation’s energy resource, is expected to rise. High economic growth in the Asia-Pacific region, including India, is spurring a rapid increase in energy consumption. Total energy use in India has expanded in the past five decades, with a shift from non-commercial energy to commercial energy sources. The trends in production of primary commercial energy in the past five decades indicate coal as the most abundant among all commercial energy sources. The petroleum and natural gas sector has seen significant growth in domestic production and supply. Resource augmentation and growth in energy supply has not kept pace with increasing demand and, therefore, India continues to face serious energy shortages. This has led to increased reliance on imports to meet the energy demand. In 1991, the Indian government opened the avenue for private sector participation in the power sector. Due to the shortage of power, the government offered incentives for Independent Power Producers (IPPs) to enter the generation sector. New technologies that help to efficiently utilise energy, especially electricity, need a long time to be developed. Therefore, it is desirable to identify the key areas and initiate research and development. There is also a need for clarity in the direction in which we wish to move in areas like energy security, research and development, addressing environmental concerns, energy conservation, etc.

The tariff policy is developed in consultation with the State Governments and the Central Electricity Authority (CEA) keeping in view the advice of the Central Electricity Regulatory Commission and suggestions of various stakeholders. Since the Electricity Act of 2003, the Government of India has issued detailed guidelines for competitive bidding for all future power generation projects, tariff norms for renewable energy, new transmission pricing grid code, etc., and from January 2011, Central/State public sector companies also are expected to compete with the private sector to supply power to the distribution companies through competitive bidding.

Though subsidies are a burden on the government, they are one of the most powerful policy tools in its hands to achieve a range of economic, social and environmental objectives. There are a number of criteria by which a subsidy policy may be appraised in the power sector in India. In the Indian power sector, consumers in each state are divided into five broad categories: domestic, agriculture, commercial, industry and railways. Each of these categories is further divided into sub-categories based on consumption levels. The categories and sub-categories vary from state to state. Even within these sub-categories, some states have different tariff rates for consumers in urban and rural areas.

Power is subsidized for agricultural and domestic consumers through two sources: (i) state support to State Electricity Boards (SEBs) in the form of subventions or write-off of loans or interest, etc., and (ii) cross-subsidization by charging higher prices from industrial and commercial consumers.

This issue presents a good number of articles by distinguished experts and authors on the ‘Economics of the Power Sector’, the cover story theme of this issue. A new section, ‘Letters to the Editor’ that started a few issues ago, continues. We look forward to constructive feedback from our readers on the articles and overall development of the journal under this section. Please send your mails at editor@icmai.in. We thank all the contributors to this important issue and hope our readers enjoy the articles.
CMAs to continue to spread the cause of cost competitiveness

*Our greatest weakness lies in giving up. The most certain way to succeed is always to try just one more time.* – Thomas Edison

T A K E this opportunity to thank all the members and stakeholders for gathering adequate support in favor of the Cost Accounting Records, Cost Audit and for modification of the draft Companies (Cost Records and Cost Audit) Rules, 2013 so that the professionals and the profession could contribute its expertise for the cause of the society and I sincerely look forward for your continued support for the cause of the profession.

The Council continues its follow up with MCA on the matter to safeguard the interest of the profession and the profession will continue to play its expertise role in spreading cost competitiveness in the country. I know that as practicing CMAs and as working executives, many of our colleagues have made immense contribution to inculcate cost competitive practices in the industry associated with.

In an effort to add strength to the usefulness of cost audit mechanism, the CMA Committee is compiling a “Compendium on Cost Competitive Practices in India”, which will be periodically updated and is expected to showcase the practical cost competitive practices across the sectors in industry and services. I appeal to all the CMA professionals, who have been part of the success stories on cost competitive practices, to share the same with the Institute so as to form a part of the CMA benchmark practices in India being published by the Institute.

**Ground-breaking ceremony of the Centre of Excellence for Quality and Ethics at Ajmer**

I am happy to share with all the members that I along with CMA Sanjay Gupta and CMA H.K. Goel, CCMs attended Ground Breaking Ceremony of the Centre of Excellence for Quality and Ethics at Ajmer on 28th January 2014. The foundation stone of the Center of Excellence was laid by Shri Sachin Pilot, Hon’ble Minister of Corporate Affairs in the presence of Presidents of the three Professional Institutes, Central Council members and senior officials from the Ministry of Corporate Affairs and three Institutes. The Hon’ble Minister has assured that the new Cost Rules will be finalized after the careful study of the suggestions given by Institute of Cost Accountants of India and inputs received from other stakeholders, keeping in mind the sensitivity of Cost and Management Accounting in bringing competitiveness to Indian industry and the interest of all stakeholders including the CMA profession. It was also assured by the Hon’ble Minister that the Cost Rules will not be finalized in haste and the concerns of the students, CMA fraternity and society at large will be taken care of.

The Institute is a partner body along with the Institute of Chartered Accountants of India and the Institute of Company Secretaries of India in setting of this Centre of Excellence at Ajmer intended to focus at creating a knowledge hub, organizing of programs aimed at capacity building through financial literacy and accounting education for the benefit of local population, student activities, members activities, professional development activities, workshops and seminars, conducting research and outreach programs on Investors Education and Protection, corporate governance and the best practices globally followed in the areas of Accounting, Cost Management, Corporate Governance etc. and other activities in furtherance of the professions of the Professional Institutes. The Institute of Cost Accountants of India feels privileged to be associated with this path breaking professional initiative and I am confident that this would become a reality and a game changer for bringing about inclusive growth of the economy with empowerment and enhancement of stakeholders value.

**Meeting with Advisor (Accounts), Ministry of Railways**

I along with CMA Dr. A.S. Durga Prasad, Vice President and CMA H.K. Goel, CCM and senior executives met Mr. P.V. Vaidialingam, IRAS, Advisor (Accounts), Ministry of Railways, Government of India and his senior colleagues on 30th January, 2014 and briefed about the ongoing initiatives of the Institute in terms of developing cost competitiveness in all social and government spending. Mr. Vaidialingam while appreciating Institute’s initiative, stressed on the long term collaboration with the Institute in terms of developing a viable costing model and data sourcing system for providing timely costing inputs to the management for proper decision making and meeting the requirement of the regulated regime of railway tariff setting. The Institute is looking for building a professional relationship with the Indian Railways, the biggest employer in the world to create new opportunities for CMAs.

**MoU with Institute of Internal Auditors, India**

I am happy to share that the Institute has signed a MoU with the Institute of Internal Auditors, India on 9th January 2014 at Kolkata. The MoU envisages sharing of knowledge, experience and best practices.
and will facilitate conducting seminars, conferences and joint activities with a focus on contemporary areas in the field of Internal Audit, Internal Control and Risk Management etc. By virtue of the MOU, members of ICAI are eligible to obtain direct membership of IIA-India. The details are available on the website of the Institute.

**Chapters Meet at SIRC**

I along with Vice-President, my Central Council Colleagues, Regional Council colleagues and Senior executives had the opportunity to discuss several issues relating to the profession with the Chairmen and other office bearers of different Chapters of the Southern Region on 17th January 2014. I am thankful to my colleagues at Chapters Management for their contribution and suggestions which will help the Institute to provide timely services to the stakeholders. Similar meeting of the Chapters at other Regions are being planned by the institute.

**Inauguration of Technical Directorate Extension Centre office at Chennai**

I congratulate SIRC of the Institute for creating a state-of-art office space for the Technical Directorate Extension Centre office at Chennai inaugurated on 17th Jan 2014, in presence of Shri J.D. Sharma, Director, IOB, CMA M. Gopalakrishnan, Chairman, CMA Committee, CMA D.L.S. Sreshti, Dr. PVS, Jagan Mohan Rao, CCMs, Chairman, Vice-Chairman, SIRC, Regional Council Members and chapter representatives of the southern region.

**Meeting on Power Sector at Chennai**

I had the opportunity to participate in the meeting by the Technical Directorate Extension Centre office at Chennai to discuss about the cost competitiveness in the power sector and to develop a document on benchmark practices and standards in the power sector. Various experts from the power sector, power regulator, CMA professionals and Institute officials attended the meeting. In the power sector good practices are not documented properly even after the major activities such as generation, transmission and distribution were unbundled. After the introduction of power reforms, a different business model for generation, transmission and distribution has evolved. There is need to bring a Technical Guide on Cost Competitiveness in the Power Sector and to fix the benchmark/standards in the power sector. The Institute is taking efforts to work in this direction. The objective is to provide adequate data to the government, Regulators and players in the sector so as to ensure quality power at affordable prices to the consumers and strengthen the sustainability of the key sector of the economy.

**Programme organised by Forum of Practicing Professionals at Chennai**

I had the opportunity to participate in the programme organized by the Forum of Practicing Professionals at Chennai on the theme ‘Cost aspects in a competitive environment’.

**Meeting with CMD, Bhartiya Mahila Bank**

I along with Dr A.S. Durga Prasad, Vice President met Mrs. Usha Ananthasubramanian, Chairman & Managing Director, Bhartiya Mahila Bank at Delhi on 29th January 2014 to finalize an MoU with the Bank for the Members and the Students of the Institute. I am happy to inform that the Bank has agreed to have tie-up with the Institute for overall banking relationship and for assisting the members and students of the Institute for availing various banking facilities including financial assistance or any other banking services from the Bank. An MOU with BMB is under process.

**Meetings at Dy. CAG Office**

I accompanied with Director (Technical) and Joint Director & Head, Tax Research Department had the opportunity to meet Ms. Revathy Iyer, Dy. CAG and Chairperson, GASB at New Delhi on 22nd January 2014 and discussed with her on the activities and action plan for 2013-14 of the Institute specially the thrust on studies in Government sector. Dy. CAG appreciated and acknowledged that CMAs have a critical role in Government organizations such as Power, Railways, Pharmaceutical etc. for determination of true cost, fixation of tariff and subsidy is essential for safeguarding public interest. She requested for nomination of an Advisor and also a member for the consultative group for value addition/professional scrutiny of the Standards being developed by GASAB.

We met Mr. Prasenjit Mukherjee, Dy CAG, who is handling Direct and Indirect taxes. I informed him that the Institute has created a Tax Research Department and we look forward to have active interface with CAG office for carrying out research, special studies and offering suggestions on improving provisions/rules of tax legislation in the larger public interest. We also met Mr. A.K. Singh, Dy. CAG in his office who has consented to Chair the session on Government Perspective – Tax & Expenditure Management during the NCC 2014.

**Meeting with Member, (CE&c), CBEC**

I accompanied with Director (Technical) and joint Director and Head, Tax Research Department met with Ms. J.M. Shanti Sundaram, IRS, Member (Central Excise & Computerization), CBEC on 22nd January 2014 in her office and handed over a representation from the Institute in the context of Circular no 979/03/2014-CX dated 15th January 2014, issued by CBEC. It was emphasized that calculations of manufacturing cost have to be carried out using CAS 4 Standard and only Cost Accountants in practice can certify the
information. The Member has kindly agreed to look into the matter.

**Seminar on Risk Management – Role of CMAs by Howrah Chapter of the Institute**

Howrah Chapter has organized a Seminar on Risk Management – Role of CMAs on 25th January 2014 and I had the opportunity to address the delegates on the occasion. I shared with the participants the key role CMAs can play in Risk Management, as they possess the requisite expertise and knowledge. CMAs as internal auditors can help the companies in effective risk management by giving assurance on risk management practices. The Institute is planning to organize chain seminars/ workshops across the country covering various aspects of risk management for supporting capacity building in this core area of corporate functioning and provide understanding of state-of-the-art risk management tools and techniques.

**Regional Conference at Sambalpur**

I am pleased to inform you that I have participated in the inauguration session at the Regional Conference on the theme “Enthusiasm, Enhance, Excel” hosted by the Sambalpur Branch of EIRC of the Institute of Chartered Accountants of India on 24th January 2014 and addressed the participants.

To apprise all the members about the activities / initiatives undertaken by the Departments/ Directorates of the Institute, I now present a brief summary of the activities.

**CPD Activities**

A series of webinars were organised for members on ‘Business Valuation’, ‘Transfer Pricing – Applying Cost Plus Method, A Scope for Practicing Cost Accountants’ and ‘Enterprise Performance Management’. The Institute was associated with the Institute of Directors for their Advanced Studies Department is also planning to start Diploma Courses on ‘Business Valuation, Audit and Control’ has been started. I sincerely appeal to the members to grab the opportunity and enroll for the course. The Advanced Studies department is also planning to start Diploma Courses on ‘Business Valuation and Internal Audit from April 2014.

**Examination Directorate**

The Examination Directorate held Foundation Examinations for the first time in online mode in December 2013 and results for the same were declared on 14th January 2014. I congratulate the students who have passed the examination.

**ICWAI MARF Programs**

The programme on ‘Finance for Non-Finance Executives’ has been organized for ‘Punjab State Power Corporation Limited (PSPCL)’ during 06-11 January 2014 at Delhi which was attended by their Officers. The programme on ‘Understanding Cost Accounting, Budgeting and Taxation’ was organized for GAIL (India) Limited at GAIL Training Institute, Jaipur during 15-17 January, 2014, which was attended by officers of GAIL.

**Membership Department**

The esteemed members are aware that the membership fee for FY 2013-14 became due on 1st April 2013 and the last date for payment of the same has already expired on 30th September. However, as of now, there are about close to 2000 members who are yet to make payment of their membership fee for FY 2013-14. I, therefore, take this opportunity to urge the esteemed members to make payment of their prescribed membership fees at the earliest to avoid removal of their names from the Register of members. I am glad to share that during the month, 192 members have been admitted to Associateship and 17 members have been advanced to Fellowship of the Institute.

**Tax Research Department**

It is a matter of pleasure that the newly formed Tax Research Department has completed the preparation and submission of Pre-Budget Memorandum 2014 and completed preparatory work of Cost Accounting Standards on “Valuation of Works Contract” and “Valuation of Services Captively Consumed” in line with CAS-4.

The department is in process of drafting Training Material on Anti-Dumping, Central Excise, Service Tax, and Adjudication Process under Central Excise, Service Tax, Customs & Anti-Dumping for members and students.

**Advanced Studies Department**

The enrolment for online certificate course on “Information Systems Audit and Control” has been started. I sincerely appeal to the members to grab the opportunity and enroll for the course. The Advanced Studies department is also planning to start Diploma Courses on “Business Valuation and Internal Audit from April 2014.

**NCC-2014**

Friends, the National event of the Institute is very near and I take this opportunity to urge all of you to provide adequate support and participate in the 55th National Cost Convention (NCC-2014) of the Institute at Bhubaneswar during 23rd & 24th February 2014 to make it a grand success.

I wish all the members, their families and friends on the occasion of Basant Panchmi, Ravidas Jayanti and Maha Shivaratri. With warm regards,

CMA Suresh Chandra Mohanty
1st February 2014
LETTER TO THE EDITOR

The Management Accountant exhibits high professional excellence and its content covers several issues related to the profession, industry and economy. We are witnessing dramatic improvements in the quality of cover stories as well as the design of the journal. The changes that have been brought by the magazine’s team is really appreciable. The section, ‘Economy Updates’ and its associated links were required for long. The invitation for papers for future issues will attract more thoughtful and useful articles. I look forward to the April issue where Cost Management in the Education Sector will be discussed, because mindless privatisation and meaningless bureaucracy has made education unattainable for those who really need it. I hope the February issue will give realistic assessments about the audit of power companies in Delhi. I am also eager for articles on working capital management and the necessity of indigenization.

CMA Jayanta Ghoshal
Sr. Manager (Finance), HAL

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA
(STATUTORY BODY UNDER AN ACT OF PARLIAMENT)

CLARIFICATION

Ref. No: BOS/01-12/13-14  Dated: Kolkata, 18th December 2013

Clarification on applicability of Companies Act, 2013 for CMA Examinations

In continuation with the earlier clarification reference no.BOS/01-08/13-14, which was already hosted in the website on 26th August, 2013.

It is further clarified for general information that the provisions of “The Companies Act, 2013” shall not be applicable for the CMA Intermediate and Final Course Examinations for June, 2014 term of Examination.

Regarding applicability of the Companies Act, 2013, for/from December 2014 CMA Examination, necessary communication would be intimated in due course.

All concerned are hereby requested to make a proper and wide publicity to meet the concern of stakeholders on this stated subject.

This issues with an approval of the competent authority.

CMA Chiranjib Das
Secretary to the Board of Studies Committee

AT THE HELM

CMA K C Samal, a Fellow member of the Institute of Cost Accountants of India, has joined the National Aluminium Company Limited (NALCO), a Central Govt. Navratna company, as Director (Finance) from 3rd January, 2014. He was in NALCO since the formation of the company in 1982 and has held various key responsibilities in treasury functions, foreign exchange risk management, budgetary control, capital restructuring, foreign debt management, etc. CMA Samal is passionate about developing the Cost and Management Accounting profession and has been associated with various academic institutions like XIMB, Utkal University, KIIT, and ICAI as visiting faculty.

We wish CMA K C Samal all the best in the future.

CMA S V Ramana, a Fellow member of the Institute of Cost Accountants of India has joined Vijayavisaka Milk Producers Company Ltd as Managing Director. Before this, he worked as CFO in the same company for about 7 years. He has good exposure in the areas of Policy & Planning, Finance & Accounts, Risk Management, etc. He had also been Associate Vice President in ING Vysya Bank at their Corporate office in Bangalore and also worked for other banks prior to that.

We wish CMA S V Ramana the very best in the future.

Notice

CD of List of Members, 2013 will be made available for sale to the Members at a price of Rs.100/- per copy. Members interested to procure the same may remit Rs.100/- by Demand Draft in favour of “The Institute of Cost Accountants of India”, payable at Kolkata, addressed to the Secretary, The Institute of Cost Accountants of India.

Special honour

Prof. (Dr.) Paresh Shah, a Fellow member of the Institute has been honoured by the World Jain Confederation as an ‘Outstanding Jain Educationalist’ for his achievements and service to society in education. We congratulate the member.

Attention Members

You are requested to please verify and update your journal mailing address through the online membership system and/or contact the membership department for correcting it. This would help you to receive the journals regularly. Please visit the Institute’s website at www.icmai.in for details
1. CMA S.C. Mohanty, President and CMA P. Raju Iyer, Chairman of SJRC felicitating Shri M. Narendra, Chairman & Managing Director, Indian Overseas Bank on January 18, 2014 at the bank’s central office. They discussed issues relating to Cost Management & Risk Management in Banking.

2. CMA S. C. Mohanty, President met CMA K. C. Samal and congratulated him for assuming the office of Director (Finance), National Aluminium Company Ltd., at the company’s Corporate office in Bhubaneswar on January 13, 2014.

3. 16th Meeting of Quality Review Board (QRB) was held on January 22, 2014 at Delhi office. From left: CMA Dr. Asish K Bhattacharyya, Advisor Advanced Studies ICAI, CMA D C Bajaj, Past President ICAI, CMA Kunal Banerjee & CMA V Kalyanaraman, Members QRB, CMA R S Sharma, Chairman QRB, CMA A S Bagchi, Secretary QRB, Dr. Navrang Saini, Member QRB.

4. CMA S.C. Mohanty, President and CMA (Dr.) A.S. Durga Prasad, Vice President met Mrs. Usha Ananthasubramanian, Chairman & Managing Director, Bhartiya Mahila Bank on January 29, 2014 at the New Delhi office of the bank.

5. CMA S.C. Mohanty, President visited CMA Kulamani Biswal, Director (Finance) of NTPC on December 9, 2013 at New Delhi. CMA Trinath Behera, Director (Finance) of ITDC Ltd. are also seen in the picture.

6. A programme on ‘Mandatory Cost Audit – Need and Utility’ held on January 23, 2014, at the Haldia Trade Fair-2014, organized by Haldia Development Authority. From left: CMA Chiranjib Das, Joint Director (Studies), CMA Dr. D. P. Nandy, Director (Research & Journal), CMA Manas Kr. Thakur, Council Member, Shri A.K. Dey, Chairman, Haldia Zonal Council, CII.
National Seminar of Cost and Management Accountants: Risk Management—the Role of CMAs
PAPERS INVITED

Cover stories on the topics given below are invited for *The Management Accountant* for the four forthcoming months.

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The subtopics are only suggestive and hence the articles may not be limited to them only. Articles on the above topics are invited from readers and authors along with scanned copies of their recent passport-size photograph and scanned copy of declaration stating that the articles are their own original and have not been considered for publication anywhere else. Please send your articles by e-mail to editor@icmai.in by the 1st of the previous month.
ECONOMY UPDATES

Income Tax
- As per Circular No. 1/2014 [F.NO.275/59/2012-IT (B)], dated: 13-1-2014 it is clarified that tax will be deducted at source under section 194-I of the Income-tax Act, 1961 on the amount of rent paid/payable without including the service tax component. CBDT has decided that wherever in terms of the agreement/contract between the payer and the payee, the service tax component comprised in the amount payable to a resident is indicated separately, tax shall be deducted at source under Chapter XVII-B of the Act on the amount paid/payable without including such service tax component.
- Central Government notifies the Contributory Health Service Scheme of the Department of Space for the purposes of the deduction under clause (a) of sub-section (2) of section 80D of the Income-tax Act, 1961 (43 of 1961) for the assessment year 2014-15 and subsequent assessment years vide Notification No.6/2014 (F. No. 149/97/2013 –TPL), dated: 15-1-2014.
- An agreement was entered into between the Government of the Republic of India and the Council of Ministers of Republic of Albania for the avoidance of double taxation and the prevention of fiscal evasion with respect to taxes on income and on capital which was signed at New Delhi on the 8th day of July, 2013. Whereas the date of entry into force of the said agreement is the 4th day of December, 2013. Now, therefore, in exercise of the powers conferred by section 90 of the Income-tax Act, (43 of 1961), the Central Government hereby directs that all the provisions of said agreement between the Government of the Republic of India and the Council of Ministers of Republic of Albania for the avoidance of double taxation and the prevention of fiscal evasion with respect to taxes on income and on capital, as set out in the Annexure hereto, shall be given effect to in the Union of India with effect from date of entry into force of said agreement i.e., the 4th day of December, 2013. – Notification No. 02/2014/F.

Provident Fund – News
EPFO approves raising Provident Fund interest rate to 8.75 percent
Retirement fund body EPFO decided to increase the rate of interest on Provident Fund deposits to 8.75 percent for 2013-14, a move that will benefit about 5 crore subscribers. Source: PTI, 13 Jan 2014

EPFO: Permanent PF account number to be a reality in 2014-15
Portable permanent PF account number, which will enable over five crore EPFO members to get rid of the process of transferring their accounts on changing jobs, will be a reality in 2014-15.

The permanent PF account number would also help provide social security benefits to workers in sectors like construction where they change contractors and place of work frequently. According to the ‘Action Plan’ handed over by the Labour Ministry to the Employees’ Provident Fund Organization (EPFO), the body has to put in place a system for unique employee number which would eventually make its facilities at par with core banking service. The EPFO is working on the system to provide permanent account numbers to its subscribers. Source: PTI, January 17, 2014

Central Excise
- As per notification no.01/2014-Central Excise (N.T.), dated: 8th January, 2014 Central Government hereby makes CENVAT Credit (First Amendment) Rules, 2014 to amend the CENVAT Credit Rules, 2004.
- Clarification regarding availability of excise duty exemption to the units which have already availed of exemption under New Industrial Policy for another 10 years by way of 2nd substantial expansion in the State of Jammu & Kashmir – Circular 977/1/2014, dated: 03 January, 2014.
- Seeks to extend the validity of notification No.95/2011-Customs dated the 3rd October, 2011 for a period of one year i.e. up to and inclusive of 25th December, 2014 – Notification - 04/2014-Cus (ADD), dt. 16-01-2014.
- Seeks to extend the validity of notification No.137/2008-Customs dated the 26th December, 2008 for a period of one year i.e. up to and inclusive of 25th December, 2014 - 03/2014-Cus (ADD), dt. 16-01-2014.
- Seeks to extend the validity of notification No.55/2009-Customs dated the 26th May, 2009 for a period of one year i.e. up to and inclusive of 20th November, 2014 - 02/2014-Cus (ADD), dt. 03-01-2014.
- Seeks to amend notification No.121/2009-Customs dated 30th October, 2009 so as to change the name of a producer/ exporter - 01/2014-Cus (ADD), dt. 03-01-2014.
- Regarding classification of “Transmission shafts / Power takeoff (PTO) shafts” in the HS Harmonized Customs Tariff – Circular No. 02/2014, dated: 09-01-2014

Service Tax
- Clarification regarding issue of Discharge Certificate under VCES and availment of CENVAT credit – Circular No.
• Levy of service tax on services provided by a Resident Welfare Association (RWA) to its own members - Circular No.175/01/2014 – ST, dated: 10th January, 2014.

SEBI
• SEBI constituted the Depository System Review Committee (DSRC) to undertake a comprehensive review of the Indian depository system. Based on the recommendations of DSRC, following guidelines are issued to strengthen the Information Technology (IT) governance framework of depositories – Circular No. CIR/MRD/DMS/03/2014, dt. January 20, 2014.

Banking
• RRBS - Guidelines for Classification and Valuation of Investments - RBI/2013-14/434 RPCD.CO.RRB.BC.No. 74/03.05.33/2013-14, dt. Jan 07, 2014.
• Revision of timings of Reverse Repo window under Liquidity Adjustment Facility (LAF). The Reverse Repo window will now be available between 7.00 pm and 7.30 pm instead of the existing timings of 4.45 pm to 5.15 pm. The change in timings will take effect from January 20, 2014 (Monday) - RBI/2013-14/451, DCM. MOAG. No.95/01.01.001/2013-14, dt. Jan 17, 2014.

Indian Economy – News

• India approves 10 percent IOC stake sale to state oil firms A panel of ministers has approved the sale of a 10 percent stake in state refiner Indian Oil Corp to two state exploration firms, a move that will help the cash-strapped government raise funds to narrow its budget deficit. Oil and Natural Gas Corp Ltd (ONGC.NS) and Oil India Ltd (OIL.NS) will buy the stake, Oil Secretary Vivek Rae said. Source: Reuters, 16 Jan 2014

• Headline inflation eases to five-month low, rates may stay on hold India’s headline inflation eased to a five-month low in December on lower vegetable prices, providing some relief to the ruling coalition before a national election and increasing the odds that interest rates will stay on hold this month. Source: Reuters, 15 Jan 2014

• CPI eases to three-month low as food prices cool India’s retail inflation in December eased to a three-month low as vegetable prices fell, giving some relief to policymakers struggling to contain price pressures as growth hovers at a decade low. Retail prices rose an annual 9.87 percent last month, slower than the 9.92 percent expected by economists in a Reuters poll. Prices had surged a revised 11.16 percent year-on-year in November - their fastest pace on record. The moderation was largely driven by a fall in vegetable prices, which cooled nearly 19 percent from November on improved supplies. That helped slow down annual food inflation to 12.16 percent last month from 14.72 percent in November. Source: Reuters, 14 Jan 2014

• India to release Dec WPI inflation data on Jan 15 India will release December’s wholesale price index-based inflation data a day later on January 15, a trade and industry ministry spokesman said, as government offices will remain closed on Tuesday for a religious holiday. Source: Reuters, 13 Jan 2014

• Oil ministry considering partial rollback of price hike in bulk diesel The oil ministry is considering a partial rollback of bulk diesel prices as sales have dropped significantly, oil secretary Vivek Rae said on Thursday. Source: Reuters, 09 Jan 2014

• Bangalore to see second highest office demand in Asia in 2014 IT hub Bangalore is expected to witness the second highest demand for office space in the Asia Pacific region during 2014 in a list topped by Tokyo, according to property consultant Cushman and Wakefield. “Bangalore is expected to see the second highest absorption in the APAC region and the highest demand in the country owing to expansion of the IT, ITes and multi-national companies,” C&W said in a statement. The oversupply situation, which most cities across the country are witnessing, will ease from 2014 onwards as economic conditions improve domestically and globally,” C&W Executive Managing Director, South Asia, Sanjay Dutt said. Source: PTI, January 02 2014

(For further details on these issues, please visit the Institute’s website: www.icmai.in for the complete CMA E-Bulletin, Feb 2014, Vol 2, No. 2, at ‘Research and Publications’ section.)
In India Power Generation, transmission and Distribution has made significant progress after Independence. In 1947 Power generation capacity was 1,362 MW only and that also primarily by hydro power and thermal power generation plants. Few private utilities were involved in generation and distribution of electrical power. After 1947, all power generation, transmission and distribution were taken over and controlled by State and Central government agencies. As such State Electricity Boards (SEB) came into existence.

2. India’s power sector was regulated and dominated by SEBs until economic reforms began in 1991. The SEBs controlled the entire electricity supply chain from generation, transmission to distribution within a state. The unviable tariff structure, lack of political will and vote bank considerations resulted into high transmission & commercial losses that lead to almost bankrupt SEBs and erratic, poor quality power and the last but not the least insufficient power supply.

3. The power generation could not keep pace with the overall development taking place due to bureaucratic tangles and involvement of multiple agencies both at the State as well as Central Government coupled with the demon of corruption.

4. Originally the Electricity Supply Industry in India was governed by the Indian Electricity Act, 1910, the Electricity (Supply) Act, 1948 and the Electricity Regulatory Commissions...
Act, 1998. The Indian Electricity Act, 1910 created the basic framework for electric supply industry in India and provided for licensees who could supply electricity in a specified area. The Electricity (Supply) Act, 1948 mandated the creation of State Electricity Boards who have been arranging the supply of electricity in the State. Over a period of time, the performance of State Electricity Boards had deteriorated on account of various factors one of them being that they were generally unable to take decisions on tariffs in a professional and independent manner and tariff determination in practice was being done by the State Governments. To address this issue the Electricity Regulatory Commissions Act was enacted in 1998 which created the Central Electricity Commission and had an enabling provision through which State Governments could create a State Electricity Regulatory Commission.

5. In the early 1990’s few State Governments enacting legislations to reform and restructure integrated State Electricity Boards (SEBs). The first state to restructure its SEB was Orissa in 1995. Thereafter, Haryana, Andhra Pradesh, Rajasthan, Uttar Pradesh, Karnataka, Delhi and Madhya Pradesh restructured the SEBS.

6. The most important change was the promulgation of Central Electricity Act, 2003. This Act superseded all the previous electricity Acts, Rules, mandatorily requiring restructuring of SEBs and separation of trading function from transmission and system operation. The intent and purpose was to create an open and transparent environment for attracting investment in the sector and promotion of competition.

7. Orissa was the first state to introduce reforms that failed. The GNCT of Delhi also followed the suit by introducing private players i.e., BSES and Tata Power.

8. In spite of all the reforms, the sector did not show a healthy picture. I had the benefit of reading the Performance Report of Power Sector for the year period released by Power Finance Corporation on 11-09-2013. The report presents a dismal picture of entire power sector. The some of the shocking revelations are reproduced here
under:-
(a) The total income excluding subsidy for utilities selling directly to consumers increased from Rs.2,28,731 Crs. in 2010-11 to Rs.2,68,447 Crs. in 2011-12 reflecting growth 17.36% in the year 2011-12.
(b) The total energy sold by these utilities increased from 5,78,698 Mwh in 2010-11 to 6,22,504 Mwh in the year 2011-12 registering a growth of 7.57% in the year 2011-12.
(c) The total subsidy booked by utilities selling directly to consumers increased to Rs.30,242 Crs. in the year 2011-12 from Rs.22,666 Crs. in the previous year. Subsidy booked as a percentage of revenue from sale of power increased from 10.93% in the year 2010-11 to 12.49% in the year 2011-12.
(d) The subsidy released by the State Govts has been about 85% of the subsidy booked by the utilities. All State Govts except Assam, Andhra Pradesh, Karnataka and Haryana have released the entire subsidy booked by their respective distribution utilities.
(e) The aggregate book losses (on accrual basis) of all the utilities increased from Rs.30,430 Crs. in 2009-10 to Rs.51,602 Crs. in the year 2010-11 and to Rs.62,581 Crs. in 2011-12.
(f) The aggregate losses (without accounting for subsidy) for all the utilities increased from Rs.64,463 Crs. in 2009-10 to Rs.74,291 Crs. in 2010-11 and to Rs.92,845 Crs. in 2011-12.
(g) The losses despite accounting for subsidy on realizable basis for all utilities increased from Rs.45,382 Crs. in 2009-10 to Rs.53,986 Crs. in 2010-11 and to Rs.67,006 Crs. in 2011-12.
(h) The aggregate book losses for all the utilities in the states as well as UT of Puducherry as a ratio of aggregate revenue (excluding subsidy) increased from 22.56% in 2010-11 to 23.31% in the year 2011-12. Similarly, the aggregate losses on subsidy received basis increased from 23.60% in the year 2010-11 to 24.96% in 2011-12.
(i) On an aggregate basis utilities in 19 States and the UT of Puducherry have shown deterioration in book profits/increase in book losses during the year 2011-12 over the previous year 2010-11 amounting to Rs.16,035 Crs
(j) The net worth decreased from Rs.14,973 Crs. as on 31st March 2010 to Rs.5,314 Crs. as on 31st March 2011. The net worth turned negative to Rs.31,812 Crs. as on 31st March 2012.

9. The aforesaid summary indicates that the situation is alarming. Despite incentives offered by the Central Government, the fixation of remunerative price by the CERC to Generators, the manifold increase in the power tariffs payable by the consumers, still the sector is sinking. The huge money pumped in the sectors seems to have just disappeared. Hence there is something radically wrong either with the system or working. Therefore one can draw the following inferences:-
(i) the investment worth thousands crores of rupees seems to have gone down the drain;
(ii) The investment claimed to have been invested has failed to achieve the targeted results because the investment was made only on paper.
(iii) the policies initiatives lacked the system of checks or balances;
(iv) the PSU’s related to Power sector have earned profit at the cost of the consumers, still the sector is sinking. The huge money pumped in the sectors seems to have just disappeared. Hence there is something radically wrong either with the system or working. Therefore one can draw the following inferences:-

(ii) Power Grid Corporation
(a) In 1980, the Rajadhyaksha Committee on Power Sector Reforms submitted its report to the Government of India suggesting that extensive reforms were needed in the Indian power sector. In 1981, the Government of India took a policy decision to form a National Power Grid, which would pave the way for the integrated operation of the central and regional transmission systems.
(b) In October 23, 1989 under the Companies Act, 1956, the National Power Transmission Corporation Limited was formed, and assigned the responsibility of planning, executing, owning, operating and maintaining the high voltage transmission systems in the country. In October 1992, the National Power Transmission Corporations name was changed to Power Grid Corporation of India Limited, as we know of it today.

(iii) Power Trading Corporation
PTC was established in the year 1999 as a Government of India initiated Public-Private Partnership, whose pri-
mary focus is to develop a commercially vibrant power market in the country. PTC is the pioneer in implementing the power trading concept in India and has successfully demonstrated its efficacy in optimally utilizing the existing infrastructure within the country to the benefit of all. (c) PTC has maintained No. 1 position in electricity trading since sustained trading began in 2000-01. It seeks to provide holistic services in the power trading market, including intermediation for long-term supply of power from identified domestic IPPs and cross-border power projects, financial services like providing equity and debt support to projects in the energy value chain through its subsidiary PTC India Financial Services (www.ptcfinancial.com), fuel intermediation/ aggregation for cross-border power plants through PTC Energy Ltd. and advisory services among others. (d) PTC today is not just the leading power trader in the country, but also the co-promoter of 1st National Power Exchange in the country besides diversifying into the unique role of a Complete Energy Solutions Provider.

11. As per Balance sheet available on the websites of all the three PSUs, now all these three PSUs are profit making entities as is evident from Table 1. 12. The collective losses suffered by the entire sector are summed up in Table 2.

13. Therefore, it is obvious that the PSU created out of tax payer’s money to sub serve the purposes of the development of the Power Sector have become separate profit making entities. Therefore, the profit earned by these PSUs is part of the loss suffered by the sector. Therefore, it is important today to take a holistic view whether these PSUs are to enrich themselves at the cost of the Consumer who bears the brunt of contributory cascading cost of power.

Table 1 (Rs. in Crore)

<table>
<thead>
<tr>
<th>Year</th>
<th>PGC</th>
<th>PFC</th>
<th>PTC</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012-13</td>
<td>4234.5</td>
<td>30.09%</td>
<td>4420</td>
<td>45.80%</td>
</tr>
<tr>
<td>2011-12</td>
<td>3254.95</td>
<td>20.69%</td>
<td>3032</td>
<td>15.72%</td>
</tr>
<tr>
<td>2010-11</td>
<td>2696.89</td>
<td>32.13%</td>
<td>2620</td>
<td>11.15%</td>
</tr>
<tr>
<td>2009-10</td>
<td>2040.94</td>
<td>20.72%</td>
<td>2357</td>
<td>19.65%</td>
</tr>
</tbody>
</table>

Table 2 (Rs. in Crore)

<table>
<thead>
<tr>
<th>Year</th>
<th>Loss- State utilities (after subsidy)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012-13</td>
<td>NA</td>
</tr>
<tr>
<td>2011-12</td>
<td>45382</td>
</tr>
<tr>
<td>2010-11</td>
<td>53986</td>
</tr>
<tr>
<td>2009-10</td>
<td>67006</td>
</tr>
</tbody>
</table>

Regulatory Mechanism

14. Most of the State Governments have constituted the State Electricity Regulatory Commissions. In case of the Union Territories Joint Commission has been appointed. The Forum of Regulators has also been appointed under section 166(2) of the Electricity Act, 2003. The Forum consists of Chairperson of Central Electricity Regulatory Commission (CERC) and Chairpersons of State Electricity Regulatory Commissions (SERCs). The Chairperson of CERC is the Chairperson of the Forum. The Business is conducted under Forum of Regulators (Procedure for Transaction of Business) Rules, 2009. Despite all this the public confidence in regulatory mechanism has been completely eroded due to opaque and non transparent tariff fixation. In this regard I would like to refer to the Regulatory process followed in the Capital City of Delhi which could be an eye opener for all.

Delhi Electricity Regulatory Commission

15. As envisaged under the Electricity Regulatory Commissions Act, 1998 the legislative assembly of the National Capital Territory of Delhi enacted the Delhi Electricity Reforms Act, 2000 (hereinafter referred to as “DERA”) which provided for the constitution of an Electricity Commission, restructuring of the electricity industry (ration-lization of generation, transmission, distribution and supply of electricity), increasing avenues for participation of private sector in the electricity industry and generally for taking measures conducive to the development and management of the electricity industry in an efficient, commercial, economic and competitive manner in the National Capital Territory of Delhi.

16. Section 3 of the DERA provided for the establishment and constitution of the Electricity Regulatory Commission for the National Capital Territory of Delhi to be known as “the Delhi Electricity Regulatory Commission”. Under the said provision, on 3rd March, 1999, the Government of NCT of Delhi constituted the Delhi Electricity Regulatory Commission it became operational from December 1999.

17. Section 11 of the DERA laid down the following functions of DERA – (a) to determine the tariff for electricity, wholesale, bulk, grid or retail, as the case may be; (b) to determine the tariff payable for the use of the transmission facilities; (c) to regulate power purchase and procurement process of the licensees and transmission utilities including the price at which the power shall be procured from the generating companies, generating stations or from other sources for transmission, sale, distribution and supply in the National Capital Territory of Delhi;
(d) to promote competition, efficiency and economy in the activities of the electricity industry to achieve the objects and purposes of this Act;
(e) to promote competitiveness and make avenues for participation of private sector in the electricity industry in the National Capital Territory of Delhi and also to ensure a fair deal to the customers.

18. The provisions of the Electricity Act, 2003 relevant for tariff setting are mentioned below:-

(i) Under section 61, the Appropriate Commission is to specify the terms and conditions for the determination of tariff, and in doing so, shall be guided by the following:-
(a) the principles and methodologies specified by the Central Commission for determination of the tariff applicable to generating companies and transmission licensees;
(b) the generation, transmission, distribution and supply of electricity are conducted on commercial principles;
(c) the factors which would encourage competition, efficiency, economical use of the resources, good performance and optimum investments;
(d) safeguarding of consumers' interest and at the same time, recovery of the cost of electricity in a reasonable manner;
(e) the principles rewarding efficiency in performance;
(f) multi-year tariff principles;
(g) that the tariff progressively reflects the cost of supply of electricity and also reduces cross-subsidies in the manner specified by the Appropriate Commission;
(h) Fix trading margins and monitoring closely so as to ensure that the traders do not indulge in profiteering in case of scarcity;
(i) the promotion of co-generation and generation of electricity from renewable sources of energy;
(j) the National Electricity Policy and tariff policy.

(ii) Section 64 prescribes for procedure for tariff order i.e. making of an application, its publication, considering all suggestions and objections received from the public and issue of a tariff order or rejecting of the application if it is not in accordance with the provisions of this Act and the rules and regulations made thereunder or the provisions of any other law for the time being in force:

(iii) Section 86 prescribes the functions of the State Commission such as –
(a) determine the tariff for generation, supply, transmission and wheeling of electricity, wholesale, bulk or retail, as the case may be, within the State;
(b) regulate electricity purchase and procurement process of distribution licensees including the price at which electricity shall be procured from the generating companies or licensees or from other sources through agreements for purchase of power for distribution and supply within the State.
(iv) Section 87 provides for the establishment of State Advisory Committee comprising of not more than twenty-one members to represent the interests of commerce, industry, transport, agriculture, labour, consumers, non-governmental organizations and academic and research bodies in the electricity sector.

(v) Section 88 provides that the State Advisory Committee shall advise the Commission on –
(i) major questions of policy;
(ii) matters relating to quality, continuity and extent of service provided by the licensees;
(iii) compliance by licensees with the conditions and requirements of their licence;
(iv) protection of consumer interest; and
(v) electricity supply and overall standards of performance by utilities.

(vi) Section 180 provides the State Government to make rules for carrying out the provisions of the said Act.

(vii) Section 181 empowers the State Commission to make regulations consistent with the said Act and the rules to carry out the provisions of the said Act and provide for the following matters:

“(zd) the terms and conditions for determination of tariff under Section 61;

(ze) details to be furnished by licensee or generating company under sub-section (2) of Section 62;

(zf) the methodologies and procedures for calculating the expected revenue from tariff and charges under sub-section (5) of Section 62.”

(viii) Under Section 185, the Indian Electricity Act, 1910 (9 of 1910), the Electricity (Supply) Act, 1948 (54 of 1948) and the Electricity Regulatory Commissions Act, 1998 (14 of 1998) have been repealed and Section 185(3) stipulates that the provisions of the enactments specified in the Schedule to the Act not inconsistent with the provisions of the Act shall apply to the States in which such enactments are applicable. DERA being one of the enactments mentioned in the Schedule, its provisions to the extent not inconsistent with the provisions of the Electricity Act, 2003 are applicable in the National Capital Territory of Delhi.

(ix) DERC, in exercise of powers vested in it under sub-sections (zd), (ze) and (zf) of Section 181(2) read with Sections 61, 62 and 86 of the Electricity Act, 2003 has now formulated the following Regulations effective from 1st April 2012 for a period of three years unless reviewed earlier covering:-

(A) Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2011:-

The Commission shall set targets for the items or parameters that are deemed to be “controllable” and which include:

i. Availability of the Transmission System;

ii. Operation and Maintenance Ex-
penditure which includes employee expenses, repairs and maintenance expenses, administration and general expenses and other miscellaneous expenses viz. audit fees, rents, legal fees etc;

iii. Return on Capital Employed; and

iv. Depreciation.

**Truing Up**

b. For controllable parameters,

i. Any surplus or deficit on account of Operation and Maintenance (O&M) expenses shall be to the account of the Licensee and shall not be trued up in ARR; and

ii. Depreciation and Return on Capital Employed shall be trued up every year based on the actual capital expenditure and actual capitalisation vis-à-vis capital investment plan (capital expenditure and capitalisation) approved by the Commission:

Provided that any surplus or deficit in Working Capital shall be to the account of the Licensee and shall not be trued up in ARR:

Provided further that the Commission shall not true up the interest rate, if variation in State Bank of India Base Rate as on April 1, 2012, is within +/- 1% during the Control Period. Any increase / decrease in State Bank of India Base Rate beyond +/- 1% only shall be trued up.

(B) Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Generation Tariff) Regulations, 2011:--

The Commission in specifying these Regulations shall be guided by the principles contained in Sections 61 and 62 of the Act to encourage competition, efficiency, economical use of resources, good performance and optimum investments.

a. The Commission shall adopt Multi Year Tariff Framework for determination of tariff for each year of the Control Period.

b. The Multi Year Tariff framework shall be based on the following:

i. Business Plan of the generating company (plant wise separately) for the entire Control Period to be submitted to the Commission for approval, prior to the start of the Control Period;

ii. Applicants’ forecast of expected tariff for sale of power for each year of the Control Period, based on reasonable assumptions of the underlying financial and operational parameters, as submitted in the Business Plan;

iii. Trajectory for specific parameters shall be stipulated by the Commission, where the performance of the Applicant is sought to be improved through incentives and disincentives;

iv. Annual review of performance shall be conducted vis-à-vis the approved forecast.

(C) Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011 considering the following:--

(i) True Up

The true up across various controllable and uncontrollable parameters shall be conducted as per principle stated below:

(a) Variation in revenue/expenditure on account of uncontrollable sales/power purchase respectively shall be trued up every year;

(b) For controllable parameters,

(i) Any surplus or deficit on account of Operation and Maintenance (O&M) expenses shall be to the account of the Licensee and shall not be trued up in ARR; and

(ii) Depreciation and Return on Capital Employed shall be trued up every year based on the actual capital expenditure and actual capitalisation vis-à-vis capital investment plan (capital expenditure and capitalisation) approved by the Commission:

Provided that any surplus or deficit in Working Capital shall be to the account of the Licensee and shall not be trued up in.

**ARR**

Provided further that the Commission shall not true up the interest rate, if variation in State Bank of India Base Rate as on April 1, 2012, is within +/- 1% during the Control Period. Any increase / decrease in State Bank of India Base Rate beyond +/- 1% only shall be trued up.

19. It may be seen here that Regulations except in case of Generation are
silent on competition in case of Generation. The Regulations also provides for True Up and Prudence Check. The fact remains that DERC has admitted that it has not Trued Up the capitalization for previous MYT. DERC has rendered findings in each Tariff Determination order passed by it that it has carried out Prudence Check, but fact remains that the Prudence Check has not been carried out till date.

Ground realities
20. I had been participating in all the proceedings of Delhi Electricity Commission since its inception. The first order passed by the Commission on 16-01-2001 had accepted all our suggestions and had issued directives. Thereafter in 2009 I was inducted as Member of State Advisory Committee to represent Consumers. I am sharing my experience with you all that are not only shocking but also demonstrate the sad state of affair.

21. Once I joined the State Advisory Committee to represent Consumers, the first rude shock I received was that the Commission had to accept that it does not know how to reconcile the Financial and regulatory accounts. Therefore, after much of persuasion the Commission agreed to appoint Institute of Chartered Accountants of India (ICAI) to help the Commission in developing the suitable mechanism. However, due to lack of interest both from the Commission and ICAI, somehow, this initiative failed. Now for the first time the DERC has come out with Draft DERC (Power Regulatory Accounting) Regulations, 2013. My endeavour to find out whether any other Regulator has introduced such Regulations or not did not yield any results.

22. The other rude shock in store was that once the DERC is incapable of reconciling the Regulatory accounts with financial accounts, then who was drafting orders on behalf of Commission? How did the Commission arrive at Tariff Determination?

23. Therefore, after exercising the RTI, I came to know that DERC on 15th December, 2011 appointed a Consultant to carry out Prudence Check of true up petitions for the Financial Year 2010-11 of all the four DISCOMS and its tariff adjustments in accordance with the provisions of the existing MYT Regulations for the Financial Year 2007-12. However, the Consultant never disclosed the conflict of interest as it was statutory auditor for parent company of two DISCOMS.

Prudence Check
24. Though in every Tariff Determination Order passed by the DERC, there exists a specific table indicating the steps taken for prudence check. Unfortunately, once my colleague obtained copies of internal notes under RTI and perusal of said notes starting from 18th April 2012 to 27th July 2012, it emerged that the said Consultant did not-(i) Submit a comprehensive report highlighting the major anomalies by it during the course of Prudence Check; (ii) have the information related to prudence check in documentary form; (iii) keep the record of Prudence Check observations, as it is not part of deliverables by the Consultant. The consultant maintained that they have been associated with the issuance of the Tariff order for DERC for 4 times now and this has never been the practice followed in the assignment execution in the past and that they have been completed 70% of the Prudence Check without keeping any record of the observations and as such submission of such report by them was not possible and that they had been told that the report of Prudence Check will be done by the staff of the Commission;

25. That while the blame game was going on and time had come to pronounce the Tariff Determination Order that was pronounced, the Commission was still struggling with the appointment of a capable Consultant who could understand both technical as well as accounting issues.

26. Unfortunately DERC is unmindful of the observations by Hon’ble High Court of Delhi in Para 72 of the order dated 23rd May 2011 in W.P.(C) No. 4821/2010, between Nand Kishore Garg vs. Govt. of NCT of Delhi and Ors., relevant text of which is reproduced as under:-

We have reproduced paragraphs from the aforesaid decision in extended only to highlight the role ascribed to the Commission under the act and the interpretation place by their Lordship of the Apex Court on various provisions. Keeping the statutory role ascribed to it and the jurisdiction determined by the Apex Court, the Commission has to function with responsibility, intellectual integrity, consistent objectivity and transparent functionalism appreciating the essential nature of the regulatory body. We emphasize on intellectual integrity and transparent functioning as we totally dissatisfied with the way the Commission has proceed with the manner of determination. We may also note here that if a state chaos and anarchy has ushered-in in the Commission the State Government is also responsible by unjustifiably intruding and encroaching on the functions of the Commission by interdicting. We have already held that the State Government has no power to restrain the Commission in the manner it has done. This is not in the fitness of things. This Court hopes and trusts that the Commission and the State shall remain within their boundaries and function within the statutory parameters.

27. Even the Appellate Tribunal for Electricity while passing order in Appeal number 184 of 2011 on 27th February 2013 between Delhi Transco Ltd., vs. DERC and Others, in Paras 39 to 42 had castigated the DERC.
The relevant text of aforesaid Paras is as under:-

39. The principle of judicial discipline requires that the orders of the Appellate authorities should be followed scrupulously by its subordinate authorities. If the Subordinate authority refuses to carry out the directions or to follow the dictums given by the superior Tribunal in exercise of Appellate powers, the result would be chaos in the administration of the justice. In fact, it will be destructive of one of the basic principles of the administration of justice.

40. If the State Commission develops such a mindset that they cannot be questioned by the Appellate Authority at any cost, then there would be serious havoc.

41. As a quasi judicial authority, the State Commission is expected to know the law prescribed under the Act and the legal procedures laid down by this Tribunal and Hon’ble Supreme Court.

42. In this case, with great restraint, we are constrained to observe the conduct of the State Commission who has not cared to follow our directions, would reflect lack of judicial approach, lack of judicial knowledge and lack of judicial ethics. We do not want to say more than this.

True up of Capitalization

28. The DERC while passing Tariff Determination order for the year 2013-14 has admitted the fact that in absence of DATA from the DISCOMS, it has allowed provisional True up on account of Capitalization. The moot question arises that when there is no provision for provisional true up, how DERC has provisionally true up the capitalization in view of the following facts:-

(i) Report submitted by Administrative Staff College of India, Hyderabad, had serious apprehensions on the asset registers of fixed assets maintained by two DISCOMS that should have included the assets transferred by erstwhile Delhi Vidyut Board and also the assets acquired by both of them after unbundling of DVB;

(ii) DERC wanted ICAI to assist it in conducted physical verification of the assets held by the DISCOMS for the following period
   (a) Assets transferred by erstwhile DVB as on 01-04-2002 to the DISCOMS;
   (b) Assets acquired by DISCOMS from 01-04-2002 to 31-03-2007;
   (c) Assets acquired by the DISCOMS from 01-04-2007 till 31-03-2011 – 1st MYT period.

Revenue Gap

29. The DERC, on its own without even discussing in the State Advisory Committee has forwarded a Statutory Advice under section 86(2) of the EA amongst other recommendations, recommended:-

(i) Bailout package to DISCOMS;
(ii) Allocation of coal to power stations supplying power from the mines with shortest distance or allocate additional power from pit-head stations of NTPC from Northern and Western regions;

30. The question arises, the DERC has worked out revenue gap as claimed by the DISCOMS, is it not mandatory for the DERC to:-

(a) Work out the amounts due to/recoverable from the DISCOMS on account of prudence check:
(b) Work out the amounts due to / recoverable from the DISCOMS on account of True up of Capitalization.

State Advisory Committee

31. The DERC despite having been advised both by the Hon’ble High Court of Delhi and Appellate Tribunal for Electricity refuses to mend its ways and continues to work in isolation without discussing the Important Policy matters in the State Advisory Committee. The DERC it seems entertains a view that it is Supreme and discussion within SAC are merely a formality. The Commission till date has not been in a position to:-

(a) Enforce the DERC (Supply Code & Performance Standards) Regulations, 2007;
(b) Finalize the Draft DERC (Supply Code & Performance Standards) Regulations, 2012;

In both the aforesaid Supply Code the entire burden of compliance has been shifted on the Consumers and not even a word has been mentioned about Supply Code or Quality of Supply
(c) Address the issue of Residual back flow leading to inflated bills of the consumers;

Experience

32. From my experience with Regulatory mechanism, I feel that the time is ripe to take a relook at the Regulatory Mechanism and revamp the whole set up by infusing young professionally qualified professionals in the Regulatory Mechanism instead of making the set up as retirement berths for the retired Bureaucrats. I do not see any reason when the CERC fixes up rates for sale of power by the Generating Units, how and why the Generators are suffering?

33. Equally strange is the fact that despite collecting amounts from Consumers, why the DISCOMS are in loss? Why the DISCOMS are failing to provide DATA for Capitalization True Up or for Prudence Check?

Consumer’s Prospective

Power Corrupts and Absolute Power Corrupts Absolutely. When it comes to POWER, as in Energy, it is Corrupted Totally even before it is conceived or when it’s still in the womb, we all know most of the Coal Blocks were allocated for setting up Power Plants and what came off it.

34. Cheap power: At the time of privatization, keeping in view Chile experience a promise was held out that by curbing Theft and ushering Efficiency that would result in huge savings that would be passed on to consumers and tariffs would reduce after five years. The opposite happened
power that was Rs. 2.50/- has ended up at Rs. 8/- and the theft brought down to 15% from around 60% with no corresponding benefit to consumers, it’s calculated that every 1% drop saves 90 crores. Instead we have had a 300% jump in tariffs. The alibi given is that Power Purchase cost has gone up, that has substantially come down over the years. Even power purchase during emergency has also come down.

35. On one hand PFC comes out with a report that all the three DISCOMS in Delhi are in profit. I fail to understand that how come as per Regulatory Accounts there are huge losses. At times I pose a question to myself that is it a case where two balance sheets are prepared one for Income Tax and one for DERC or is it a case of Regulator’s incompetence to reconcile regulatory accounts with financial accounts. To top it all they have not been paying their dues to the Power Producers, Banks or the Government, so where is the question of Fuel Cost Adjustment ….. we know now for a Fact that how come as per Regulator’s incompetence to reconcile regulatory accounts with financial accounts are treated as luxuries.

36. Stable power: Performance Standards for delivery of services were meant to have been framed by 2005 and have yet to be notified, giving DISCOMS an escape route for deficient service. Inflated billing is due to Residual Back Flow in Neutral is a direct result of Performance Standards not being in place.

37. Absolute earth potential: Consumers have been demanding strict Compliance in the Matching of Neutral to the Absolute Earth Potential as per relevant Act/Code. This alone is the main cause of Fluctuations and Spikes, resulting in damaging expensive household appliances like TV, Fridge, AC etc and unnecessary expenditure on Voltage Stabilizers. Performance Standards pertaining to Stable and uninterrupted 24X7 Power was one of the reason why Privatization was done. Consumers should be compensated for the losses due to Fluctuations and Spikes and be a part of Schedule I of Guaranteed Performance Standards. In the absence of any punitive provisions DISCOMS do not find it important to invest in such infrastructure.

38. 24X7 power supply: Uninterrupted 24X7 Power Supply has remained a dream that was sold to bring in Private Players. Rampant power cuts are keeping the Inverter Industry alive and the consumer foots the bill for charging and maintaining inverters amounting to average Rs. 1200/- per month. Are these the Performance Standards that were envisaged in the Act to be in place on or before 2007? DISCOMS cannot be allowed to Charge Five Star and Serve Dhaba.

39. End Monopoly: Open Access was to have been in place by the year 2009, it has remained a Pipe Dream even in Delhi, with Regulators and Government playing in the hands of Private Players.

What’s more the DERC is making some DISCOMS permanent fixtures by investing in expensive exercise of Time of Day Metering System and asking these very Private Players to invest and put up equipment to measure Usage Patterns. Once such huge investments are made how will DERC ask them to make way for Open Access Policy?

40. Fuel Charge Adjustment: This is another head in which Lack of Transparency is working against the Consumers. What is the total component of Fuel Cost in the Production of Power? We believe it is not more than 15%, a little higher in case of inefficient Plants. How can DERC allow 2%, 5% and 7% as Fuel Charge Adjustment ….. we know now for a Fact that our Central Government Gifted Coal Blocks for free, we also know that DISCOMS have not been paying their Dues to NTPC and others for the power Purchased (the Govt. had to bail them out with our Rs. 500cr package), so where is the question of Fuel Cost Adjustment. In a CERC meeting it was brought to light that NTPC has no scientific system of calculating fuel cost and the Power Producer ie NTPC itself decides how much should be the increased charge ARBITRARY and protested by all DISCOMS.

41. Conduct Energy Audit: Like Air and Water, Power too is essential for existence. This is not a luxury anymore and high use domestic consumers are already paying higher slab rates. Today citizens have to draw water to water purifiers, from inverters to voltage stabilizers and last but not the least Mosquito repellents all point to unnecessary power consumption due to Govt. Apathy. Computers, Refrigerators, Televisions are as much a part of daily life as Air and Water and cannot be treated as luxuries.

The energy Audit should Revisit its Public Service Entitlement Code, bureaucrats who are on an overdrive installing AC’s in Govt. offices throwing the rule book on entitlement to the wind. Gone are the days when Rs. 20,000/- AC’s were needed to protect Rs. 5 lac PC’s. Today PC’s are more robust and very cheap and do not require Air Conditioning to operate. Remove AC’s from offices of those not entitled for the same. Why should consumers subsidize government officials’ fancy life style? Who decides how much power is needed to keep the Govt. cold to people’s miseries?

The Energy Audit should also look into the Energy Guzzlers in Industry, Commercial Establishment, Street Lighting, Neon Signs, Hoardings etc. The industry and Commercial establishments recover the Energy Component from the consumer in the form of the Final Product Cost.

We see no reason that Energy Guzzlers like Government Departments, Hospitals (Private), Private Schools, Corporate Offices, Shopping Malls, Banquets, Farm Houses etc. be allowed
to burden the Domestic Consumer by way of eating up the Cheap Power Quota available from NTPC, SEBs etc.

Delink Power consumed by Domestic consumers and let Power Guzzlers buy power from open Market, right now there is no incentive for them to conserve energy as they recover their life style from the cost of their Product or Service.

42. Change of city skyline: Prudence Checks are mandatory to ensure that Capital invested has actually happened and not on paper alone. Overhead Wires dot the cityscape and Crumbling Transformers that breakdown due to local faults leading to long power cuts. DISCOMS have been given windfall guaranteed ROI of 16% of capital invested and there is no check as to where the capital was invested, which leads to the Citizens call for Regulating the Regulator.

**Way forward**

43. Once we look at the Tariff Determination Orders and other orders passed by the DERC, it emerges that the orders are dealing with financial viability of the DISCOMS and the technical issues like integration of old system with new metering, stabilization, ungradation of infrastructure, assessment of voltage wise loss levels and the cost thereof and balancing of supply at transformers and supply of quality power have not been addressed.

44. The issue of lack of transparent working of the DERC as well as DISCOMS is another key issue that has created an atmosphere of mistrust and the consumers for various reasons feel cheated.

45. Lack of Government’s initiative to ensure fulfillment of the objectives of the EA, NEP and NTP is another area of concern.

46. The PSU’S have become money spinning machine instead of facilitator for the Sector. Despite several initiatives claimed to have been undertaken to save the sector, still the sector is sinking. There is a need to revisit the Policies and actions taken in this regard so as to take corrective steps without losing time. The issue is not Delhi centric but is a national issue. Delhi is just an example.

47. Unfortunately the sector is suffering due to built-in inefficiencies of Generation i.e. High Cost of generation and distribution – high transmission and distribution losses. Though the EA provides for encouragement of Competition in an area but somehow on ground instead of creating competition cartelization has actually taken place. The basin intent and purpose was to have more than one licensee in an area, which has not happened.

48. The DISCOMS are not in a position to invest in the infrastructure due to cost factors. Therefore, there is an urgent need to have a relook at the entire step of the sector. May be the generation and retail distribution be made more competitive and the transmission and distribution be retained with the State Governments. This would lead to healthy competition among generators necessitating elimination of avoidable overheads. While retail distribution can be made competitive by incentivizing the control and curb on theft, which has actually not taken place as of now.

49. The next important factor is the fixation of cost reflective tariff. Today in many States provide either free or subsidised power to agriculture sector. Therefore, this cost is factored in the tariff for other consumers. Very often the tariff for domestic consumers upto about 400 units is fixed on socio economic considerations, thus this also leads to cross subsidization. Another factor that leads to distortion in tariffs is purchase of costly power for high end consumers. Even that cost is factored while fixing tariffs for all consumers that includes domestic too. Therefore, there is a need to segregate the high end consumers and domestic consumers. This would also benefit the high end consumers because they can opt for purchase of power from more competitive source once there is a competition.

50. As on date, authentic DATA on actual voltage wise transmissions losses or Distribution Line losses is not available. Therefore, it is not possible to correctly estimate cost to be factored while fixing tariffs.

51. Therefore, this necessitates introduction of system of voltage wise fixation of tariffs instead of category wise for which the State Regulator shall have to take initiative.

52. Hence in larger interest it is important to review the entire situation in a holistic manner and take necessary steps for overall development. **MA**

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THE CRITICAL BALANCE: POWER SUPPLY, ENVIRONMENT AND THE ECONOMY

Unless the capability of offering power to a large section of the people still suffering from zero or inadequate supplies rises, we do not stand a possibility of being able to assess the relationships between power supply and economic outcomes.
Energy policies in India have long matured. The establishment of the Kalpakkam Nuclear Power Station, way back in the year 1971, leapfrogged India into the world of nuclear power-driven energy facilities. It is a comprehensive nuclear power production facility with fuel reprocessing and waste treatment facility that includes plutonium fuel fabrication for fast breeder reactors (FBRs). It is also India’s first fully indigenous constructed nuclear power station. It has two units of 220 MWe capacity each and have been running successfully so far, although with a couple of critical cases in 1985 and 1987 and admittedly a few cancer related deaths caused by nuclear radiation.

It is well known that in the present times the rise in demand for electricity in India is commensurate with the economic growth that the country has experienced during the last two decades. However, the nuclear power stations along with other traditional sources have not been able to match the supply. Consequently, there is huge power deficit in various parts of the country. In fact, the Queen’s Necklace in the Mumbai sea-front, the well-lit five star hotels in New Delhi or Bengaluru are snapshots of India basking in a lit-up world, are not at all part of the routine for 40% of Indians. Since, the traditional modes of power generation such as thermal power and hydel power remain insufficient for lighting countless homes and business establishments on all corners of the country, still more traditional sources such as coal, kerosene, diesel, and firewood serve as major substitutes for electricity. Among these, the fixed costs of extending electricity connections turned out to be restrictively high for public and private companies alike, and have left large zones without adequate power supply. Poverty in many other places is responsible for very low demand for electricity with similar outcomes. Other than electricity generation, traditional sources of fuel needless to mention, are also significantly used in day-to-day activities in the entire world, of which automobiles capture the greatest share. In this article allow me to continue with the issues centric to power generation in the country rather than (surely, more pressing) concerns about use of petroleum and other fossil fuels. – World Development Report, various years, World Bank, Washington DC.

Chart 1 shows that among the major south Asian countries, both Sri Lanka and Pakistan have made some progress in terms of generating power through alternative and nuclear sources, albeit as proportion of total energy use these are still relatively small. In fact, for Sri Lanka, the share went up close to 7 percent during 1995–96 following which the share took a nosedive and of late remained close to 5%.

For India, the rate of progress is visibly slow touching 3% only recently, while Pakistan despite annual fluctuations has raised the share to approximately 5% in 2011.

All these lead to continued use of fossil fuel in India (as also in many other parts of the world) generating more heated debates than light and energy. The environmental impact of burning fossil fuels has consequently come under intense policy discussion in governmental and other forums. The magnanimous energy policy summits in Rio, Kyoto or Copenhagen bear testimony to the critical nature of the issue. In fact, given the extent of mass sensitization and awareness that comes with these summits their scale can be best compared with the formations of the United Nations or the World Trade Organization or even with breaking of a global war. Fossil fuel or otherwise, the energy consumption has been rising significantly commensurate with the growing population and the intensive use of electrical and electronic equipments replacing traditional techniques. It should also be remembered that the technological changes that has swept the production fronts use energy intensively. Economic growth in the developing and emerging countries is also responsible for rise in demand...
for energy-intensive commodities and services. In this regard, the following chart offers consumption of electricity per capita for the South Asian countries over the last two decades using the World Development Report for various years.

*Chart2* shows that the per capita consumption in India is significantly higher than that achieved in the neighboring countries and reaches 700 KWh annually. This is at least two hundred KWh more than that in Pakistan and Sri Lanka during the latest periods. Interestingly, much of this still comes from the traditional sources including coal and oil, which continue to pose problems for the environment in terms of the negative externality associated with burning fossil fuel. The fairly limited use of alternative sources of power in these countries is clearly reflected in *Chart1*. The economic trade-off and the policy questions are central to these observed realities.

And it should not surprise any one. Combating global warming demands nothing short of a global war against sources that lead to rise in surface temperature. Strange as it might sound, in the decade of 1970s those concerned discussed more about ‘global cooling’ and not ‘warming’. Articles published in the *New York Times, News Week* and such trusted outlets and also directly quoting from even more dependable sources like the National Academy of Sciences, warned that the climate change would force economic and social adjustments on a global scale and that the political leaders were not even discussing potential assuaging strategies. The average surface temperature in the Northern Atmosphere had fallen by 0.28 degree Celsius between 1945 and 1968. Although the absolute fall in temperature was fairly low, many reports at that time argued that there was a large increase in snow cover between 1964 and 1972 pushing the earth one-sixth on its way towards the average ice-age temperature.

This threat has turned 180 degrees so that the earth is no longer a ‘cool’ place but a ‘warm’ boiling pot. The use of ‘black soot’ then proposed by scientists to melt ice caps has instead filled the atmosphere and led to trapping of green house gases chiefly responsible for rise in the surface temperature. However, scientific sources also acknowledge that about 50% of all green house gases actually come from exhalation, belching and manure of cud-chewing animals like cows and ships. The methane released from these sources into the atmosphere is twenty-five times more potent as source of GHG than all CO2 released by cars and humans.1

This makes the science of environment protection pretty complex. In a way the environmental scientists do not have the luxury of running controlled laboratory experiments quite like other practitioners of pure and dismal sciences (I mean, economics) and must therefore rely heavily on observed data. These include historical data on rainfall, temperature, evaporation, and even animal emis-

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1 More on this is available in *Super Freakonomics* by Steven Levitt and Stephen Dubner, published in 2009 (Harper Collins).
sions. Furthermore, in order to predict the effect of GHG on temperature the appropriate models must factor in changes in the above-mentioned variables as also the growth in demand for automobiles, processed food, factory-based consumer and capital goods and many such dynamic relations. This makes the predictions rather uncertain, which has in turn influenced the core choices to be made in terms of policy formulations at the national and supranational levels. Economist’s (unlike environmentalists) encountering this issue as neutral researchers (with some policy orientation of course) may still have the luxury of staying in their arm chairs comparing immediate costs and benefits of environmental changes vis-à-vis what lies ahead and safely issue policy briefs based on subjective discount rates. That seems not enough, unfortunately.

In fact, the scale of the problem is hardly of the nature, where economists, environmental scientists, lawyers or chemists can independently offer meaningful solutions. It must come from all of us in a much more coherent and credible manner. This is currently well appreciated in almost all relevant forums. But the common homo economicus, may react to these concerns in various possible ways primarily due to lack of coordination, communication and often owing to the fact that individuals do not realize that their actions may generate ‘externalities’. That the principal problem with restoring and improving environmental quality is one of externality, is by now well conceived. A negative externality would mean that an individual does not have to bear the entire burden of one’s action that affects the society in a negative way. As long as the person or the institution is not made to pay in full for dumping (and this may literally mean dumping environment damaging substances) the socially and economically undesirable substances, the resources for mitigating the ill effects must come from somebody else. In fact, negative externality means that an action taken by an individual generates costs to be borne, without agreeing, by someone else in part or in full. For example, those living downstream from an ammonia factory bear the stench carried by air to their residence without automatic corrections made by the company. Conversely, the ones that generate a lot of positive externality to the society often do not get rewarded sufficiently, pushing them to produce the same in lesser quantities than the socially desirable level. Moreover, the usual mis-targeting of agents made to pay for reversing the extent of negative externality is both inequitable and welfare reducing. On the other hand, that the miscreant gets away with generating a lot of negative externality induces him to produce more than the socially desirable level of the substance. Not surprisingly therefore, the cross-currents and tensions with regard to the appropriate choice of policy may often lead to no consensus or deliberate neglect of socially optimal policy choices. One may recollect the infamous water pollution case by the Pacific Electric Company in California, which has now become an Oscar winning Hollywood film, ‘Erin Brokovich’. Such pollutions are negative externalities in the same vein as the cost of coal-based electricity does not include the price that the coal miners pay with ‘black lung disease’. The consumers did not have to pay for 300,000 mining related deaths in the US coalmines over the last century or the 36,000 per year death that China endures presently. In India, we do not have to pay for dumping 40% ash from use of coal on the environment. If these prices are internalized, many argue, consumption retracts depending on how elastic they are to price changes, industries contract, economies take a hit and global meltdown of a different nature may sweep in. If protection of environment comes at the cost of jobs and livelihood, the governments are made to believe in developed and developing countries alike, it cannot be a sustainable policy in the long run. The task at hand is hardly an easy one. Since the growth vis-à-vis environment-protection offers a set of choices
that need a careful balancing, in any political economy set up the task is quite daunting. Moreover, it is now agreed upon that an all-or-nothing solution much to the chagrin of the environmentalists, is infeasible. Is relatively clean nuclear power the then the savior of the world? If nuclear power and other fossil fuels are not used for power generation owing to safety and environmental considerations, can poorer countries bear the cost of mass solar panels in every rooftop in densely populated cities and town of the global South? Would India be able to invest in US$75 million projects to set up offshore wind turbines that can generate only 5 MW capacities in the same way Norway can afford it? Can we set up such power generators in the shores of Kerala or Goa, which would continue to supply undisturbed power even during high tides and storms? Can India request or put a mandate on its poor villagers to stop burning firewood, charcoal or cow-dung cakes and switch to relatively cleaner LPG? We certainly need to do all of these, but can we afford it in the visible short-run? Obviously, there are more questions than answers facing policy makers. The nuclear power perhaps could be a widely accepted solution, but are we ready to consider that if Fukushima can happen in Japan, which stands technologically so much more superior to developing countries of Asia, what chances do we have during crises? According to a recent paper by Padma Shri Prof. Srikumar Banerjee, Former Chairman of the Atomic Energy Commission of India (AECI), currently Bhabha Chair Professor at the BARC and the Chancellor, Central University of Kashmir, the security issues shall be well taken care of when the nuclear power stations start operating to their full capacities. Prof. Banerjee opine that given the modest resources of uranium (but a huge thorium reserve), India has chosen the option of closed nuclear fuel cycle from the very beginning. It seems that the energy policy in India is not about reduction of facilities or substitution between different facilities simply because 40% of the population still lives outside the power grids. To include them in, there can be no alternative to nuclear power plants and the necessary use of uranium, plutonium and thorium, which according to this schema part are part of a fuel cycle and hence re-usable. The problem of dumping nuclear waste is also directly minimized when fuel is recycled. This, by 2023–24 shall generate 23,000 MW of power going up to 60,000 MW by 2032. However, it would still be supplying not more than 10% of total power requirements of India by 2050 when the population in likely to stabilize at 1.5 billion. Over and above, some new technologies have been able to bring down the life of nuclear radiation to 300 years. The last statement would imply that in case of a nuclear accident, the 7th generation descendants with an average life span of 75 years for the seven generation forefathers, will not be exposed to the radiation anymore unless at least another accident happens in between. This is complicated; but nothing better seems available as far as nuclear capability goes.

The possible reconciliation between supply of energy and environmental protection as long as Fukushimas do not happen here or anywhere else, is largely the focus of the nuclear power plan in this country. The energy policy in India is not about reduction of facilities or substitution between different facilities simply because 40% of the population still lives outside the power grids. To include them in, there can be no alternative to nuclear power plants and the necessary use of uranium, plutonium and thorium, which according to this schema part are part of a fuel cycle and hence re-usable. The problem of dumping nuclear waste is also directly minimized when fuel is recycled. This, by 2023–24 shall generate 23,000 MW of power going up to 60,000 MW by 2032. However, it would still be supplying not more than 10% of total power requirements of India by 2050 when the population in likely to stabilize at 1.5 billion. Over and above, some new technologies have been able to bring down the life of nuclear radiation to 300 years. The last statement would imply that in case of a nuclear accident, the 7th generation descendants with an average life span of 75 years for the seven generation forefathers, will not be exposed to the radiation anymore unless at least another accident happens in between. This is complicated; but nothing better seems available as far as nuclear capability goes.

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Power development in India commenced at the end of the 19th century with the commissioning of electricity supply in Darjeeling during 1897, followed by the commissioning of a hydropower station at Sivasamudram in Karnataka during 1902. In the Pre – Independence era, the power supply was mainly in the private sector that too restricted to the urban areas. With the formation of State Electricity Boards during five-year plans, a significant step was taken in bringing about a systematic growth of power supply industry all over the country. A number of multi – purpose projects came into being, and with the setting up of thermal, hydro and nuclear power stations, power generation started increasing significantly.

Since independence, the growth of Indian Power Sector has been noteworthy. The increasing installed power capacity from 1,362 MW to over...
1,00,000 MW and electrification of more than 5,00,000 villages are impressive. In spite of this achievement, very high level of technical and commercial losses and level of commercial approach in the management of utilities created an unsustainable financial operation. The most important problem faced by the power sector in the irrational and unremunerative tariff structure. Out of total energy generated, only 55% is billed and ultimately 41% is realized from the consumer end. Lack of competition and monopoly status has made all the SEBs ineffective and commercially unviable leading to erosion of its internal resource generation.

The Government of India in the mid-term review of the Tenth plan recognized the fact that under-performance of the energy sector can be a major constraint in delivering a growth rate of 8% GDP during the plan period. To achieve Economic Growth, we need to and have to use more and more energy. Understanding energy cost is vital for creation of awareness and savings calculation. It calls for Management of Energy and the objective of which is to achieve and maintain optimum energy procurement and utilization, by minimizing energy costs and wastes (without affecting production & quality) and to reduce environmental effects. Very concerted efforts in a planned manner are to be established for Energy Management. Strategy needs to be established based on the target of energy conservation. Increasing pressure of population and increasing use of energy in different sectors of the economy is an area of concern for India. Despite the global financial crisis, India’s energy demand continues to rise.

The end users of electricity like household, farmers, commercial establishments, industries are confronted with frequent power cuts, both scheduled and unscheduled. Power cuts, erratic voltage and low or high supply frequency have added to the ‘power woes’ of the consumer. These problems enumerate from:

- Inadequate power generation capacity
- Lack of optimum utilization of the existing generation capacity
- Inadequate and aging sub-transmission links
- Inadequate and aging sub-transmission & distribution network leading to power cuts and local failure/faults
- Large scale theft and skewed tariff structure
- Slow pace of rural electrification
- Inefficient use of electricity by the end consumer
- Lack of grid discipline

**Present scenario**

The power sector has been suffering from serious problems which were identified as far back as fifteen years ago. Though a number of corrective measures have been taken, they have yet to yield the desired results. The outcome is that the power sector faces an imminent crisis in almost all states. No State Electricity Board is recovering the full cost of power supplied, with the result that they make continuous losses on their total operations. These losses cannot be made good from state budgets, which are themselves under severe financial strain. As a result the SEBs are starved of resources to fund expansion and typically end up even neglecting essential maintenance.

The reasons for the huge losses of the SEBs are well known. Power tariffs do not cover costs because some segments, especially agriculture, but also household consumers, are charged very low tariffs, while industry and commercial users are overcharged. However, the overcharged segments do not always pay the high charges because of theft of electricity, typically with the connivance of the staff in the distribution segment, is very high. Of the electricity charges billed only 80% are actually collected. These large issues were hidden by claiming a large absorption of electricity in agriculture which is unmetered which enabled SEBs to claim T&D losses of around 24%. However, when actual losses were calculated more precisely in states undertaking power sector reforms, it was found that the actual T&D loss were as high as 45-50%.

Operational efficiencies in generation are also very low in some states. Overstaffing is rampant. Political interference in the management of SEBs has become the norm in most states, making it difficult to ensure high levels of management efficiency. If electric power is to expand to support 8% growth, a substantial expansion in domestic coal production will be needed. As a step towards reformation of the SEBs, the Government of India enacted the Electricity Regulatory Commissions Act 1998 in July 1998. One of the objectives of this Act was “improving the financial health of the SEBs which are losing heavily on account of irrational tariffs and lack of budgetary support from the state government.”

**The Electricity Act, 2003**

The provisions of this Act have been brought into force with effect from 10 June, 2003 [with this, The Indian Electricity Act, 1910, The Electricity (Supply) Act, 1948 and The Electricity Regulatory Commissions Act, 1998 stand repealed]. The main features of the Act are:

- Generation has been delicensed and captive generation freely permitted. Hydro projects would, however, need concurrence From the Central Electricity Authority.
- No license required for generation and distribution in rural areas.
- Transmission Utility at the Central as well as State level, to be a government company – with responsibility for planned and coordinated development of the transmission network.
The present energy problem which, in fact, has the dimensions of a crisis, has come about for two reasons: one is the growing demand for energy and the other is the growing world population. It is now recognised that energy must be treated as the previous commodity that it is, both at home and in the factory. With the ever widening gap between the demand and supply of energy, due to fast depleting fossil fuels on the one hand and phenomenal growth in energy requirements on the other, the need for energy conservation has become imperative. The first international conference of the Watt Committee on Energy held in UK in April, 1992, has expressed the view that half the energy currently used could be saved quite easily through a mix of measures. The three major concerns of the policy matters in dealing with the energy sector problems should be:

- Increasing availability of energy resources to meet growing demand in an optimal manner.
- Minimising environmental impact from use of resources and
- Promoting efficient use of energy resources.

**Facing the challenges: Demand-Supply mismatch**

The energy intensity of India is over twice that of the matured economies, which are represented by the OECD (Organization of Economic Co-operation and Development) member countries. India’s energy intensity is also much higher than the emerging economies – the Asian countries, which include the ASEAN member countries as well as China. We are the world’s 11th biggest energy producer, accounting for about 2.4% of the world’s total annual energy production and again, we are the world’s 6th largest energy consumer accounting for about 3.3% of the world’s total energy consumption. Seeing purely in our context, if India reaches 5000 KWH per Capita, which it should, because after all, that is our right – right to development; if that happens, India alone would require additional electricity that would constitute 40% of the present total world electricity production. This would amount to a tenfold increase in our electricity production. We thus have to cope up with a much bigger challenge even as compared to other developing countries, even China. We must have strategy to face the Demand-Supply mismatch in power sector.

The Power Finance Corporation Limited (PFC) was incorporated on 16 July, 1986 as part of Government of India’s initiative to enhance funding of power projects in India, with an objective to provide financial resources and encourage flow of investments to the power and associated sectors, to work as a catalyst to bring about institutional improvements in streamlining the functions of its borrowers in financial, technical and managerial areas to ensure optimum utilization of available resources, to mobilise various resources from domestic and international sources at competitive rates, to strive for upgradation of skills for effective and efficient growth of the sector, and to maximize the role of return through efficient operations and introduction of innovative financial instruments and services for the power sector. It works as Nodal Agency for Government Schemes.

**Ensuring sustainable development**

Our mother earth closes nothing, refuses nothing and shuts none but we, human beings through the development process has consumed natural resources, generated pollution primarily from 19th century till date and even today, if scientists are to be believed, Mother Earth has reached an alarming stage where the problems of global warming, rising of sea levels, drastic trends of climate changes is a threat to the very existence of human life on Earth. The industrial
processed has generated gases which have generated a blanket over the Earth trapping heat by the process known as Greenhouse Effect which experts believe is linked to the global warming and climate changes. Kyoto Mechanism has created an architectural framework for market based management of global atmosphere and thus has taken a positive step for a cleaner future.

The concept of Sustainable Development dates back a long way but it was at the UN Conference on Human Environment (Stockholm, 1972) that the International Community met for the first time to consider global environmental and developmental concerns and needs. United Nations Conference on Environment and Development (UNCED), also called Earth Summit, held at Rio de Janeiro laid the foundation for global deliberations on environment and sustainable development. The Summit agreed on Agenda 21 and the Rio declaration which led to agreement on two legally binding conventions on Biological diversity and the Framework Convention on Climate Change (FCCC). India had signed the United Nations Framework Convention on Climate Change (UNFCCC) on June 10th, 1992.

The Kyoto Protocol has identified three flexibility mechanisms to lower the overall costs to achieve the emission targets. They are:

I. Clean Development Mechanism (CDM)
II. Joint Implementation (JI) and
III. Emission Trading.

**Government Initiatives**

The ministry of Power is primarily responsible for the development of electrical energy in the country. The ministry is concerned with perspective planning, policy formulation, processing of projects for investment decisions, monitoring of the implementation of power projects, training and man-power development and the administration and enactment of legislation with regard to thermal and hydro power generation, transmission and distribution. In all technical matters, the Ministry of Power is assisted by the Central Electricity Authority (CEA).

A number of policies and initiatives have been taken by the Government of India so as to strengthen India’s position in the world scenario. Some of them which need mention are:

- Capacity Addition target of 78,700 MW for the 11th plan fixed by the Planning Commission.
- The Installed power generation capacity has increased from about 1,400 MW in 1947 to 2,09,276 as on 31-10-2012.
- 50,000 MW Hydro Electric Initiative launched by the Government in 2003-04.
- 20,334 MW Hydro Capacity Addition during 12th plan (2012-17).
- Setting up of Ultra Mega Power Project (UMPPs) with a view to provide power to all at a reasonable rate and ensuring fast capacity addition.
- The National Electricity Policy has been notified.
- Cabinet Committee on Economic Affairs (CCEA) approved the Restructured Accelerated Power Development and Reforms Programme.
- Automatic approval for FDI (RBI Route) for 100% investment of foreign equity is permitted in generation, transmission and distribution and trading in power sector.
- Launching of Rajiv Gandhi Grameen Vidyutikaran Yojana scheme of Rural Electricity Infrastructure and Household Electrification in March, 2005.
- The Ministry has set up the Solar Energy Centre (SEC) near Delhi.
- The Development of Solar Cities.
- International corporation activities in Renewable Energy.

**Future lies in renewable energy**

There are several important alternative sources of energy—some renewable, some long lasting, some free from CO2 production, and some totally un-
explored by us at present. These sources are listed below:

- Wind energy
- Solar energy
- Hydro-power
- Agricultural biomass and community wastes
- Gas from solid wastes (waste-to-energy plants)
- Coal Gas, Natural Gas, LNG, CNG, LPG
- Shale Gas
- Biofuels from oil-bearing plants
- Nuclear energy
- Geothermal energy

The Government has been promoting private investment in setting up of projects for power generation from renewable energy sources through an attractive mix of fiscal and financial incentives, in addition to the preferential tariffs being provided at the States level. These include capital/interest subsidy, accelerated depreciation and nil/concessional excise and custom duties. Further, the Government is encouraging foreign investors to set up renewable power projects on a ‘Build-Own and Operate’ basis with 100% foreign direct investment. The annual turnover of the renewable energy industry, including the power generating technologies for wind and other sources, has reached a level of around Rs. 550 billion.

The feasibility of a larger application of renewable energy, to that of the present assessments, would depend on how rapidly the costs decline and efficiencies increase. As a result, research and technology development have been accorded high priority in the national renewable energy programme and mission mode research has been planned for developing solar, bio-energy and hydrogen technologies. International Cooperation activities in renewable energy are aimed at sharing of experiences and expertise with other countries, promoting scientific and research cooperation in technologies of interest to the country.

During 2011–12 the Ministry entered into Memorandum of Understanding with Bangladesh, Egypt, Uruguay and a programme of cooperation was signed with Spain.

Solar power: new hope
Generation of electricity from the Sun is a flagship programme of the Government. The solar market potential is huge, while only a fraction of the aggregate potential has so far been realised. India has one of the world’s largest programmes in solar energy which includes R & D, demonstration and utilization, testing and standardization, industrial and promotional activities, processed material for solar cells, inverters, charge controllers etc. The solar sector is expected to see an increased participation and collaboration especially in the technology and manufacturing space.

As a tropical country which receives much sunlight, India tops the world (along with California and Hawaii in the US) in its potential for developing solar energy systems. Spain, Italy, Australia and China come next on the list. However, in actual implementation Germany and Spain top the list at present. The Jawaharlal Nehru National Solar Mission envisages establishing India as a global leader in solar energy. An ambitious target of 20,000 MW of solar power by the year 2022 has been set under the mission. The plan outlay for the Ministry of New and Renewable Energy increases by 61% from Rs. 620 crore in 2009-10 to Rs. 1,000 crore in 2010-11. The Mission supports research, development and innovation to achieve grid-parity in the shortest time-frame. The mission will be implemented in three phases. The first phase is up to March, 2013, the second till March, 2017 and the third phase will continue till March, 2022. Around 1000 MW of grid connected solar power capacity has already been set up.

SunBorne Energy, funded by General catalyst and Khosla ventures, is set to make solar power affordable and widespread across India. The company is partnering with MNRE on an R & D project to indigenise and decrease the cost of solar plants. Over the next decade, the plant is to cut the costs in half, making solar power competitive with other sources. SunBorne’s affordable solar power can help India grow without risking the environment or energy security.

The way forward
The world has tapped only a small percentage of its vast renewable energy resources. Policy efforts need to be strengthened in order to encourage a massive scale up of renewable technology so as to build a long term, stable, low carbon economy. Countries all over the world fully recognise the imperative to promote widespread adoption of renewable energy into their Country’s energy sources to promote sustained economic growth, social development and environmental stewardship. It is estimated that renewable energy could contribute at least half of electric power in each of the large economies by 2050.

Power sector in India will witness a boom in the coming decades with huge FDI coming up in both conventional and non-conventional power generation sector. This sector is estimated to grow at a rate of 25% year on year in the coming years. Government has taken various electrification programmes which are considered in the context of socio-economic development of India. The Ministry of Power has taken Missions like ‘Power for all by 2012’ and ‘Rural Electrification Supply Technology (REST) Mission’ which will accelerate the electrification for all villages and household through decentralised technologies and conventional grid connection.

Solar energy castor looks to have a
very viable prospect for investment in the coming years as the Government is showing its firm stance towards the use of renewable energy resources. As per Kyoto Protocol and Copenhagen Convention, Government has taken initiatives to reduce carbon footprints and encourage non-posting energy production technique.

In order to have sustainable management of power sector we need
• Carbon Reduction by using LED Lights
• Government to take an imitative stand
• Enhancement of Grid Efficiency
• Awareness of the Financial Benefits of Energy Efficiency
• Create Incentives to Save Energy
• Incentives to Promote Renewable Energy Sources and
• Adoption of Lucifer (Jugnu – emits light without consuming any energy) Products.

Conclusion
The most important factor which can act as a constraint on economic growth of a country is the availability of energy and power (including generation, transmission and distribution). India is both a major power producer as well as a major power consumer. Investment in power sector is a must to enhance the infrastructural capacity of a country to sustain the process of its economic growth. The Government of India liberalized this sector and opened it before the foreign and private participants to raise adequate funds for the power sector. A quick view of the ownership pattern in this industry tells us that the State Government owned generating utilities accounted for 41.51% of the total capacity, while the Central Government owned power utilities accounted for 29.67% and private players accounted for only 28.82%.

This sector calls for centralised restructuring. One of the prime areas that need focus should be the development of nationwide grid network. Since India suffers high transmission and distribution losses, the country needs to property vigil the operation. Further we need to secure energy resources to sustain us and our future generations for a long time into the future and most importantly be able to do so without harming the environment and disturbing the climate. This is a question of our very survival in the present day very competitive, selfish and unkind world. We need to move towards a safe and secure energy future. The potential for renewable energy technologies is immense. The elimination of inefficiency and wastage shall reduce the power cost and consumers shall get sufficient and affordable (low cost) quality power for consumption, economic growth and prosperity. Energy independence has to be the nation’s first and highest priority and India must be determined to achieve this!

References

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PROPOSED AMENDMENTS IN THE ELECTRICITY ACT MAY NOT BE GOOD ENOUGH TO LIFT THE SECTOR

Though the amendments proposed in the Electricity Act 2003 seem to be far-reaching, they may just not be enough to save the power sector

Ten years of implementation of the Electricity Act, 2003 has not shown any evident cure to the maladies bothering the sector. The symptoms are loud and clear for everyone. The losses of distribution utilities are reaching new peaks and the generation sector is threatened by the non-availability of fuel (read coal and gas) and mounting receivables. The AT&C loss is still abnormally high. The subsidy burden of state governments has been increasing manifold. The Central government is forced to announce debt relief packages to avert the collapse of the entire power sector. Power shortages are threatening the orderly functioning of the grid, as witnessed during the grid failure in 2012.

The amendments proposed in the Electricity Act 2003 by Ministry of Power on 19-10-2013 is mainly in the areas of tariff fixation by regulatory commissions, role of state governments and further restructuring of the distribution sector. Let’s discuss a few of the proposed amendments and analyse them for further critical analysis for our community.

Section 11 and section 108: Directions to generating companies and regulatory commission

The control of state governments in power sector is getting curtailed. Presently, state can give directions as per section 11 (directions to generation companies) and section 108 (directions to regulatory commission) of the Electricity Act 2003. Proposed amendments intend to dilute such directions.

This move is crucial. Several states were resorting to invoking Section 11, citing rising power shortages. State governments were asking all power generating stations to operate at full capacity and supply power within the state. Besides, respective SLDCs have also used the direction issued under section 11 to deny open access. Proposed amendment provides protection to the existing contracts, which is reasonable. It would be better if there is a separate account (escrow) where the compensation amount should be deposited before imposition of compensation and before the generating station is prohibited from selling power outside the State. Further, the time period for such direction has been limited to 30 days in the proposed amendment but there is no restriction that no similar direction can be given again after expiry of 30 days. Appropriate Commission would offset any adverse financial impact on the generator. But this compensation has to be provided in a timely manner. This also needs to be provided in the proposed amendment.

The National Electricity Policy and Tariff Policy would be mandatory as per sections 3(a), 61, 62, 79 and 86 of the proposed amendment. This leaves little room for state government to give policy directions to SERC as per section 108 of the Act. States will not have any say in the determination of tariff. Proposed Section 61 says that the Central Government may direct the principles and methodologies specified by the Central Commission as it considers appropriate and the same has to be followed by the Appropriate State Commissions for determination of tariff. These
amendments may be termed as an en-
conachment over the privileges of the
State and a real threat to the federal
system although well intended.

Supply license: New invention of
the proposed amendment
The main agenda of this amendment is
to separate the wire business and oth-
er activities like billing and collection.
New segment named ‘supply licensee’
is introduced in power sector in addition
to existing generation, transmission,
distribution and trading licensees.
The Act in its present format had in-
vented the fourth wheel in the form of
‘trading’ in power sector in addition to
the three traditional sectors compris-
ing generation, transmission and dis-
tribution. The proposed amendments
envision the fifth wheel in terms of
‘supply licensee’. The fourth wheel
was invented for the smooth ride of
market reforms in the sector. Now the
proposed amendment has invented the
fifth wheel in the form of sale of elec-
tricity which is to be unbundled from
distribution of electricity.

In section 2 new terms such as In-
cumbent supply licensee (35A), sup-
ply licensee (70a), subsequent supply
licensee (70b) are introduced for this
purpose. The definition of Distribu-
tion licensee(17) is changed drastically
to separate the supply function from it.
Distribution(17a) is newly defined as
mere conveyance of electricity. Earlier
multiple distribution licenses in a par-
ticular area were possible only if they
have their own networks. Now com-
misions can grant unlimited number of
supply license within the same area
of supply (Section 14). However, the
amendments fail to clearly state the
boundary conditions for such segrega-
tion. The amendments have not elab-
orated the treatment of the following
items, in the absence of which the
scheme appears to be in-operative:

a) Allocation of PPAs: The pro-
posed amendment is silent on who
would be the custodian of the exist-
ing Power Purchase Agreements. The
obligations to purchase power are on
supply licensee for ensuring supply
to the consumers. However, once all
Power Purchase Agreements would be
allocated to incumbent supply licensee,
then it would suppress the competi-
tion as no subsequent licensee would
be able to offer competitive tariff. It is
important also to evaluate the reason-
ableness of allocating PPA portfolio to
supply licensees who do not have any
major stakes in the sector.
b) Cross Subsidy Surcharges: The
proposed amendment does not pro-
vide clarity on the applicability of
the cross subsidy and cross subsidy
surcharge. To promote competition,
consumers should be given an option
to migrate from one supply licensee
to another without artificial barriers.
Cross subsidy surcharge would create
a barrier for consumers to migrate, if
not applied appropriately. This needs
to be clarified either in the proposed
amendments to the Act
c) Contact point for Consumers:
To get a new electricity connection
the consumer has to first approach the
distribution licensee and pays the
charges for availing connection. After
getting connected to the network he
has to approach the supply licensee.
After availing supply he has to regular-
ly pay charges to both the distribution
licensee and the sales licensee. Default
in paying charges of any licensee could
lead to stoppage of supply. This will
create significant difficulties in opera-
tion for the consumers as well as con-
fusion/ disputes between the different
licensees sandwiching the consumer in
between.
d) Transfer scheme for new sup-
ply licensees (Section 131): The
provision for transfer to new supply
licensees is rather complicated. The
proposed amendments do not envis-
age a condition where private licensees
are also in operation like in places like
Mumbai, Delhi, Odisha etc. Further, the
transfer scheme refers to Boards,
which in many states have already
been unbundled. More clarity is thus
required on this.

Supply license shall not be refused on
the ground that there already exists a
licensee in the same area for the same
purpose. The supply licensee will not
own any power system assets. His only
business is to purchase power, arrange
open access, sell it to the consumers
and collect money. However, there is
always the danger that these supply li-
censees will have a free hand in cher-
ry picking customers, they would try
picking the well-paying customers but
those seen as not remunerative enough
— including agricultural consumers or
domestic users in areas with high loss
levels — might find no takers.

Section 51B: Distribution licensee
will continue as incumbent supply li-
censee and it shall have the obligation
to supply electricity to all consumers in
its area of supply. If new supply licensee
under area of distribution of distribu-
tion licensee fails to supply to a con-
sumer, the incumbent supply licensee
shall supply electricity to such consum-
er as a provider of last resort. In other
words, subsequent licensee can cherry
pick customers and incumbent licensee
will be compelled to supply power only
to low income customers owing to its
obligation to supply electricity to other
consumers. The Section also says that
the supply licensee shall arrange for the
purchase of electricity to meet the de-
mands for electricity by the consumers
without resorting to load shedding or
power cuts. So, licensees will be comp-
pelled to buy power from market forces
at escalated rates. To avoid this, subse-
quent supply licenses should be grant-
ed for the entire area co-terminus with
the incumbent supply licensee, with the
obligation to supply electricity to all the
consumers in its area of supply.

Parallel licenses for distribution:
The proposed amendments seem to
suggest that there would not be two
Section 3 and 62: Amendments affecting tariff

Section 3: Inclusion of (3a) in section 3 of the Act to make provisions of National Electricity Policy and Tariff Policy mandatory would amount to excessive jurisdiction. It would not be appropriate to make policies issued by the executive mandatory over all the statutory functionaries under the Act who are expected to function independently.

Section 62: Introduction of second proviso to Section 62 (1) (a) which reads as “PROVIDED further that there shall be no such determination of tariff by the Appropriate Commission under clause (a) of this sub-section if it is specified in the National Electricity Policy or the Tariff Policy that the procurement of electricity by the supply licensee shall be done only by competitive bidding as per section 63” has made competitive bidding ‘mandatory’ for procurement of power by distribution companies under section 63.

As per Clause 5.1 of Tariff Policy issued by Ministry of Power on 6-1-2006, all future requirement of power should be procured competitively by distribution licensees. Even for the Public Sector projects, tariff of all new generation and transmission projects should be decided on the basis of competitive bidding after a period of five years. However, different Commissions including appellate tribunal (APTEL) while adjudicating different disputes had opined that this clause cannot override Section 62 of the Act. They were of the view that Section 62 is the mother Section and Section 63 is an exception and moreover a policy cannot negate provision of an Act. This amendment must have been introduced so that Government of India can achieve which it couldn’t by introduction of Clause 5.1 of Tariff Policy. However, it has been rightly pointed out by the Forum of Regulators that power procurement option under Section 62 should also be available to Utilities and they have cited the reasons that “there has not been sufficient participation in competitive bidding cases in States. Also, there is no level playing field between plants based on imported coal and those based on domestic coal. As such, the power market in India has not matured to a level where competitive procurement can be mandated. It was felt although competitive bidding is internationally accepted as more efficient, considering the current market situation in India, especially keeping in view the fuel shortage, both options of tariff determination – Sections 62 and 63 – should be continued for the present”. It wouldn’t be out of place to mention here that fuel issues have forced Commissions to reopen the concluded PPAs finalized under competitive bidding route and allow compensatory Tariff viz. Petition No. 155/MP/2012 of Adani Power Limited and Petition No. 159/MP/2012 of Coastal Gujarat Power Limited (Tata Power) in Central Electricity Regulatory Commission.

Section 42: Amendments affecting open access

Deletion of Section 42(3): This sub-section had a special treatment of ‘local authority’ engaged in power trading. The deletion of this sub-section has been proposed to correct the oversight of the drafters of the Act which included the word ‘trader’ instead of ‘supplier’ or ‘licensee’.

Other important amendments proposed

Section 14: Intra-State trader shall be deemed to be a supply licensee for the area for which trading license has been granted to it and shall have the obligation to supply on demand to all consumers who have been provided open access in the said area of supply.

Section 51 G: Introduction of Electricity Supply Code: State Commission shall specify an Electricity Supply Code to provide for recovery of electricity charges, intervals for billing of electricity charges, disconnection of supply for non-payment thereof, assessment for unauthorized use and theft of electricity, restoration of supply of electricity and such other matters.

Section 92(6): Every proceeding before the Appropriate Commission shall be decided expeditiously and with the endeavour to dispose the proceedings within one hundred and twenty days and in the event of delay the Appropriate Commission shall record the reasons for delay beyond one hundred twenty days.

Section 121 (3): This subsection proposes review of Regulator Commissions by a committee constituted by APTEL.

Disclaimer: The views expressed above are personal views of the author. Indiabulls Power Limited doesn’t subscribe to them.

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POWER TRADING IN INDIA: AN OVERVIEW

At present, the business faces a lot of threats but if all the states mandate the open access policy, there will be huge participation of bulk consumers in the power market.

Introduction to the power market in India

The Indian power sector is one of the most diversified sectors in the world. Today India is the fifth largest producer and consumers of electricity in the world. Power in India, is generated from commercial sources like coal, lignite, natural gas, oil, hydro and nuclear power, as well as non-conventional sources like wind solar, agriculture and domestic waste. Electricity production in India stood at India 911.6 Terra watt hour (TWh) in fiscal year 2013, a 4% growth over the previous fiscal. The demand for the electricity is the country has been growing at a rapid rate and expects to increase further in the years to come. The power sector is high on India’s priority as it offers tremendous potential for investing companies based on the sheer size of the market and the returns available on investment capital. The ministry of power has set a target of adding 76000 MW of electricity in the 12th five year
power sector by the Government private licenses, however, to continue.clusively for the state, letting, existing distribution of electricity almost ex-1956 reserved the generation and line with the Industrial policy Resolu-
tion of 1948, the Electricity supply Act tion with regard to operational safe-
ty. When India got Independence in 1947, the country had a power gener-
ating capacity of 1362 MW only. Hydro power and coal based thermal power have been the main sources of generating electricity. Generation and distribution was carried out primarily by private utility companies. Notable among them and still in existence is Calcutta Electric Power was available only in few urban centres. Rural areas and villages did not have power. In the line with the Industrial policy Resolution of 1948, the Electricity supply Act 1948 was formed. The Act provided for the establishment of Central Electricity Authority (CEA) and of State Electricity Boards (SEBs) which were to become main agencies for supplying power throughout India.

- Nationalisation phase (1956-1991): The Industrial Policy Resolution of 1956 reserved the generation and distribution of electricity almost exclusively for the state, letting, existing private licenses, how ever, to continue. This led to the gradual domination of electricity sector by the Government Enterprises. Amendment in 1976 enabled generation companies to be set up by the central and state governments resulting in the establishment of National Thermal Power Corporation of India Ltd (NTPC.), National Hydro Power Corporation Ltd. (NHPC), and North Eastern Eastern Electricity Power Corporation Ltd. (NEEPCO) etc. Until 1980s, the electricity services were delivered by the state owned monopolies. In India until 1991, power sector in the states was managed by one large, vertically integrated entity that generated, transmitted and distributed power under the respective State Ministries of Power. However the absence of competition led to poor quality of services, sub optimal utilization of resources and little considerations for consumer interest.

- Liberalisation phase (1991-2003): Indian power sector has witnessed significant change since early 1990s. Beginning with allowing private investment in power generation in 1991, initiating regulatory reforms through Electricity Regulatory commissions Act, 1998. The act seeks to establish Central and State Electricity Regulatory Commissions and to rationalise the tariffs. The Electricity Laws (Amendment), Act 1998 was also passed with a view to make transmission as a separate activity for inviting greater participation in investment from public and private sectors.The act provides for creation of Central and State Transmission Utilities. The function of Central Transmission Utility (CTU) shall be to undertake transmission of energy through inter-state transmission system. The function of the State Transmission Utility (STU) shall be to undertake transmission of energy through intra-state transmission system.

- Growth phase (2003 onwards): The Electricity Act 2003, has created a consolidated policy framework for generation, transmission, distribution, trading and consumption of electricity, based on market based mechanism. It encourages more competition in this sector by unbundling SEBs into generation, transmission and distribution utilities. Thermal generation and Captive generation were delicensed. Non discriminatory open access in transmission was granted to all generators to ensure fairness. Mandatory meeting, stringent punishment of electricity theft and multi-year tariff wear introduced to curb financial losses of SEBs. The act included a purchase obligation of renewable based electricity. The act also mandated the preparation of two keys policies. National Electricity Policy 2005 provided detailed initiatives and programmes to carry out the mandates of the Electricity Act, 2003 and National Tariff Policy 2006 aimed to strengthen the financial viability of the sector and to attract investments. The Ministry of Power in association with the Central Electricity Authority and Power Financial Corporation Ltd. has launched on initiative for the development of coal based Ultra Mega Power Projects (UMPPs) in 2005-06 to remove power deficits and provide ‘power for all’ by the end of 11th five year plan (2007-12).

Concept of power trading
Power trading inherently means a transaction where price of power is negotiable and option exists about whom to trade with and for what quantum. It is an effective tool to strike the balance between the availability and the distribution of power in various parts of the country or between various countries. Surplus power in one region may be made available to deficient region through trading that ensures optimizing efficiency of the power sector. Power is regarded as a commodity capable of being brought, sold and traded. As per Sec-2(71) of the Electricity Act, 2003, “power trading means purchase of electricity for resale thereof”. Power trading has been recognized as a distinct licensed activity as per Sec-12 and Sec-14 of
the Act and has been added as a core function in the Indian Power sector from the very date of promulgation of the Electricity Act 2013. The concept of power trading is introduced in India under the approved guidelines of Central Electricity Regulator Commission (CERC). CERC has notified procedures, terms and conditions for the grant of Trading License and other related matters. In India, Power trading is essential for meeting peak demand and overall resource optimization. In India, Power Trading is in evolving stage and the volumes of exchange are not huge. All ultimate consumers of electricity are largely served by their respective State Electricity Boards or their successor entities.

Legislations related to power trading
- **Electricity Act, 2003:** The Electricity Act 2003, has created a consolidated policy framework for generation, transmission, distribution, trading and consumption of electricity, based on market based mechanism. It encourages more competition in this sector by unbundling SEBs into generation, transmission and distribution utilities. Thermal generation and Captive generation were delicensed. Power trading has been recognized as a distinct licensed activity by the Act. The Act aimed at the development of a multi-buyer multi-seller market in power.
- **National Electricity Policy, 2005:** The Government has notified the National Electricity Policy on 12th February 2005, which provides direction to the evolution of the power sector within the ambit of the Electricity Act 2003. The policy objectives include demand to be fully met by 2012 and per capita availability of electricity to be increased to over 1000 units by 2012. Various other issues listed in the policy like rural electrification, generation, energy conservation, environmental issues, etc.

- **Open Access Regulations, 2004 & 2008:** Open access in inter-State transmission was first introduced by the Commission in the year 2004 with a view to facilitating bilateral transaction as a first step in the direction of developing electricity market – a mandate given to it by the Electricity Act, 2003. The Open Access Regulations for Inter-State transmission, 2008 have been conceived after taking into account the evolution of the electricity market during the last four years. It has created a framework, which would not only facilitate traditional bilateral transaction (negotiated directly or through electricity traders), but also cater to collective transactions discovered in a power exchange through competitive bidding by sellers and buyers.
- **National Action Plan on Climate Change, 2008:** The National Action Plan on Climate Change formally launched on June 30th, 2008 aimed to promote of Renewable energy market through Renewable Energy Certificates (RECs) and energy efficiency market through Energy Saving Certificates (EScerts)
- **Power Market Regulations, 2010:** The Central Electricity Regulatory Commission (CERC) has issued Power Market Regulations, 2010 governing various contracts related to trading in electricity, including inter-state sales. The Power Market Regulations, 2010, issued under the provisions of the Electricity Act, aims at taking measures conducive to development of electricity industry, promoting competition therein, and protecting interest of consumers and enhancing supply of electricity.
- **CERC has permitted trading of electricity through power exchange w.e.f. June 2008. Currently two exchanges IEX and PXIL are in operation in India which facilitates an automated online platform physical Day Ahead Contracts. The first company to take up this challenge was ‘Indian Power Exchange Ltd’ which is presently known as Indian Energy Exchange. It was set up the Financial Technology, the promoter of Multi Commodity Exchange (MCX). IEX started its operations in June 2008 becoming the Indian’s first ever power exchange to trade electricity. Power exchange India Ltd (PXIL) is the Indian’s second power exchange offering trading platform for electricity set up in September, 2008. It is promoted by the exchange like National Stock Exchange (NSE) and National Commodity & Derivatives Exchange (NCDEX). The objectives of Power exchange in India are listed below.
- **To promote the development of power market and power trading in India.**
- **To create marketplaces for efficient use of the energy resources.**
- **To operate state-of-the-art energy marketplace that is transparent, competitive and reliable, for the ultimate benefit of all the stakeholders.**
- **To aid stakeholders to make better informed business and investment decisions.**
- **To improve the efficiency of the power markets.**
- **To constantly demonstrate core values – Integrity, Excellence, Commitment and Continued Innovation for the development of power market.**

**Modes of power trading in India**
Open Access allows consumers to purchase electricity directly from power generators or exchanges. This increases the competition in the market and ultimately benefits the consumers. Power trading bridges the gap between
deficit energy and surplus energy. This not only reduces staggering but also improves power distribution scenario. There are various modes of power trading available in India. These are as follows.

- Depending upon the Duration of Transactions: Trading modes are divided into three categories depending upon the duration of contract.
  1. **Short Term:** contracts exceeding 1 month but less than 6 months.
  2. **Medium Term:** Contracts exceeding 3 months but less than 3 years.
  3. **Long Term:** Contracts exceeding 12 years but less than 25 years.

- Depending upon the energy trading platform: Trading modes are divided into two categories depending upon the energy trading platform.
  1. **Collective (Through Exchanges):** Power can be purchased directly form two energy exchange in India through trading members of the exchange. This also permits collective buying and selling through the process of bidding.
  2. **Bilateral contracts /Over-the-Counter (OTC):** Electricity can be directly purchased form specified power generators by a specified buyer. The specific point of injection and point of draw can be fixed mutually. Varying quantum of power can be taken for any time period during a month. To facilitate this CERC issued Licenses to power traders to ensure smooth operation of these contracts.

### List of Inter-State Power Trading licensees in India

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<tr>
<th>SL. NO.</th>
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<tr>
<td>1</td>
<td>Tata Power Trading Company Ltd.</td>
<td>34</td>
<td>Ambitious Power Trading Company Limited</td>
</tr>
<tr>
<td>2</td>
<td>Adani Enterprises Ltd.</td>
<td>35</td>
<td>RPG Power Trading. Co. Ltd.</td>
</tr>
<tr>
<td>3</td>
<td>PTC India Limited</td>
<td>36</td>
<td>Basis Point Commodities Pvt. Ltd.</td>
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<td>Reliance Energy Trading Ltd.</td>
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<td>Vinergy International Private Limited</td>
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<td>National Energy Trading and Services Ltd</td>
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<td>Shyam Indus Power Solutions Pvt. Ltd</td>
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<td>8</td>
<td>MMTC Limited</td>
<td>41</td>
<td>Global Energy Private Limited</td>
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<tr>
<td>9</td>
<td>DLF Power Limited</td>
<td>42</td>
<td>Knowledge Infrastructure Systems Pvt. Ltd.</td>
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<td>10</td>
<td>Jindal Steel &amp; Power Limited</td>
<td>43</td>
<td>Mittal Processors Private Limited</td>
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<tr>
<td>11</td>
<td>Sarda Energy &amp; Minerals Ltd.</td>
<td>44</td>
<td>Godawari Power and Ispat Limited</td>
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<td>12</td>
<td>GMR Energy Limited</td>
<td>45</td>
<td>Shree Cement Limited</td>
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<td>13</td>
<td>Karam Chand Thapar &amp; Bros. (Coal Sales) Limited</td>
<td>46</td>
<td>PCM Power Trading Corporation Ltd., Kolkata</td>
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<td>14</td>
<td>Subhash Kabini Power Corporation Ltd.</td>
<td>47</td>
<td>Abellon Clean Energy Limited, Ahmadabad</td>
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<td>15</td>
<td>Special Blasts Ltd.</td>
<td>48</td>
<td>Jay Polychem (India) Limited, New Delhi</td>
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<td>16</td>
<td>Maheshwary Ispat Limited</td>
<td>49</td>
<td>Jaiprakash Associates Limited, Noida.</td>
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<td>17</td>
<td>Instinct Infra &amp; Power Ltd.</td>
<td>50</td>
<td>My Home Power Private Limited, Hyderabad</td>
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<td>18</td>
<td>Essar Electric Power Development Corporation Limited</td>
<td>51</td>
<td>Customized Energy Solution India Private Limited, Pune</td>
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<td>BS TransComm Ltd., Hyderabad</td>
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<td>Chromatic India Limited, Mumbai</td>
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<td>21</td>
<td>BGR Energy Systems Limited</td>
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<td>Kandla Energy and Chemical Limited, Ahmadabad</td>
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<td>22</td>
<td>Malaxmi Energy Trading Private Limited</td>
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<td>Marquis Energy Exchange Limited</td>
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<td>23</td>
<td>Visa Power Limited</td>
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<td>DLF Energy Private Limited, Gurgaon</td>
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<tr>
<td>24</td>
<td>Pune Power Development Private Limited</td>
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<td>SN Power Markets Pvt. Ltd., Noida</td>
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<td>25</td>
<td>Patni Projects Pvt. Limited</td>
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<td>Manikaran Power Limited, Kolkata</td>
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<tr>
<td>26</td>
<td>Ispat Energy Limited</td>
<td>59</td>
<td>Greta Power Trading Limited</td>
</tr>
</tbody>
</table>
Products offered by power exchanges

1. Day-Ahead Market: The Day-Ahead-Market (DAM) is the electricity trading market for delivery on the following day. The prices and quantum of electricity to be transacted is determined through a double-sided closed auction bidding process. The operations are carried out in accordance with the ‘Procedure for scheduling of collective transactions’ (PGCIL), issued by the Central Transmission Utility, CERC (Open Access in Inter-State Transmission) Regulations, 2008, amended from time to time and the Bye-Laws, Rules and Business Rules of the Exchange. Following are the main features of DAM:

- 15 minute time block wise bidding for next day
- Trading is on all days irrespective of holidays.
- Order entry / revision /cancellation can be done on D-1 (a day before delivery) from 10:00 hrs to 12:00 hrs related to Delivery Day (D day)
- Clearance obtained from State Load Despatch Center (SLDC) by buyers and sellers based on availability of network and Availability Based Tariff (ABT) meters.
- Congestion Management through market splitting and determining Area Clearing Price (ACP) specific to an area
- Risk management through the requisite Margin, including any additional Margin as specified for the respective trading segment or the type of contracts

2. Term-Ahead Market: Term-Ahead market (TAM) includes products allowing participants to transact for delivery of electricity for duration up to 1 week. It enables participants to purchase electricity for same day through intra-day contracts, for next day through day-ahead contingency, on daily basis for rolling seven days and on weekly basis to manage their electricity portfolios for different durations in a better way. TAM segment is operated on all days except the specified holidays. The operations are carried out in accordance with the ‘Procedures for scheduling of Bilateral Transactions’ issued by the Central Transmission Utility (PGCIL), CERC (Open Access in inter-State Transmission) Regulations, 2008, as amended from time to time and the Bye-Laws, Rules and Business Rules of the Exchange. Following are the main features of TAM:

- Trading of Region specific contracts
- Firm Delivery - the contracts under Term Ahead Market can be used to ensure delivery of electricity for a few days in advance.

3. Renewable Energy Certificate (REC): RECs are tradable, intangible energy commodities which represent the attributes of electricity generated from renewable resources. Central Electricity Regulatory Commission introduced REC mechanism to ease the purchase of renewable energy by the state utilities and obligated entities, including the states which are not well endowed with RE sources. REC framework seeks to create a national level market for renewable generators to recover their cost. One REC (Renewable Energy Certificate) represents 1 MWh of energy generated from renewable sources. Under the REC mechanism; a generator can generate electricity through the renewable resources in any part of the country. For the electricity part, the generator receives the cost equivalent to that from any conventional source while the environment attribute is sold through the exchanges at the market determined price. The obligated entity from any part of the country can purchase these RECs to meet its RPO compliance.

4. Energy Saving Certificates (ESCs): National Mission on Enhanced Energy Efficiency (NMEEE) – a mission under National Action Plan on Climate Change (NAPCC), envisages 714 energy intensive industries to reduce their Specific Energy Consumption (SEC) in a given time frame of three years under Perform, Achieve & Trade (PAT) scheme. Under this mechanism, identified energy intensive industries are considered as...
‘designated consumers’ (DCs) who will have an obligation to reduce SEC from a given benchmark level set up by the Bureau of Energy Efficiency (BEE). DCs reducing SEC more than their obligation would be awarded Energy Saving Certificates (ESCert) which would be traded in open market. Similarly, DCs not meeting SEC reduction targets may buy ESCerts to avoid penalty.

Power Trading Mechanism: Following steps are followed at the exchange to ensure smooth trading experience for the buyer or seller.
- **Margining:** For Day Ahead Market (DAM) Buyer has to deposit margin equal to the total bid he/she intends to put in the DAM and there is no margin requirement for a seller in DAM.
- **Bidding:** A registered buyer/seller has to enter their Bids/Order into the electronic platform provided by the Exchange. There are various kinds of Orders available to the buyer/seller whom they can choose according to their needs and preferences.
- **Price discovery:** Exchange discovers Price through its Matching Engine based on the various bids put by different buyers and sellers. The Matching Engine and Matching Methodology used by the Exchange differ from Product to Product. The Matching Methodologies of all Products is validated and approved by CERC, so that the Price discovery happens in a fair, transparent and efficient manner. Scheduling: Based on the Prices discovered for various time slots or various Products, Exchange provides schedules that provides client-wise and time slot-wise information related Price, Quantity and Region.
- **Settlement:** After the scheduling is over, the Exchange initiates the settlement process wherein the pay-in collected from various buyers need to be transferred to the sellers. Also, any residual Margins left are transferred back to the buyers whose bids were not successful.
- **Delivery:** Seller starts injecting power into the required node of the grid on the basis of cleared quantum and symmetrically the buyer starts drawing power from the connected node.

**Some important matters related to power trading**

A) **Eligibility for trading**
Intended buyers & sellers shall have to go through an entity who has been admitted by Power Exchange as a registered member, by becoming their client.

B) **Preliminary requirements for starting of trading**
- Grid Connectivity either at 11 Kilovolt (KV), 33 KV, 66 KV, 132KV, 220 KV or 400 KV level.
- Installation of special Energy meter & other auxiliary equipments as directed by SLDC, which records flow of energy, demand, Voltage & Average frequency at fifteen minute intervals.
- No Objection Certificate (NOC) from respective SLDC in prescribed format
- Depositing annual subscription of Rs. One Lac per financial year to exchange against which exchange will provide a unique identification number which enables an applicant to start trading.
- Depositing the margin money to Power Exchange which equals to the total bid he/she intends to put in the DAM and there is no margin requirement for a seller in DAM.

C) **Contract size**
- Minimum Volume = 1MWh
- Minimum Size = 15 Minutes
- Minimum Bid Price: Tick Size = Re. 1/MWh
- Minimum Volume: Tick Size = 0.1MW

D) **Power flow**
The power will flow through the existing STU/CTU network depending on the location of the entity’s injection/drawl point. The National Load Dispatch Centre (NLDC), Regional Load Dispatch Centre (RLDC) & State Load Dispatch centre (SLDC) controls and regulates the power flow.

E) **Power delivery**
The Exchange prepares the schedule based on the Available Transfer Capability (ATC), Market Clearing Price (MCP) & Market Clearing Volume (MCV). The Final Schedule is given by the Power Exchange to the NLDC. The NLDC sends the Schedule to respective RLDC’s who incorporates the schedule in their schedule and send the same to respective SLDC’s. SLDC delivers the schedule to concerned buyers or sellers. Once the schedule is delivered, it is deemed that power has been delivered. The actual injection/ drawl are recorded by the special energy meter installed at the point of injection / drawl. The meter reading is collected through telemeter or by joint inspection.

F) **Market Clearing Price (MCP) and Market Clearing Volume (MCV)**
Prices and volumes are governed by the principal of Demand Vs Supply at exchange platform. MCP is the price of hourly electricity contracts established on exchange arrived at after considering all valid purchase and sale bids on unconstrained transmission network. MCV is the quantum of hourly electricity contracts established on exchange arrived at after considering all valid purchase and sale bids on unconstrained transmission network.

G) **Financial Settlement of Trade**
Financial settlement is done by electronic transfer of funds between the clearing members & the Exchange. The proceeds from sale of power are transferred to members settlement
account by 2 P.M of the day following the day of delivery by the exchange. The fund transfer to clients account is either through electronic money transfer system or by issuing cheque as preferred by the client. The buyers have to pay the amount of power purchased at MCP by 14.30 Hours on the day of bidding.

**H) Trading Hour**
Trading session is 10am to 12 noon i.e. the clients bid will be accepted on the system during this period. After this it is the exchange responsibility to take care of the rest of the formalities. Members will inform the buyers about the status of their bid by 12.30 P.M. If the buyers bid are provisionally accepted at Exchange platform, they should deposit the money to members account by 14:30 hours or else their bid will be rejected. If client is a seller then the member will inform the seller about the Final MCP/MCV at 4.00 PM

**I) Adjustment of loses**
In day ahead marked, both buyers & sellers are to adjust the losses up to their regional periphery. RLDC will adjust the CTU & STU loses at the time of bidding.

**J) Settlement of Deviation from Schedule**
Electricity is very dynamic in nature. Any deviation from the schedule is either payable/receivable by the client and is settled by the RLDC/SLDC under the UI mechanism. UI calculation is compiled by RLDC and certified by Regional Power Committee (RPC).

**K) Unscheduled Interchange (UI) Charges**
UI charges are frequency dependent penalty charges paid by open access consumers for non adherence to

---

**L) Timeline for scheduling and settlement**

<table>
<thead>
<tr>
<th>Time</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.00 AM.</td>
<td>Collection of ATC from NLDC/RLDC &amp; display the information on Exchange website and also to be used as an internal input (master) for scheduling</td>
</tr>
<tr>
<td>10.00 AM to 12.00 PM</td>
<td>Bid - Call session</td>
</tr>
<tr>
<td>11.00 AM.</td>
<td>Funds pay out pertaining to day before previous days transaction for sellers</td>
</tr>
<tr>
<td>12.00 PM to 12.30 PM</td>
<td>Exchange to determine MCP &amp; match the orders.</td>
</tr>
<tr>
<td>12.30 PM</td>
<td>Provisional MCP &amp; MCV</td>
</tr>
<tr>
<td>12.30 PM to 1.00 PM</td>
<td>Communication to bank to Confirm &amp; block the funds pay in from buyer Member’s settlement account.</td>
</tr>
<tr>
<td>1.30 PM</td>
<td>Communication to NLDC/RLDC for transmission capacity. Exchange will receive confirmation from bank for availability &amp; blocking of Clear balance along with a note on shortages.</td>
</tr>
<tr>
<td>2.30 PM</td>
<td>In case if the member brings in funds in his settlement account afterwards (members who were reported as short), the bank will confirm it to the Exchange.</td>
</tr>
<tr>
<td>3.30 PM</td>
<td>NLDC/RLDC will confirm the transmission capacity</td>
</tr>
<tr>
<td>4.00 PM</td>
<td>Exchange will generate FINAL MCP &amp; MCV</td>
</tr>
<tr>
<td>4.00 PM to 4.30 PM</td>
<td>Dispute period</td>
</tr>
<tr>
<td>4.30 PM</td>
<td>File sent to banks for actual debits</td>
</tr>
<tr>
<td>4.45 PM</td>
<td>Confirmation file received from bank</td>
</tr>
<tr>
<td>5.00 PM</td>
<td>5.00 PM NLDC/RLDC will confirm the final ATC &amp; confirm the schedule if any</td>
</tr>
</tbody>
</table>
The exchange collects requisite margins (listed below) before trading and the delivery to ensure payment security.

- **In the day-ahead market**: A Member or the Client is allowed to transact only when the margin deposited by the Member or the Client is at least or equivalent to the average value of transactions done by it for last seven (7) days; or the initial margins prescribed by the Exchange for any Member or the Client.

- **In the Term Ahead Market**: The Member or Client will have to make available the following types of margins to the Exchange from time to time as described below:
  1. **Initial Margin (Operational Limit)**: Initial Margins are computed on the total order value. This initial margin is blocked automatically from the total available deposits. The trading system will automatically reject orders in case the initial margin exceeds the balance deposits available.
  2. **Basis Margin**: Additional Margin is computed as a percentage of the traded value as per the risk curve defined and are collected in different trenches as per the contract specifications.
  3. **Variation Margin**: The Exchange on a predecided day also computes the Variation Margin of Members based on their trades (open position).
  4. **Extreme Loss**: The Exchange may collect any ad hoc margins from time to time in case if it feels that the available margins collected by the exchange are inadequate due to variation in the prices in the Market.

All the above mentioned margins can be deposited in form Cash, Bank-guarantee (BG), Fixed-deposit (FD) and Letter of Credit (LC).

- In the REC Market, Member is allowed to place a purchase order against cash amount made available, equivalent to 100% of the order value. After receiving confirmation about availability of RECs in the depository account of Eligible Entity from the nodal agency (NLDC), the exchange proceeds to process the final bid matching solution. The bids of the Sellers for whom the balance in the depository account with the central agency is reported short, is not considered.

### Power Trading Performance in terms of volume and price

1. **Total Volume of Short-term Transactions of Electricity with respect to Total Electricity Generation**

   Total volume of short-term transactions of electricity increased from 65.90 billion kWh (BU) in 2009-10 to 98.94 BU in 2012-13. The annual growth in volume was 24% from 2009-10 to 2010-11, 16% from 2010-11 to 2011-12 and 5% from 2011-12 to 2012-13. Total volume of short term transactions of electricity as percentage of total electricity generation has increased from 9% in 2009-10 to 11% in 2012-13 (see Table 1 and Figure 1).

### Table 1

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Electricity Generation (BU)</th>
<th>Total Electricity Generation (BU)</th>
<th>Total volume of Short-term Transactions of Electricity as % of Total Electricity Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009-10</td>
<td>65.90</td>
<td>764.03</td>
<td>9%</td>
</tr>
<tr>
<td>2010-11</td>
<td>81.56</td>
<td>808.45</td>
<td>10%</td>
</tr>
<tr>
<td>2011-12</td>
<td>94.51</td>
<td>874.17</td>
<td>11%</td>
</tr>
<tr>
<td>2012-13</td>
<td>98.94</td>
<td>907.49</td>
<td>11%</td>
</tr>
</tbody>
</table>

![Figure 1: Total Volume of Short-term Transactions of Electricity with respect to Total Electricity Generation](source:CERC)
short-term transactions of electricity has shown a moderate rise (from 51.45% in 2009-10 to 60.30% in 2012-13). The growth in volume for this segment during the year 2012-13 as compared to 2011-12 was 8.28 BU in absolute terms and about 16 in percentage terms. Majority of this growth has come from the power exchange segment (8.00 BU). Looking at the individual sub-segment growth between the years 2011-12 and 2012-13, it is observed that the growth was 51% in power exchange segment whereas the growth was 0.78% in bilateral trader segment.

3. Price of electricity transacted through traders and power exchanges
The price of electricity transacted through trading licensees and Power Exchanges is shown in Table-3 and Figure-3. The weighted average price of electricity transacted through trading licensees and power exchanges declined from 7.29/kWh and 7.49/kWh respectively in 2008-09 to 4.33/kWh and 3.67/kWh respectively in 2012-13.

Present position and future prospects of power trading in India
In India, most of power traders are involved in the short-term power mar-

<table>
<thead>
<tr>
<th>Year</th>
<th>Electricity Transacted through trading Licensees (BU)</th>
<th>Electricity Transacted through IEX (BU)</th>
<th>Electricity Transacted through PXIL (BU)</th>
<th>Electricity Transacted through IEX and PXIL (BU)</th>
<th>Total (BU)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DAM</td>
<td>TAM</td>
<td>DAM</td>
<td>TAM</td>
<td></td>
</tr>
<tr>
<td>2008-09</td>
<td>21.92</td>
<td>2.62</td>
<td>0.15</td>
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<tr>
<td>2009-10</td>
<td>26.72</td>
<td>6.17</td>
<td>0.92</td>
<td>0.003</td>
<td>7.19</td>
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<td>2010-11</td>
<td>27.70</td>
<td>11.80</td>
<td>1.74</td>
<td>1.07</td>
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<td>2011-12</td>
<td>35.84</td>
<td>13.79</td>
<td>0.62</td>
<td>1.03</td>
<td>15.54</td>
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<tr>
<td>2012-13</td>
<td>36.12</td>
<td>22.35</td>
<td>0.48</td>
<td>0.68</td>
<td>23.54</td>
</tr>
</tbody>
</table>

Note1: The volume of electricity transacted through trading licensees in 2008-09 (April to July 2008) includes cross border trading and intra-state trading volume.

Source: CERC

<table>
<thead>
<tr>
<th>Year</th>
<th>Price of Electricity transacted through Trading Licensees (`/kWh)</th>
<th>Price of Electricity transacted through Power Exchanges (DAM+TAM) (`/kWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008-09</td>
<td>7.29</td>
<td>7.49</td>
</tr>
<tr>
<td>2009-10</td>
<td>5.26</td>
<td>4.96</td>
</tr>
<tr>
<td>2010-11</td>
<td>4.79</td>
<td>3.47</td>
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<tr>
<td>2011-12</td>
<td>4.18</td>
<td>3.57</td>
</tr>
<tr>
<td>2012-13</td>
<td>4.33</td>
<td>3.67</td>
</tr>
</tbody>
</table>

Figure2: Total Volume of Electricity through Traders and Power Exchanges

Source: CERC
ket, which is done in bilateral and also through power exchanges. Right from its inception, the growth of the power trading business has been healthy. The main reason behind the development in trading is due to the power deficit in this country. Due to the increase in the demand of power, the buyers are very interested in getting their power through short-term power market. Power trading, in general, is a risky task because the commodity (electricity) is quite different from other commodities due to the fact that it is non-storable, it depends on the supply-demand balance and it also faces a lot of transmission constraints. In India, of the 65 licensed traders, only 20 are actively participating out of which the top 5 trading licensee in the market occupy around 70% of the market. These include PTC India Ltd, NTPC Vidyut Vyapar Nigam Ltd, Tata Power Trading Company (P) Ltd, JSW Power Trading Company Ltd and National Energy Trading & Services Ltd. Trading margins have also been on the decline since average price of power traded through the traders have dropped 40% from nearly Rs.7 per unit in 2008 to nearly Rs.4 per unit currently, at a time when cost of purchase has been on the rise. Also, if the demand closes to supply, the consumers in India might be going for PPAs (Power Purchase Agreements) rather than taking risks of going into short term power market. Presently this business faces a lot of threats but the opportunities are just around the corner. The Electricity Act, 2003 dictates open access for all bulk consumers (usage of more than 1MW) in India, from January 2009. Only few states like Andhra Pradesh, Gujarat, Haryana, Punjab, Rajasthan, and Tamilnadu incorporated the open access policy for bulk consumers. However, Uttar Pradesh, Maharashtra, Madhya Pradesh and Karnataka, which are major power consuming states, have some restrictions. If all the states mandate the open access policy, there will be huge participation of bulk consumers in the power market. In addition, the synchronization of NEW (Northern-Eastern-Western) grid and SR (Southern Regional) grid is expected to be complete in early 2014. This will definitely bring active participation of buyers and sellers of Southern India in the short term power market. Also, the Power Ministry is likely to bring carriage and content operations as separate entities. At present, distribution companies manage network as well as supply electricity to residential and commercial consumers. Above all, the future of power trading business lies in the hands of both sellers and buyers as they have to trust in the market and believe that they will sell/buy power at reasonable price.

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bs15071980@gmail.com
## Top 100 Electricity Producing Countries

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country</th>
<th>Electricity-production (billion kwh)</th>
<th>Rank</th>
<th>Country</th>
<th>Electricity-production (billion kwh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>China</td>
<td>4,604.0</td>
<td>51</td>
<td>Portugal</td>
<td>46.53</td>
</tr>
<tr>
<td>2</td>
<td>United States</td>
<td>3,953.0</td>
<td>52</td>
<td>Singapore</td>
<td>45.37</td>
</tr>
<tr>
<td>3</td>
<td>Japan</td>
<td>937.6</td>
<td>53</td>
<td>New Zealand</td>
<td>42.0</td>
</tr>
<tr>
<td>4</td>
<td>Russia</td>
<td>925.9</td>
<td>54</td>
<td>Hong Kong</td>
<td>41.22</td>
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<td>India</td>
<td>835.3</td>
<td>55</td>
<td>Algeria</td>
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<td>Canada</td>
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<td>38.79</td>
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<td>Germany</td>
<td>556.4</td>
<td>57</td>
<td>Syria</td>
<td>38.71</td>
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<td>8</td>
<td>France</td>
<td>510.0</td>
<td>58</td>
<td>Peru</td>
<td>38.7</td>
</tr>
<tr>
<td>9</td>
<td>Brazil</td>
<td>509.2</td>
<td>59</td>
<td>Hungary</td>
<td>37.37</td>
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<tr>
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<td>Korea, South</td>
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Source: CIA World Factbook
Arun Kaul, an MBA from Punjab University, joined the Indian Public Sector Banks (PSBs) as a probationary officer. He achieved remarkable feats in the banking sector, travelling through SBI and then PNB as CGM (Treasury, International Banking and Credit). He was then the Executive Director of Central Bank of India. His imaginative leadership of treasury management led to substantial improvement in bank’s trading and profit. He took over as Chairman and MD of UCO Bank on 1st September, 2010.

Q&A

What should be the concerns of the banks relating to NPA management during this present scenario of economic downturn in India?

Prevention is always better than post-mortems. During an economic downturn, the focus should be on strict due diligence before selection of assets. One has to carefully analyse the outlooks of different sectors of the economy, which sectors are experiencing stressful conditions, which sectors remain comparatively unaffected.

In case of corporate lending, banks have to be quite selective in underwriting, focusing only on...
highly rated corporate.

Side by side, the Credit Monitoring department should diligently control and monitor the health of the loan assets and put out early warning signals wherever warranted.

As far as assets which have already turned bad, the root causes have to be identified and genuine defaulters may be provided hand-holding support to tide over the crisis while for others, Banks should vigorously pursue various recovery channels including taking recourse to legal remedies proactively.

In short, under the present situation prudent asset selection, monitoring of asset health and recovery of dues should be top priorities for banks.

**MA** Do you feel that ‘big ticket’ advances could be the major cause of burgeoning NPAs in banks, if yes what remedial measures would you suggest?

Smart lenders are selective about projects they finance even in boom times. But if the economy is under stress, then there will always be pressure on large corporate credit. As a result, deteriorating asset quality – caused by persistent inflation, slackening demand, and slowing down of economic activity - is now a major concern for the country’s banks.

In the case of UCO Bank, NPAs in the category of Rs.5 crore and above constitute 77% of the GNPA involving 172 accounts. Similarly, top 50 NPAs of the bank has contributed around 42% of total NPA portfolio.

UCO Bank took several remedial measures to control NPAs. With a view to de-risk the business as also improve profitability, the bank embarked upon changing the mix of both its assets and liabilities. Bank’s business model shifted from bulk to retail banking. The improvement in bank’s profitability in the last couple of quarters is primarily because of the growth in low-cost CASA deposits and rebalancing of our asset portfolio. Three years back the share of CASA deposits (in total deposits) had declined to 21%, but now it is around 35%. This has helped us in reducing the cost of funds. On the asset side, our loans were skewed heavily in favour of large corporates and the infrastructure sector. Since there was stress on these segments, Bank decided to move away from large corporate credit to retail, SME and agricultural advances. In the process, the share of large corporate credit and infrastructure finance reduced from above 70% of our loan portfolio to below 50%. After rebalancing of portfolio Bank do not anticipate large slippages in the future.

As on 30.09.2013 the GNPA %age decreased to 5.32% from 5.42% as on 31.03.2013.

**MA** What is your view about credit to SME sector, how much of it could become NPA? Are there any guidelines from the government in this regard?

A) Credit to SME Sector

Worldwide, the Micro & Small Enterprises (MSEs) have been accepted as the engine of economic growth and for promoting equitable development. In India too, the MSEs play a pivotal role in the overall industrial economy of the Country. Further, in recent years the MSE Sector has consistently registered higher growth rate compared to the overall industrial sector.

**B) Regarding NPA**

- Under SME Sector, NPA percentage of our Bank stood at 2.50% as on September, 2013 as against 3.20% a year ago.
- Our Bank have been financing MSMEs which are covered by Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE). Hence we are very hopeful that percentage of NPA will further reduce to 2% or less within a short period.

**C) Guidelines from Govt. regarding financing MSME**

Govt. of India has enacted the Micro, Small & Medium Enterprises Development (MSMED) Act, 2006 which is in force from 2nd October, 2006 which is a turning point for the development of Indian Industry.

Some of the salient points in the main guidelines are:

- Banks are advised to achieve a minimum 20% YOY growth over the MSE advances.
- 40% of total advances to Small Enterprises should go to Micro (Manufacturing) Enterprises having investment in Plant and Machinery up to Rs.10.00 lakh and Micro (Service) Enterprises having investment in equipment up to Rs.4.00 lakh.
- 20% of total advances to Small Enterprises Sector should go to (a) Micro (Manufacturing) Enterprises having investments in Plant & Machinery between Rs.10.00 lakh to Rs.25.00 lakh, and (b) Micro (Service) Enterprises with investment in equipment between Rs.4.00 lakh and Rs.10.00 lakh.
- Annual growth in the number of Micro Enterprises Accounts should be at least 10%.
- Govt. has specified time limits for disposal of loan applications for different credit limits.
- Recently, RBI has stipulated that incremental bank loans to Medium Service Enterprises extended after November 13, 2013 up to the credit limit of Rs.10.00 crore, would qualify as Priority Sector advances up to 31/03/2014, while for Micro and Small Service Enterprises similar incremental loans up to the credit limit of Rs.10.00 crore (as against the present ceiling of Rs.5.00 crore) shall be treated as Priority Sector advances up to 31/03/2014.

Govt. guidelines have been implemented by our Bank in true spirit to increase our MSE Sector as well as Priority Sector.

**MA** How successful has the SARFAESI Act 2002 been in helping banks to manage NPA?

With a view to speed up the process of recovery from NPAs, The Securitization and Reconstruction of Financial Assets and
Enforcement of Security Interest (SARFAESI) Act was enacted in 2002 for regulation of securitization and reconstruction of financial assets and enforcement of security interest by secured creditors. The SARFAESI Act empowers Banks / Financial Institutions to recover their non-performing assets without the intervention of the Court. The Act provides three alternative methods for recovery of non-performing assets, namely:

- Securitization
- Asset Reconstruction
- Enforcement of Security without intervention of the court

Despite enactment of a long overdue act like the SARFAESI Act to facilitate recovery of banks’ money from defaulting borrowers, the ground level experience by the Banks/FIs tells a different story. Some major problems faced by the Banks/FIs are as follows:-

1) Interference of Superior Courts in SARFAESI matters:
Although there is clear provision and procedure laid down under SARFAESI Act to challenge recovery actions of secured creditors, the Hon'ble Superior Courts are entertaining the recovery matters covered under SARFAESI Act by invoking writ jurisdiction vested upon them and granting stay/status quo which causes lot of delay in effecting recovery of banks’ dues. This is despite the fact that ordinarily in SARFAESI matters, the borrower is not allowed to approach High Court invoking Article 226. In fact, the Hon'ble Supreme Court in the case of United Bank of India V/s Satyawati Tondon held that where an effective remedy was available to the aggrieved parties i.e. borrowers or guarantors, the High Court must insist that before availing the remedy under Article 226, the alternative remedies available to them under the relevant statute are exhausted.

2) Delay in disposal by DRTs: Now a days it is observed that DRTs are overburdened with SARFAESI Applications and DRT suits, which cause inordinate delay in disposal of cases, adversely affecting banks’ recovery.

3) Direction by the DMs./CMMs to the lenders: It has been the experience of banks that whenever application is made by them under Sec 14 of the SARFAESI Act for police assistance to take physical possession of the secured property, the DMs/CMMs pass order directing the borrower to make repayment of the bank’s dues by installments which is beyond the jurisdiction of the DMs/CMMs.

4) Priority of Govt. Dues: Though the SARFAESI Act has got overriding effect over other legislations, the claim of government prevails and often the amount realized though sale is claimed by the Government authorities. Due to the amendment in the Sale Tax Act of various States and decisions of Higher Courts, Banks are bound to honour sales tax claims etc.

5) Registering FIR against Bank personnel: Many a time, it is observed that influential borrowers/guarantors get criminal cases registered against the bank personnel thereby hindering the SARFAESI action of the Bank.

IN THESE CIRCUMSTANCES, THE ROLE OF FINANCE PROFESSIONALS CANNOT BE OVER-EMPHASIZED. THEY ARE THE BEST PERSONS TO PROPERLY GUIDE THE BORROWERS ON WHAT TO DO AND WHAT NOT TO DO

How is NPA presently affecting the profitability and efficiency of banks in India?

Impact of NPA

Profitability
Because of the money getting blocked, the profitability of bank decreases in proportion to NPAs. NPAs also lead to opportunity cost because otherwise if deployed in other assets/ investments the money could have earned income for the bank. So NPA does not only affect current profit but also future stream of profit. Reduction in profitability in turn results in lower ROI (return on investment).

Liquidity
With bank’s money getting blocked, and decrease in generation of surplus, bank’s liquidity gets affected forcing the bank to resort to short-term high-cost borrowing. This translates to additional cost.

Management Time
Since NPAs have become a burning issue, a lot of time and efforts of the top management are devoted towards this i.e. tackling and controlling the situation rather than to pursuing newer business opportunities which would have given good returns. Besides, banks have to bear substantial expenditure for legal and other related charges – like employing specialised recovery agents - to effect recovery from NPAs.

Reputation Loss
NPAs affect the repayment capacity of banks. Markets punish those with above-normal NPA levels as analysts and investors keep a hawk-eye on banks’ asset health. High NPAs lead to loss of goodwill and affect brand image of the Bank.

The gross NPA ratio of the banking sector increased to 4.2% as at end September, 2013 from 3.4% of March, 2013. As on September 30, 2013, gross NPAs of banks stood at Rs 2,29,007 crore. The
restructured standard advances also increased to 6% of total advances as at end September 2013 from 5.8% of March, 2013. Banks have to provide more for restructured assets, as per the RBI’s revised guidelines.

All these factors would exert downward pressure on margins and squeeze profits for 2013-14 by around 30 percent according to a study.

**MA** Do Basel II and Basel III provide for sufficient provisions for management of NPA?

Banks are required to maintain adequate capital against various risks faced by them for carrying out banking business. Capital requirement inter alia depends on the quality of assets of the bank. Basel II & III guidelines provide for allocation of higher risk weight for determining capital requirement on Non Performing Assets (NPAs). The salient points are:

- The unsecured portion of NPA (other than a qualifying residential mortgage loan), net of specific provisions, will be risk-weighted as follows:
  - I. 150 percent risk weight when specific provisions are less than 20 percent of the outstanding amount of the NPA;
  - II. 100 percent risk weight when specific provisions are at least 20 percent of the outstanding amount of the NPA;
  - III. 50 percent risk weight when specific provisions are at least 50 percent of the outstanding amount of the NPA.
- Where NPAs are secured by ineligible collaterals viz land, building, plant and machinery and provision reach 15% of the outstanding, risk weight is 100%.
- Claims secured by residential property, which are NPA will be risk weighted as under:
  - I. At 100 percent net of specific provisions.
  - II. If the specific provisions in such loans are at least 20 percent but less than 50 percent of the outstanding amount, the risk weight applicable to the loan net of specific provisions will be 75 percent.
  - III. If the specific provisions are 50 percent or more the applicable risk weight will be 50 percent.
- The higher provisioning requirement for NPAs stipulated by Basel guidelines adversely affects the capital base of the bank which makes it all the more essential to ensure that assets do not turn bad.

**MA** In the present economic downturn, where borrowers are facing cash flow crunch and banks finding it difficult to provide for NPA accounts, how much do you feel the prudential guidelines are relevant to this scenario? Do you agree to the fact that stressing both the lenders and borrowers in an economic downturn scenario, as now, would simply impact the economy negatively and therefore the need of the hour is a situation based guideline that provide relief to genuine borrowers? Do you feel that two sets of prudential guidelines be suitable for two different economic scenarios, one at the time of flourishing economy and one at the time of economic downturn?

In order to reflect a bank’s actual financial health in its balance sheet, the Reserve Bank has introduced prudential norms for income recognition, asset classification and provisioning for the advances portfolio of the banks. With a view to ensure that banks are not affected due to defaults, RBI has directed banks to make provisions or set aside money when an account turns bad.

It is true that in the present economic scenario, many bank borrowers are facing cash flow problems resulting in their failure to fulfill the repayment obligations to their lenders. For this reason asset quality of the banks has deteriorated substantially over the last 2-3 years requiring banks to make provision in all such accounts as per RBI prudential norms. This rise in provisioning for stressed assets is severely affecting the profitability of the banks.

Despite this, taking into account the time lag between an account becoming doubtful of recovery, its recognition as such, the realisation of the security and the erosion over time in the value of security charged to the bank, the banks should make provision against NPAs. This is also in line with the international standards and now, more than ever before, the prudential guidelines have become all the more relevant. Yes, during extra-ordinary situations, some special dispensations may be thought of - purely as a temporary measure - to help both bankers and genuine borrowers tide over the crisis.

For example, some relaxations may be thought of with regard to the delinquency period for classifying a genuinely distressed account as NPA. This will provide some breathing time to both bankers as well as borrowers to chalk out and implement a viable revival plan. However, this has to be sector-specific.

**MA** In the present scenario what roles professionals like Cost & Management Accountants play to help banking sector to check this problem? Please suggest in what way CMAs can offer their expertise in these situations?

In times of distress, the role of professionals like Cost & Management accountants is of paramount importance. They can render a yeomen’s service to the banking sector by guiding the distressed borrowers properly. In such times people tend to take knee-jerk action like restructuring, over leveraging instead of proper study / analysis of the causative factors and then undertaking the correct long term sustainable remedial measures. In these circumstances, the role of finance professionals cannot be over-emphasized. They are the best persons to properly guide the borrowers on what to do and what not to do in a situation like the one obtaining today.

There cannot be one-formula-fits-all kind of suggestion across the board for all types of borrowers. This is where the expertise of professionals like CMAs would be required to diagnose the maladies and offer practical solutions to the bankers and borrowers.
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Due to changes in economic policies during the last decades, Indian companies have been facing more and more competition even in the home market. To become a successful player in the marketplace, one has to be quality-conscious and cost-effective. Cost is one of the key success factors and has to be managed efficiently. A firm that fails to reduce costs as rapidly as its competitors do, will find its profit margin squeezed and its existence threatened. It is no longer enough to say, “Reduce costs by 10 percent across board.” Cost management has to become a discipline practised by virtually every person in the firm. Accordingly, systems and procedures that create intense downward pressures on all elements of costs are required to be implemented to achieve ever-improving levels of performance. It is in this context that strategic cost management is very important. This paper deals with conceptual aspects of Strategic Cost Management (SCM) and makes a brief discussion on adoption of successful business strategies and explains how sustainable competitive advantage of the firm through various tools can be developed. The role of emerging tools like Activity Based Costing, Life Cycle Costing, Target Costing and Quality Cost Management, in achieving SCM is also briefly touched upon. The last section gives concluding observations.

What is Strategic Cost Management?
One of the major themes in strategic cost management concerns the focus of cost management efforts. The key question is: How does a firm organize its thinking about cost management? Strategic cost management is an approach to management accounting that explicitly highlights strategic issues and concerns. It sets cost analysis in a broader context in which cost information is used to develop superior strategies. A sophisticated understanding of the firm’s cost structure can go a long way in the search for sustainable competitive advantage. This is what is referred to as strategic cost analysis [1]. Strategic cost management describes cost management that specifically focuses on strategic issues [2]. The overall recognition of the importance of cost relationships among the activities (in the value chain) of the firm and the process of managing those cost relationships to the firm’s advantage, is called strategic cost management [3]. Understanding how cost management facilitates the development of a successful business strategy requires a knowledge of the principles and practices of strategic management—the process of developing a competitive strategy.

Developing a sustainable competitive advantage
Through systematic analysis of critical success factors, a firm can identify and develop its competi-
tive advantage over its competitors. The traditional approach may be SWOT analysis. SWOT analysis is a systematic procedure for identifying a firm’s critical success factors—its internal strengths (S) and weaknesses (W), and its external opportunities (O) and threats (T). The more scientific approach is the value chain analysis which is the linked set of value-creating activities of the firm. The focus is external to the firm. According to Michael Porter [4], a firm can develop sustainable competitive advantage by following one of the two strategies.

(1) Low cost strategy, i.e., cost leader. Low cost relative to the competitors of the firm through economies of scale in production, learning curve effect, tight cost control, and cost minimization in service areas.

(2) A differentiation strategy, i.e., product uniqueness, e.g., brand loyalty (Coca Cola), superior customer service (IBM), best quality product (Mercedes in automobiles, Rolex in wrist-watches, etc.).

Cost leadership is a competitive strategy in which a firm outperforms competitors by producing products or services at the lowest cost. Differentiation is another competitive strategy in which a firm succeeds by developing and maintaining a unique value for the product, as perceived by the customers. The perception allows the firm to charge higher prices and outperform its competitors in profits without reducing costs significantly.

Porter emphasizes that the success of the above two strategies—cost leadership and product or service differentiation—depends on how a firm manages its own value chain relative to those of its competitors. Thus, value chain analysis is essential to determine exactly where in the firm’s segment of the chain—from supply of materials and design to distribution and customer service—cost can be lowered or customer value can be enhanced. Competitive advantage comes from carrying out these activities in a more cost-effective way than one’s competitors. In order for a company to achieve a sustainable competitive advantage, it must either (1) perform one or more activities in the value chain at the same quality level as its competitors, but at a lower cost, or (2) perform its value chain activities at a higher quality level than its competitors, but at no greater cost.

The Methodology
Porter (1985) explained the steps involved in strategic cost analysis. Shank and Govindarajan (1989) developed them further. In short, it involves the following three major steps:

- define the firm’s value chain and assign costs and assets to value activities;
- investigate the cost drivers regulating each value activity; and
- examine possibilities to build sustainable competitive advantage, either through controlling cost drivers or by re-configuring the value chain.

In identifying the value chain, the main thrust would be to gain competitive advantage, as competitive advantage cannot be meaningfully examined at the level of the industry as a whole. As stated earlier, a value disaggregates the firm into its distinct strategic activities. These activities are the building blocks by which a firm creates a product valuable to buyers. Activities should be isolated and separated if they satisfy any or all of the following conditions:

(a) They represent a significant percentage of operating costs;
(b) The cost behaviour of the activities or the cost drivers are different;
(c) They are performed by competitors in different ways; and
(d) They have a high potential of being able to create differentiation.

Each value activity incurs costs, generates revenues and ties up assets in the process. After identifying the value chain, operating costs, revenues and assets must be assigned to individual value activities.

The second step is to diagnose the cost drivers that explain variations in costs in each value activity. In conventional cost and management accounting, cost is primarily a function of only one cost driver—output volume. In the value chain approach, multiple cost drivers are used for cost allocation and they differ across value activities.

The third step relates to developing sustainable competitive advantage. Once a firm has identified the industry’s value chain and diagnosed the cost drivers of each value activity, sustainable competitive advantage can be gained either by controlling cost drivers or by configuring the value chain. In achieving this goal, the key questions in respect of each value activity would be:

(a) Can cost in this activity be reduced keeping value (revenue) constant?
(b) Can value (revenue) be increased in the activity, keeping costs constant?

By scientific analysis of costs, revenues and assets in each activity, the firm can achieve both low cost and differentiation. One way to accomplish this goal is to compare the value chain of the firm with the value chains of one or more of its major competitors and then identify the actions needed to manage the firm’s value chain better than their competitors. The very process of performing the value chain analysis can be quite instructive. Such an exercise forces each manager to ask: How does my activity add value to the customers who use my product (or service)?

Confrontation strategy
The two generic strategies—cost leadership and differentiation strategy, as stated earlier—rely upon avoiding competition by creating sustainable competitive advantages. The cost
leader, by becoming the low-cost producer, creates a price barrier and the differentiator, by satisfying its customers through developing unique products, creates a satisfaction barrier. But when such advantages cannot be achieved or sustained for long, firms are forced to adopt a third generic strategy, confrontation strategy. In confrontation strategy, firms compete head-on for their share of the market by developing and exploiting temporary competitive advantages. Kooper [5] explains in his research publication how this can be done through analysis and management of survival triplet.

**Confrontation Strategy and Survival Triplet**

Three product-related characteristics — cost, functionality and quality — play a critical role in the success of a firm that adopts a confrontation strategy. Since cost is transformed into selling price, the triplet can be represented as having cost-price, functionality and quality perspective as shown in Figure 1. The triplet has both internal and external perspectives.

![Figure 1 The Survival Triplet](image)

Internaually, the three characteristics represent the product’s costs (inclusive of research and development, selling and distribution), quality and functionality. Quality is defined as conformance to specifications and functionality represents conformance to engineering features of the product. Externally, these characteristics are selling price, perceived quality and perceived functionality for intended use.

According to confrontation strategy, firms do not attempt to collude with their competitors nor do they attempt to become cost leaders or differentiators. Instead, they compete head-on for their market share by developing and exploiting temporary competitive advantages. Firms can still try to differentiate their products by introducing new features or reducing prices both of which may bring in temporary, but not sustainable, competitive advantages. Topcon, a Japanese manufacturer of advanced ophthalmic instruments, had successfully applied this strategy in early 1980s before new competitors, like Nidek, Canon, and Nilon, entered into the market in early 1990s.

**Survival Zone**

In a competitive market, there cannot be one level of quality, functionality and price for a product in the survival triplet. We can conceive of maximum and minimum values of each characteristic in the survival triplet. A product’s survival zone is identified by determining the survival range for each characteristic. The survival range is the difference between maximum and minimum values for each characteristic. For functionality and quality, the minimum allowable level is the lowest value of each characteristic that the customer is willing to accept regardless of the value of the other two characteristics. For example, below a certain level of functionality, very few customers will be willing to buy a product no matter how high the quality or how low the price is. Similarly, low quality and high prices will attract only a few customers to buy the product. The maximum feasible value represents the highest value that the characteristic can have with respect to the other two characteristics and still the customers will be willing to purchase the product. The price characteristic is however different from the other two characteristics, functionality and quality, in that the customer determines the maximum allowable price and the firm decides the minimum feasible price. The maximum allowable price is the highest price that the customer is willing to pay regardless of the values of two other characteristics. The minimum feasible price is the lowest price the firm is willing to accept having regard to the minimum level of allowable quality and functionality.

The survival zone as described above can now be shown in Figure 2 [6].

![Figure 2 Survival Zones of the Triplet](image)
Managing the Survival Triplet
How can a firm manage various characteristics or elements of the survival triplet? Is it necessary to try to give equal emphasis on all the three characteristics at the same time?

In reality, one characteristic may dominate the other two at a point of time, depending upon the market and other conditions. For example, when the Japanese economy went into severe recession in the early 1990s, many Japanese firms changed their emphasis from the most important characteristic of functionality to cost. Similarly, many successful public enterprises in India (like Bharat Heavy Electricals Ltd. and Steel Authority of India Ltd.) had to shift emphasis on cost (subject to quality-functionality constraints) after the economy was liberalized in 1991 to meet the threats of competition in terms of price. In a market where customer is demanding increased functionality (say, PCs, laptops, and mobile industries) and is willing to pay for it, subject to cost-price and quality constraints, giving more attention to functionality will develop a temporary competitive advantage. It is also likely that the importance of one characteristic over the two others is likely to shift frequently over time. Accordingly, management of survival triplet demands that a firm must determine which characteristic of the survival triplet is the most critical over the two others to their competitive success at a point of time. It may be harmful to try to be the best in all three — it would be wise to select one characteristic at which to excel while ensuring that the other two remain inside their survival zones. Also, the key to success lies in selecting the appropriate rate of improvement for each characteristic. By any chance, if a firm enjoys the distinction of becoming number one in all the three characteristics dominate its competitors, and can sustain the advantage, it would lead to a monopoly position.

Thus, under the confrontation strategy, firms should develop integrated quality, functionality and cost management systems. The systems must be flexible enough so that with the change of emphasis from one element to the other, only the amount of effort for increasing the rate of change of the characteristics is modified but not the systems themselves.

5. Tools of Strategic Cost Management
There are several tools of SCM. We very briefly deal with the following:
(a) Activity Based Costing (ABC)
(b) Life Cycle Costing (LCC)
(c) Target Costing (TC)
(d) Quality Cost Management (QCM).

(a) Activity-based Costing (ABC)
In the competitive global business environment, costing system is required to be refined to provide high quality relevant cost information for decision making. How can this be achieved? Three steps are generally suggested:
• Adopting direct cost tracing as much as possible.
• Increasing the number of indirect cost pools.
• Selecting appropriate cost allocation base for each cost pool.

In short, activity-based cost drivers are used for allocation of indirect costs. In relation to ABC, three factors can be identified to judge the suitability of its adoption viz., product diversity, volume diversity and higher incidence of overhead costs. These are common in most cases. Because of the benefits flowing from application of ABC, there has been growing interest in its application, either as a basic or on-going cost accounting system or selective use for some critical service activities. ABC is widely used for cost reduction, product or service pricing, profitability analysis and so on. Using activity-based management, non-value-added activities and costs can be reduced or dispensed with.

(b) Life Cycle Costing
Life cycle costing is a technique which takes account of the total cost of making a product or owning a physical asset, during its economic life. It tracks and accumulates business function costs of the value chain of each product from initial R&D to final customer service and support [7].

The production and sale of many products follow a cycle over their economic lives. Normally, sales start out low, expand rapidly as the product is popularized, and then drop off rapidly as a better product becomes available or a new prod-
uct emerges in the market. Therefore, each product takes a number of years (accounting periods) to complete the cycle. Figure 3 shows the product life cycle of a product. Just as a human being, or any animate being, goes through different phases in the life cycle, a product too has similar phases. The length of the product cycle is governed by the rate of (a) technological change, (b) market acceptance and (c) competition. By and large, consumer products have shorter life cycle than basic industry goods which have a longer life cycle. For automobile companies, such as Ford and Nissan, the product life cycle for different cars ranges from 12 to 15 years to design, manufacture and sell. Pharmaceutical companies, such as Pfizer, Merck, and Glaxo Smith Kline, have a life cycle of 15 to 20 years for different products. Thus, the product life cycle concept is a very useful concept in sales forecasting, planning and control, as current company products cannot hold the market position indefinitely.

Another variation of life-cycle costing is Customer Life-Cycle Costing. Customer life-cycle costs focus on the total costs incurred by a customer to acquire, use, maintain and dispose of a product or service. From strategic viewpoint, when a firm chooses to serve only a narrow group of customers, it adopts ‘Focus Strategy’. Using focus strategy, a firm competes in a few narrow segments – each with different need – of a market. Customer Life Cycle Costing can be a useful tool for such companies. They can charge a customer based on customer life-cycle costs. For example, the Boeing Corporation in the US charges higher price for a Boeing 777 because of its special features that significantly decreases the life cycle cost of the customer.

Life cycle cost reporting (over the life cycle) is an essential part of LCC. It is generally combined with expected revenues over the life cycle to give a complete product-wise picture of profitability.

(c) Target Costing

Target costing is a process of developing costs for a product (or service) based on market-driven considerations. It is a method that allows firms to provide customers with products (or services) that they want, at a price that they can afford, and still earn desired financial returns. The philosophy is not to find out how much a product (or service) does cost but to find out what it should cost. It is thus strategic in nature and creates a culture of excellence in the firm that provides continuing strategic advantage. There are six key principles in target costing: (1) Price-led costing (i.e., target price less desired mark-up = target costs); (2) Customer focus; (3) Focus on design of products and processes; (4) Cross-functional teams; (5) Life cycle cost reduction; and (6) Value chain involvement.

One has to start from the market and then work back finally to the production process through design and development of the product (or the service) that the customer needs at an acceptable price (known as the target price). Target costing thus helps control costs before they are locked-in or designed in (i.e., in the design stage). On the other hand, traditional costing methods of cost control focus on controlling costs while they are being incurred (e.g., variance analysis). Target costing is widely used by Japanese and American industries in automobiles (e.g., Toyota, Nissan), electronics (e.g., Panasonic, Sharp, etc.), information technology (e.g., Apple, Compaq, etc.) and many other areas.

Target Costs: Target costs are derived from target selling price by deducting target margin. Target costs thus become goals for designers and production personnel. Value engineering is key to achieving target costs. It is the systematic evaluation of all aspects of production and marketing that starts from research and development, design of products, and ends with
distribution of products to the customers and the customer service. Thus, it covers the entire value chain or business functions of a firm.

*Cost Reduction Target:* Target costing aims at cost reduction. When the target costs are compared with currently feasible total costs, the difference gives the cost reduction target which should be met in order to achieve the target profit. In target costing, many costs are driven by decisions. Therefore, one feasible approach may be to redesign or concurrently design products and processes to achieve the cost reduction target. It is no doubt a big challenge to management and management has to accept it.

**(d) Quality Cost Management**

Quality is considered as one of the key tools of achieving competitive advantage of the firm. Of the three important components of Robin Cooper’s Survival Triplet, quality is one. Other factors remaining constant, customers will always prefer higher quality. In Japan, Toyota, a leading car manufacturer, recalled millions of car from the market worldwide in 2009-2010 to rectify some defects in engine of a number of Toyota models. Same thing happened in India in case of Indica model of Tata Motors and one or two models of Maruti Udyog Ltd. in recent years. Although defective products undoubtedly hit reputation, the companies concerned very quickly rectified the defects in the design and put the models back to sales. Of course, there was loss of revenue and goodwill.

Many companies the world over have emphasized ‘quality’ as an important strategic tool. What does then product or service quality mean? The American Society for quality defines quality as the total features and characteristics of a product or service made or rendered according to specifications to satisfy customers at the time of purchase and during use. There are two basic aspects of quality: (a) design quality and (b) conformance quality. The design quality implies how closely the features or characteristics of a product or service satisfies the needs and wants of customers. For example, if the gear-box of a car shows signs of problems at the final inspection stage, it means that the design specifications are not met. Conformance quality is the performance of the product or service relative to its design and product specifications. Thus, actual performance (quality) of a product may fall short of customer expectation either due to design quality failure and/or one to conformance quality failure.

Accordingly, in a competitive market, companies have to become quality conscious both for survival and growth. Many organizations have emerged to secure desired quality of a product or service. Use of ISO 9000 series enables companies to claim that their products or services maintain desired quality. Use of ISO 9000 has now become a necessary condition for competing in the global market. Similarly, companies, particularly hazardous ones, have to comply with environmental management standards (ISO 14000 series) to reduce the impact of their operations (air pollution, waste water and hazardous waste disposal, etc.) on environment. There are international environmental laws which companies have to comply with. Also, in many countries, there are specific legislations to regulate the activities of hazardous industries to protect environment [8].

Quality has both financial and non-financial perspectives. Financially, it represents costs of quality. Non-financial measures are number of customer-complaints, percentage of defectives to good production, employee empowerment and training, etc.

**Quality as a Strategic Competitive Tool**

Many companies the world over have been giving emphasis on quality as an important strategic initiative or tool. It is because a focus on quality reduces costs and increases customer satisfaction. In many countries, several high-profile awards or prizes are given to companies that have produced high quality products and services [9]. As for instance, Malcolm Baldrige National Quality Award in the U.S., the Deming Prize in Japan, and the Premio Nacional de Calidad in Mex-
How does quality serve as a strategic competitive tool? Companies have to establish the quality mission based on the needs of the business and understanding of the internal and external business environments. Then strategies are developed and quality improvement projects are undertaken. As per Deming Chain Reaction, successful implementation of these quality improvement projects leads the company to competitive advantage in terms of reduced cost, improved productivity, increased market share and growth.

Costs of Quality
Due to the increasing importance of maintaining high-quality product or service, companies must focus on quality costs management. What are these costs and how they can be classified for better management? Quality costs can be classified as: (1) Prevention Costs i.e. the costs of preventing defects (systems development, pilot studies, reliability engineering and quality training, etc.); (2) Appraisal Costs i.e. costs of determining whether defects exist (reliability testing, metallurgical laboratory, material and supplies inspection, etc.); (3) Internal failure costs i.e. costs of defect rectification before delivery of product to the customers (rework, repair, scrap, downtime, etc.); (4) External failure costs i.e. costs incurred after delivery of the products (customer complaints, product liability, repairs and replacement arising out of warranty, warranty costs, etc.), and (5) Opportunity costs: Costs of opportunities foregone (loss of contribution on lost sales due to defects in product or service, loss of reputation, etc.).

For better management, quality costs may be classified into direct costs and indirect costs. Direct costs can be traced to products or services. Indirect costs are incurred for each of the costs-of-quality activities. Once indirect costs are identified, use of ABC for allocation will produce better results.

Concluding observations
We have briefly discussed various contemporary business strategies that a firm should adopt for managing costs strategically. With an understanding of these strategies, the Management Accountant will be in a better position to adopt one or all of the tools of cost management to optimise benefits. These strategies and modern tools of cost management go hand in hand and are complementary to each other. The Management Accountant has to adopt an integrated approach to apply his knowledge and skill to select the right strategy in a given situation and apply the appropriate tool from his ‘tool kits’ for better cost management to enhance the customers’ value. In the present competitive global market, the process of achieving excellence in cost management is continuous and never-ending.

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PROFITABILITY OF SELECTED CO.s IN TEXTILE INDUSTRY: AN EMPIRICAL ASSESSMENT

The study showed that the fixed assets management of the companies made notable contribution towards improving their overall profitability.

Indian textile industry is one of the leading textile industries in the world. Though it was predominantly an unorganized sector even a few years back, the opening up of Indian economy in 1991 has brought about revolving changes in the scenario. The economic liberalization measures adopted by the Government of India have given much-needed thrust to the Indian textile industry. As a result, it has now become one of the largest textile industries in the
world. The success of Indian textile industry is absolutely dependent on its manufacturing as well as export performances. India earns about twenty seven percent of its total foreign exchange through textile exports. Further, the Indian textile industry contributes nearly fourteen percent of the total industrial production and around three percent to the GDP of the country. On the other side, the process of liberalization has exposed the Indian textile industry to intensified competition by paving the way for entrance of foreign companies in the country. In the present situation of turbulent market conditions, the domestic companies have been forced to reorient their strategies for managing odds arising out of tremendous competition in the post liberalization era. Some of them have been able to adapt themselves as per requirements while the other failed to do so. In this backdrop, the present study seeks to analyze the profitability status of the twenty two selected companies in the Indian textile industry during the period 2002-03 to 2011-12.

**Review of literature**

During the last few decades, a good number of studies have been made in India and abroad on the analysis of profitability of different industry segments. The following paragraphs provide a very brief explanation of some of the significant studies so far carried out on the issue relating to the profitability analysis.

Eljelly (2004), in his study, examined the relation between profitability and liquidity of some selected joint stock companies in Saudi Arabia. While assessing the liquidity of the companies, the study used cash conversion cycle and current ratio as measures of liquidity. The study observed, at the firm level, a significant negative relation between the firms’ profitability and their liquidity level as measured by current ratio, whereas at the industry level, the relation was more significant when liquidity was measured by cash conversion cycle during the study period.

Parasuraman (2004) carried out a cross-sectional analysis of the working capital management practices in leading pharmaceutical companies in India. An attempt was also made in this study to examine the relationship between the credit policies adopted by the companies under study and their profitability. The study concluded that the companies adopting liberal credit policy achieved higher profitability during the period under study.

Mallik, Sur and Rakshit (2005) conducted a study to examine the relationship between efficiency of working capital management and profitability with reference to some selected companies in Indian pharmaceutical industry during the period 1990-91 to 2001-02. The study concluded that there was a favourable influence of inventory management and debtors management on profitability in majority of the selected companies but no definite relationship was found between liquidity and profitability from the empirical results.

Lazaridis and Tryfonidis (2006) in their study investigated the relationship between working capital management and corporate profitability of the selected listed companies in the Athens Stock Exchange. The results of the study showed that there was a significant relationship between profitability and cash conversion cycle.

Azhagaiyah and Gejalakshmi (2007) carried out a study for examining the efficiency of working capital management of thirty selected companies in Indian textile industry during the period 1995-96 to 2005-06. This study concluded that the efficiency of managing current assets of the companies under study was one of the contributory factors towards enhancing their profitability.

Sur and Chakraborty (2011) in their paper examined empirically the relationship between working capital management and profitability of the ten multinational companies in the Indian pharmaceutical sector during the period 1996-97 to 2007-08. One of the significant outcomes of the study was that the liquidity management, inventory management and credit management made positive contribution towards improvement of the corporate profitability during the study period.

Rahman (2011) carried out a study on the working capital management and profitability of the selected nine companies belonging to textile industry in Bangladesh for the period 2005-06 to 2007-08. The findings of the study showed that the profitability performance as well as the working capital position of the selected companies were not satisfactory during the study period. The study also revealed that the nature of working capital policy (CA to Sales), financing of working capital (CL to TA), inventory holding period (Inventory Turnover in Days), Accounts Receivable Collection Period (Accounts Receivable Turnover in Days), Accounts Payable Period (Accounts Payable Turnover in Days), and Cash Conversion Cycle in Days of the sample companies played an important role in determining their overall profitability (Return on Total Assets) during the period under study. The study concluded that the poor management of working capital is one of the important causes for poor performance or poor profitability position of the selected textile companies during the study period.

Owolabi and Obida (2012) made a study on the relationship between liquidity management and corporate profitability of a sample of twelve manufacturing companies quoted on Nigerian Stock Exchange during the period 2005 to 2009. The study concluded that the efficiency in liquidity management of the selected companies had significant influence on enhancing their profitability during the study period.

Ogundipe et al. (2012) conducted a study to assess the
impact of efficiency of working capital management on the maximization of profitability and market value of the fifty four selected non-financial companies listed in Nigerian Stock Exchange for the period of 1995 to 2009. This study used the cash conversion cycle (CCC) as a measure of efficiency of working capital management and revealed that reduction in the length of CCC had made significant contribution towards the realization of profit maximization objectives and consequently the firms’ market values during the period under study.

Sur and Rahaman (2013) made a comprehensive study on the efficiency of liquidity management by considering quantitative as well as qualitative aspects of liquidity of twenty two selected companies in Indian pharmaceutical industry for the period 2001-02 to 2010-11. One of the significant findings of the study was that there was a strong positive association between liquidity and profitability of the companies under study during the study period. The study also revealed that the efficiency of receivables management made a notable contribution towards enhancing overall profitability of the selected companies during the period under study.

On the basis of the above discussion, it can be said that several studies on the profitability analysis of different sectors in India and abroad have been made even in the last few years. A considerable number of studies have also been made during the last few decades on the evaluation of the financial performance of Indian textile industry in which along with other aspects of financial performance the profitability has been analysed. However, in the post-liberalisation era, the issue relating to the profitability of the companies belonging to the Indian textile industry has not been properly addressed. No significant study on the analysis of profitability of the Indian textile industry in the post-liberalisation period has so far been carried out. Thus, in order to bridge the gap the present study is made.

**Objectives of the study**

The present study aims at assessing the profitability of the selected companies belonging to the textile industry in India. More specifically, the study has the following objectives:

i) To make a comparative analysis of the selected companies in respect of profitability using some suitable ratios.

ii) To ascertain the profitability status of the companies under study more precisely based on composite profitability scores.

iii) To examine the relationship between the overall profitability of the selected companies and efficiency in managing their fixed assets and working capital.

iv) To analyze the joint impact of fixed assets management and working capital management of the selected companies on their profitability.

**Methodology of the study**

The study is based on twenty two selected companies belonging to the textile industry in India. The companies considered in this study (as shown in Appendix-1) were selected following the purposive sampling procedure. This selection was made on the basis of ‘BW Real 500’ published by the Business World, Vol. 28, Issue 23, in October, 2008. The data used in this study, for the period 2002-03 to 2011-12, were taken from secondary sources, i.e., Capitaline Corporate Database of Capital Market Publisher (I) Ltd., Mumbai. For analyzing the data the technique of ratio analysis, simple statistical tools like arithmetic mean, statistical techniques like Pearson’s simple correlation analysis, Kendall’s correlation analysis, Spearman’s rank correlation analysis and multiple regression analysis and statistical tests such as t-test, Chi-square ($\chi^2$) and F-test were applied at appropriate places.

**Limitations of the study**

The study suffers from the following major limitations:

i) The study was based on the published annual reports of the selected companies. So, it is subject to all the limitations that are inherent in the published annual financial statements.

ii) While ascertaining the working capital turnover ratio (WCTR) in this study, some negative WCTRs were found. These negative ratios were taken as nil in this study.

iii) Out of a wide range of factors determining profitability of a firm, only a few selected internal determinants were considered in this study.

iv) The study was mainly based on accounting ratio analysis. Therefore, the limitations of ratio analysis also delved into the study.

**Findings of the study**

A. In Table 1 an attempt was made to assess the profitability of the selected companies in Indian textile industry during the period under study. While analyzing the profitability in the present study, some suitable profitability indicators such as gross profit ratio (GPR), operating profit ratio (OPR), net profit ratio (NPR), return on capital employed (ROCE), return on net worth (RONW) and earning per share (EPS) were used.

a) **GPR**: It is a basic measure of profitability. The higher the value of GPR, the higher is the firm’s ability to generate gross profit. Table 1 shows that the average GPR was the highest in Himatsingka (25.30%) while it was the least in Abhishek (-33.06%) during the study period. The second highest position was occupied by SRF, whereas Koutons was placed in the second worst position in respect of mean GPR. Out of the twenty two selected companies, sixteen companies were placed in the category of ‘above the industry average’ while in the remaining six companies the
average GPR was lower than the ‘industry average’ during the study period.

b) OPR: It measures the operating profitability of a firm. The higher the value of OPR, the higher is the firm’s ability to earn profit from its business operations. Table1 depicts that Himatsingka (29.63%) and SRF (22.95%) occupied the first and the second top positions respectively while Koutons (-0.52%) and Alps (5.14%) were placed in the worst places respectively in respect of average OPR during the period under study. Ten companies, amongst the selected ones, found place in the category of ‘above the industry average’ while the remaining twelve companies were placed in ‘below the industry average’ class.

c) NPR: It indicates the firm’s net earning capability. The higher the value of NPR, the greater is the firm’s ability to generate net earnings. Table1 reveals that the mean NPR had a wide range between 14.43% (Himatsingka) and -57.41% (Abhishek). The mean NPR of the industry was also found to be very negligible (0.17%) and in seventeen companies, out of the twenty two selected ones, the mean
NPR was less than 5% during the study period.
d) **ROCE:** It is one of the most dependable ratios for testing profitability of a business firm. It measures the overall performance of the firm in terms of its profitability. The higher the value of ROCE, the greater is the overall profitability of the firm. Table 1 shows that mean ROCE was the highest in SRF (23.37%) while the same was the least in Eskay (2.56%) during the study period. Out of the twenty two selected companies, seven companies were placed in 'above the industry average' class whereas the remaining fifteen companies found place in 'below the industry average' category.
e) **RNOW:** It is used at the time of judging the profitability of a firm from the viewpoint of its owners. The higher the value of RNOW, the greater is the firm’s ability to compensate its owners. Table 1 reveals that Koutons (28.05%), in spite of occupying the worst place in respect of mean OPR and the second worst place in respect of mean GPR and mean NPR, found place in the top most position with respect to mean RONW during the study period. Eskay (0.87%) occupied the least position during the same period. One half of the companies under study found place in the category of ‘above the industry average’ while the remaining companies were placed in ‘below the industry average’ class.
f) **EPS:** It is also a profitability indicator from the viewpoint of owners. The higher the value of EPS, the higher is the firm’s ability to earn profit from the view point of its owners. It is evident from Table 1 that the mean EPS was the highest in Vardhman (Rs. 31.79) while it was the least in

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<td>1</td>
</tr>
<tr>
<td>Vardhman</td>
<td>3 5 4 6 6 1</td>
<td>25</td>
<td>2</td>
</tr>
<tr>
<td>Welspun</td>
<td>5 4 6 7 8 14</td>
<td>44</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: Compiled and computed from Capitaline Corporate Database of Capital Market Publishers (I) Ltd., Mumbai.
### Table 3.1: Analysis of Relationship between Efficiency of Fixed Assets Management and Overall Profitability of the Selected Companies in Indian Textile Industry

<table>
<thead>
<tr>
<th>Company</th>
<th>Pearson</th>
<th>Kendall</th>
<th>Spearman</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abhishek</td>
<td>0.942**</td>
<td>0.795**</td>
<td>0.902**</td>
</tr>
<tr>
<td>Alps</td>
<td>0.907**</td>
<td>0.676**</td>
<td>0.828**</td>
</tr>
<tr>
<td>Arvind</td>
<td>0.550</td>
<td>0.225</td>
<td>0.292</td>
</tr>
<tr>
<td>Bombay Dyeing</td>
<td>0.629</td>
<td>0.511*</td>
<td>0.673*</td>
</tr>
<tr>
<td>Bombay Rayon</td>
<td>0.965**</td>
<td>0.911**</td>
<td>0.976**</td>
</tr>
<tr>
<td>Century Erika</td>
<td>-0.109</td>
<td>-0.045</td>
<td>-0.067</td>
</tr>
<tr>
<td>Eskay</td>
<td>-0.489</td>
<td>-0.477</td>
<td>-0.701*</td>
</tr>
<tr>
<td>Garden</td>
<td>0.058</td>
<td>0.135</td>
<td>0.116</td>
</tr>
<tr>
<td>Gokaldas</td>
<td>0.938**</td>
<td>0.854**</td>
<td>0.936**</td>
</tr>
<tr>
<td>Himatsingka</td>
<td>-0.102</td>
<td>-0.090</td>
<td>-0.018</td>
</tr>
<tr>
<td>Koutons</td>
<td>0.764*</td>
<td>0.795**</td>
<td>0.909**</td>
</tr>
<tr>
<td>KSL</td>
<td>0.254</td>
<td>0.067</td>
<td>0.115</td>
</tr>
<tr>
<td>Nahar</td>
<td>0.095</td>
<td>0.045</td>
<td>0.140</td>
</tr>
<tr>
<td>Raymond</td>
<td>0.667*</td>
<td>0.556*</td>
<td>0.721*</td>
</tr>
<tr>
<td>RSWM</td>
<td>0.576</td>
<td>0.422</td>
<td>0.600</td>
</tr>
<tr>
<td>S. Kumars</td>
<td>0.949**</td>
<td>0.809**</td>
<td>0.912**</td>
</tr>
<tr>
<td>Sangam</td>
<td>0.720*</td>
<td>0.600*</td>
<td>0.782**</td>
</tr>
<tr>
<td>Shri Lakshmi</td>
<td>0.010</td>
<td>0.180</td>
<td>0.195</td>
</tr>
<tr>
<td>Spentex</td>
<td>0.759*</td>
<td>0.708**</td>
<td>0.847**</td>
</tr>
<tr>
<td>SRF</td>
<td>0.633*</td>
<td>0.270</td>
<td>0.377</td>
</tr>
<tr>
<td>Vardhman</td>
<td>0.639*</td>
<td>0.556*</td>
<td>0.661*</td>
</tr>
<tr>
<td>Welspun</td>
<td>0.878**</td>
<td>0.764**</td>
<td>0.912**</td>
</tr>
<tr>
<td>Industry (based on pooled data)</td>
<td>0.564**</td>
<td>0.317**</td>
<td>0.440**</td>
</tr>
</tbody>
</table>

* Significant at 0.05 level, ** Significant at 0.01 level.

**Source:** Compiled and computed from Capitaline Corporate Database of Capital Market Publishers (I) Ltd., Mumbai.
Table 3.2: Analysis of Relationship between Efficiency of Working Capital Management and Overall Profitability of the Selected Companies in Indian Textile Industry

<table>
<thead>
<tr>
<th>Company</th>
<th>Correlation coefficient between ROCE and WCTR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pearson</td>
</tr>
<tr>
<td>Abhishek</td>
<td>0.466</td>
</tr>
<tr>
<td>Alps</td>
<td>0.352</td>
</tr>
<tr>
<td>Arvind</td>
<td>0.420</td>
</tr>
<tr>
<td>Bombay Dyeing</td>
<td>-0.155</td>
</tr>
<tr>
<td>Bombay Rayon</td>
<td>0.833**</td>
</tr>
<tr>
<td>Century Enka</td>
<td>0.027</td>
</tr>
<tr>
<td>Eskay</td>
<td>0.179</td>
</tr>
<tr>
<td>Garden</td>
<td>-0.362</td>
</tr>
<tr>
<td>Gokaldas</td>
<td>0.595</td>
</tr>
<tr>
<td>Himatsingka</td>
<td>-0.152</td>
</tr>
<tr>
<td>Koutons</td>
<td>0.435</td>
</tr>
<tr>
<td>KSL</td>
<td>0.475</td>
</tr>
<tr>
<td>Nahar</td>
<td>-0.540</td>
</tr>
<tr>
<td>Raymond</td>
<td>0.275</td>
</tr>
<tr>
<td>RSVM</td>
<td>0.066</td>
</tr>
<tr>
<td>S. Kumars</td>
<td>0.868**</td>
</tr>
<tr>
<td>Sangam</td>
<td>0.437</td>
</tr>
<tr>
<td>Shri Lakshmi</td>
<td>0.302</td>
</tr>
<tr>
<td>Spentex</td>
<td>0.796**</td>
</tr>
<tr>
<td>SRF</td>
<td>-0.323</td>
</tr>
<tr>
<td>Vardhman</td>
<td>0.121</td>
</tr>
<tr>
<td>Welspun</td>
<td>0.258</td>
</tr>
<tr>
<td>Industry (based on pooled data)</td>
<td>0.174**</td>
</tr>
</tbody>
</table>

* Significant at 0.05 level, ** Significant at 0.01 level.

Source: Compiled and computed from Capitaline Corporate Database of Capital Market Publishers (I) Ltd., Mumbai.
Eskay (Rs. 0.26) during the study period. Nine companies, out of twenty two selected ones, fell into the category of ‘above the industry average’ while in the remaining thirteen companies the mean EPS was lower than the average EPS of the industry (Rs. 10.77) during the study period.

It was observed from Table1 that Himatsingka occupied the top most rank in respect of three selected parameters of profitability, namely, OPR, GPR, and NPR whereas SRF was placed in the second position with respect to all the parameters except ROCE in respect of which it ranked first.

<table>
<thead>
<tr>
<th>Company</th>
<th>Partial Regression Coefficients</th>
<th>Multiple Correlation Coefficient (R)</th>
<th>Coefficient of Determination (R2)</th>
<th>F-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b0</td>
<td>b1</td>
<td>b2</td>
<td></td>
</tr>
<tr>
<td>Abhishek</td>
<td>-3.950</td>
<td>20.698*</td>
<td>-0.324</td>
<td>0.942*</td>
</tr>
<tr>
<td>Alps</td>
<td>-13.374*</td>
<td>16.206*</td>
<td>-0.736</td>
<td>0.913*</td>
</tr>
<tr>
<td>Arvind</td>
<td>-0.685</td>
<td>12.49</td>
<td>-0.509</td>
<td>0.559</td>
</tr>
<tr>
<td>Bombay Dyeing</td>
<td>5.099</td>
<td>0.696**</td>
<td>0.285</td>
<td>0.635</td>
</tr>
<tr>
<td>Bombay Rayon</td>
<td>7.036*</td>
<td>4.340*</td>
<td>-1.175</td>
<td>0.974*</td>
</tr>
<tr>
<td>Century Enka</td>
<td>15.763</td>
<td>-6.636</td>
<td>-0.001</td>
<td>0.109</td>
</tr>
<tr>
<td>Eskay</td>
<td>7.907</td>
<td>-4.455</td>
<td>0.536</td>
<td>0.496</td>
</tr>
<tr>
<td>Garden</td>
<td>12.914*</td>
<td>3.605</td>
<td>-1.298</td>
<td>0.489</td>
</tr>
<tr>
<td>Gokaldas</td>
<td>-3.415</td>
<td>5.016*</td>
<td>-2.263</td>
<td>0.953*</td>
</tr>
<tr>
<td>Himatsingka</td>
<td>12.325</td>
<td>-3.366</td>
<td>-0.659</td>
<td>0.156</td>
</tr>
<tr>
<td>Koutons</td>
<td>0.653</td>
<td>3.125*</td>
<td>-7.127</td>
<td>0.841*</td>
</tr>
<tr>
<td>KSL</td>
<td>-5.559</td>
<td>4.642</td>
<td>3.159**</td>
<td>0.664</td>
</tr>
<tr>
<td>Nahar</td>
<td>9.375</td>
<td>15.135</td>
<td>-9.641**</td>
<td>0.645</td>
</tr>
<tr>
<td>Raymond</td>
<td>-14.914*</td>
<td>17.499*</td>
<td>1.428</td>
<td>0.711**</td>
</tr>
<tr>
<td>RSWM</td>
<td>10.783</td>
<td>19.684***</td>
<td>-1.165</td>
<td>0.585</td>
</tr>
<tr>
<td>S. Kumars</td>
<td>-7.172*</td>
<td>4.690*</td>
<td>6.019**</td>
<td>0.967*</td>
</tr>
<tr>
<td>Sangam</td>
<td>-8.915</td>
<td>16.886*</td>
<td>-0.590</td>
<td>0.731**</td>
</tr>
<tr>
<td>Shri Lakshmi</td>
<td>9.104*</td>
<td>-0.498</td>
<td>2.656</td>
<td>0.463</td>
</tr>
<tr>
<td>Spentex</td>
<td>-5.716*</td>
<td>4.049*</td>
<td>1.531*</td>
<td>0.927*</td>
</tr>
<tr>
<td>SRF</td>
<td>-18.614</td>
<td>39.047**</td>
<td>-0.035</td>
<td>0.682</td>
</tr>
<tr>
<td>Vardhman</td>
<td>8.904</td>
<td>13.47*</td>
<td>-5.604</td>
<td>0.772*</td>
</tr>
<tr>
<td>Welspan</td>
<td>-3.231</td>
<td>14.56*</td>
<td>0.043</td>
<td>0.879*</td>
</tr>
<tr>
<td>Industry (based on pooled data)</td>
<td>6.082*</td>
<td>1.72*</td>
<td>0.111*</td>
<td>0.597*</td>
</tr>
</tbody>
</table>

* Significant at 0.05 level, ** Significant at 0.10 level.

Source: Compiled and computed from Capitaline Corporate Database of Capital Market Publishers (I) Ltd., Mumbai.
Appendix 1: List of the Selected Companies in Indian Textile Industry

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Abbreviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abhishek Corporation Ltd.</td>
<td>Abhishek</td>
</tr>
<tr>
<td>Alps Industries Ltd.</td>
<td>Alps</td>
</tr>
<tr>
<td>Arvind Ltd.</td>
<td>Arvind</td>
</tr>
<tr>
<td>Bombay Dyeing &amp; Manufacturing Company Ltd.</td>
<td>Bombay Dyeing</td>
</tr>
<tr>
<td>Bombay Rayon Fashions Ltd.</td>
<td>Bombay Rayon</td>
</tr>
<tr>
<td>Century Enka Ltd.</td>
<td>Century Enka</td>
</tr>
<tr>
<td>Eskay K<code>n</code>IT (India) Ltd.</td>
<td>Eskay</td>
</tr>
<tr>
<td>Garden Silk Mills Ltd.</td>
<td>Garden</td>
</tr>
<tr>
<td>Gokaldas Exports Ltd.</td>
<td>Gokaldas</td>
</tr>
<tr>
<td>Himatsingka Seide Ltd.</td>
<td>Himatsingka</td>
</tr>
<tr>
<td>Koutons Retail India Ltd.</td>
<td>Koutons</td>
</tr>
<tr>
<td>KSL and Industries Ltd.</td>
<td>KSL</td>
</tr>
<tr>
<td>Nahar Spinning Mills Ltd.</td>
<td>Nahar</td>
</tr>
<tr>
<td>Raymond Ltd.</td>
<td>Raymond</td>
</tr>
<tr>
<td>RSWM Ltd.</td>
<td>RSWM</td>
</tr>
<tr>
<td>S. Kumars Nationwide Ltd.</td>
<td>S. Kumars</td>
</tr>
<tr>
<td>Sangam (India) Ltd.</td>
<td>Sangam</td>
</tr>
<tr>
<td>Shri Lakshmi Cotsyn Ltd.</td>
<td>Shri Lakshmi</td>
</tr>
<tr>
<td>Spentex Industries Ltd.</td>
<td>Spentex</td>
</tr>
<tr>
<td>SRF Ltd.</td>
<td>SRF</td>
</tr>
<tr>
<td>Vardhman Textiles Ltd.</td>
<td>Vardhman</td>
</tr>
<tr>
<td>Welspun India Ltd.</td>
<td>Welspun</td>
</tr>
</tbody>
</table>
during the period under study. So, at a glance, uniformity among the selected profitability indicators of the companies under study was observed during the study period. In order to examine whether there was any relationship among the mean values of the selected measures of profitability, analysis of Kendall’s coefficient of concordance \((W)\) was made in Table 1 and also to test the significance of \(W\), Chi-square \((\chi^2)\) test was used. The computed value of \(W\) was 0.587, which was found to be statistically significant at 0.01 level. It confirms that there was a strong evidence of uniformity among the selected measures of profitability during the study period.

B. In Table 2, the profitability status of the selected companies was measured more precisely using the composite profitability score. The composite rank of a company was ascertained on the basis of the sum of the individual ranks of the firm in respect of the mean values of the selected profitability measures. The ultimate ranking was done following the principle that the lower the sum of individual ranks, the higher the profitability. Table 2 discloses that SRF captured the top most position and was followed by Vardhman, Bombay Rayon, Himatsingka, Welspun, Shri Lakshmi, Century Enka, Arvind, Sangam, Raymond, Nahar, Gokaldas, Koutons, S. Kumars, Garden, RSWM, Bombay Dyeing, KSL, Abhishek, Spentex, Alps and Eskay respectively.

C. The analysis of the relationship between overall profitability and efficiency of fixed assets management and that between overall profitability and efficiency of working capital management of the selected companies were made in Table 3.1 and Table 3.2 respectively. The overall profitability was measured in terms of average ROCE, while the efficiency of fixed assets management and that of working capital management were ascertained on the basis of their respective turnover ratios. For the purpose of making the analysis three types of correlation coefficients were computed, viz. Pearson’s correlation coefficient, Spearman’s rank correlation coefficient and Kendall’s correlation coefficient. In order to judge whether these coefficients were statistically significant or not t-test was applied. Table 3.1 discloses that out of sixty six correlation coefficients between ROCE and fixed assets turnover ratio \((FATR)\), fifty seven coefficients were positive, of which thirty six coefficients were found to be statistically significant and the remaining nine coefficients were negative of which only one coefficient was found to be statistically significant. Table 3.1 also reveals that all the three correlation coefficients computed on the basis of pooled data were significantly positive during the study period. Theoretically, there should be a positive association between ROCE and FATR, and the net outcome derived from the correlation analysis also conforms to the theoretical argument.

In Table 3.2 it was shown that fifty one correlation coefficients, out of sixty six correlation coefficients between ROCE and WCTR, were positive, of which eight coefficients were statistically significant and fifteen coefficients were negative, but none of which was found to be statistically significant. However, all the three coefficients computed based on combined data set were positive and statistically significant even at 0.01 level. So, the net result of this analysis also corroborate the theoretical argument that the efficiency of the company in managing its working capital has a positive influence on its overall profitability.

D. In Table 4 an effort was made to investigate the joint influence of the efficiency of fixed assets management and working capital management of the selected companies on their overall profitability by applying multiple regression analysis and multiple correlation analysis. The partial correlation coefficients and multiple correlation coefficients were tested by using the t-test and the F-test respectively. The regression equation fitted in this table was: \[ ROCE = b_0 + b_1 \cdot FATR + b_2 \cdot WCTR, \] where \(b_0\) was the intercept and \(b_1\) and \(b_2\) were the partial regression coefficients. Table 4 exhibits that when FATR increased by one unit, the ROCE went up in eighteen out of twenty two selected companies and the increases in ROCE were found to be statistically significant in fourteen companies whereas for one unit increase in FATR the ROCE came down in four companies but none of the decreases in ROCE was found to be statistically significant. For one unit increase in WCTR, the ROCE increased in eight companies, of which three were observed to be significant statistically whereas it reduced in fourteen companies, of which one decrease was found to be significant. The multiple correlation coefficient of ROCE on FATR and WCTR of the sample companies ranged between 0.109 (Century Enka) and 0.974 (Bombay Rayon) during the study period. These coefficients were found to statistically significant in eleven companies. It implies that the joint influence of the company’s efficiency in managing fixed assets and working capital was notable in eleven companies during the study period. Table 4 also contains the outcomes derived from the multiple regression analysis and multiple correlation analysis which were made using the combined data set of the twenty two selected companies for the study period. The combined data set consists of two hundred and twenty observations for each of the variables. The result obtained in Table 4 using the combined data set indicates that for one unit increase in FATR and WCTR, the ROCE increased by 1.72 units and 0.111 units respectively and these coefficients (\(b_1\) and \(b_2\)) were found
to be statistically significant at 0.01 level. The multiple correlation coefficient of ROCE on FATR and WCTR worked out using the pooled data was 0.597, which was found to be statistically significant at 0.01 level. This table also reveals that the coefficient of multiple determination ($R^2$) ascertained on the basis of the pooled data was 0.357 which indicates that the FATR and WCTR of the selected companies contributed jointly 35.70% of the variation in their ROCE during the study period.

Concluding remarks

A. Himatsingka proved itself as the best performer in terms of mean GPR, OPR and NPR amongst the selected twenty two companies during the study period whereas Koutons captured the least rank in respect of average OPR and Abhishek was placed in the worst positions in respect of average GPR and average NPR during the same period. The top-most positions in respect of mean values of ROCE, RONW and EPS were captured by SRF, Koutons, and Vardhman respectively whereas Eskay was the worst performer in terms of all the above three parameters of profitability during the study period. The net outcome derived from the analysis of Kendall’s coefficient of concordance indicates a strong evidence of uniformity among the mean values of the selected measures of profitability during the study period.

B. The analysis of composite profitability scores of the selected companies reveals that SRF, Vardhman, Bombay rayon, Himatsingka, and Welspun were the top five companies amongst the selected ones while Eskay, Alps, Spentex, Abhishek and Bombay Dyeing were placed in the last five positions respectively during the study period.

C. A significant positive correlation between overall profitability (as indicated by ROCE) and efficiency in fixed assets management (as indicated by FATR) was observed in 54.55 percent cases whereas in only 1.52 percent cases the impact of fixed assets management on profitability was significantly negative. The findings of the pooled correlation analysis also show that the association between profitability and fixed assets management was positive and significant during the study period. Therefore, the net outcome derived from the analysis of the interrelationship between fixed assets management of the selected companies and their profitability reflects that the fixed assets management of the companies made notable contribution towards improving their overall profitability during the study period.

D. The analysis of correlation between efficiency in working capital management (as indicated by WCTR) and overall profitability (as measured by ROCE) reveals that the relationship was positive in 77.27 percent cases while the same was negative in 22.73 percent cases. However, a significant positive relationship was found only in 12.12 percent cases while no significant negative association was observed during the study period. Moreover, the analysis of correlation between ROCE and WCTR based on the pooled data set also provides a strong evidence of significant favourable impact of WCTR on ROCE. It reflects that the contribution made by the working capital management of the selected companies towards amplifying their overall profitability was noticeable during the study period.

E. The empirical results of the study of multiple regression of overall profitability on the efficiency in managing fixed assets and working capital show that the impact of fixed assets management on the overall profitability was
The findings of this analysis provide an evidence of notable contribution of fixed assets management as well as working capital management towards enhancing the overall profitability of the sample companies during the period under study.

This inference is also confirmed by the net outcome derived from the analysis of multiple correlation of ROCE on FATR and WCTR as the multiple correlation coefficient in fifty percent cases and also the same coefficient in case of the pooled data were significant during the study period.

References:

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debasishsur@yahoo.co.in
TELECOM INFRASTRUCTURE TOWERS: COST ISSUES

The best practices in infrastructure management are remote monitoring systems (to reduce trucking expenses) and the use of renewable energy sources such as solar and wind.

With the advent of liberalized policy in telecom sector by allowing the private operators to participate in the sector lead to the vast development in telecom sector especially in cellular phones. The mobile phones working in the wireless mode requires the installation of towers in the service area. The phenomenal growth in mobile subscribers in India over the past years has created huge opportunities for the telecom industry activity. The telecom network services in India are being expanded in order to meet the in-house demands and also set new world standards. Telecom infrastructure in India has brought Indian telecom industry in an enviable position, as it is second amongst the emerging nations of Asia. The telecom tower sector is a very capital intensive sector and involves high value investments. In this article the issues relating to cost in respect of telecom towers are discussed.

Telephone towers
The exponential wireless subscriber growth witnessed in the country over the latter half of the last decade between 2006 and 2011, the industry almost quadrupled in size with number of towers growing from 85,000 to over 3,70,000 as on March 2011 and 4,00,000 as on January 2012. The number of towers is expected to go up by an addition 60,000 by September 2014 and the industry is expected to grow by 20-25% during the next five years.

According to the data provided by Minister of State for Communications and IT Milind Deora, India has total 7,36,654 base transceiver stations (BTS –2G GSM and CDMA & 3G Mobile Towers) while out of that only 96,212 BTSs have been installed to provide 3G mobile and data services in the country till the 30 November 2012.

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Name of LSA</th>
<th>Number of BTSs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Andhra Pradesh</td>
<td>60368</td>
</tr>
<tr>
<td>2</td>
<td>Assam</td>
<td>14015</td>
</tr>
<tr>
<td>3</td>
<td>Bihar</td>
<td>44613</td>
</tr>
<tr>
<td>4</td>
<td>Chennai</td>
<td>21187</td>
</tr>
<tr>
<td>5</td>
<td>Delhi</td>
<td>21992</td>
</tr>
<tr>
<td>6</td>
<td>Gujarat</td>
<td>46105</td>
</tr>
<tr>
<td>7</td>
<td>Haryana</td>
<td>17650</td>
</tr>
<tr>
<td>8</td>
<td>Himachal Pradesh</td>
<td>6933</td>
</tr>
<tr>
<td>9</td>
<td>Jammu &amp; Kashmir</td>
<td>10392</td>
</tr>
<tr>
<td>10</td>
<td>Karnataka</td>
<td>53627</td>
</tr>
<tr>
<td>11</td>
<td>Kerala</td>
<td>34266</td>
</tr>
<tr>
<td>12</td>
<td>Kolkata</td>
<td>18546</td>
</tr>
<tr>
<td>13</td>
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<td>63604</td>
</tr>
<tr>
<td>14</td>
<td>Madhya Pradesh</td>
<td>44933</td>
</tr>
<tr>
<td>15</td>
<td>Mumbai</td>
<td>29027</td>
</tr>
<tr>
<td>16</td>
<td>North East</td>
<td>7722</td>
</tr>
<tr>
<td>17</td>
<td>Orissa</td>
<td>19819</td>
</tr>
<tr>
<td>18</td>
<td>Punjab</td>
<td>26531</td>
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<tr>
<td>19</td>
<td>Rajasthan</td>
<td>34692</td>
</tr>
<tr>
<td>20</td>
<td>Tamil Nadu (Except Chennai)</td>
<td>46467</td>
</tr>
<tr>
<td>21</td>
<td>Uttar Pradesh (East)</td>
<td>45556</td>
</tr>
<tr>
<td>22</td>
<td>Uttar Pradesh (West)</td>
<td>39256</td>
</tr>
<tr>
<td>23</td>
<td>West Bengal</td>
<td>29353</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>736654</strong></td>
<td></td>
</tr>
</tbody>
</table>
For 3G mobile and data services, Tamil Nadu circle has maximum of 9,350 BTSs, followed by Delhi and NCR with 8,405 BTSs, Maharashtra and Goa (excluding Mumbai) with 8,377 BTSs. Mumbai had 6,622 BTSs for 3G services as on November 30, 2012. Out of 640 districts of India, 610 districts are being covered by 3G services as on November 2012.

As per present 3G service rolls out norms, mobile operators that have won 3G spectrum in 2010, are required to provide street level coverage in at least 90% of service area in Metros within 5 years of the date (till 2015) they were allocated 3G spectrum.

For other than Metro circles, operators are required to cover 50 percent of district headquarters (DHQs) which should be 90% of the area bounded by municipal or local body (Panchayat – Jila Parishad) limits till the year of 2015. It seems that uptake of 3G services is also hampered by the fact that no 3G operator covering the entire country or not providing street level indoor and outdoor 3G coverage in all circles across India.

**Mobile network**

Mobile network is classified into three types, one is active infrastructure or electronic infrastructure, the second one is passive infrastructure or non electronic infrastructure and the third one is backhaul. The key components of the said are described in the following table:

<table>
<thead>
<tr>
<th>Active infrastructure</th>
<th>Passive Infrastructure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key components include-</td>
<td>Key components include-</td>
</tr>
<tr>
<td>- Spectrum (radio frequency);</td>
<td>- Steel tower/antenna mounting structures;</td>
</tr>
<tr>
<td>- Base tower station;</td>
<td>- Base tower station shelters;</td>
</tr>
<tr>
<td>- Microwave radio equipment;</td>
<td>- Power supply;</td>
</tr>
<tr>
<td>- Switches;</td>
<td>- Batter bank;</td>
</tr>
<tr>
<td>- Antennas;</td>
<td>- Invertors;</td>
</tr>
<tr>
<td>- Transreceivers for signal processing and transmission, etc.</td>
<td>- Diesel generators set for back up;</td>
</tr>
<tr>
<td></td>
<td>- Air conditioner;</td>
</tr>
<tr>
<td></td>
<td>- Fire extinguisher;</td>
</tr>
<tr>
<td></td>
<td>- Security cabin, etc.,</td>
</tr>
</tbody>
</table>

**Types of towers**

Telecom towers are broadly classified on the basis of their placement as Ground-based and Roof-top.

(i) **Ground-Based Tower:** Erected on the ground, ground-based towers (GBTs) are taller (typically 200 to 400 feet) and are mostly used in rural and semi-urban areas because of the easy availability of real-estate space there. GBTs involve a capital expenditure in the range of Rs. 2.4 to 2.8 million, depending on the height of the tower.

(ii) **Roof-Top Tower (RTT):** Roof-top towers (RTTs), which are generally placed on the roofs of high-rise buildings, are shorter (than GBTs) and more common in urban and highly populated areas, where there is paucity of real-estate space. Typically, these involve a capital expenditure of Rs. 1.5 to 2 million.

It is the height of a telecom tower that determines the number of antennas that can be accommodated, which in turn determines the capacity of the towers, apart from factors such as location and geographical conditions (wind speeds, type of terrain, etc.). Hence, typically, while GBTs can accommodate up to six tenants, RTTs can accommodate two to three tenants.

**Objectives**

A tower is expected to accomplish one or more of the following objectives:

- **Coverage** – a new tower is to provide coverage over the areas that do not have currently Coverage;
- **Capacity** – a new tower provides additional capacity for handling more calls in areas Where existing towers are overloaded;
- **Quality** – a new tower can provide better coverage over an area where call drops are high Or quality of the calls is poor.

**Target for tower industry**

To ensure reduction in carbon footprint, the Telecom Regulatory Authority of India (‘TRAI’ for short) in its recommendations on “Approach towards Green telecommunications” provided that 50% of all rural towers and 20% of the urban towers should be powered by hybrid power by 2015. 75% of rural towers and 33% of urban towers are to be powered by hybrid energy by 2020. All telecom products, equipments and services should be assessed for energy efficiency and performances and should be green pass port certified by 2015 on the basis of Energy Consumption rating (ECR). The operators will have to submit the carbon foot print of their network twice a year to TRAI. The recommendations have since been accepted by the Government. During January 2013, the Department of Telecom (‘DoT’ for short) released guidelines for the implementation of Green Telecom.

TRAI has fixed the targets for limiting carbon emissions in the country

- **Up to 8% by 2012-13;**
- **12% by 2014-15;**
- **17% by 2016-17;**
- **25% by 2018 – 19.**

**Cost of tower**

The Industry faces challenges related huge capex invest-
ments vis-à-vis low returns on investment. The industry is working towards moving to a fixed cost model. Ground based towers are erected on open ground with foundations. The height of these towers is normally 30 to 200 meters. Most of the towers are of 40 meters height. The approximate cost of setting up of a ground based tower is Rs.25 lakh to 30 lakh depending on the height of the tower. Roof top towers are erected on top of the roof of the existing buildings with raised columns and tie beams. The height of these towers may be 9 to 30 meters. The capital expenditure for setting up such towers is Rs.15 lakhs to Rs.20 lakhs.

Cost factors
- Civil cost – Pouring concrete;
- Mast and its erection;
- Back up generators;
- Fencing;
- Tiny air conditioned shack;
- Security systems.
- Baseband processors
- Transreceivers
- Power supplies
- Amplifiers
- Cost to connect the tower to the core network

Bulk of the cost is for civil installation. This cost may be less in urban areas by placing towers on top of buildings. Ongoing costs for maintenance, diesel fuel will be there.

The telecom tower segment has witnessed significant growth in the past few years. The tower base has increased from 160000 in 2009 to 3,92,000 in 2012. The number of Base Receiver stations has also increased from 2,36,000 to 735000 during the same period.

With increasing competition telecom companies today have to be better than their companies in at least two of the three business function-managing/expanding network and infrastructure, improving customer intimacy and creating rich services/content. Cost optimization and revenue generation strategies are essential to success.

Infrastructure sharing
Infrastructure sharing, which provides significant cost savings while rolling out mobile work, is increasingly being adopted by operators around the world. Coupled with falling tariffs and low ARPUs promoted operators to share infrastructure to maintain margins and reduce costs. Today the infrastructure sharing model has been adopted by prominent Indian Telecom service providers.

There are primarily two types of infrastructure sharing—active and passing. While the former involves the sharing of only physical infrastructure and space, the latter involves the sharing of some of the constituents of the active network layer. There are various models:
- Site sharing,
- Mast sharing
- Radio access network sharing;
- Core network sharing; and
- Network roaming.

The Department of Telecommunications approved the TRAI’s recommendations of allowing active infrastructure sharing among service providers which enables for the easier entry for the new players, faster roll out of network and services in underserved and rural areas, increased competition, more competitive tariffs and opex and capex savings.

The following are the challenges:
- It is difficult to formulate an effective business model while taking into account factors like contract duration;
- Dividing the cost of operating and maintaining the shared infrastructure;
- It is difficult to organize the shared and the dedicated parts of infrastructure;
- Sharing has an adverse impact of quality of 2G services;
- Vendor compatibility and support are the other issues;
- Site acquisition continues to be single biggest challenge faced by the service providers.

With the industry’s power, fuel, rental and security expenses are around $1billion each, cost optimization is essential. The passive infrastructure cost component in capital expenditure is going up. With sharing, operators can save $ 8 to $13 billion in capital expenditure in four years.

Operators’ opex savings from infrastructure sharing will be $ 1 billion per annum, mainly through a reduction of Rs.18000 to 20000 per tower per month in fixed portion of opex which comprises ground rent, security etc., Operators might also enjoy cost savings of Rs.25,000 to 30000 per tower per month for semi variable items like diesel and electricity.

Infrastructure sharing will enable operators to maintain their operating margins, despite falling tariff, keep rentals low despite high demand and service the rural population characterized by a high cost per subscriber.

The infrastructure management model should be capable of achieving zero break downs and defects, optional life and availability of telecom equipment, low machine life cycle costs and maximum productivity of resources.
The best practices in infrastructure resource planning include identifying the input, output and stakeholders of every activity and adopting the following five pronged approach to each of the identified activities:

- Process;
- Competency;
- Documentation;
- Ownership and
- Identifying the volume of tasks.

The industry is also moving towards the enhanced use of high capacity multi-tenant towers. In order to reduce costs, it is looking at streamlining tower designs and making them lightweight and tubular. Companies are also aiming to downsize older uneconomical towers that cater to only one or two tenants.

The industry recognized the value of sharing infrastructure instead of setting up their own towers. 44,000 new towers will require for this period. The current tower sharing ratio is 1.7 which is expected to be increased to 2.46.

Through shared mobile infrastructure Scheme 7353 telecom towers have been set up in remote areas with the participation of infrastructure providers and Universal service providers. The Infrastructure Providers provide the towers and the USPs provide the base transreceiver station (BTS).

**Energy problem**

Telecom towers are expected to run 24 x 7 to provide uninterrupted service. The energy requirement will be high for deployment of 3G and 4G and also for net work coverage in rural areas. Metro and Category A cities have highly clustered tower networks which result in high energy demand. Interrupted power supply is the major issue. Grid power has failed to meet the demand. Of the 22 telecom circles only 13 circles have grid power availability for more than 15 hours. The tower industry has adopted several energy storage solutions for powering sites. Diesel back up is an expensive. Alternative energy solution for this problem is to be carved out. According to TRAI’s report it takes 8760 litres of diesel to run the towers. The tower and infrastructure providers Association (TAIPA) estimated that the telecom companies would need Rs.33,000 crores to meet the green initiative targets set by DoT.

The diesel generators, battery banks may not be commercially viable for long term. Reducing diesel consumption is a challenge for infrastructure providers.

Stringent deadlines have been set by the Government for adopting renewable energy for running towers site in rural areas. The industry felt that operating 50% and 70% of towers on renewable sources by 2015 and 2020 respectively is a very ambitious target and will have severe cost implication for the industry.

The diesel operator sets have been preferred for reducing the dependence of grid. The Indian Telecom Industry consumes around 2 billion liters of diesel every year for tower operations and every liter of diesel emits about 2.7 Kg. of carbon dioxide. Therefore the total annual Carbon-di-oxide emission in the telecom industry stands at about 6 million ton.

Currently 4,25,000 towers require about 16.5 billion units of energy. The industry consumes 2.2 billion litres of diesel at a cost of Rs.100 billion. By 2015 their cost is expected to reach 2.5 billion litres amount to cost Rs.120 billion to power telecom sites.

Going forward, the Chief Technological Officer, Bharti Infolte told that there is a need to explore other alternative energy services to make a shift from diesel use. Currently wind, biomass and fuel cells are being considered commercially viable options. While wind energy is one of the cheapest sources, its deployment is limited to sites located in coastal regions in Southern and Western India. Biomass is a power technology but fuel procurement is a key area of concern.

The cost of energy required to run a telecom tower site has been the subject of much industry debate. The main factors driving up energy costs are the prohibiting price of diesel and of transporting fuel to remote area. Renewable energy sources such as solar power are a visible solution.

The infrastructure sharing is in a growing trend for the last four to five years. Currently there is no exclusive site for a single operator. Sharing results in a 25% reduction in energy consumption in a tenant scenario. The tower companies face—

- Meeting 24 x 7 connectivity demands; and
- The need to optimize costs on the business side;

The tower industry along with TRAI and Ministry of New and Renewable Energy is working towards developing a sustainable and commercially and technically viable renewable energy model. Solar, biomass and fuel cells are technically viable technologies for telecom sites. Their commercial viability is to be decided.

**i) VRLA**

Value Regulated Lead Acid batteries – significant cost savings can be achieved. This can reduce diesel operation hours by 12 hours at an off grid site and by 8 hours in a site with poor grid availability thereby resulting in 60% and 52% cost saving. The solution brings maximum.

Cost savings about 80% at a solar hybrid site where diesel generator set use can be eliminated and towers can be operated through a battery, solar energy and grid electricity. It can bring annual opex savings of Rs.2,90,000/- to
Using an advanced VRLA conventional energy solution along with other conventional energy solution at an off grid site could result in annual open savings of Rs.4,40,000/-; For a poor grid site it will be Rs.2,90,000/-

**ii) Fuel cell**

It also results in the complete elimination of diesel generator sets. An advanced VRLA battery is used primary back up while a fuel cell is used for providing extended back up. It is opt for sites located in the vicinity of hydrogen source. The sites with erratic and discontinuous grid availability and those having ground based towers can also apply fuel cell solutions for energy storage. It is an expensive solution. The unit cost is around Rs.24/- which includes both fuel and logistics costs. It is a very recent technology and lacks the skilled manpower required for its operation. The total cost of ownership (TCO) is the highest when compared to the other hybrid solution.

**iii) Lithium iron battery**

It also results in the complete elimination of a diesel generator set from a site. These are use for cyclic application. It is much helpful for sites with power and erratic grid supply. It is also suitable for both the ground based tower and roof top sites. It is a highly cost effective solution. It occupies lower space; lower maintenance requirements; provides improved performance and offers higher reliability.

**Remote monitoring of energy management**

Another challenge is remote monitoring of energy management. It is required that the remote management must be seen from the perspective of securing timely and accurate information. Energy cost reduction may be achieved through-

- Improved productivity and efficiency;
- Higher tenancy;
- Making payment within the time frame without dispute;
- Acting as a one stop for the operator as well as the minimum foot print.

Lack of understanding or the interactive effects of energy efficiency and dynamic spectrum management results in higher energy costs. Some issues in minimizing energy are-

- The energy saving potential of taking an energy efficiency measure or adopting a renewable energy option is specific to the tower site and cost benefit differently;
- The power usage effectiveness (PVF) at tower sites varies from 1.27 to 3. It is a major impact on the capex and opex requirements of renewable energy technologies;
- The core direct current load for an indoor site is 35.50% of the total energy consumption. The remaining energy is utilized for air conditioning etc.,

**Tax**

Taxes and duties constitute a significant proportion of direct costs. The variation in percentage of sales tax/VAT ranges from 12% to 25%. If GST is implemented it is expected 16% of tax will reduce the tax burden. The Government conferred infrastructure status to Telecom tower industry. TRAI has recommended that telecom infrastructure provider companies should be extended tax benefits under Section 80-IA.

**Spectrum**

The majority of operators are currently offering services using spectrum in the 1800 MHz and 2100 MHz which call for denser networks as against spectrum in the 800 MHz or 900 MHz band.

**Problems with State Government**

In last few years, a large number of towers with close proximity, especially in metro and urban areas, has raised several concerns about aesthetics, health issues concerning radiation hazards and safety of telecom towers. The use of power generators to address lack of un-interrupted power supply also adds to pollution. As a result, stringent conditions have been imposed by various civic authorities for erection of towers. These include requirements such as advance clearance from Resident Welfare Associations (RWAs) in case of residential areas, structural safety certificate, clearance from pollution control authorities and fire authorities. At times there are huge delays in granting the permission. Moreover, there has been multi fold enhancement in levies for grant of permission.

- There have been several instances of unnecessary delays by local authorities while granting permission for erecting towers and developing infrastructure;
- The policy guidelines vary across the country with each state having its own set of regulations. This leads to inconsistency in procedures as well as imposition of varied charges for the installation of towers;
- Inadequate power supply, high costs of back up power, theft of diesel and low availability of alternative power solution;
- The lack of grid power availability in remote areas continues to compel tower companies to rely on diesel increasing their operational expenditure;
- Currently there is no mandatory design specification for telecom tower construction which lead to companies adopting customize design based on their own preferences and requirements.

An Infrastructure provider has to obtain the following
Certificate from the State Government/Local bodies:
• Copy of structural stability certificate for ground based tower. In case of roof top BTS towers, structural stability certificate for the building and tower based on written approvals of any authorized Structural Engineer of state/local bodies/Central Building Research Institute (CBRI), Roorkee/ IIT/NIT or any other agency authorized by local body.
• Copy of clearance from Fire Safety Department only in case for high rise buildings where Fire Clearance is mandatory;
• For forest protected areas, the copy of clearance from State Environment & Forest Department, if applicable.
• The local bodies may also seek submission of the copy of No Objection Certificate (NOC) from Building Owner / entities having roof top rights or roof top tenants in case of roof based tower/ land owner in case of ground based tower, as the case may be. As per their rules in force, State Governments, at their discretion, may seek fresh NOC at the time of renewal of site (tenancy) contract for mobile tower.

The Infrastructure service providers are facing difficulties in getting clearance in respect of the above.

Role of TRAI
TRAI has recommended that the Infrastructure Providers (IP-I) should be brought under Unified licence. The Authority recommended that DoT should clarify this position – that the local authority’s power in terms of exercising the provisions of the Indian Telegraph Act, 1885 is limited only to those properties that are vested in or under the control or management of local authority - to all the State Governments for strict compliance by local authorities. The Authority further recommended that-
• The Central Government should appoint Joint Secretary in DoT as the Dispute Resolution Authority for dealing with the cases of refusal of permission or imposition of conditions for granting permission by local authority.
• A maximum of forty five (45) days should be prescribed for grant of 24 permission by the local authority for establishing telegraph line/ post/ laying of cable.
• DoT should address all State Governments to direct the Power Distribution companies in the States to provide grid power connectivity on priority for telecom tower sites.
• IP-I and telecom service providers should be mandated to share IBS/DAS system deployed in the buildings, complexes or streets.
• DoT should advise all ministries to provide, within next one year IBS/DAS solutions in all Central Government buildings including central PSU buildings, Airports and buildings falling under their jurisdiction & control.
• All State Governments should be similarly advised to provide/mandate, within next one year, IBS/DAS solutions in all buildings including hospitals having more than 100 beds and shopping malls of more than 25000 square feet super built area.
• A single window system for providing clearance to the operators intending to establish cable landing station should be established at DoT. The operator desiring to establish cable landing station should submit all the forms required by all concerned ministries to this single window agency and final approval of clearance should be intimated by the single window agency within six months.
• Infrastructure providers should be permitted to install and share active network limited to antenna, feeder cable, Node B, Radio Access Network (RAN) and transmission system, subject to the condition that they are brought under the Unified Licensing regime as recommended by the Authority in May 2010.
• Such Unified licencsee should also be permitted to possess and maintain wireless telegraphy equipment.
• Such Unified licencsee may also be assigned spectrum for providing backhaul through microwave system.
• Infrastructure sharing should be mandated in locations of heritage, security and environmental importance.

DoT’s guidelines
In line with the recommendations of TRAI, DoT issued guidelines for the actions to be taken by State Government/Local Body, with effect from 01.08.2013 as detailed below:
⇒ Nominal one time Administrative Fee as may be decided by the State Government to recover its costs on the issue of permission for installation of Tower.
⇒ Single Window Clearance may be provided in a time bound manner to telecom service provider / infrastructure provider by the local body / State Government. This will ensure issuance of faster clearances.
⇒ Telecom towers have been given infrastructure status by Government of India vide gazette notification no 81 dated 28.03.2012. All benefits, as applicable to infrastructure industry, should be extended. Electricity connection may be provided to BTS site on priority.
⇒ Telecom installations are lifeline installations and a critical infrastructure in mobile communication. In order to avoid disruption in mobile communication, an essential service, sealing of BTS towers / disconnection of electricity may not be resorted to without the consent of the respective TERM Cell of DoT in respect of the EMF related issues.
State Governments along with DoT may organise public awareness programmes involving civil society members.

In order to effectively address Public Grievances relating to installation of towers and issues related to telecommunication infrastructure, State Governments may set up:

- State Level Telecom Committee (STC) consisting of Officers from TERM Cells, State Administration, representative(s) of concerned Telecom Service Provider(s) and eminent public persons etc.,
- District Level Telecom Committee (DTC) consisting of officers from District Administration, representative(s) of concerned Telecom Service Provider(s) and eminent public persons etc.,

Recent trend
As discussed above TRAI submitted a proposal to bring tower companies under licensing on grounds that it would liable them to reduce restrictions from different local bodies while being rolled out. By this the Government would get additional revenue of Rs.2000 crores. Accordingly the Department of Telecom has decided to bring telecom tower companies under the purview of the Unified Licence Regime. Till now the tower companies were given ‘infrastructure’ status and hence they were required to pay revenue share to the Government. The tower companies opposed the move of DoT and they worry that it would drive some companies out of the business.

Conclusion
The best practices in infrastructure management can be summed as cost efficient design of telecom towers:

- Remote monitoring system (to reduce trucking expenses);
- Use of renewable energy sources such as solar and wind the fee site.

Sixty percent of the capex cost is on account of passive infrastructure and the balance 40% is active. Out of 40%, only 20-25% is shareable. Active infrastructure sharing needs to be done in a way that prevents cartelization and anti-competitive behavior.

It is important to undertake adequate upfront analysis specific to each tower site, based on detailed measurement and verification of energy performance in order to develop a site specific energy efficiency to optimum energy costs for telecom towers. It is needed to compare multiple technologies with different capital costs and performance, determine optimum storage size and configuration, understand product warranty implications and determine operating strategies to maximize profit.

The Government has given infrastructure status to the tower companies which will make it easier for them to set viability gap funding. The industry expects a status at par with other infrastructure sectors like roads, ports, highways etc. The industry also expects to review the decision of DoT to bring the tower industry under a unified licence scheme.

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Obituary
The Institute and its members deeply mourn the demise of CMA P. N. Deb Goswami a senior member of the Institute, who left for his heavenly abode on 30th November, 2013. During his professional career, he served many organizations in various capacities.

May his family have the courage and strength to overcome the loss.
REVENUE IN THE DRIVER’S SEAT: CBEC’S ACTION PLAN ON THE FIAT INDIA JUDGMENT TAX TROVE

There are a lot of grey areas on which sufficient light will be required to be shone. The CBEC Circular has a silver lining in the bleak skies when it undertakes to find out whether loss-making sales are in line with accepted business practices.

The relative stability that prevailed in the Central Excise Valuation Arena since the landmark year 2000 has been unhinged by the consequences of the watershed judgment of the Supreme Court of India in the case of FIAT INDIA LTD [2012-TIOL-58-SC-CX & 2012 (283) E.L.T. 161 (S.C)]. In a stunning development in the later half of 2012, the Hon’ble Apex Court laid down the unexpected ratio that a loss-making price would not be a normal value since it was premised upon the commercial consideration of market penetration. The Court reached the conclusion in the context of FIAT India Ltd selling their cars at a loss (below the cost of manufacture) in order to penetrate the market. The judgment was left somewhat open-ended by
the Apex Court as it said that there could be some circumstances when sales at a value below the cost of manufacture could still be gone through at the transaction value for the purpose of payment of excise duty. The Court dealt lightly with the possible exclusions by illustrating just two examples of when a manufacturer has to switch over his business for any other manufacturing activity or when the goods could not be sold within a reasonable time and thus cannot fetch a market price over the cost of manufacture. Other likely situations warranting a similar treatment of exclusion have not been touched upon. The Fiat India judgment made one thing absolutely clear. It was that a price below the cost of manufacture to push the products into the market cannot constitute acceptable assesable value under Section 4(1) of the Central Excise Act, 1944. In other words, in such a scenario, the assessable value for the purpose of excise duty calculation would have to be determined in line with the provisions and methods enumerated in the Central Excise Valuation Rules. A detailed analysis of the Supreme Court judgment in the Fiat Industry case is available in the Management Accountant issue dated October, 2012.

The unexpected FIAT judgment has predictably caused disappointment and concern in the industry and business. The undertakings belonging to the Central and State Governments cannot also remain immune from the fall-out of this judgment. The case has likely echoes in other indirect tax laws such as Service Tax and Value Added Tax. In the aftermath of this unexpected bolt from the blue, the industry fondly hoped, perhaps somewhat naively, that the Central Government would amend the Valuation Rules to cancel the negative effects of the FIAT case law so as to benefit the trade and industry. Nothing of the sort has happened. It is of course natural for the Revenue department to seize the initiative fallen on a platter to it and seek to milk its tax-maximizing effects. The only thing that could be appreciated in this saga was the welcome respite of more than a year from the Revenue regarding their plans to put the FIAT judgment to good effect. The Central Board of Excise and Customs has now come out with a Circular No.979/03/2014-CX dated 15th January, 2014 with a detailed action plan for their implementation of the decision of the Supreme Court in the case of FIAT India. The CBEC has to be complemented for coming out with how they propose to make use of the fall-out of the FIAT India case law. Now there is a certain level of clarity regarding the intentions of the Revenue vis-à-vis the FIAT case verdict. Let us now analyse the decision-making contours unveiled by the department in their administrative follow-up of the tax effect of the FIAT case judgment which is bound to have considerable Revenue significance.

The opening salvo
The Circular highlights the prospect that the Revenue would reject the transaction value declared by the Central Excise Assesses under Section 4 and invoke the provisions of Central Excise Valuation Rules to reassess the Central Excise Duty in cases where the price adopted is substantially lower than the cost of manufacture. Whether cost differences of a minor nature would be forgiven by the Department of Revenue is not clear from the circular. In some cases, the unit differences in cost would be small but the volume of transactions may be huge and in other cases individual items may have large cost differential but the number of transactions may be few and far in between. It is not clear as to what Revenue will do in such circumstances. It will be better for all the stake holders if the Revenue could come out with precise guidelines on what constitutes substantive level below the cost of manufacture so as to become unacceptable to the Revenue.

The sale circumstances eligible for exemption from the application of the circular
The Circular has simply reiterated the two illustrations (in
the Fiat India judgment) that the Apex Court has cited, namely, where a manufacturer was to switch over his business for any other manufacturing activity or where the goods could not be sold within a reasonable time as instances of exclusion from the application of the effect of the FIAT India judgment. The Government could have analysed and exempted various possible mitigating circumstances such as the following:-

- Distress sales caused by unanticipated circumstances of a dire nature such as flood damage, epidemics, earthquakes and acts of God etc necessitating temporary sales at a huge discount to the cost of manufacture.
- A startup company may not be in a position to sell initially at cost plus profit. The first sales of new ventures for a period of say three months or six months may have to be cleared at a loss price for a variety of reasons.
- Refusal of customers to honour the value originally adopted and seeking a steep discount resulting in a loss price.
- Resale of sales returns may not often fetch the original market price.

These illustrations are not exhaustive. The Government ought to constitute a Committee or a Study Group to go into such issues and come out with comprehensive guidelines to exclude situations of unusual hardship or genuine commercial practice from the devastating effects of the application of the CBEC circular. It is a matter of concern that the Revenue has not engaged in this kind of duty which it owes to taxpayers in the interests of justice and fairness.

**Computation of cost price**

The CBEC knows pretty well that it does not have the expertise to detect and compute a loss making price all across the spectrum of manufacturing in its myriad variety. Therefore, it has chosen to rely on the time-tested cost accounting standard in Form CAS-4 promulgated by the Institute of Cost Accountants of India. The CAS-4 is already in service at the CBEC especially in the context of calculation of value for self-consumption purposes. It is the Cost Accountants who certify the CAS-4. The relevant portion of the CBEC circular regarding the use of the Cost Accounting standard is extracted as follows:-

"Verification of payment of duty

3. The second issue is regarding the procedure to be adopted by the field officers to identify cases where the ratio of the judgment would apply. It may be noted that, under the self-assessment procedure, there is a legal obligation on the assessee to correctly assess and pay the duty in terms of the Central Excise Act, 1944 read with the Valuation Rules, 2000. Verification of this aspect may be conducted by the Central Excise officer during the audit of units. Aspects such as the percentage of loss at which sale has taken place, the period for which such loss making price has prevailed, reasons for sale at such loss making price, whether such sales are contrary to the standard and accepted business practices, and whether such sale is leading to erosion of capital of the company, may be looked into. In addition, due care may be taken at the level of the Commissioner to see whether the case at hand is similar to the facts and circumstances of the FIAT case.

3.1 Calculations of manufacturing cost may be carried out using CAS-4 standards. Information submitted by the manufacturer, duly certified by a Chartered or Cost Accountant should normally be accepted. Only where a decision to investigate a case has been taken at the level of the Commissioner and it is considered necessary in the interest of investigation, steps such as ordering Cost Audit of the Unit or summoning of the Costing data should be undertaken".

From the above extract, the following assurances of the Department may be noted:-

- Verification of the cost will be undertaken by the central excise officers during the audit of units. An Audit visit will be more benign than raids by the Central Excise Intelligence teams.
- The following aspects will be taken into consideration by the Auditors:
  - Percentage of loss at which the sale has taken place.
  - The period during which such loss-making price has prevailed.
  - Reasons for sale at such loss-making price.
  - Whether such sales are contrary to the standard and accepted business practices.
  - Whether such sales are leading to the erosion of the capital of the company.

- The commissioner will decide whether the facts are similar to the circumstance of the FIAT India case.
- Calculation of manufacturing cost will be carried out using CAS-4 standard based on information submitted by the manufacturers and duly certified by a chartered accountant or cost accountant.

The circular also lays down a cautionary note for the field formations as follows:

“Only where a decision to investigate a case has been taken at the level of the Commissioner and it is considered necessary in the interest of investigation, steps such as ordering Cost Audit of the Unit or summoning of the Costing data should be undertaken”.

An analysis of the assurance explicitly given as above shows that there is a possibility that the Department of Revenue is willing to accept standard and accepted business practices of selling below cost. If this were not the case there was no reason for the Circular to decide to find out whether any instances of loss-making sale are contrary to the standard accepted business practices. The CBEC
is required to come out with a clarification that genuine cases of loss-making sale as an accepted business practice will not be targeted by the field formations. Since the decision on all the issues is left in the hands of the Commissioners of Central Excise, it would be in the fitness of things from the view point of natural justice for the tax demands, irrespective of the monetary limits, to be issued and adjudicated by the Commissioners and not by their subordinate officials.

**The period of application of the Fiat India case effect**

The CBEC circular seems to make the use of the FIAT India Case law prospective from the date of the judgment, i.e. 29th August, 2012. There is nothing prospective about 2012 at this point in time and the effect of the CBEC circular should be computed only with effect from 15th January, 2014, the date of issue of the Circular. The relevant portion of the circular is extracted as follows:

“Period of application:
4. The third issue is whether the judgment can be applied for periods prior to the date of the judgment i.e 29-8-2012, invoking the extended period of limitation. Under the provisions of valuation law, in a case where price is not the sole consideration for the sale, money value of any additional consideration flowing directly or indirectly from the buyer to the assessee is added to the transaction value in terms of rule 6 of the Central Excise Valuation Rules, 2000. However, in the FIAT judgment, sale of cars at an abnormally lower price to penetrate the market has been considered by the Hon'ble Supreme Court as constituting extra-commercial consideration, even when there was no additional consideration of money value flowing directly or indirectly from the buyer to the seller. For the period prior to the date of the judgment, in cases where a show cause notice has been issued on the grounds of the FIAT judgment alone, there may not be a case for invoking the extended period of limitation. In such cases, only the normal period of limitation will apply.

4.1 For the period after the date of the judgment, i.e. from 29-8-2012 onwards, if there is a sale in the circumstances similar to the case of M/s FIAT and yet transaction value of goods is declared as the correct assessable value, then such declaration would amount to wilful mis-statement of the assessable value”.

The issue of retrospectivity of a Tax Circular has been resolved by the Hon’ble Supreme Court of India vide Suchitra Components Ltd vs. Commissioner of Central Excise, Guntur -2008 (11) S.T.R. 430 (SC). In this case, the Hon’ble Apex Court laid down that a beneficial Circular has a retrospective application while an ‘oppressive’ Circular can only be applied prospectively. Thus, when the Circular is against the tax paying assessee, they have the right to claim enforcement of the oppressive Circular prospectively.

**Conclusion**

The CBEC circular shows that the Revenue does not want to wait to get the treasure trove of tax implicit in the effect of the FIAT Judgment. It is at best a starting point in the whole saga that is going to play out. As discussed in this article, there are a lot of grey areas on which sufficient light will be required to be shone. The CBEC Circular has a silver lining in the bleak skies when it undertakes to find out whether loss-making sales are in line with accepted business practices even though the circular does not promise that tax demands would not be pressed against the manufacturers under such circumstances. There is a further glimmer of hope unveiled in the circular when it states that the department will also investigate whether loss-making sales have led to an erosion of the capital base of the companies involved. Again there is no promise not to issue tax demands under such circumstances where the capital base of the company has not been affected by such sales. The CBEC circular dated 15th January, 2014 is not a racy tango with the tax payers but a cautious work-in-progress that warrants more debate and wider consultation with the stakeholders.

ravinpranaa@gmail.com
SHALL WE ABOLISH INCOME TAX?

The fact that some countries can carry on without the levy of income tax is no ground for us to emulate them but ways must be found to mitigate the hardships caused by the income tax law.

India is going in for general elections. This summer we will have a newly elected government to run the country. It is anybody’s guess what policies that Government may follow. In the run up to the elections, one of the major parties has brought up the issue whether income tax can be abolished. The idea is no-doubt startling. Taxes play an important role in government finances. It is through mobilization of taxes that the government is able to fund its expenditure and welfare programs. See the following break up for 2013-14.

Firstly, there is a constant complaint that tax rates are high. Salaried taxpayers will be the happiest if taxes are abolished. No income tax means more spending power and more demand. That in turn will lead to more manufacture and jobs. There will be better incentive to work and save. Money thus saved will go into Bank deposits. Banks are in any event compelled to put a sizable part of the deposits in government securities. Government coffers will thus go up. There is discrimination in the levy of income tax. Agriculture is left out. Again, though cost of collection is low when it comes to Direct taxes, compliance cost is heavy. Experts have calculated that compliance cost will be as much as 49% of the total collections. Paper work multiplies; accounting and harassment are hazards to be avoided.

The taxpayer’s profile

A breakdown of the number of effective taxpayers in India shows the following figures for 2011-12:

If income tax is abolished, the non corporate taxpayers totaling about 4 crores 20 lakhs in number will have a sigh of relief. The actual collec-
tion of taxes from these non-corporate taxpayers amounted to Rs.201795 in 2012-13 out of a total direct tax collection of Rs.558965 lakh crores. The contribution of non-corporate taxpayers to total tax revenue is nearly 35% of the total direct tax collection. The Direct tax GDP ratio stands at 5.58%. Last year’s Budget statement showed that 42,800 people have annual incomes exceeding Rs.1 crore. Their contribution to tax revenue is minimal. This is because they are able to take advantage of various deductions and exemptions allowed in the tax code. Just about 3% of the population pays personal income tax. The reasons for this low figure are several. The non-salaried classes of taxpayers get profit-linked deductions. Revenue foregone because of exemptions, deductions and incentives will represent about 5.5% of the GDP. If all exemptions are taken away, the tax GDP ratio may go up to 22%. This is easier said than done.

**Zero tax nations**

There are countries which don’t levy income tax at all. These are given below:
- Bahamas
- Bahrain
- Bermuda
- Brunei Darussalam
- Cayman Islands
- Kuwait
- Qatar
- Oman
- Saudi Arabia
- United Arab Emirates

Eight of these countries are oil-rich. Bahamas and Cayman Islands are tax havens in the Caribbean. They are all able to finance their government without income taxes. Can we emulate them? Unfortunately, the answer is a firm no.

**Alternatives**

The alternative to the abolition of income taxes will mean raising of indirect taxes like excise duty and customs and service taxes. As any student of economics will point out, these are all regressive taxes. While in the case of income tax, impact and incidence are on the same person, in the case of indirect taxes, the ultimate incidence is on the consumer and thus it became a regressive tax. The poorer sections of the populace have to bear the major burden of all taxes. This is against all canons of civilized taxation. Especially if the income taxes are abolished, the burden of indirect taxes will be hard to bear. The truth is India is not comparable in the matter of resources to the zero tax countries. Government cannot be financed merely by mobilizing indirect taxes.

**The consumption tax**

Often called a ‘fair tax’, the consumption tax can substitute income tax completely. Revenue will be generated through a national sales tax. People will be taxed when they spend money and not when they earn. It is also a comprehensive tax. It will encourage savings. There will be no investments in big cars or mansions. Spending will be limited to needs. Everybody will be paying taxes under this system. Since consumption is taxed, there will be incentive to work harder and be more productive in order to earn more money. There will be more money in the stock market and more dividends. Jobs will increase.

At the same time, there are impressive arguments against a consumption tax. The tax is regressive. Lower income families spend a higher percentage of their income on essentials to survive. Poorer people will pay a higher percentage of their income in tax than the rest of the population. This will widen the gap between the rich and the poor. There can be shrinkage of the economy because people avoid spending.

**Conclusion**

There can be other ways of mobilizing resources for the government like the levy of a Tobin tax or a banking transactions tax. But we have learnt to live with income tax. Bibek Debroy of the Economic Times hit the nail on the head when he said: ‘Just because Peter the Great taxed beards, should we?’ The fact that some countries can carry on without the levy of income tax is no ground for us to emulate them. We have been talking of tax reforms endlessly. Ways must be found to mitigate the hardships caused by the income tax law. Since the DTC has been talked out, it is necessary we should think of a new high powered commission to go into all aspects of mobilizing the resources for government when the new government takes over. ramunujar@vsnl.com
A SSESSEE company incurred expenses on providing street lights on roads to assessee’s factory, besides an ambulance for medical emergencies for the residents of the village apart from outlay on public gardens. These were disallowed by the Assessing Officer as not directly relatable to assessee’s business, but all the same, it was found to be deductible under section 37(1) concurrently by Commissioner (Appeals) and affirmed by the Tribunal in the light of duty expected of a corporate citizen in Addl. CIT v. Nicholas Piramal India Ltd. [2013] 27 ITR (Trib) 182 (Mumbai) following the decision of the Madras High Court in CIT v. Madras Refineries Ltd. [2004] 266 ITR 170 (Mad) followed in Cheren Engineering Corporation Ltd. v. CIT [1999] 238 ITR 892 (Mad) in respect of expenses on social welfare. However, the Supreme Court in the decision in Chennai Petroleum Corporation Ltd. v. CIT [2009] 313 ITR 334 (SC) heard with the departmental special leave application against Madras Refineries’ case (supra) granted special leave and set aside the ruling of the High Court in a short judgement remitting the matter back for a de novo examination for a finding, that the expenses constituted business expenditure. The issue may require to be further adjudicated by the Supreme Court in due course. Meanwhile, the Companies Act, 2013 has incorporated section 135 to recognise the duty of a company to discharge its social responsibility along with Schedule VII listing out the activities covered by the provisions, so that the rationale of the decisions of the Madras High Court should now be upheld in the light of the present provisions under the new company law.

A SSESSEE adopted a system for production avoiding pollution and, therefore, entitled to carbon credit, which was transferable. It realised the credit for a consideration of Rs.3.4 crores, which was brought to tax as revenue receipt and confirmed in first appeal. In My Home Power Ltd. v. Dy. CIT [2013] 21 ITR (Trib) 186 (Hyderabad), the Tribunal discussed the issue on the basis of first principles relating to capital and revenue receipt and allowed the appeal. This decision has been followed by the Tribunal in Ambika Cotton Mills Ltd. v. Dy. CIT [2013] 27 ITR (Trib) 44 (Chennai) and Sri Velayudhaswamy Spinning Mills P. Ltd. v. Dy. CIT [2013] 27 ITR (Trib) 106 (Chennai). In the light of the objective spelt out by the Kyoto Protocol adopted internationally, the Government should accept the character of receipt to be of capital nature and encourage industries to fall in line with the objects.
NO TDS ON SERVICE TAX

The Urban Development Department of Government of Rajasthan had made payments to technical and project consultants besides others with deduction of tax at source under section 194I and 194J, but without including service tax component reimbursed to the service providers under agreement with them. Assessing Officer inferred short deduction. The High Court in CIT v. Rajasthan Urban Infrastructure Development Project [2013] 359 ITR 385 (Raj) found that the words “any sum paid” under these provisions cannot possibly include service tax, which is to be treated as contractually payable and not as a component of the payment for items covered by these provisions, so as to require inclusion of service tax. This judgement should spare not only liability for deduction of tax from service tax component, but also the consequent compliance requirement. It is hoped, that this decision will be accepted by the Income-tax Department.

ROYALTY – EXTENDED MEANING, WHETHER JUSTIFIED?

Accords with the assessee availed the facility of international private lease circuit provided by a non-resident company, a resident of Singapore, by way of connectivity in Asia Pacific region through Videsh Sanchar Nigam Ltd. (VSNL), a licensee for the non-resident service provider at Singapore. The authorities brought the payment by the assessee to tax, a levy upheld by the Tribunal and now by the Madras High Court in Verizon Communications Singapore Pte. Ltd. v. ITO [2013] 39 taxmann.com 70 (Mad). A number of decisions including that of the High Court in SkyCell Communications Ltd. v. Dy. CIT [2001] 251 ITR 53 (Mad) and that of the Supreme Court in respect of technical services rendered abroad in Ishikawajima-Harima Heavy Industries Ltd. v. Director of Income-tax, Mumbai [2007] 288 ITR 408 (SC) were cited. But the High Court after conceding that the decisions directly on the point in Asia Satellite Telecommunications Co. Ltd. v. Director of Income-tax [2011] 332 ITR 340 (Del) and the Authority for Advance Ruling in Cable and Wireless Networks India P. Ltd., In re [2009] 315 ITR 72 (AAR) among others were in favour of the assessee, rejected the claim of the assessee in the light of the retrospective amendments by way of Explanation 5 to section 9(1)(vi) giving an extended meaning to royalty. But then, the Double Taxation Avoidance Agreement on this issue as between India and Singapore and the decision of the AP High Court in Sanofi Pasteur Holding SA v. Department of Revenue [2013] 354 ITR 316 (AP) as to the effect of treaty override over domestic law were not given due weight. The High Court felt that the Agreement with Singapore retrospective amendment in domestic law, a view which is highly controversial in the light of earlier precedents. The assumption, that the payment was for intellectual property rights, when the non-resident had merely provided a facility by way of a net work controlled from abroad, is also prima facie far-fetched. The decision needs review.

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NOTIFICATION

It is hereby notified vide Notification Nos. 18-CWR (4084-4106)/2013 dated 26th November 2013, 18-CWR (4107-4141)/2013 dated 6th December 2013, 18-CWR (4142-4169)/2013 dated 13th December 2013, 18-CWR (4170-4188)/2013 dated 17th December 2013, 18-CWR (4189-4227)/2013 dated 23rd December 2013 and 18-CWR (4228-4248)/2013 dated 27th December 2013 in pursuance of Regulation 18 of the Cost and Works Accountants Regulations, 1959 that in exercise of the powers conferred by Regulation 17 of the said Regulations, the Council of the Institute of Cost Accountants of India has restored to the Register of Members, the names of members, details of which are uploaded on the Institute’s website www.icmai.in

ENGAGEMENT OF INTERNAL AUDITORS

Separate applications are invited from Cost Accountants Firms for conducting Internal Audit of the Institute of Cost Accountants of India of its Headquarter in Kolkata & its office in Delhi for the Financial Year 2014-15.

For more details please log on to www.icmai.in
INFLATION IN INDIA: A CHRONIC PROBLEM

While jumping inflation is certainly a disturbing trend, the increase in build-up inflation at 6 percent in the fiscal year so far clearly shows that there is still pain ahead.

India now is running into the highest consumer inflation rate among all the major economies of the globe, save some of the basket case economies. The most astonishing thing is that India not just compared with Euro area, or the Americas, but also Asia, Africa and most significant the Latin American nations. Worse, as the OECD or any global chart of say The Economist, will show India has been at the top for quite some years now. Brazil, Mexico, Chile and Colombia have all battled out of the price spiral.

The rupee, which has fallen almost 13 percent in the current financial year, is the world’s most undervalued currency (Table 1) (Economist 2013). At $1.50 or Rs. 90, the “Maharaja Mac”, the Indian version of the Big Mac, is the cheapest among major countries, keeping the Indian Rupee at the bottom (Table 2).

<table>
<thead>
<tr>
<th>Country</th>
<th>Big Mac Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>(-67.1 %)*</td>
</tr>
<tr>
<td>China</td>
<td>(-42.8 %)</td>
</tr>
<tr>
<td>Thailand</td>
<td>(-37.9 %)</td>
</tr>
<tr>
<td>Pakistan</td>
<td>(-34.2 %)</td>
</tr>
<tr>
<td>Euro Zone</td>
<td>(+ 2.3 %)</td>
</tr>
<tr>
<td>United States</td>
<td>(0 %)</td>
</tr>
<tr>
<td>Canada</td>
<td>(15.4 %)</td>
</tr>
<tr>
<td>Brazil</td>
<td>(+16.1 %)</td>
</tr>
<tr>
<td>Norway</td>
<td>(+67.8 %)</td>
</tr>
</tbody>
</table>

*Figures in parenthesis indicate currency under-valuation/over-valuation. 
Source: Hindustan Business; New Delhi; July 16, 2013. P. 11
Why has India come up as a highly inflated country?

In the last two decades of 90s and 2000s, India had low domestic inflation which kept a check on monetary spiral out of control. Now India has come out from that zone. India’s neighbour country Pakistan is witnessing lower food price inflation at around 6 percent as compared to 9.4 percent in India. [Bhattacharjee 2013]

High degree of consumer inflation always results into making population restive and sets in wage price correction mechanism which accepts that prices will remain high and hence every one from the employer to the employees as well as households have to make adjustments accordingly. The first impact that country has to bear it out is paying higher price fro its employees despite being surplus in it which in turn gradually prices itself out of world competition. Higher food prices indicates the demand for retaining subsidies does not ebb and more Government money is locked away to feed it.

There is a good reason why an economy that was quite

<table>
<thead>
<tr>
<th>Table 2</th>
<th>Trends in Big Mac Price</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Country</strong></td>
<td><strong>Big Mac Price in $</strong></td>
</tr>
<tr>
<td>India</td>
<td>1.50</td>
</tr>
<tr>
<td>China</td>
<td>2.61</td>
</tr>
<tr>
<td>Thailand</td>
<td>2.81</td>
</tr>
<tr>
<td>Pakistan</td>
<td>3.00</td>
</tr>
<tr>
<td>Euro Zone</td>
<td>4.66</td>
</tr>
<tr>
<td>United States</td>
<td>4.56</td>
</tr>
<tr>
<td>Canada</td>
<td>5.26</td>
</tr>
<tr>
<td>Brazil</td>
<td>5.28</td>
</tr>
<tr>
<td>Norway</td>
<td>7.51</td>
</tr>
</tbody>
</table>

*Figures in parenthesis indicate currency under-valuation/over-valuation. Source: Hindustan Business; New Delhi; July 16, 2013, P. 11
inflation conscious till the months of decade 2000s has become so blase about high prices since. This has taken place despite a period where the globe has gone through a massive recession and India is in the second year of downturn in growth. The answer of this question is the massive expansion of Government expenditure in con-economic pursuits that was pumped in aggressively in the last few years.

After the 2009 drought, the RBI sensed that rates of food articles were defying usual trends by not falling back to their previous levels even with normal rains. One the main reasons Indians were paying the highest food prices in a decade had to do with their radically changes diets. From 2004-05 to 2009-10, more than 200 million people in the country are estimated to have crossed two thresholds of monthly Expenditure- Rs. 58-690 for rural dwellers, and Rs. 1,100-1,380 in urban areas, at which consumption shifts to more nutritious food.[Gorkan 2013] India could be really understating the role of rural-income growth in inflation.[Sen 2013]

Rural incomes have continued to increase, clocking 13.1 percent in August 2013, although this is significantly lower than the increase recorded in 2011 and 2012 (Table 3). Rising real rural wages have both supported rural demand and increased the cost of production, thereby making inflation sticky. There are many contributory factors which have pushed up rural consumption, such as the rural employment guarantee scheme, which also made farm labour pricey, and better rural wages aligned with retail inflation.

India’s wholesale price index (WPI) based inflation, India’s wide price movements, inched up to 4.86 percent in June 2013 from 4.7 in May 2013, reversing a four-month falling trend on higher food prices like vegetables that have become costlier. A sub-5 percent WPI inflation is still well within the Central Bank of the Country (Reserve Bank of India) comfort zone, but with high retail inflation especially food items, that looks good to hit double digits in July 2013, experts are of the view that the Central Bank is unlikely to reduce lending costs in coming months.

The most important impact of inflation is that expenditure in both urban and rural areas on food has decreased (Table 4) as households have started spending more on non-food items namely- durables, clothing and footwear. Table 4 gives some very astonishing trends which are as under:

- **a)** Shift from food items to non-food items;
- **b)** High degree of disparity between rural and urban in terms of food and non-food items;
- **c)** The margin of difference between food and non-food items in terms of rural and urban households is more noticeable in 2009-10 as compared to 2011-12;
- **d)** Some vital food items show increase both in 2009-10 and 2011-12;
- **e)** In case of non-food items increase in durable good in rural areas is much more than increase in urban areas;
- **f)** In regard to vegetables the scenario is different. In case of rural the decline is considerable while in case of urban the expenditure remained same.

### Table 3

<table>
<thead>
<tr>
<th>Year</th>
<th>Growth in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 2011</td>
<td>23.4</td>
</tr>
<tr>
<td>August 2012</td>
<td>18.5</td>
</tr>
<tr>
<td>August 2013</td>
<td>13.1</td>
</tr>
</tbody>
</table>

Source: Commerce Ministry; CACP and Credit Suisse.

### Table 4

<table>
<thead>
<tr>
<th>Item</th>
<th>Rural 2009-10</th>
<th>Rural 2011-12</th>
<th>Urban 2009-10</th>
<th>Urban 2011-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cereals</td>
<td>15.6</td>
<td>12.0</td>
<td>9.1</td>
<td>7.3</td>
</tr>
<tr>
<td>Pulses &amp; goods</td>
<td>3.7</td>
<td>3.1</td>
<td>2.7</td>
<td>2.1</td>
</tr>
<tr>
<td>Milk &amp; goods</td>
<td>8.6</td>
<td>9.1</td>
<td>7.8</td>
<td>7.8</td>
</tr>
<tr>
<td>Edible Oil</td>
<td>3.7</td>
<td>3.8</td>
<td>2.6</td>
<td>2.7</td>
</tr>
<tr>
<td>Egg, fish &amp; meat</td>
<td>3.5</td>
<td>3.6</td>
<td>2.7</td>
<td>2.8</td>
</tr>
<tr>
<td>Vegetables</td>
<td>6.2</td>
<td>4.8</td>
<td>4.4</td>
<td>4.4</td>
</tr>
<tr>
<td>Beverages</td>
<td>5.6</td>
<td>5.8</td>
<td>6.3</td>
<td>7.1</td>
</tr>
<tr>
<td>Food Total</td>
<td>53.6</td>
<td>48.6</td>
<td>40.7</td>
<td>38.5</td>
</tr>
<tr>
<td>Fuel &amp; light</td>
<td>9.5</td>
<td>9.2</td>
<td>8.0</td>
<td>7.6</td>
</tr>
<tr>
<td>Cloths &amp; Bedding</td>
<td>4.9</td>
<td>6.3</td>
<td>4.7</td>
<td>5.3</td>
</tr>
<tr>
<td>Durable goods</td>
<td>4.8</td>
<td>6.1</td>
<td>6.7</td>
<td>6.3</td>
</tr>
<tr>
<td>Non Food Total</td>
<td>46.4</td>
<td>51.4</td>
<td>59.3</td>
<td>61.5</td>
</tr>
</tbody>
</table>

Source: Indian Express (Business); New Delhi; June 21, 2013; P. 17
Table 5
Major Items Good for Consumer in 2013

<table>
<thead>
<tr>
<th>Items</th>
<th>Inflation in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pulses</td>
<td>-13.42</td>
</tr>
<tr>
<td>Potato</td>
<td>-13.10</td>
</tr>
<tr>
<td>Iron &amp; steel</td>
<td>-8.37</td>
</tr>
<tr>
<td>Sugar</td>
<td>-7.49</td>
</tr>
<tr>
<td>Oil seeds</td>
<td>-5.07</td>
</tr>
<tr>
<td>Cement &amp; Lime</td>
<td>-3.16</td>
</tr>
<tr>
<td>Edible oils</td>
<td>-2.58</td>
</tr>
<tr>
<td>Basic Metal &amp; Metal products</td>
<td>-2.39</td>
</tr>
<tr>
<td>Minerals</td>
<td>-0.03</td>
</tr>
</tbody>
</table>

Source: Government of India and PHD Chambers Data Pertains to September 2013.

Table 6
Main Items Bad for Consumers in 2013

<table>
<thead>
<tr>
<th>Items</th>
<th>Inflation in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Onion</td>
<td>322.94</td>
</tr>
<tr>
<td>Vegetables</td>
<td>89.37</td>
</tr>
<tr>
<td>High speed diesel</td>
<td>20.13</td>
</tr>
<tr>
<td>Fibers</td>
<td>19.93</td>
</tr>
<tr>
<td>Rice</td>
<td>18.76</td>
</tr>
<tr>
<td>Food Articles</td>
<td>18.40</td>
</tr>
<tr>
<td>Fruits</td>
<td>13.54</td>
</tr>
<tr>
<td>Egg, Meat and Fish</td>
<td>13.37</td>
</tr>
<tr>
<td>Cereals</td>
<td>13.05</td>
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<tr>
<td>Petrol</td>
<td>9.64</td>
</tr>
<tr>
<td>LPG</td>
<td>9.00</td>
</tr>
<tr>
<td>Leather and Leather goods</td>
<td>7.88</td>
</tr>
<tr>
<td>Cotton Textiles</td>
<td>6.57</td>
</tr>
<tr>
<td>Wheat 5.90</td>
<td>5.90</td>
</tr>
<tr>
<td>Rubber and Plastic Goods</td>
<td>5.88</td>
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<tr>
<td>Man made textiles</td>
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<tr>
<td>Milk</td>
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<tr>
<td>Non-food articles</td>
<td>5.17</td>
</tr>
<tr>
<td>Wood &amp; wood goods</td>
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<tr>
<td>Paper &amp; Paper goods</td>
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<td>Transport Equipment</td>
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<td>Beverages &amp; Tobacco</td>
<td>2.95</td>
</tr>
<tr>
<td>Food goods</td>
<td>1.61</td>
</tr>
</tbody>
</table>

Source: Indian Express (Business); New Delhi; June 21, 2013; P. 17

Recent trends
The rise in inflation in recent months has been largely driven by inflation in primary articles and fuel. Primary articles alone have contributed nearly 44 percent to WPI inflation in the fiscal so far, despite having a weight of only 20 percent in WPI. The average inflation is particularly sharp for goods that are aspiration items. The major times that are good and bad for consumers are given in Tables 5 and 6.

Food inflation
In urban India, consumers have to shell 40 percent more for vegetables in 2013 what they paid in 2012 (table 4). With vegetables prices soaring despite a good monsoon, households across the country are feeling heat and pinch. Similarly, onion inflation is hitting households’ budget hard 2013. High vegetable prices, which put pressure on inflation, affect not only farmers and consumers but even policy makers as these have a spill over effect on the other sectors as well.

The Government, hit by economic woes has bumped into a small window of political opportunities. A 10 percent rise in food prices proportionately hits household welfare in developing nations and form the larger chunk of monthly expenditure of average Indians and affect, the poor most. (FAO 13).
As high prices essentially shrink monthly incomes, inflation alone will be perceived as a failure of the policy makers and the Government. The most pertinent to mention here is that this the first time since November 2009 that WPI inflation has decelerated below 5 percent (Chachra 2013).

Falling global prices have helped India, a key importer; good domestic output of perishable foods; cheaper cereals, egg, fish meat point to falling consumption. On the other hand, good monsoon, as has been predicted, is critical; widening current account deficit i.e. more imports than exports because of brisk gold buying poses inflation risks.

CCI and food inflation
To help thousand of people who have been left with a burning hole in their respective incomes, fair trade regulator, the Competition Commission of India (CCI) has decided to look into the operations of the agricultural markets to ensure that there is no cartelization or unfair play in the determination of food prices in general and vegetable prices in particular. The CCI is collecting all details and data to analyze the pricing pattern and the role of traders to see if there are any discrepancies. Generally, if there are early and good rains, supply and prices should ease out.

In case of agricultural goods, the role of traders is of extreme significant, which needs to be scrutinized. Agriculture markets should function effectively and our aim is to ensure that both farmers and consumers are getting fair deal and return and are not being short –changed (Gouri 2013).

According to the anti–trust body, recent price hikes in some cases did not match the fundamentals of demand and supply, fuelling the need for regulator to study agriculture markets structure across the country. In 2011, the CCI had decided to look into the pricing pattern in the onion markets, after onion prices touched all time high figure of Rs. 80 per kilo.

Decline in spending on food items
Expenditure across the country has increased by a third from 2010-11 to 2012-13, but growth in rural spending outclassed that in urban areas. The consumption basket of households across the country also saw a sharp change during the period under review. So even as food prices rose between 2009 and 2012-13, the average monthly expenditure on food dipped in cities and villages though it made up for nearly half the monthly spending.

Cereal and pulses no longer seem to dominate the grocery bills of most households, with spending on proteins like meat and eggs as well as dairy products on the more on the durable goods, clothing, footwear, as well as education and medical facilities rise. Further, discretionary spending seems to be on the increase with households spending.

Expenses on fuel and light remained the second biggest contributor, amounting to 8 percent of the total budget in villages and 6.7 percent in cities. Medical bills in villages (6.7 percent as against 5.5 percent in cities and education in cities (6.9 percent versus 3.5 percent in villages) are the third largest spending items. Meanwhile, durables took up about 4.5 percent and 5.3 percent of the total spending in villages and cities respectively.

According to the National Sample Survey (68th) Round that the rural-urban divide has narrowed down with city dwellers spend 84 percent more on consumption activities than those residing in villages. While the average monthly per capita expenditure (MPCE) rose by 37.5 percent in rural areas to Rs. 1429.96 in 2012-13 from Rs. 2053.04 in 2009-10, the average urban MPCE jumped up by a margin of 32.5 percent to Rs.2629.65 as against Rs.1984.46 during the said period. In 2009-10, urban areas on an average spent 88 percent more per month on consumption that of rural areas.

Analysts are of the opinion that developmental scheme have had an impact on rural incomes and purchasing

Primary articles alone have contributed nearly 44 percent to WPI inflation in the fiscal so far, despite having a weight of only 20 percent in WPI.
power. The NSS data shows that programmes for rural areas are working and the benefits of rural intervention schemes are reaching the targeted population. The Survey further opines that nearly 10 percent of rural and urban households live below poverty lines. The poorest five percent in rural areas subsist on a mere Rs. 521.44 per month, while in urban areas, the monthly spending by the poorest 5 percent is on an average Rs. 700.50. This in effect means that the poorest of poor subsist on just 17.38 rupees per day in villages and a mere 23.35 rupee a day in cities.

Recent trends in food inflation

The current spiral of onion prices will ease sooner than later, as new harvests roll in, but the bigger question about food inflation haunting economists is whether the high is the new normal. Better wages are raising demand and cost production both. It is what economists call a ‘wage-price spiral’. Inflation in food articles has averaged 13.1 percent during the first 7 month of the fiscal compared to 9.5 percent during the same period last year. Rapidly rising prices of vegetables have been the prime driver of food inflation. During April-October 2013, inflation in vegetables averaged 44.2 percent. CPI inflation also crossed double digits in October 2013 (Chart 2). The RBI now expects WPI inflation to be higher than its earlier forecast of 5.5 percent in 2013-14; a 25 bps hike in the repo rate is likely during the fiscal year. The high food prices calls for urgent measures to increase the efficiency of the food supplies chain through appropriate policy responses to cut down on intermediaries and reduce waste.

The increase in WPI inflation comes after the October retail inflation went up by a margin 10.1 percent, the highest in the last seven months. While inflation in the vegetable component stood at 78.38 percent in October 2013, rate of price rise in onion continued to remain high at 278.21 cent. Protein rich items like egg, meat, and fish became dearer by 17.47 percent against 13.37 percent in September 2013.

Conclusion
From the foregoing analysis, it is clear that India has been facing the problem of inflation especially food inflation consistently and continuously. Food inflation is worryingly high. While there was slight moderation in prices of cereals and rice, wheat became dearer in October 2013. Inflation in regard to manufactured goods is inching up to 2.5 percent. While jumping inflation is certainly a disturbing trend, the increase in build-up inflation at 6 percent in the fiscal year so far clearly shows that there is still pain ahead. MA
The greatest challenge before the business is understanding shareholders' expectations. Creating shareholder value is all about cash inflows exceeding the total value of cash and financing decisions so that total value of the business increases by the future cash flows generated by that asset. The underlying value of an asset is determined by the value creation for the shareholder is assured. But the vicious cycle of value erosion begins with a faulty understanding of risk and returns. In this context, the author raised following questions in his book:

(i) Are the principles of corporate finance misaligned with economic rationale causing value erosion?
(ii) Are the financial tools used for decision making inconsistent with reality?
(iii) Is there any gap in understanding of risk and return between the equity investors on one hand and their agents on the other leading to value erosion, adversely impacting proper discharge of the Agency Role and Good Corporate Governance?

Keeping in mind the principles of corporate finance and shareholders' value creation as well as value erosion with risk and return parameters, the book has been designed into fifteen chapters.

Four chapters (Chapter 1 to 4) have been completely devoted to critically analysis global financial crisis with some fundamental issues: (i) faulty decision making (ii) erroneous understanding of risk and reward (iii) poor management of risk (iv) poor understanding of value and (v) misleading measurement and analysis of financial performance.

The underlying assumption modern of portfolio theory is that industry is expected to understand shareholder expectations correctly and fulfill those expectations. But, the reality of rational investor behaviour validity confirmed by the report of the Accenture Institute for Higher Performance Business (2006) that the methods being practiced worldwide for evaluation of risk and return accentuates communication error. This issue has been discussed in chapter-5.

The Capital Asset Pricing Model (CAPM) is used as a financial tool to determine an appropriate required rate of return of an asset taking into account three influential factors: asset’s relative sensitivity to systematic risk (beta), expected return of the market as a whole and the expected return of a risk free asset (Treynor, 1961). The author pointed out that: do the CAPM and Weighted Average Cost of Capital (WACC) are the suspected fallacies responsible for shareholder value erosion? He meticulously tried to prove this question in next four separate chapters (Chapter 6 to 9) with charts, diagrams and real examples.

Leverage impacts investor behaviour, returns and asset valuation. It is the only factor which affects beta. The real impact of leverage arises not from the debt-equity ratio but from its flow impact. Making debt-equity adjustments alone cannot result in better risk management. On the contrary, it would only treat and diagnosis in a faulty way. This issue has been thoroughly highlighted in chapter-10.

The question of prudent deployment of intermediate cash flows generated, regardless of the quantum of such cash flows, still remains. Unless this is done, value creation cannot take place. The author has taken this responsibility to discuss this issue by analyzing pay back methods and value centric capital budgeting in chapters 11 and 12.

Value creation in a business enterprise is achieved when its financial resources are utilised wisely. This must essentially involve applications of fundamentally economic rationale. Measuring value of stock has been explained in chapter 13 by taking different real examples.

Financial decision making standards are critically examined in chapter 14 of the book. The last chapter mentioned different sources of limitations that author used in his book.

The insights and arguments presented in this book has been an attempt to unravel such fallacies in capital budgeting practices which by virtue of being interlinked have a compounding effect on erosion of shareholder value. He used many Indian as well as global real life examples with authoritative references to understand value erosion perspective.

This book would be very much useful to the cost accountants, professional financial managers and students of cost accounting and finance to understand misconception and over-dependency on beta and WACC on project evaluation. This research based book will also help to researchers as a guide book to find out some answered questions.

However, this book suffers some limitations. Important fundamental theories of corporate finance are not discussed elaborately. Flow of presentations of all chapters are not been made in a systematic way. Terminology and glossary have not been incorporated. A separate conclusion chapter may enrich the degree of gravity of the book.

Reviewer: Dr. Ashish Kumar Sana
Associate Professor
Department of Commerce
University of Calcutta
email: cu.ashis@gmail.com
Theme: Nation Building through Cost Competitiveness and Responsible Governance

Dear Sir/Madam,

The term competitiveness is interpreted in many ways aimed at the sustainability and growth of any business entity, be it in technology, quality, business process, market share or customer orientation. Cost competitiveness subsumes all of those as it examines the long-term growth and sustainability of the business model. It takes into account the business, economic, legal, governance and ethical environment of the business.

The drive to emerge as a winner by any means has entangled many a corporate into scams which have been result of unbridled greed for short term wealth generation, sacrificing the governance and control aspects at its alter. This has resulted in Government, Regulators and Professional Institutes stepping in to stem the tide and introduce tight legislation and stricter control, which add to compliance costs, but are essential for protecting the public interest.

As Cost and Management Accountants it is vital for the profession, to build the cost competitiveness on a solid foundation built on responsible governance as envisaged in the Companies Act, 2013. Although we CMAs are “behind every successful business decision”, it is imperative for us to have a 360 degree vision to ensure that the governance and ethical best practices are kept sight of, while inculcating cost competitiveness. The 55th National Cost Convention 2014, delves into these aspects, which have become key pillars of capacity building for CMA professionals.

The various sessions have been designed with those aspects in view, starting with the Companies Act, 2013, dealing mainly with radical changes in legal, governance and ethical environment, the focus on MSMEs which deals with the current reality of their humongous contribution to the economy and employment and services sector which accounts for a significant proportion of the country’s GDP, the internal audit taking the hue of operational and management audit, tough provisions for auditors, and a new orientation to the Cost Audit, effective tax and Government expenditure monitoring mechanism, as an enabler of investment and growth.

Each convention brings an element of fresh thinking and ideas for taking the profession forward in the face of new opportunities and threats. This convention is no different.

Looking forward for your co-operation and active participation & wishing you a very prosperous and eventful New Year 2014.

Thanking You

With best regards

CMA Dr. A. S. Durga Prasad
Chairman
Convention Committee

CMA Chitra Agarwal
Co-Chairperson
Convention Committee
The Institute of Cost Accountants of India
(Statutory body under an Act of Parliament)

Programme Schedule

DAY 1: 23rd February, 2014 (Sunday)

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>08:30 a.m. to 09:30 a.m.</td>
<td>Registration</td>
</tr>
<tr>
<td>09:30 a.m. to 11:00 a.m.</td>
<td>Inaugural Session</td>
</tr>
<tr>
<td>11:00 a.m. to 11:30 a.m.</td>
<td>Tea Break</td>
</tr>
<tr>
<td>11:30 a.m. to 01:00 p.m.</td>
<td>Plenary Session - Cost Competitiveness for Inclusive Growth (CEO Forum)</td>
</tr>
<tr>
<td>01:00 p.m. to 02:00 p.m.</td>
<td>Lunch Break</td>
</tr>
<tr>
<td>02:00 p.m. to 03:30 p.m.</td>
<td>Technical Session I - Transition from Regulatory to Affirmative Corporate Action</td>
</tr>
<tr>
<td>03:30 p.m. to 04:00 p.m.</td>
<td>Tea Break</td>
</tr>
<tr>
<td>04:00 p.m. to 05:30 p.m.</td>
<td>Technical Session II - Professional Perspective - Response to the Emerging Challenges and Opportunities</td>
</tr>
<tr>
<td>07:30 p.m. to 10:00 p.m.</td>
<td>Cultural Programme followed by Convention Dinner</td>
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DAY 2: 24th February, 2014 (Monday)

<table>
<thead>
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<tbody>
<tr>
<td>09:30 a.m. to 11:00 a.m.</td>
<td>Technical Session III - Energizing MSMEs for Sustained Economic Development</td>
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<tr>
<td>11:00 a.m. to 11:30 a.m.</td>
<td>Tea Break</td>
</tr>
<tr>
<td>11:30 a.m. to 01:00 p.m.</td>
<td>Technical Session IV - Government Perspective - Tax &amp; Expenditure Management</td>
</tr>
<tr>
<td>01:00 p.m. to 02:00 p.m.</td>
<td>Lunch Break</td>
</tr>
<tr>
<td>02:00 p.m. to 03:30 p.m.</td>
<td>Technical Session V - Service Sector as a Key Enabler for Sustainable Growth</td>
</tr>
<tr>
<td>03:30 p.m. to 04:30 p.m.</td>
<td>Valedictory Session - CMA Growth Perspective (CFO Forum)</td>
</tr>
</tbody>
</table>

Venue
Hotel Mayfair Lagoon, Jaydev Vihar, Bhubaneswar-751013 (Odisha)
Phone: +91 674 666 0101

Contact Details

Headquarters: The Institute of Cost Accountants of India
CMA Bhawan, 12, Sudder Street, Kolkata 700016
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55th National Cost Convention 2014
Behind Every Successful Business Decision, There is Always a CMA
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## 55th National Cost Convention - 2014

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---

*Behind Every Successful Business Decision, There is Always a CMA*
Dear Sir/Madam,

We invite you/your company to register/sponsor delegates for the 55th National Cost Convention 2014 to be held on 23rd and 24th February, 2014 at Hotel Mayfair Lagoon, Bhubaneswar, Odisha in association with the Eastern India Regional Council and Cuttack-Bhubaneswar Chapter of Cost Accountants.

Participants

Corporate Directors, CFOs, Cost and Management Accountants and other Senior Management Executives in the Corporate Sector, Practicing Professionals in Secretarial, Financial, Legal and Management Discipline, Researchers, and Academicians who would benefit from participation in the Convention.

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Fees(₹)</th>
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<tr>
<td>Corporate Delegates</td>
<td>5,500</td>
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<td>Members</td>
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<td>Student</td>
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<td>Foreign Delegates</td>
<td>US $ 200</td>
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</table>

The entire fee is payable in advance and is not refundable once the nomination is received. The Delegate Registration Form duly filled in along with delegate fees may please be sent to:

The Chairman,
Delegate Committee,
The Institute of Cost Accountants of India
3, Institutional Area, Lodhi Road, New Delhi-110003

Thanking You,
Yours Sincerely,

CMA Manas Kumar Thakur
Chairman
Delegate Committee

PAYMENT

The Cheque/Demand Draft to be drawn in favour of "ICAII 55th National Cost Convention 2014" payable at New Delhi. Details for NEFT Payment: Punjab National Bank, Lodhi Road, New Delhi-110003

Current A/C No.: 0128000100629511 IFS Code: PUNB0012800

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<td>Delegate fee (non-residential) exemption for 10 delegates</td>
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<tr>
<td>Display on the Convention Backdrop as Platinum Sponsor and all other prominent places Sponsor Logo in badges and all Convention Material</td>
<td></td>
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<tr>
<td><strong>GOLD SPONSOR</strong></td>
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<td>Delegate fee (non-residential) exemption for 8 delegates</td>
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<td>Prominent display on the Convention Backdrop as Gold Sponsor and all other prominent places Sponsor Logo in badges and all Convention Material</td>
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<td><strong>SILVER SPONSOR</strong></td>
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<td>Delegate fee (non-residential) exemption for 6 delegates</td>
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<td><strong>SPONSOR FOR DINNER</strong></td>
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<td><strong>SPONSOR FOR LUNCH</strong></td>
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<td><strong>SPONSOR FOR CONVENTION KIT</strong></td>
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<td>Sponsor name printed on Convention kit</td>
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<td><strong>SPONSOR FOR MEMENTOES</strong></td>
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<td>Sponsor name printed on Mementoes</td>
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<td><strong>SPONSOR FOR CULTURAL EVENT</strong></td>
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<td><strong>Note:</strong> One special full page (Coloured) advertisement in the Souvenir for all above mentioned categories.</td>
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<tr>
<td><strong>OTHER SPONSORSHIP</strong></td>
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<td>Banner/ Stall/ Publicity Material on request</td>
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Dear Sir/Madam,

The Institute of Cost Accountants of India, established under an Act of Parliament is the premier professional body imparting Education, training and propagating Cost and Management Accountancy in India and abroad. There are over 64,000 members in Service and Practice. The members in service with Government, Public and Private Sectors, are occupying high positions like Chairman & Managing Directors, CEOs, CFOs and so on.

We are proud to inform you that the 55th National Cost Convention-2014 is being organized by the Institute of Cost Accountants of India in association with the Eastern India Regional Council and Cuttack-Bhubaneswar Chapter of Cost Accountants.

The theme of the Convention is “NATION BUILDING THROUGH COST COMPETITIVENESS AND RESPONSIBLE GOVERNANCE”. The convention is scheduled for 23rd and 24th February, 2014 at Hotel Mayfair Lagoon, Bhubaneshwar (Odisha). This mega Convention will be attended by a large number of delegates from India and abroad. On the occasion of this Convention, the committee has decided to bring out a Souvenir which will be released in the Valedictory Session. The Convention of this nature can be success only with your support in the form of Advertisements.

We request you to participate in this mega convention by releasing an advertisement in the souvenir. A souvenir Advertisement form is enclosed.

Looking forward to your kind co-operation and active participation.

Thanking you,
Yours Sincerely

CMA Dr. Sonjiban Bandyopadhyaya
Chairman
Souvenir Committee

<table>
<thead>
<tr>
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For enquiry and further details, please contact at

- The Institute of Cost Accountants of India, CMA Bhawan 12, Sudder Street, Kolkata-700016
  Phone: +91 33-22521031-34-35, Fax No. +91 33-22527993, Mobile: +91 90516 15252

- Delhi Office, CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi-110003
  Phone: +91 11-24622156-58, 24666100, Fax No. +91 11-24666 166, Mobile: +91 93133 75254

- Eastern India Regional Council: CMA Bhawan B4, Harish Mukherjee Road, Kolkata-700025
  Phone: +91 33-24553418/5957, Fax No. +91 33-24557920, Mobile: +91 98364 46669

- Cuttack-Bhubaneswar Chapter: A-122/2, Nilakantha Nagar, Nayapalli, Bhubaneswar-751012
  Phone: +91 674-2396622/2395622, Fax No. +91 674-23956622, Mobile: +91 97789 40481

Email: ncc2014@icmai.in • website: www.icmai.in
The topics covered by the model are grouped into five content domains.

IS Audit and Control
The Programme
This is a Certification programme of the Institute. The Programme adopts the curriculum of ISACA and seeks their help in choosing the right faculty and examiners. ISACA (Information Systems Audit and Control Association) – is an international professional association focused on IS Audit, IS Security, IT Governance and IT Risk Management.

Raison d'être of the Programme: Post liberalization, India has chosen the path of market-driven economy. The way of doing business has undergone a paradigm change, thanks to the technological changes, and constantly changing the customers’ aspirations, geographical boundaries, and regulatory environment.

The Revolution in the realm of computing has brought in its wake, speed, flexibility and mobility. Along with the Risk of losing, stealing, and manipulating the precious data has increased by many times. In the days of click and portal, the emphasis is on online transactions, divorcing in a large way, the pen and paper mode. These developments no doubt have susceptibilities and it is a constant challenge for an Auditor to overcome and ensure protection of the business interests of the Auditor and the client.

The above revolution has posed serious challenges to Accountants and Audit professionals. Today’s business enterprises are totally automated with very few manual dependencies. Processes and controls are in-built in modern technologies and therefore need to be reviewed with a fresh perspective by using latest tools and techniques.

The Programme aims to build capabilities among the members of the Institute to take those challenges and to handle challenges in auditing in an IT environment using IT tools.

ISACA
ISACA is a non-profit global association that was formed, and continues to exist today, to meet the unique and diverse technology needs of the continually developing IT field. In an industry in which change is constant, ISACA has moved with agility and speed to bridge the needs of the international business community and the IT control community.

The Curriculum
The Institute has adopted the ISACA Model curriculum for IS audit and control (3rd edition).

These domains are divided into major topic areas, and subtopics are provided within each topic area, along with the number of contact hours needed to adequately cover the topic, which total 250 hours. The Domains are:

- The Process of auditing information systems
- Governance and management of IT
- Information systems acquisition, development and implementation
- Information systems operations, maintenance and support
- Protection of information assets

Benefits to Members: The ISACA model curriculum entitles the programme to be posted on the ISACA web site, and graduates of the programme shall qualify for one year of work experience toward the CISA certification. ICAI members would be entitled to two years of further credit. Therefore, of the total requirement of five years of work experience in the IS Audit Domain, members successfully undergoing this course would need only two more years of relevant experience. The course curriculum would give them the required technical impetus and exposure to successfully complete the remaining two years of training requirement.

It is envisioned that the contact hours would typically be in some type of classroom, but the model is designed so that the contact could be accomplished through other education delivery methods, including distance learning programs.

Duration
One Year

Pedagogy
Self learning mode in the form of periodical contact sessions and web based learning through webinars

Scheme of Evaluation
Since the course requires a dedicated and disciplined approach, the evaluation is being carried on periodically and topic wise. The IT tools will be used. Weekly test are being contemplated as part of continuous evaluation.

Examination
With duration of six months, examinations will be conducted twice in a year. Examinations will be conducted by the Examination Department of the Institute.

The Pattern of Examination
The Question Paper will be Objective with multiple choice questions.

The Eligibility Criteria
Only members of the Institute are eligible for registration for the programme.

Registration Process
Registration will be online and the link will be provided to applicants. For registrations please visit the Institute’s web site www.icmai.in

Fee
Rs. 20,000 (Twenty thousand rupees only). The fee does not include examination fee and the cost of course material, if any.

For more information, please mail at advstudies.murthy@icmai.in
### Examination Time Table & Programme – April 2014

**Foundation Course Examination**

#### Syllabus-2008

<table>
<thead>
<tr>
<th>Day &amp; Date</th>
<th>Foundation Course Examination</th>
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</table>
| Sunday, 6th April, 2014. | Paper – 1 & 2 (100 Marks)  
Time : 10 A.M. to 12.00 Noon  
Paper 1 : Organisation and Management Fundamentals (50 Marks)  
Paper 2 : Accounting (50 Marks)  
Paper – 3 & 4 (100 Marks)  
Time : 2 P.M. to 4.00 P.M.  
Paper 3 : Economics and Business Fundamentals (50 Marks)  
Paper 4 : Business Mathematics and Statistics Fundamentals (50 Marks) |

#### Syllabus-2012

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<tr>
<th>Day &amp; Date</th>
<th>Foundation Course Examination</th>
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| Sunday, 6th April, 2014. | Paper – 1 & 2 (100 Marks)  
Time : 10 A.M. to 12.00 Noon  
Paper 1 : Fundamentals of Economics and Management (50 Marks)  
Paper 2 : Fundamentals of Accounting (50 Marks)  
Paper – 3 & 4 (100 Marks)  
Time : 2 P.M. to 4.00 P.M.  
Paper 3 : Fundamentals of Laws & Ethics (50 Marks)  
Paper 4 : Fundamentals of Business Mathematics and Statistics (50 Marks) |

### Examination Fees

| Foundation Course Examination | Inland Centres | Rs1000/-  
|-------------------------------|---------------|
| Overseas Centres | US $ 60  

1. The Foundation Examination in both syllabus (2008 & 2012) will be conducted in M. C. Q. Mode through Online only.
2. Total Questions : 100 (Multiple Choice Questions), Maximum Marks : 100 (Each Question will carry 1 Mark). There will be no negative marking for wrong answers.
3. (a) Students can login to the website www.icmai.in and apply online through payment gateway by using Credit/Debit card.
   (b) Application Forms for Foundation Examination is available from Institute’s Headquarters at 12, Sudder Street, Kolkata, Regional Councils and Chapters of the Institute on payment of Rs50/- per form. In case of overseas candidates, forms are available at Institute’s Headquarters only on payment of US$10 per form.
   (c) Students can also download the Examination Form free of cost from ICAI Website at www.icmai.in.
   (d) Students can also pay their requisite fee through payfee module of IDBI.
4. Last date for receipt of Examination Application Forms without late fees is 19th February, 2014 and with late fees of Rs300/- is 1st March, 2014. In case of online Examination Application with payment gateway by using Credit/Debit Card, the late fees of Rs300/- will be waived if applied within 1st March, 2014.
5. Examinations fees to be paid through Bank Demand Draft of requisite fees drawn in favour of “The Institute of Cost Accountants of India” and payable at Kolkata.
6. Students may submit their Examination Application Forms along with the fees at ICAL, CMA Bhawan, 12 Sudder Street, Kolkata – 700016 or Regional Offices or Chapter Offices. Any query in this regard may be addressed to Examination Directorate at 12, Sudder Street, Kolkata – 700016.
7. **Examination Centres**: Agartala, Ahmedabad, Akurdi, Allahabad, Asansol, Aurangabad, Bangalore, Baroda, Berhampur(Ganjam), Bhilai, Bhilwara, Bhopal, Bhubaneswar, Bilaspur, Bokaro, Calicut, Chandigarh, Chennai, Coimbatore, Cuttack, Dehradun, Delhi, Dhanbad, Durgapur, Ernakulam, Faridabad, Gandhidham, Guwahati, Hardwar, Howrah, Hyderabad, Indore, Jaipur, Jabalpur, Jalandhar, Jammu, Jamshedpur, Jodhpur, Kalyan, Kannur, Kanpur, Kolhapur, Kolkata, Kota, Kottayam, Lucknow, Ludhiana, Madurai, Mangalore, Mumbai, Mysores, Nagpur, Nasik, Nellore, Noida, Panaji (Goa), Patiala, Patna, Pondicherry, Port Blair, Pune, Rajahmundry, Ranchi, Rourkela, Salem, Sambalpur, Shillong, Siliguri, Solapur, Srinagar, Surat, Thrissur, Tiruchirapalli, Tirunelveli, Trivandrum, Udaipur, Valsad, Vashi, Vellore, Vijayawada, Vindhyanagar, Waltair and Overseas Centres at Bahrain, Dubai and Muscat. (If no examination centre is available at a particular location, examinees will be accommodated at the nearest Centre available)
8. A candidate who is completing all conditions will only be allowed to appear for examination.
9. **Probable date of publication of result**: Foundation – 16th April, 2014.

A. Das  
Director (Examination)
The members of the Institute holding Certificate of Practice having validity up to 31st March, 2014 are requested to comply with the following guidelines for renewal of their Certificate of Practice:

1. The following changes consequent to amendment of the Cost and Works Accountants Regulations, 1959 vide Notification dated 4th February, 2011 published in the Gazette of India may be noted:
   • The validity of a Certificate of Practice (COP) is for the period 1st April to 31st March every year unless it is cancelled under the provisions of the Cost and Works Accountants Act and Regulations, 1959 as amended.
   • The Certificate of Practice issued shall automatically be renewed subject to submission of prescribed Form M-3 and payment of renewal fee and annual membership fee.
   • From the year 2011-12 onwards, letter for renewal Certificate of Practice is not being issued.

However, the members concerned may download the renewal status from the Institute’s website www.icmai.in.

2. It may please be noted that under Section 6 of the Cost and Works Accountants Act, 1959, both the Annual Membership Fee and Fee for Renewal of Certificate of Practice falls due on 1st April each year.

3. Special attention is invited to the fact that the validity of a Certificate of Practice expires on 31st March each year unless it is renewed on or before the date of expiry in terms of the amended Regulation 10 of the Cost and Works Accountants Regulations, 1959. Hence, a member shall be required to renew his certificate within 31st March every year.

4. If the Certificate of Practice of a member is not renewed within 31st March, 2014, his/her status of COP from 1st April 2014 till the date of renewal would be “Not Active” and he will neither be able to affix his digital signature on any cost audit report or compliance report nor will he be able to get approval of Form 23C or Form 23D and the forms will get rejected on the MCA Website.

5. Subject to what has been mentioned in Sl. No. 4 above, a member can get his/her Certificate of Practice for 2014-15 renewed within 30th June, 2014. If application for renewal of Certificate of Practice is made after 30th June 2014, the member’s Certificate of Practice for 2014-15 will not be renewed but will be considered as a case of fresh issuance with effective date being the date of the application or receipt of the prescribed fee for Certificate of Practice, whichever is later.

6. It may please be noted that mere payment of fees alone will not be sufficient for renewal of Certificate of Practice. Application in prescribed Form M-3 is to be used for Renewal of Certificate of Practice duly filled in and signed is mandatory. Soft copy of prescribed Form M-3 for Renewal of Certificate of Practice can be downloaded from Institute’s website www.icmai.in.

7. The Institute has introduced a scheme of Continuing Education Programme (CEP) and the same is mandatory in accordance with proviso to sub-regulation (1) of Regulation 10 of the Cost and Works Accountants Regulations, 1959, as amended, whereby no Certificate of Practice and renewal thereof shall be issued unless a member has undergone minimum number of hours of such training.

The detailed guidelines in this connection are available on Institute’s website www.icmai.in.

The requirement specified above does not apply to a member in practice who has attained the age of 65 years as on 1st April 2014.

Other relevant issues for Renewal of Certificate of Practice are as follows:

• Application for renewal of Certificate of Practice upto 31st March 2014 has to be made in prescribed Form M-3 which may be filed online or through hard copy of form duly filled in and signed on both sides together with Renewal Certificate of Practice fee of Rs.2,000/- and all other dues to the Institute on account of annual membership fees and entrance fees.

• The annual membership fee for Associate and Fellow members are Rs.1,000/- and Rs.1,500/- respectively. The entrance fee for Associate and Fellow members is Rs. 1,000/- each payable at a time at the time of application for admission to Associateship or advancement to Fellowship, as the case may be.

• The fees may be paid online or by Demand Draft/Pay Order/Cheque payable at Kolkata if remitted by post to the Headquarters of the Institute. In case remittance is made through outstation cheque, Rs. 30/- is to be included towards bank charges. The fees may also be paid directly by cash at the Headquarters, Kolkata or by Cash/Demand Draft/pay Order/Cheque at the Regional Councils or Chapters of the Institute.

• Members should note that the renewal of Certificate of Practice can be effected only after receipt of the prescribed fees along with duly filled in form at the Headquarters of the Institute and on meeting the stipulated CEP credit hours. Mere submission of the same at the Regional Councils or Chapters will not be sufficient. Members are advised to make payment directly to the Headquarters or use the online facility of submission of application and payment to avoid any delay.

All practicing members are advised to send their application for renewal of Certificate of Practice for the year 2014-15 along with other requirements as indicated above immediately so as to reach the Institute’s Office at Kolkata by 28th March 2014 to enable the Institute to issue the renewal certificate by 31st March, 2014.

Renewal of Part-time Certificate of Practice

1. For renewal of part-time Certificate of Practice, it is also essential to furnish a certificate from the employer in the following form or in a form as near thereto as possible if the practicing member has undertaken any employment or there has been a change in employment:

   “Shri/Smt ………………………………………………. is employed as (designation)
   …………………………………… and (name of Organisation)
   ……………………………………. he is permitted, notwithstanding anything contained in the terms of his employment, to engage himself in the practice of profession of Cost Accountancy in his spare time in addition to his regular salaried employment with us.

   Signature of Employers with seal of Organisation”

2. It may be noted that members holding Part-time Certificate of Practice (CP) are not eligible to undertake statutory assignments like Cost Audit, Central Excise Audit, Certification of Compliance Reports etc.
Eastern India Regional Council

Asansol Chapter of Cost Accountants

On December 8, 2013, the Chapter organized its Annual Seminar-2013-14 where the topic was ‘Rupee Devaluation- Its Impact on Indian Economy and Industry- Role of CMAs’. The seminar was inaugurated by Shri Amitava Saha, Director (Finance), BCCL, CMA Chitra Agarwal, Chairperson, EIRC, CMA Pallab Bhattacharya, Vice-Chairman, EIRC, CMA Anil Homraj, Chairman of the Chapter. The Technical session was attended by various eminent dignitaries viz. Dr. Tanupak Chakraborty, Asst. Professor, University of Calcutta, Dr. Saikat Sinha Roy, Faculty, Dept. of Economics, Jadavpur University and Shri S.C. Basu, Ex-CMD, Bank of Maharashtra who deliberated in brief the various reasons for rupee devaluation in the recent times and on the impact of rupee devaluation on the economy and industry and co-related the same to inflation and current account deficit. The programme was coordinated by CMA Subrato Banerjee, member and past chair- man of the Chapter, CMA Sudip Dasgupta, Vice Chairman of the Chapter, CMA C. Bhattacharyya, Secretary of the Chapter, CMA Rambabu Pathak, Treasurer of the Chapter, CMA Jaydeep Ghosal, and CMA M.K. Mitra, members of the Chapter. Various delegates from ECL, BCCL, ISP-SAIL, BSCL, DPL, Dhanbad chapter, Durgapur chapter, Ranchi chapter etc. and practitioners in and around Asansol, Raniganj, Durgapur, Dhanbad also participated in the seminar. 4 CEP hours were awarded to the members of the Institute.

Cuttack-Bhubaneswar Chapter of Cost Accountants

This Chapter organized a monthly soft skill development programme for Inter & Final Students for the session October, 2013 to March, 2014 on December 29, 2013 to make them ready for the corporate world and to impart all managerial qualities in them. Prof. R.K. S Mangesh Dash, Advisor, TWARAN, Ex-Professor in IMIS & an expert soft skill trainer guided the students on development of soft skill & communication skill in order to excel in their professional life. 80 numbers of Inter and Final year pursuing students of the chapter actively participated in the programme.

Northern India Regional Council

Allahabad Chapter of Cost Accountants

The Chapter organized a professional development programme on Governance, Transparency and Disclosures under the Companies Act, 2013 on December 15, 2013. CMA Subhasis Pal, secretary of the chapter welcomed the guest and members and CMA C S Arti Nigam was the Keynote Speaker of this event who detailed the various provisions relating to Governance under the new Act. She briefly explained on Composition of Board, Role of Independent Directors, Disqualifications of Directors, Rotation of Auditors, Penalties, Corporate Social Responsibility under Companies Act, 2013 as well as Transparency Initiatives and Disclosure requirements in Financial Records and also in Board’s Report was specially elaborated. The topic was briefly introduced by CMA S.M. Anwar Hasan, chairman of the chapter. He highlighted the importance of Transparency and Governance. CMA Naveen Chandra, treasurer of the chapter expressed the vote of thanks. More than 25 professionals and 25 students including CMA Naresh Gupta, joint secretary of the chapter, CMA Naveen Chand, treasurer of the chapter, CMA G.P. Gupta, CMA Jawahar Lal, CMA Shishir Jaiswal , CMA Ashok Agrahari, CMA Virendra Srivastav, Shri Jagdish Tripathi, Sr. Advocate attended the seminar.
Kota Chapter of Cost Accountants

On January 5, 2014 the chapter organized inaugural function of new oral coaching session of January 2014 to June 2014. CMA Rajendra Natani, secretary of the chapter welcomed all the old as well as new faculties and CMA Shri M.B. Sonkhiya, Vice Chairman of SIRC addressed his motivational and inspirational speech to the students. CMA S.N Mittal, director of coaching center addressed to all students about CMA career and the course details. He also explained that CMAs are competent enough to control the inflation of our nation. The programme ended with a vote of thanks by CMA Rajendra Natani, secretary of the chapter.

Southern India Regional Council

Coimbatore Chapter of Cost Accountants

An orientation programme was conducted by the Chapter on December 24, 2013 by Vice-Chairperson CMA Meena Ramji and coaching in charge CMA S. Subbaraman accompanied by A.O. Shri B. Divakar, who emphasized the advantages of studying the course along with degree course. CMA Ramji and CMA Subbaraman elaborated on the course details and its prospects. The meeting was followed by interaction session and the doubts and clarifications raised by the students were answered. The chapter also conducted a lecture on Stock Audit in Banks in the PDP meeting led by CMA S. Srinivasaragavan, retired Assistant General Manager, SBI on December 27, 2013.

Hyderabad Chapter of Cost Accountants

The Chapter organized a series of Investor Awareness Programmes in December, 2013 at different colleges of Andhra Pradesh and nearby area. CMA K. Siva Prasad, practicing cost accountant addressed the participants in the programme. The Chapter also organized a Students’ Interactive Session on December 6, 2013. Among the dignitaries present were CMA A. Vijay Kiran, secretary & chairman of coaching administration & students’ services, CMA N. Srinivasan, director, Propart Solutions India Pvt. Ltd. and CMA V. Arunagiri, member of British Institute of Management, London. During the session, CMA V. Arunagiri briefly explained the techniques of facing an interview. About 45 students attended the programme.

The Chapter organized a presentation skills program for the students on December 18, 2013. The students of the Chapter were asked to make presentations on a said topic and the students shared effective presentations. CA Chandan Ghosh, Senior Manager, Novartis, the Chief Guest, CMA Ch. Venkateswarlu, Secretary of SIRC and CMA N. Srinivasan being the Guests of honour were among the dignitaries present, who shared their valuable suggestions and made the program an eventful one.

A half-a-day Seminar on ‘Internal Audit and Role of CMAs’ was organized by the Chapter on December 25, 2013. The seminar was divided into two parts: the first part was addressed by CMA KPC Rao, and was focused on Companies Act, 1956 vs. Companies Act 2013 and the changing role of Cost Accountants as Internal Auditor. The second part was addressed by CA Prem Nath, and was focused on technical aspects of Internal Audit. Various discussions on Internal Audit had been made. The Seminar was attended by more than eighty members.

On January 5, 2014 the Chapter organized a Practitioners’ Meet on ‘Emerging opportunities to Professionals under the New Companies Act, 2013. CMA V. Ahalada Rao, Practising Cost Accountant deliberated a speech regarding the opportunities available as per the act. CMA B.L. Kumar,
Chairman, CMA A. Vijay Kiran, Secretary, CMA S. Nagendra Kumar, Treasurer & Chairman, Practitioners’ Forum with several other members attended the programme.

A career counseling programme was organized by the Chapter on January 4, 2014. The primary objective of organizing such an event was to grab attention of students who take admission to the course of Cost and Management Accountancy at an early age through foundation course & to create a platform to cultivate the competitive spirit amongst the commerce students. A subsequent career counseling programme was also organized where CMA Dr. P.V.S. Jagan Mohan Rao, council member had deliberated on the scope and opportunities of the students in the Cost and Management Accounting field.

On January 12, 2013 the Chapter organized a programme on ‘Swami Vivekananda on Leadership and Governance’ on the occasion of 150th Jayanthi celebrations of Swamiji. Swami Bhitiharananda ji Maharaj, Director, Vivekananda Institute of Languages, Ramakrishna Math, Hyderabad was the Special Guest of Honour and Sri N. Krishna Murthy, Registrar of Companies, Hyderabad was the Chief Guest. The programme was attended by several members and students.

A campus placement programme was organized by the Chapter. This was inaugurated by the Chairman, SIRC, CMA S. Raju Iyer. The programme was a resounding success and there was overwhelming response from the corporate as well as industry. Seven companies actively participated in the recruitment drive which included M/s Wipro Ltd, M/s Synthite Industries Ltd etc. Members from Vizag and all chapters in Kerala have participated in the Programme. In order to enhance the competency levels of candidates, mock tests/interviews and personality development programme were conducted as a prelude to the campus placement programme. The collective efforts of the committee/staff members of the chapter under guidance and support from Headquarters and SIRC paved the way for the successful conduct of the first ever campus placement programme at Cochin chapter.

The Chapter conducted a full day programme on ‘Recent CAS & Guidance Notes’. The Programme was presided over by CMA Santhosh Kumar V, Chairman of the Chapter, and CMA S. A. Murali Prasad, Director, Sam Consultancy Services Pvt. Ltd. was the resource person.

The Chapter, in association with the Institute of Company Secretaries of India, Kochi Chapter organised a half day seminar on Internal Audit & Risk Management on November 30, 2013. CA Vivek Shenoy, Senior Vice President, Risk Management, Muthoot Pappachan Group delivered a speech. CMA C S Padmanabhan, Vice Chairman of the Chapter welcomed the gathering and C S Jayan K, Chairman, ICSI, Kochi Chapter delivered vote of thanks.

The Chapter also conducted a discussion forum on ‘Companies Draft Rule-2013’ in association with the Institute of Company Secretaries of India, Kochi Chapter on December, 7 2013. A one-day Professional Development Programme was also organized by the Chapter jointly with Kochi Chapter of Institute of Company Secretaries of India on December 14, 2013.
On December 21, 2013, the Chapter conducted a professional development program on ‘Taxability of Service Tax under the New Service Tax Regime’. CMA S. Kumararajan, the Chairman of the Professional Development programme delivered the welcome address. CMA J. Balasubramanian, the member of the Institute gave a vivid description of service tax regime from the date of introduction till date analyzing the definition of ‘service’ in an extended manner. He also explained the negative list in detail. CMA M. Govindarajan, Vice Chairman of the Chapter provided vote of thanks at the end.

Western India Regional Council

Ahmedabad Chapter of Cost Accountants

The Chapter organized a program on December 23, 2013. CMA R. B Kothari, Chairman of the Chapter welcomed all the students and parents, and thereafter he introduced the scheme of Oral Coaching provided by the Chapter. CMA P. H. Desai, Ex-Chairman of the Chapter was the Chief Guest who explained the importance of cost accounting and growing opportunities and challenges for CMAs in the changing world business. CMA Ashish Bhavsar, Secretary of the Chapter proposed vote of thanks.

Baroda Chapter of Cost Accountants

The Chapter organized an evening talk on ‘An overview of Companies Act, 2013’ and Shri Devesh Pathak, a senior practicing company secretary was invited to share his thought on the subject. The session was interactive and the members present were requested to organize similar session at least a month.

Pune Chapter of Cost Accountants

The Chapter organized a CEP Program on ‘Service Tax Compliance Encouragement Scheme 2013’ December 9, 2013. The CEP was presided by Mrs. Sungita Sharma, Commissioner of Central Excise. Mr. S. H. Dange, Additional Commissioner of Central Excise was Guest of Honour in the programme. A presentation was made by Mr. Manish Thapliyal, Assistant Commissioner of Central Excise on the above subject. There was good interaction between the attendees and Mrs. Sharma and Mr. Dange. CEP ended with a vote of thanks by CMA Amit Shahane.

On the initiative of CMA Harshad Deshpande and CMA Chaitanya Mohrir, Secretary of the chapter and the Chairman of Professional Development Committee of Pune Chapter of Cost Accountants respectively, a practice test was conducted for the foundation students to give them an exposure of the new online examination pattern in our advanced computer laboratory.
A directory of some research papers on Business Valuation that appeared in various journals/periodicals/magazines across the world is presented below for the reference of readers. The articles are available at the link provided next to them.

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Date of Advancement: 20th January 2014

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Circular on Revised Cut-off dates for Admission to the CMA Foundation Course

Pursuant to publication of The Gazette of India, Part III, Section 4, Ministry of Corporate Affairs, The Institute of Cost Accountants of India, notification CWR(2),2013 dated Kolkata, the 29th November, 2013, to be implemented from the date of their publication (dated 6th December, 2013) in the official gazette.

The following modification/amendment has been brought in /incorporated in the Cost and Works Accountants Regulations, 1959, in Regulation 20B, in clause (a),

(A) for the item (i), the following item shall be substituted, namely:-

“(i) he has been admitted to the Foundation Course under regulation 20A and has been enrolled for undergoing postal or oral or e-learning tuition for at least one hundred and fifty days prior to the commencement of such examination;”

(B) for item (iii), the following item shall be substituted, namely:-

“(iii) he makes an application in the form approved by the Council, at least forty-five days prior to the commencement of the examination;

Provided that the Council may extend the said period for not more than ten days with such late fees as it thinks fit.”

Considering the date of holding CMA Foundation Course examination, in line with this revised regulation, the cut-off dates for admission to the “CMA Foundation Course” only, stands revised as follows:

<table>
<thead>
<tr>
<th>Term of Examination</th>
<th>Existing cut-off date</th>
<th>Revised cut-off date</th>
</tr>
</thead>
<tbody>
<tr>
<td>For December term examination</td>
<td>31st May of the same year</td>
<td>30th June of the same year</td>
</tr>
<tr>
<td>(Example: If for December 2014 term of Examination, the existing cut-off date is 31st May 2014, which shall stand revised to 30th June, 2014)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>For June term examination</td>
<td>30th November of the previous year</td>
<td>31st December of the previous year</td>
</tr>
<tr>
<td>(Example: If for June 2015 term of Examination, the existing cut-off date is 30th November,2014, which is now revised to 31st December,2014)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This revised cut-off dates shall be effective for all admission to CMA Foundation Course for December, 2014 term and onwards, until further notification to this effect.

This issues with an approval of the competent authority.

CMA R.N.Pal
[Sr. Director (Directorate of Studies) and Secretary to the T&EF Committee]
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