THE JOURNAL FOR CMAs

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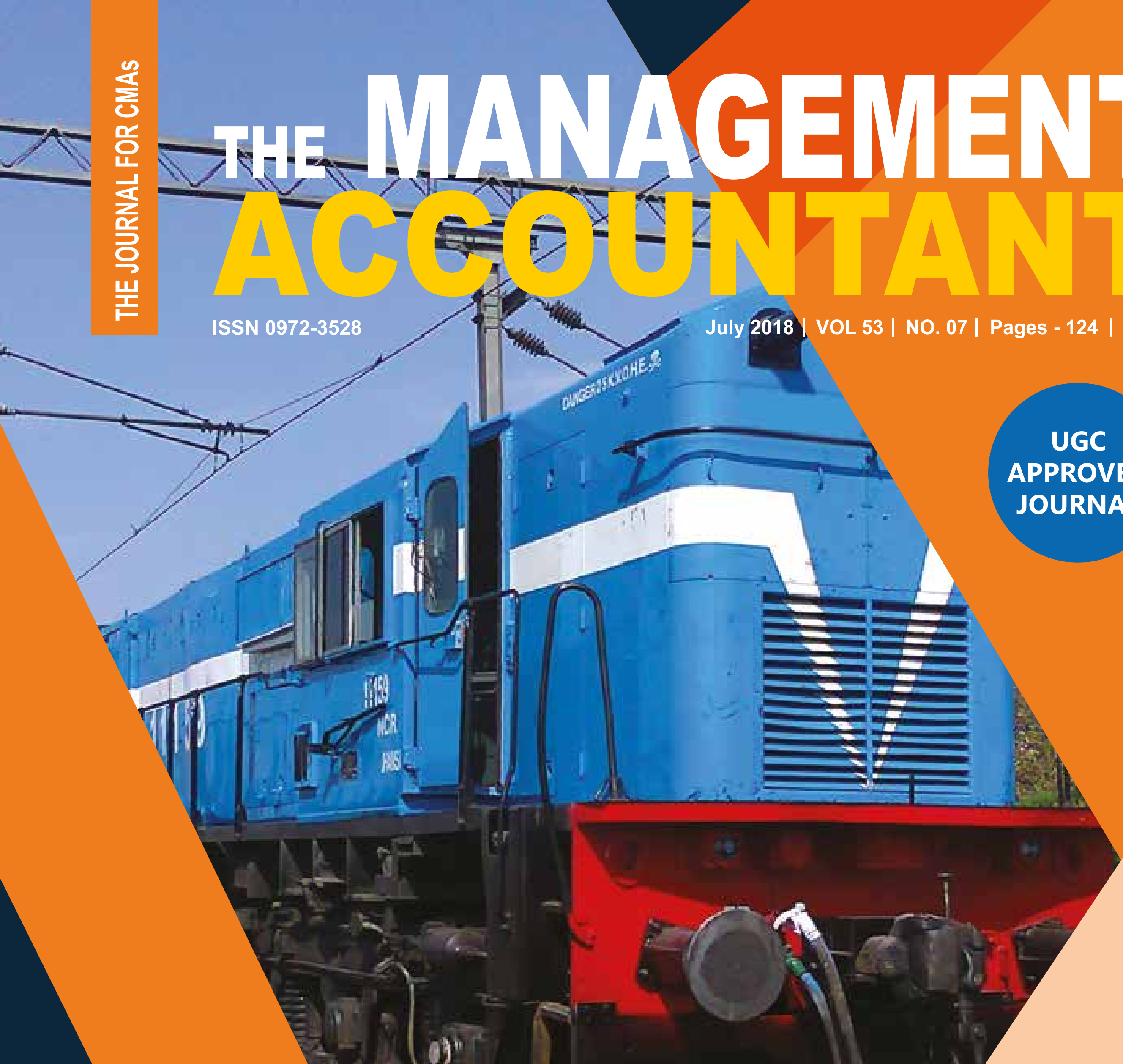

INDIAN RAILWAYS
CMAs AS GAME CHANGERS

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA
(Statutory Body under an Act of Parliament)
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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 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***

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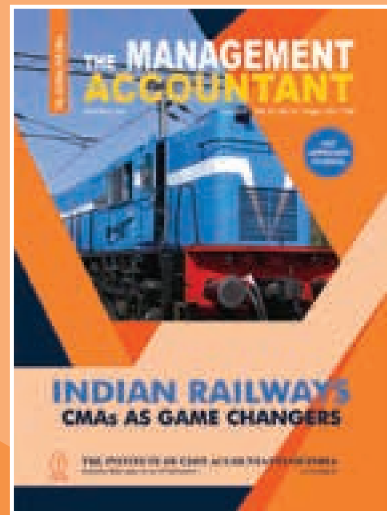

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We have expanded our Readership from 1 to 92 Countries

Afghanistan, Algeria, Argentina, Australia, Azerbaijan, Bahrain, Bangladesh, Belgium, Benin, Botswana, Brazil, British Indian Ocean Territory, Cambodia, Cameroon, Canada, Chile, China, Colombia, Croatia, Czech Republic, Djibouti, Egypt, France, Gambia, Germany, Ghana, Great Britain, Greece, Honduras, Hong Kong, Hungary, Iceland, India, Indonesia, Iraq, Ireland, Italy, Jamaica, Japan, Jordan, Kazakhstan, Kenya, Kuwait, Lebanon, Lithuania, Malawi, Malaysia, Mauritius, Mexico, Morocco, Myanmar, Namibia, Nepal, Netherlands, New Zealand, Nigeria, Oman, Pakistan, Papua New Guinea, Paraguay, Peru, Philippines, Poland, Portugal, Qatar, Romania, Russia, Rwanda, Saudi Arabia, Serbia, Seychelles, Singapore, Slovakia, Slovenia, South Africa, Spain, Sri Lanka, Sweden, Switzerland, Syria, Taiwan, Tanzania, Thailand, Turkey, Uganda, Ukraine, United Arab Emirates, United Kingdom, United States, Vietnam, Zaire, Zimbabwe.

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EDITORIAL

Greetings!!!

The Indian Railways' contribution to national integration has been unparalleled. It has always played a unique role in meeting the transportation needs of the common man, while simultaneously serving as a critical infrastructure facilitator for the carriage of goods. Railways are more energy efficient and less polluting than other modes of transport. IR aspires to add 1.5% to India's GDP by building infrastructure to support 40% modal freight share of India's economy. Pursuing sustainable growth through preserving the environment is one of the hallmarks of Indian Railways. Indian Railways aims to be the initiator for India's economic growth and development by being safe, financially viable, environment friendly and caring for its customers and employees.

The Railways has registered a healthy growth in revenues despite huge competition in other sectors. In 2017-2018, the national transporter earned Rs 50,000 crore from passenger fare, an increase of Rs 2,551 crore over 2016-2017 and the number of passengers travelling in trains has increased from 8219.38 million in 2016-2017 to 8267.32 million in 2017-2018.

Indian railways are adopting and changing its mindset and policy towards cost optimization and to recover from losses despite of higher revenues. It has highlighted on adoption of Activity based costing and this will provide the same with better information to make it more value-based and therefore implementing more effective decisions. Performance Budgeting will enable the Indian Railways to take correct business decisions and to improve resource utilisation, cost competitiveness, profitability, and sustainability of the organisation. All this will make the Railways an efficient organisation and a viable entity.

Under a single management, Indian railway network has been recognised as one of the largest systems in the world. The Indian Government is now focused towards making the network an investment-friendly sector through policy reforms. Recently, it has enabled foreign direct investment (FDI) in the sector for improving infrastructure for high-speed trains and freight trains.

Vision and plans 2017-2019 of Indian Railways aim to provide safe mode of transport and is committed to be key driver for the growth and development of our country with financial viability and sustainability. IR is committed to leverage latest technology, focuses on preferred freight carrier, non fare revenue enhancement, 'Zero' fatality, employee trainings and infrastructure upgrades on stations and trains to increase customer satisfaction. CMAs can be the best resource person to make research and suggest measures for cost control and other strategic management methods for enhancing operational efficiency, thereby acting as a game changer for the pride of India.

The major challenges before Indian Railways is to achieve economies of scale, reduction in cost to improve operating ratio, remove bottlenecks, automation of work, and proper deployment of resources. The application of lean manufacturing, total quality management, six sigma, digitalisation, captive power generation and none the less other tools will help to leapfrog the operating expenses thereby improving operating ratio. The innovations in the different facets will enable Indian Railways to be cost competitive and the benefits will be surpassed to the customers. CMAs could actively take part in formulation and implementation of innovative strategies. They can analyse the operating expenses and revenues and can suggest measures to improve the operating ratio and operational efficiency. The mission of Indian Railways is to develop self-sustainable railway stations in the country with high standards of safety, comfort, user friendly passenger amenities, value added services and efficiency by adopting the best technological practices, sound financial strategy and optimum utilization of resources.

This issue presents a good number of articles on the cover story theme 'Indian Railways-CMAs as Game Changers' by distinguished experts and authors. We look forward to constructive feedback from our readers on the articles and overall development of the journal. Please send your mails at editor@icmai.in. We thank all the contributors to this important issue and hope our readers enjoy the articles.

THE JOURNAL FOR CMAs

THE MANAGEMENT ACCOUNTANT

-: PAPERS INVITED :-

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

Theme: August 2018 — Doubling Farmers' Income-Strategies and Prospects

Subtopics

- ✦ *Technology and Innovations*
- ✦ *Sustainability indicators*
- ✦ *Cost Accounting techniques in Agriculture*
- ✦ *Appropriate Price Mechanism*
- ✦ *Risk Management in Agriculture*
- ✦ *Challenges and the way forward*
- ✦ *Govt Initiatives and Policies*
- ✦ *Role of CMAs*

Theme: September 2018 — Professional Scepticism

Subtopics

- ✦ *Definitions and Views of Professional Scepticism*
- ✦ *Auditor Objectivity and Scepticism*
- ✦ *Proper applications and techniques*
- ✦ *Preferred Scepticism Skills*
- ✦ *Barriers to scepticism*
- ✦ *Challenges and the way forward*
- ✦ *Global Opportunities*
- ✦ *Role of CMAs*

Theme: October 2018 — Global Management Accounting Research

Subtopics

- ✦ *History*
- ✦ *Emerging areas of research*
- ✦ *Use of modern tool s & techniques*
- ✦ *Economic sector specific research*
- ✦ *Societal contribution*
- ✦ *Academic perspective vis-à-vis Practical approach*
- ✦ *Institutionalization of research*
- ✦ *Indian experiences*

Theme: November 2018 — Skill Development and Employability

Subtopics

- ✦ *Innovation in Skills Development and Skills Management that reach SMEs*
- ✦ *Strategies for Job Creation, Skills Development and Social Protection*
- ✦ *Skill Gaps and Employability: Higher Education in India*
- ✦ *Empowering women through skill development: Challenges and Opportunities*
- ✦ *Skill development as a sustainable growth strategy*
- ✦ *Towards a Reskilling Revolution: A Future of Jobs for All*
- ✦ *Role of CMAs*

The above 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 latest by the 1st of the previous month.

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PRESIDENT'S COMMUNIQUÉ

CMA SANJAY GUPTA
President
The Institute of Cost Accountants of India

My Dear Professional Colleague,

Greetings!!

As you are aware our Institute "***The Institute of Cost Accountants of India (ICAI),*** previously known as the ***Institute of Cost & Works Accountants of India (ICWAI)***, is a premier statutory Professional Accountancy Body in India with the objects of promoting, regulating and developing the profession of Cost Accountancy.

It was on June 14th, 1944, The Institute of Cost Accountants of India came into existence. We have entered into 75 year of its foundation. This year is more than special for us as on this day we step into 75th year of its existence.

To commemorate the occasion it demands for Platinum Jubilee celebrations as we CMA's march towards Centenary. The Platinum Jubilee celebrations are set to be launched by none other than the first citizen of the country, Hon'ble President of India Shri Ram Nath Kovind on ***July 14th, 2018*** at Vigyan Bhawan, New Delhi. I request all the members and students to participate in large numbers and make the function a grand success.

It is pertinent to remember what our ***Hon'ble Prime Minister Shri Narendra Modi*** had said on 70th Independence Day last year on August 15th, 2017: It is now time to leave the 'Chalta Hai' attitude & think of 'Badal Sakta Hai'. Similarly, we all need to take the profession forward towards Centenary with glorious achievements & accolades.

On behalf of the profession and the Institute, let me mention with pride that our work, our achievements deserve for a befitting celebration.

75 Momentous Years - A Glimpse of the Past

The then Hon'ble Union Minister of Commerce & Industry, Shri Lal Bahadur Shastri (2nd Hon'ble Prime Minister of India) laid the foundation stone of the Institute on June 14, 1944.

There has been a positive paradigm shift and our profession has evolved and undergone major evolution in all aspects of the profession from syllabus to tasks & Since then CMA's have been partners in Nation Building. The role CMAs in plants have moved to the Board Rooms.

Similarly there have been many milestones for our Profession.

Now, let me bring to you some of the important professional developments that have taken place in the last one month:

International Conference 2018 in New Delhi

The Institute of Cost Accountants of India has successfully hosted SAFA Board and Committee meetings during 28th to 30th June, 2018 at ***Hotel Taj Diplomatic Enclave,*** New Delhi.

I congratulate CMA Fraternity and other SAFA member bodies for the success of ***SAFA International Conference***

PRESIDENT'S COMMUNIQUÉ

2018 on the theme ***"Professionals of the Future: Thoughts on 2018 & Beyond***" held on June 29th, 2018 at ***Hotel Taj Diplomatic Enclave,*** New Delhi.

I am pleased to share that ***Shri Piyush Goyal, Hon'ble Union Minister of Railways, Coal, Finance and Corporate Affairs*** graced the occasion as the ***Chief Guest*** of this Conference and ***Shri P.P. Chaudhary, Hon'ble Union Minister of State for Law & Justice and Corporate Affairs*** as our honored guest of the inaugural Session. ***Ms. Rachel Grimes***, President, The International Federation of Accountants (IFAC) was our Special Guest of this Conference. ***Ms Tashia Batstone***, SVP- CPA Canada was also the Special Guest of the Conference.

I am very thankful to all dignitaries, guests and speakers, my council colleagues, members of regional councils and chapters, past presidents, sponsors, members, students, press & media, foreign delegates, Institute's staff and each one of you for the making this historic event a grand success.

SAFA Board and Committee Meetings Held in New Delhi

Coinciding with the 2018 International Conference held in New Delhi, The Institute of Cost Accountants of India hosted the SAFA Board and Committee meetings too in New Delhi from June 28th to June 30th, 2018.

53rd SAFA Board meeting was held on June 30th, 2018 and was attended by IFAC delegation, in addition to the representatives of SAARC countries, viz. India, Pakistan, Bangladesh, Nepal, Afghanistan, Sri Lanka and Bhutan.

4th International Yoga Day

I wish to inform that all the offices of the Institute across the country celebrated 4th International Yoga Day on 21st June 2018. At Kolkata & Delhi offices of the Institute employees attended Yoga Sessions conducted by Shri Ajeet Bandyopadhyay and Shri Onkar Chug respectively. Yoga Day banners and posters were placed at Delhi & Kolkota offices to promote the event. The yoga sessions were well received by the participants. There was overwhelming response from the professionals and employees aspiring to have yoga session on regular basis and committed to continue practising the same for healthy and joyful life.

Meeting in MCA on Role of Auditors

I am pleased to share that CMA Ravi Sahni, RCM, NIRC attended a meeting called by Shri P.P. Chaudhary, Hon'ble Union Minister of State for Law & Justice and Corporate Affairs to discuss the Role of Auditors in MCA, New Delhi on 8th June, 2018.

Sitting of the Joint Committee on the Financial Resolution and Deposit Insurance, Bill, 2017

I along with Dr. Rishabh Chand Lodha, Chairman, ICMAI RVO, Shri Arvind Kumar Jain, Independent Director, ICMAI RVO and Shri Ajay Kumar Jain, Independent Director, IPA of ICAI attended the Sitting of the Joint Committee on the Financial Resolution and Deposit Insurance, Bill, 2017 held on 4th June, 2018 at Lok Sabha Secretariat, New Delhi.

Directorate of Advanced Studies

Advanced Studies Directorate has e-inaugurated three new Courses - Executive Diploma in Business Valuation, Executive Diploma in Cost & Management Accounting for Engineers and Certificate Course in Arbitration on 1st July 2018 through live webinar sessions conducted by CMA Manas Kumar Thakur, Chairman, Board of Advanced Studies and other subject experts. All the courses are meant for both members and non-members.

Membership Department

I feel pleasure to inform you that during the month of June 2018, 146 new members have been inducted as Associate members and 34 Associate members have been advanced to Fellowship.

I take this opportunity to heartily congratulate and warmly welcome all the new Associate members who were inducted and all the members who were advanced to Fellowship.

Professional Development and CPD Committee

I sincerely appreciate our Regional Councils and Chapters for organizing 52 programs, seminars and discussions on the topics of professional relevance and importance for the members such as, Overview of Valuation of Financial Assets & Liabilities under the Companies Act 2013, Ind AS - an overview, Overview of Insolvency & Bankruptcy Code, 2016, Cloud Computing for Professionals and Industry, Blockchain Technology, E-way bills under GST, Standards on Cost Audit and NCLT Accounts & Audit and Company Law, and so on.

The Institute was associated with Indian Chamber of Commerce for "Luxury Forum 2018 - Enhancing the Outreach of Luxury in India" on 15th June, 2018 at Shangri-La's Eros, New Delhi.

Institute was also associated with PHD Chamber of

Commerce & Industry for conducting workshops on "Levy of GST, Supply, Goods, Services and Time & Place of Supply Analysis and Open Issues", "Detailed Analysis of Advance Rulings-Employee Services, Composite vs. Mixed Supply, Exports vs. Import, Practical Aspects of E-Way Bill and Input Tax Credit-Open Issues" and "National Conclave on GST-Growing Stronger Together" on 8th June, 2018, 22nd June and 29th June 2018 respectively. I hope our members got immensely benefited with these programmes.

Representation with Government, PSUs, Banks and Other Organizations

PD Directorate has been sending representation letters to various organizations for inclusion of cost accountants for providing professional services. I am pleased to inform you that, on the request made by the Institute's representation, Kerala Ceramics Limited included Cost Accountants firm for Internal Audit work, Pradhan Mantri Bhartiya Janaushadhi Pariyojna (PMBJP) issued corrigendum and included Cost Accountants Firm for stock Audit of Bureau of Pharma PSUs of India (BPPI) and CSIR-IMTECH, Chandigarh has assured to include Cost Accountants for Tax Consultant in their upcoming tenders. Further, Karnataka State Industrial and Infrastructure Development Corporation Limited, National Health Mission , Chhattisgarh, National Institute for Micro, Small and Medium enterprises, National Health Mission, Uttar Pradesh, Airport Authority of India, National Seeds Corporation Limited, Food Corporation of India, Transport department, Aizawl, Odisha Hydro Power Corporation Ltd, Andhra Pradesh Industrial Infrastructure Corporation Limited, India Trade Promotion Organization, Indian Ordnance Factories, Intelligent Communication Systems India Limited and Coal India Limited included CMA in their Tenders/EOIs during June 2018.

Technical Directorate

Cost Auditing and Assurance Standards Board (CAASB)

I am pleased to inform that the Cost Auditing and Assurance Standards Board (CAASB) of the Institute has decided to enhance the awareness of Standards on Cost Auditing (SCAs) and also to build capacity of members of the profession on the same. In order to achieve this objective, the CAASB has organised a program on SCAs at Hyderabad. More such programs are coming up in other places also. In order to get the members acquainted with the SCAs, CAASB has published background papers on the SCAs 101 – 104 in Management Accountant. CAASB has also developed the powerpoint presentations on the SCAs 101-104, which are available on the CAASB portal of the Institute's website. I request the members to take advantage of these events and get benefitted.

Taxation Committee

The Tax Research Department, in the Month of June, 2018, has successfully launched the second batch of certificate course on GST at 12 locations. The offline classes has commenced at Delhi, Kolkata, Pune, Hyderabad, Coimbatore on the 17th of this month. At locations like Mumbai, Bangalore, Guwahati, Ranchi, Chennai, Noida, Ahmedabad the course commenced from the 23rd. Simultaneously online class on GST started off on a PAN India basis from the 20th of the month. The response of the course among the learners has been praise worthy. Also, the 15th of July, 2018 has been announced as the date of conducting the online examination for the first batch of the GST Course all across India.

Activities at Regional Councils & Chapters

Programme on 'Company Law & NCLT' and Members' meet of Hyderabad Chapter

Hyderabad Chapter of the Institute organised a Programme on 'Company Law & NCLT' and Members' meet with President on 08th & 9th June, 2018 in Hyderabad. Dr. Mamata Suri, Executive Director, Insolvency and Bankruptcy Board of India also graced the occasion.

Programme on 'Personnel Financial Planning' meet of Nagpur Chapter

Nagpur Chapter of the Institute of Cost Accountants of India organized a training programme on the topic 'Personnel Financial Planning' at Nagpur on 8th June, 2018. I also had the opportunity to meet with members of the Institute in Nagpur and deliberated on the various issues & matters of their concern related to the profession during the Members Meet organised by Nagpur Chapter.

National Seminar of Bilaspur Chapter

I was invited as a Chief Guest of the National Seminar on the theme "New Eras in CMA Profession: Goods & Services Tax and Insolvency & Bankruptcy Code, 2016" organised by Bilaspur Chapter of the Institute on 10th June 2018 at Bilaspur. CMA P.V.Bhattad, Past President and CCM also graced the occasion.

National Seminar of Jaipur Chapter

I am pleased to share that I attended the Seminar on the theme "Role of CMAs in Fastest Growing Economy under GST Regime" organised by Jaipur Chapter of the Institute on 1st July, 2018 (Sunday) at Jaipur. The event was also attended by Shri Shyam Agarwal, Immediate Past President, ICSI, as a Special Guest of the Seminar.

My tenure as President of this prestigious Institute is going to end soon. I will be handing over the baton to the next President. This will be is my last formal Page as President of the Institute; I will keep contributing to the cause of my alma mater, as a proactive member of the profession. I will remain dedicated to the welfare of my dear profession. While I look back at the developments of the Council Year 2017-18 during my tenure as President, I feel happy, but at the same time, let me acknowledge that I could not achieve all that I thought inspite of my best efforts. I realise a lot more has to be accomplished. Some of the tasks that are in process will ultimately be addressed and completed in the coming Council Year, i.e. under the suitable guidance and able leadership of the next President.

Let me also thank all my Members, Central Council colleagues for being with me at the fore of the profession with their vision and ideas in all our initiatives aimed at strengthening the brand Indian CMA on the globe, increasing our reach within and beyond our national frontiers, and in tapping the professional opportunities for our membership at large. I must thank all my professional colleagues from all Regional Councils across the nation, and overseas Chapters across the globe. The way they have assimilated their efforts and acted in the best interests of the profession supporting the vision and mission of the Institute, is commendable.

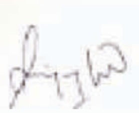
I wish you place on record that during my tenure as President of the Institute I have the occasion to interact with many Union Ministers, State Ministers and many senior officers of the Government. They have been very cooperative and supportive. I am thankful to all of them.

This communication won't be complete if I do not recall and thank my seniors in profession, i.e. past Presidents of the Institute, who always made themselves available whenever we requested and sought their interventions, suggestions and advice on any matter of concerns, readily coming forward and contributing their share to the profession. Last but not the least, I thank all employees of my alma-mater, who with their strong and indomitable spirit invested their body and soul to execute the Action Plan of the Institute. Putting in their days and nights, they have successfully performed as Committees and Departments following respective Vision and Action Plan. I promise you that my entire life will be committed to the welfare of the Members and the Institute and I will be available for all of you at all times.

I wish prosperity and happiness to members, students and their families and pray for the success in all of their endeavours.

May God bless you all.

With warm regards,



CMA Sanjay Gupta

1st July, 2018

Reminiscing the year passed by… … …

Cherishing the happenings, the achievements and the laurels collected and sharing some moment of triumph with all of you.

Initiatives for Updating and Advancing Professional Expertise

Membership Drive (Members Connect)

A massive membership drive started on the month of August to expand the CMA family, which will not only give us better visibility but also boost the Brand CMA.

Introduction of Dedicated Email ID for responding to queries related to Membership

With the objective of serving the esteemed members more efficiently, we have introduced a dedicated email membershipsupport@icmai.in and a toll free number 18003450092 for responding to queries related to membership.

Revamp of e-library for Members & Students

E-library or Digital Library provides collaborative search of all type of e-resources/on-line resources such as e-journals, e-books, e-database available with collaboration, personalization and social features to experience higher research productivity and gain valuable insights.

Companies (Registered Valuers and Valuation) Rules, 2017 – A New Professional Avenue

Ministry of Corporate Affairs has issued Companies (Registered Valuers and Valuation) Rules, 2017 wherein a new professional avenue have emerged for Cost Accountants. The members of Institute having requisite experience can get registered as "Registered Valuer".

Inclusion of Cost Accountant Qualification for the Post of Chief Financial Officer in Reserve Bank of India

On Institute's representation and subsequent meeting with officials, the Reserve Bank of India has included qualification of Cost Accountants in the eligibility criteria for the post of Chief Financial Officer in banks.

Foreign Exchange Management (Transfer or Issue of Security by a Person Resident outside India) Regulations, 2017

Cost Accountants in practice are recognized under Regulation 11of theForeign Exchange Management (Transfer or Issue of Security by a Person Resident outside India) Regulations, 2017for valuation of capital instruments of an Indian company and also under Schedule 2

- Purchase/ Sale of capital instruments of a listed Indian company on a recognized stock exchange in India by Foreign Portfolio Investors and Schedule 6
- Investment in a Limited Liability Partnership (LLP) for valuation on an arm's length basis as per pricing methodology.

Launched four new Advanced Studies Courses

- Executive Diploma in Business Valuation
- Executive Diploma in Cost & Management Accounting for Engineers
- Certificate Course in Arbitration
- Certificate Course in Goods & Services Tax

Meetings with Hon'ble Union Ministers

On 10th January, 2018, I met Shri Piyush Goyal, Hon'ble Minister of Railways and Coal and appraised about the progress of Railways Project and emerging role of CMAs in Railways and Coal Sector.

Meeting with Secretary to the Government of India, MCA

Meeting with Law Secretary, Department of Legal Affairs, MoL&J

Securities and Exchange Board of India

Securities and Exchange Board of India (SEBI) in its recent circular no. SEBI/HO/MIRSD/DOP1/CIR/P/2018/73 dated April 20, 2018 on "Strengthening the Guidelines and Raising Industry standards for RTA, Issuer Companies and Banker to an Issue" included Cost and Management Accountants to carry out internal audit on annual basis of RTAs.

Goods &Services Tax

- **Response to questionnaire to CBDT on New Direct Tax Laws**. Suggestions have also been submitted to the GST Council **on Simplification of GST Returns.**

- **Certificate Course on GST (Offline mode)** has been launched successfully in seventeen locations in two phases.

- **Online Classes on Certificate Course on GST** have also been launched for the benefits of learners in rural and far-fetched areas.

- Admission for **2nd Batch of Certificate Course on GST in both Offline and Online mode has been opened**. The course would benefit members, non-members and students. There would be a special discount for corporate who enrol bulk students.

- Institute has also submitted its Suggestions/ Comments on the Models suggested by GST Council for simplification of GST Returns on 24th April, 2018 to the Group of Ministers formed by the GST Council.

- Cost Accountants have been included to certify work sheet of tax liability before GST and after GST to be submitted by contractors on existing Works Contract under the Ministry of Railways, Government of India

Initiatives for the Students

- **Workbook** for Final & intermediate Student for Syllabus 2016 launched.

- **Placement Cell revived** to facilitate the placements for both qualified and semi-qualified CMAs. The Placement Directorate works closely with Corporate Sector to groom students as per industry requirements. Placement Cell of the Institute intends to provide 100% placement assistance to all CMA students and offers support, guidance and assistance to them at pre-placement stage which is immensely helpful in grabbing a lucrative job.

- The Institute organized **campus placement program** for the CMAs qualified in June 2017 term examination pan India basis. We have already placed approximately 170 qualified CMAs in various organizations and our team members are relentlessly trying to place the remaining qualified CMAs shortly.

- The Directorate of Studies (Training, Placement & Counselling) of the Institute conducted a **two-week Career Development Programme on "Excel your Performance"** for the CMA students pursuing Intermediate and Final from 05.02.2018 - 17.02.2018 at J.N. Bose Auditorium, Institute's Headquarters, Kolkata to impart hands on training on practical issues on different subjects of professional interest. The objective of the training was to assist students to get well placed by preparing them for the Interview. Some of the key aspects that has been covered in the programme are: Know yourself; Tools of Personality Development; Communication Skills; Team Building; Soft Skills; Technical sessions on various functional areas of Management: Accounting, Cost and Management Accountancy, Taxation, Audit, Capital Market, Foreign Trade, Quantitative methods & analysis and IT, Values and Ethics of a Responsible Manager, etc. More than 100 students actively participated in the programme. A book entitled "Excel Your Performance – A Practical Guide to Career Development" has been distributed to the participating students.

- **CMA Campus Placement Drive for December 2017** term qualified CMAs was conducted successfully across India. Already Mumbai, Chennai and Delhi Campus have been completed with grand success and Kolkata Campus is due in the first week of May 2018.

- This year the Institute organized **Summer Campus Placement Drive Program** pan India basis for the first time to facilitate qualified CMAs with lucrative job opportunities.

- Recruiters for June-2017 batch- NBCC, ITC, L&T, TATA Projects, Vedanta, PWC, Genpact, Deloitte, Saint Gobain, Peerless, GIIS, Oxynet and many more.

Significant Commemorations

71st Independence Day

Institute observed 71st Independence Day all over India through its headquarters, regional offices and chapters with great solidarity. An eventful programme on the theme 'Netaji Subhas Chandra Bose and India's Struggle for Independence' was held at J.N Bose Auditorium, Kolkata. Swami Kripakarananda from Ramakrishna Mission Seva Pratishthan was the Hon'ble Chief guest of the event and Keynote Speaker was Shri Chandra Kumar Bose, social activist and grandnephew of Netaji Subhas Chandra Bose.

Campaign: 'Swachhta Hi Sewa'

'Swachhta Hi Sewa' Campain was successfully observed from 15th September to Gandhi Jayanti on 2nd October 2017 by our Delhi Office, all regional offices and chapters of our Institute.

Diwali Milan

The Institute organized Diwali Milan on 16th October 2017 at Indian Habitat Centre, New Delhi. We were fortunate enough to have the gracious presence of Shri P.P.

Chaudhary, Hon'ble Union Minister of State for Corporate Affairs and Law & Justice and Shri Arjun Ram Meghwal, Hon'ble Minister of State of Parliamentary Affairs, Water Resources and River Development and Ganga Rejuvenation, G.O.I and many CEOs, CFOs and eminent personalities

Communal Harmony Campaign Week

The Institute participated in the "Observance of Communal Harmony Campaign Week" from November 19 till November 25, 2017 and organized a cultural programme on November 24, 2017 at JN Bose Auditorium, Kolkata, Headquarters of the Institute.

Vigilance Awareness Week 2017

Vigilance Awareness Week 2017 observed by the employees of the Institute during the period October 30, 2017 to November 4, 2017.

Rashtriya Ekta Diwas

Institute observed National Unity Day on October 31, 2017 as Rashtriya Ekta Diwas to commemorate the Birth Anniversary of Sardar Vallabhbhai Patel both at its Headquarters and Delhi Office.

Cost Governance Month

The Institute observed the month of February 2018 as "Cost Governance Month" across the country to inculcate the message – Good Cost Governance is conducive for sustainable economic development.

Mission Antyodaya Month

The month of March 2018 was celebrated as "Mission Antyodaya Month" by visiting and conducting survey in Gram Panchayats within this month through Regions and Chapters of the Institute based on the Key Parameters identified by the Ministry of Rural Development. The Institute also arranged and conducted massive awareness programs Pan India basis at various schools and colleges at Panchayat level to spread over the concept of "Mission Antyodaya".

International Women's Day

Regional Councils and Chapters organized programme and seminar such as, Unnati – Growth of Women in Profession; Second CMA Lady Submit; Avenues for Women CMA in Practice, Academics and Employment; Women: Power of the Multitasker to commemorate International Women's Day.

International Yoga Day

International Yoga Day was observed by the Institute on 21st June 2018 across the country and organized a Yoga Session at JN Bose Auditorium, Kolkata, Headquarters of the Institute.

58th National Cost Convention (NCC 2018)

58th National Cost Convention (NCC 2018) on the eve of Platinum Jubilee Year of the Institute on 16th &17th March 2018 at Vigyan Bhawan, New Delhi on the theme "New India 2022: Role of CMAs from Intent to Action". Shri M. Venkaiah Naidu, Hon'ble Vice President of India was the Chief Guest of the Inaugural Session of the NCC 2018 on 16th March, 2018. Further, Shri Suresh Prabhu, Hon'ble Union Minister of Commerce & Industry, Shri Piyush Goyal, Hon'ble Union Minister of Railways and Coal, Shri P. P. Chaudhary, Hon'ble Minister of State for Law & Justice and Corporate Affairs, Shri Shiv Pratap Shukla, Hon'ble Minister of State for Finance and Shri Injeti Srinivas, Secretary, Ministry of Corporate Affairs were the Guests of Honour.

National Events

Collaborative activities with Competition Commission of India

In continuation to our collaborative activities with Competition Commission of India (CCI) the Institute organized a 'Workshop on Competition Law and Cartel Enforcement' on 22nd September 2017 at SIRC at Chennai. The esteemed presence of Chief Guest Hon'ble Justice N. V. Balasubramanian and the deliberation by Senior Official of CCI enlightened the participants a lot.

CFO & HR Discussion Meet

CFO & HR Discussion Meet on the theme 'Skill Development & Employability – Agenda for Economic Development' was organized by the Institute on 22nd September, 2017 at Kenilworth Hotel, Kolkata.

CFO & HR Discussion Meet organised by the Institute on the theme "Skill Development & Employability-Agenda for Economic Development" on 22nd October 2017 at Hotel The Crown, Bhubaneswar, Odisha. Shri Subroto Bagchi, Chairman, Odisha Skill Development Authority, Govt. of Odisha graced the occasion as Chief Guest.

Workshop on "Paradigm Shift in Valuation - Opportunities for Professionals"

Professional Development Department organized the workshop on "Paradigm Shift in Valuation - Opportunities for Professionals". The workshop witnessed august presence of Shri P. P. Chaudhary, Hon'ble Union Minister of State for Law & Justice and Corporate Affairs as the Chief Guests. The Hon'ble Minister appreciated the initiative of the Institute by mentioning that the workshop on this topic is first of its kind. The Hon'ble Minister assured that he would consider enhancing the scope of cost audit as it is beneficial not only to the management for sustainability of a company but also to the other stakeholders like shareholders, creditors and consumers. He released "Guidance Note on Anti Profiteering" developed by the Professional Development Department of the Institute at the workshop.

Round Table Conference on "A Call to Action: Walk the Talk on Integrated Reporting"

PD Directorate of the Institute in association with Confederation of Indian Industry (CII) organized one Round Table Conference on "A Call to Action: Walk the Talk on Integrated Reporting" at Mumbai on 10th November, 2017 at Mumbai. As per the circular dated 6th February, 2017 of SEBI, Integrated Reporting may be adopted on a voluntary basis from the financial year 2017-18 by top 500 companies which are required to prepare Business Responsibility Report. Accordingly, a good number of CEO/CFO of top 500 companies attended the Round Table and had a discussion on Integrated Reporting.

CRBs 4th Annual Conference on "India & Sustainability Standards 2017"

Centre for Responsible Business (CRB) organized its CRBs 4th Annual Conference on "India & Sustainability Standards 2017 during 15-17 November, 2017 at New Delhi wherein the Institute was the "Lead Partner". Further, CMA Sanjay Gupta, hon'ble President of the Institute declared that the Institute has developed Cost Accounting Standards (CAS) and Standards on Cost Auditing (SCA) which are unique and can be utilized in standardization of costing information.

'Discussion session on Competition Law

Competition Commission of India In continuation of our collaborative activities with Competition Commission of India (CCI), the Institute organized a 'discussion session on Competition Law and related issues at Ahmedabad on 11th November 2017and a session at the Regional Cost Convention at Madurai on 19th November 2017.The deliberations by Senior Official of CCI were well received and appreciated by the participants.

Northern Regional Students Convention - 2018

The Northern India Regional Council (NIRC) of the Institute organised a Northern Regional Students Convention - 2018 on the theme "Skills towards Excellence" on 25th May, 2018 at New Delhi. Recently qualified CMAs and Students from Northern Region participated in this Convention.

SIRC Regional Cost Convention 2017

On 18th November 2017, the two-day Regional Cost Convention 2017 was organized by Southern India Regional Council of Institute of Cost Accountants of India in collaboration with Madurai Chapter of the Institute on the theme "Vision 2022: Re-engineering Nation Building Process by CMAs" on 18th and 19th November 2017 at Madurai.

Bengal Cost Summit 2017

Bengal Cost Summit 2017 on the theme "Importance of CMA in Every Decision Making" organised by Rajpur Chapter of the Institute at J.N. Bose Auditorium, CMA Bhawan, Kolkata on 25th November 2017. Shri Sobhandeb Chattopadhyay, Minister-in-charge, Department of Power & Non-Conventional Energy Sources, Govt. of West Bengal inaugurated the Summit as the Chief Guest.

PSU's Confluence for New India by ASSOCHAM

ASSOCHAM organised its Confluence on "New India Confluencefor Public and Private Enterprise-Governance, Risk &Compliance" on 15th December, 2017 at New Delhi wherein the Institute was the "Institutional Partner".

National Seminar GST organised by Bhubaneswar Chapter and Tax Research Department of the Institute

National Seminar on the theme "Goods and Services Tax – The Sustainability Imperative" organised by Bhubaneswar Chapter and Tax Research Department of the Institute at Bhubaneswar on 27th & 28th January, 2018. Shri Shashi Bhusan Behera, Hon'ble Cabinet Minister (Finance, Excise and Public Enterprises), Government of Odisha inaugurated the seminar as the Chief Guest.

39th Cost Conference

39th Cost Conference on "Transforming India through Cost Governance" jointly organized by the EIRC and Howrah Chapter of the Institute during 9th & 10th February, 2018 at Kolkata. Shri Sovandeb Chattopadhyay, Hon'ble Minister of Power, Government of West Bengal inaugurated the Conference as the Chief Guest.

National Seminar organised by WIRC of the Institute

Hon'ble Shri Chandrakant Dada Patil, Revenue Minister, Government of Maharashtra inaugurated the National Seminar as the Chief Guest, organized by the WIRC of the Institute during 10th & 11th February, 2018 at Mumbai with a theme "CMAs Partner in Vision 2022 for a Vibrant India".

Event for launch of National CSR Data Portal and Corporate Data Portal

CMA Sanjay Gupta, Hon'ble President of the Institute attended the event for launch of National CSR Data Portal and Corporate Data Portal on 19thJanuary, 2018, organised by the Ministry of Corporate Affairs (MCA) at New Delhi. Shri ArunJaitley, Hon'ble Union Minister of Finance and Corporate Affairs, graced the occasion as the

Chief Guest and Shri P. P. Chaudhary, Hon'ble Minister of State for Corporate Affairs & Law and Justice also graced the occasion as the Guest of Honour.

One-Week Workshop on "Talent Management and Career Progression"

The Directorate of Advanced Studies conducted One-Week Workshop on "Talent Management and Career Progression" for the Executives of Braithwate & Co. Limited, Kolkata during 15th – 20th January, 2018. Discussions were held on various topics like leadership, motivation, team building, corporate governance, ethics, human values, cost competitiveness in PSU, GST, communication& presentation skill etc. Certificates were distributed at the end of the event to the participants.

"8th Edition – National Legal Summit"

Institute was the "Knowledge Partner" in the **"8th Edition– National Legal Summit"** organised by Indian Chamber of Commerce in which was held on 20th January, 2018 at IHC, New Delhi. The Institute has prepared a background material on "Practical Aspect of GST Laws, Insolvency and Bankruptcy Code & Arbitration" which was circulated to participants of the Summit.

5th PHD Global Rail Convention – 2018 at New Delhi

Knowledge Report on "Indian Railways New Growth-Eco-System – From Steam to Bullet" prepared by Directorate of Advanced Studies was released by the Shri Piyush Goyal, Hon'ble Union Minister of Railways and Coal at the 5th PHD Global Rail Convention – 2018 at New Delhi. The report was highly acclaimed by the Hon'ble Minister and the eminent dignitaries present at the Convention. The Global Rail Convention 2018 also had discussions on featuring the Initiatives and Opportunities in the Railway Sector.

State Level Students Convention organised by Hyderabad Chapter of the Institute

On 24th February, 2018, Hyderabad Chapter of the Institute organised "CMA PRATHIBHOTSAV" - a State Level Students Convention at Kahirtabad, Hyderabad.

Conference of AIIPA on IBC: A Game changer for Corporate and Professional

CMA Sanjay Gupta was invited as Guest of Honour at the Inaugural session of the Conference on "IBC: A Game changer for Corporate and Professional" organised by All India Insolvency Professional Association (AIIPA) on 10thMarch 2018 at New Delhi. Hon'ble Justice Shri Sudhansu Jyoti Mukhopadhyaya, Chairperson, National Company Law Appellate Tribunal graced the occasion as the Chief Guest of the Conference.

3rd KSCC (Kerala State Cost Convention)

Southern India Regional Council (SIRC) and Cochin Chapter of the Institute of Cost Accountants of India jointly organized 3rd KSCC (Kerala State Cost Convention) 2018 on the theme 'Scaling up of Businesses, CMAs as Key Enablers' at Cochin on 26th April, 2018.

Conference on "The Blockchain Technology-A Revolution to Transform Society"

The Institute was associated with Cyber Research and Innovation Society and Cyber Immersions Solutions for a conference on "The Blockchain Technology-A Revolution to Transform Society" on 12th May, 2018 at India International Centre, New Delhi.

Global Exhibition on Services (GES) 2018

The Department of Commerce, Ministry of Commerce and Industry, Government of India, Services Export Promotion Council (SEPC) and Confederation of Indian Industry (CII) organised 4th Global Exhibition on Services from 15th – 18th May 2018 at Bombay Exhibition Centre, Mumbai. GES event targeted participation from 100 countries and also host 30 knowledge sessions, seminars and thousands of B2B & B2G meetings. As a partner-in-nation-building, The Institute had also put a stall in this exhibition to promote CMA Profession. This exhibition was inaugurated by the Hon'ble President of India that was then followed by the launch of 12 Champion Services Sectors.

A Seminar on the theme 'Legal Services: Compliance Challenges under Emerging Regulations and Technology Disruptions' was also organized during GES 2018 on 16th May 2018 at Mumbai to highlight the convergence of compliance and good governance and how sound and robust LEGAL SERVICES is vital for the growth of trade and industry in the current era of technology disruption. President of the Institute was one of the key Panelist of

Session II, who addressed the gathering on 'Resolving Insolvency in India: Progress & Way Forward' in this Seminar.

National CMA Practitioners Convention 2018

The National Practitioners Convention 2018, which was organised by the PD Directorate in association with WIRC & Baroda Chapter at the heritage city - "Vadodara", Gujarat on 19th & 20th May 2018 got overwhelming response from the practitioners. The theme of the NCPC-2018 was "Emerging Professional Avenues: Capacity Building of CMAs". There were discussions on various contemporary issues like Business Competitiveness through Cost Audit; Insolvency and Bankruptcy Code - Challenges and Opportunities; GST; Valuation Profession - the way ahead for CMA Professionals; Contemporary Areas of Practice etc.

Seminar on GST with PHD Chamber of Commerce & ASSOCHAM

- The Institute associated with PHD Chamber of Commerce & Industry in a seminar on "Corporate Frauds - Detection, Prevention & Remedies" and "Introduction of E-Waybill and Anti-profiteering measure under GST" held on January 11, 2018 and January 24, 2018 respectively at PHD House, New Delhi. Institute is also associated with PHD Chamber of Commerce & Industry for conducting workshops on "Issues in Export & Import of Goods & Services vis-à-vis Foreign Trade Policy", "Assessment, Audit, Demand and Recovery under GST-Analysis and Open Issues" and "Indian Accounting Standards (Ind AS) Transition towards Uniform Regime" on 11th May, 2018, 24th May, 2018 and 29th May 2018 respectively.

- The Institute associated with PHD Chamber of Commerce & Industry in a seminar on Analysis of Advance Ruling Process and Provisions Relating to Offences, Penalties, Appeals& Revision" and "E-Way Bill Mechanism, Refund on Export, Returns Tax Invoice and Delivery Challan" under GST held on March 16, 2018 and March 28, 2018 respectively at PHD House, New Delhi.

The Institute was associated with ASSOCHAM for a conference on "Changing Pattern of Services Industry Opportunities and Challenges" on 5th April, 2018 and associated with PHD Chamber of Commerce & Industry for workshops on "E-Way Bill Mechanism, Composition Scheme, Mixed Supply and Job Work Transaction under GST" and "Valuation of Goods & Services Basis/Inclusions & Exclusions; Analysis of Valuation Rules with Practical Case Studies" on 13th April, 2018 and 27th April, 2018 respectively.

I hope our members will be immensely benefited with these programmes.

International Events

Institute's representative as Vice-President, SAFA

CMA Dr. PVS Jagan Mohan Rao, Central Council Member has been unanimously elected in the Council Meeting of the Institute held at New Delhi on 20th December, 2017 for the position of Vice President of South Asian Federation of Accountants (SAFA) which is an apex body of SAARC, to take over with effect from 1st January, 2018

SAFA Committee and Board Meetings

48th SAFA Board meeting and other Committee meetings of SAFA attended by Institutes representatives held in Kathmandu on 27th-29th August 2017. SAFA International Conference was also organised on the theme Role of Professional Accountants in Economic Development and Sustainability, which was inaugurated by the Deputy Prime Minister and Minister of Education of Nepal Shri Gopal Man Shreshtha.

South Asian Federation of Accountants (SAFA) held its 49thBoard meeting and other Committee meeting during 30th October to 1stNovember, 2017 at Colombo, Sri Lanka.

3rd Annual IR Convention at Amsterdam on 'Growth of Integrated Reporting in India'

CII and International Integrated Reporting Council (IIRC) **jointly organized 3rd Annual IR Convention at Amsterdam on 'Growth of Integrated Reporting in India'** on 12-13 October 2017 where, CMA Sanjay Gupta, President of the Institute was a panelist for the session on "Accountants will save the World" in which he expounded on "under your leadership, how are we hitting refresh to the role of Cost & Management Accountants in India".

Global Management Accountants Conference on "Costing and Pricing- A Competitive Edge"

Global Management Accountants Conference on "Costing and Pricing- A Competitive Edge" organised by Institute of Cost and Management Accountants of Pakistan on 4thNovember, 2017, Pakistan Auditorium, Dubai.

Inspreneur: India Singapore- Entrepreneurship Bridge Conclave and ASEAN -India Pravasi Bharatiya Divas

Event organised by High Commission of India, Singapore during 4th to 7th January, 2018 at Singapore. The Institute carried out some meetings with Frost and Sullivan, Institute for South Asian Studies (part of National University Singapore) to explore possibilities of bilateral academic cooperation and collaboration.

2018 Dubai Global Convention

Institute of Directors organised 2018 Dubai Global Convention- the 28th World Congress on Business Excellence & Innovation, from 17-18 April 2018, at Dubai wherein the Institute was the "Associate Partner".

CAPA & SAFA Meetings in Kathmandu:

SAFA held its 52ndBoard Meeting on 11th May, 2018 and International Public Sector Conference on "Public Sector Financial Management – Enhanced Accountability and Transparency" organized by the Institute of Chartered Accountants of Nepal (ICAN) jointly with PEFA Secretariat in association with CAPA on 12thMay, 2018 at Kathmandu, Nepal.

SAFA International Conference 2018 on the theme 'Professionals of the Future: Thoughts on 2018 & Beyond' on June 29, 2018, New Delhi

The Institute of Cost Accountants of India, in association with South Asian Federation of Accountants (SAFA) organized SAFA International Conference 2018 on the theme 'Professionals of the Future: Thoughts on 2018 & Beyond' on June 29, 2018 at Hotel Taj Diplomatic Enclave, New Delhi. Shri Piyush Goyal, Hon'ble Union Minister of Railways, Coal, Finance and Corporate Affairs graced the occasion as Chief Guest of this Conference and Shri PP Chaudhary, Hon'ble Union Minister of State for Law & Justice and Corporate Affairs as our honoured Guest. Ms. Rachel Grimes, President, The International Federation of Accountants (IFAC) and Ms. Tashia Batstone, SVP-CPA Canada were the Special Guests of the conference.

Insolvency and Bankruptcy Code-2016

The Insolvency Professional Agency of Institute of Cost Accountants of India (IPA of ICAI), a section 8 company incorporated under the Companies Act 2013 has been promoted by the Institute of Cost Accountants of India to enroll and regulate Insolvency Professionals (IPs) as its members in accordance with provisions of the Insolvency and Bankruptcy Code 2016, Rules, Regulations and Guidelines issued thereunder.

Meeting with Chairperson, Insolvency and Bankruptcy Board of India

Met with Dr. M. S. Sahoo, Chairperson, Insolvency and Bankruptcy Board of India to discuss the role of the Insolvency Professional Agency of Institute in Insolvency and Bankruptcy related matters.

"Workshop on IBC and practical issues"

Insolvency Professionals - Capacity Constraints & Initiatives For training and dissemination of information and knowledge to Insolvency professionals, the Insolvency Professional Agency of Institute organized one day "Workshop on IBC and practical issues" on 7th October 2017 at New Delhi. The main focus of the workshop is towards the capacity building and professional development of the insolvency professionals. The technical sessions would be more focussed on the role of IRPs/RPs in first 150 days of CIRP, various challenges and aspects of important case laws decided by Supreme Court/High Courts/NCLAT/NCLT and would also deal with various practical difficulties faced by the Insolvency Professionals while conducting the transactions under IBC 2016.

CII National Conference on Resolving Insolvency in India – Progress and Way Forward

The Institute associated as an Institutional Partner with Confederation of Indian Industry (CII) for organizing

National Conference on Resolving Insolvency in India – Progress & Way Forward to be held on 4th April, 2018 at New Delhi being organized in partnership with Ministry of Affairs and Insolvency and Bankruptcy Board of India. Shri Injeti Srinivas, IAS, Secretary, Ministry of Corporate Affairs graced the occasion as the Chief Guest and Dr. M S Sahoo, Chairperson, Insolvency and Bankruptcy Board of India as the Guest of Honour of the Conference.

Companies (Registered Valuers and Valuation) Rules, 2017

Ministry of Corporate Affairs (MCA) has notified the provisions governing valuation by registered valuers [section 247 of the Companies Act, 2013] and the Companies (Registered Valuers and Valuation) Rules, 2017 (the Rules), with effect from 18th October, 2017. A registered valuer would carry out valuation in respect of any property, stocks, shares, debentures, securities or goodwill or any other assets or net worth of a company or its liabilities, as per chapter XVII of the Companies Act. The mechanism to prescribe valuation standards and syllabus for conduct of valuation education courses as well as specify the requirements with regard to the contents of the valuation report have been laid out in the rules. Among other requirements, the registered valuers have to be members of the registered valuers organisations (RVOs), recognised by the authority.

- The Institute of Cost Accountants of India (Statutory body under an Act of Parliament) has promoted ICMAI Registered Valuers Organisation (RVO), a section 8 company under Companies Act, 2013, which has received the recognition of Insolvency and Bankruptcy Board of India (IBBI) [vide RVO Recognition No.IBBI/RVO/2018/005] to conduct educational courses for three different asset classes - Land & Building, Plant & Machinery and Securities or Financial Assets.

Cost Accounting Standards

Revision of Cost Accounting Standard – 4 in light of implementation of GST:

Cost Accounting Standards Board (CASB) in its recently concluded meeting deliberated on revision of Cost Accounting Standard-4 (CAS-4) "Cost of Production for Captive Consumption". With introduction of tax on Goods and Services w.e.f. 1-7-2017, the concept of 'captive consumption' is no more relevant. However, the concept of cost of production or manufacture is still relevant under GST Rules. As per rule 30 of CGST Rules, 2017, where the value of a supply of goods or services or both is not determinable by any of the preceding rules, the value shall be one hundred and ten percent of the cost of production or manufacture or cost of acquisition of such goods or cost of provision of such services. CASB in the said meeting constituted a small group to discuss and finalized the CAS-4 as per the GST laws. The small group has already started the discussion and revision in CAS-4 will be submitted to CASB in its next meeting.

Technical Cell (Cost Audit, Compliance and Others) Impact of IND AS and GST on CASs, CRA-1 and CRA-3:

Technical Cell (Cost Audit, Compliance and Others) of the Institute held its meetings on 10th, 24th & 25th October 2017 to discuss the impact of IND-AS and GST on principles that are required to be incorporated in items of cost for various input costs e.g. Material; Packing Material; Utilities; Direct Expenses; Repairs and Maintenance; Overheads; Research and Development; Quality Control; Pollution; Service Centre Cost etc. Consequentially there will be effect on CRA-1 of Companies (Cost Records and Audit) Rules as the principles enunciated in CRA-1 are broadly based on the Cost Accounting Standards issued by the Institute. The cell also deliberated upon the impact of IND-AS and GST on Annexure to Cost Audit Report (CRA-3) particularly on Para 6 of Part D of the Annexure: "Reconciliation of Indirect Taxes (for the Company as a whole)". The detailed report shall be sent to the Ministry of Corporate Affairs for carrying out necessary changes / modifications in CRA-1 and CRA-3

Exposure Draft of CAS-4 (Revised 2017):

Cost Accounting Standards Board in its 90th meeting held on 12th December 2017 has approved the release of Exposure Draft of Cost Accounting Standard – 4(ED-CAS-4) (Revised 2017) on Cost of Production or Acquisition or Supply of Goods or Cost of Provision of Services for public comments. The ED-CAS has already been hosted on the website. Last date for submitting comments on the ED-CAS is16th January 2018. I urge all the members, in particular the Practicing Members, to go through the ED-CAS and submit their suggestions to the CASB Secretariat so that the Standard could be finalized in the light of those comments.

Guidance Note on CAS-13:

Cost Accounting Standards Board in its 90th meeting held on 12th December 2017 has approved the release of Guidance Note on Cost Accounting Standard – 13 (CAS-13) on Cost of Service Cost Centre. The Guidance Note was finalized by the CASB in light of the comments received from public.

Companies (Cost Records and Audit) Amendment Rules, 2017:

Ministry of Corporate Affairs notified the Companies (Cost Records and Audit) Amendment Rules, 2017 on 8th December2017. The amended Rules were issued by the Ministry of Corporate Affairs pursuant to implementation of Ind-AS. The draft Rules were modified by the MCA based on the suggestions of the Institute and general public. It is pertinent to mention that the amended Rules are applicable to all the Companies covered under the Companies (Cost Records and Audit) Rules, whether the Indian Accounting Standards (Ind-AS) are applicable to them or not. The Cost Rules (updated till 2017) are available on the PD Portal of the Institute's website.

Cost Accounting Standards Board (CASB)

Cost Accounting Standards Board (CASB) of the Institute has released the Guidance Note on CAS-13 (Cost of Service Cost Centre).The same is available on the CASB portal of the Institute's website. I am grateful to the stakeholders / members for sending their suggestions/ comments on the Exposure Draft of CAS-4 and enabling the CASB to finalize the said Guidance Note. Also, the Cost Accounting Standards Board (CASB) in its 91st Board meeting held on 24th January 2018 considered the suggestions/ comments received from the stakeholders and approved the Cost Accounting Standard (CAS-4)(Revised 2018) on "Cost of Production or Acquisition or Supply of Goods or Cost of Provision of Services or Both" and recommended for approval of the Council of the Institute.

Technical Cell (Cost Audit, Compliance and Others): Revision of CRA-1 and CRA-3 on account of GST and Ind AS

I wish to inform that the Technical Cell (Cost Audit, Compliance and Others) in its 18th meeting held on 25thJanuary 2018 considered the recommendations of Small Group constituted by the Institute to analyze the impact of Customs Tariff Act (CTA) Codes vis-à-vis Central Excise Tariff Act (CETA) Codes, GST and Ind As on CRA-1 andCRA-3 of the Companies (Cost Records and Audit) Rules2014. The Technical Cell finalized their suggestions and recommendations on CRA-1 and CRA-3 which are being forwarded to Ministry of Corporate Affairs/ Cost AuditBranch for carrying out necessary changes/ modifications while revising the CRA-1 and CRA-3

Meetings

- In a meeting with Tashia Batstone, CPA Canada Senior Vice-President, External Relations and Business Development on 15th September 2017 at Delhi Office of the Institute and discussed about possibilities of mutual recognition of the professional qualifications and professional development programmes offered by each Institute. We also discussed about making Collaborative Research Study, Publications, Seminars and Workshops in relevant areas of mutual interest, and also exploring any other possible initiatives for strengthening and empowering the professions globally. Again on 3rd May, 2018 in Toronto, Canada discussed with her about possibilities of mutual recognition of the professional qualifications and professional development programmes offered by both Institutes.

- In a meeting with Dr. Viral V. Acharya, Deputy Governor, Reserve Bank of India and other senior officers of RBI on 13th September to apprise them about role of Cost Accountants in Banking Sector and to brief them about the Stock and Book Debt Audit, Concurrent Audit, Forensic Audit etc. wherein the professional services of Cost Accountants can be utilized in befitting manner. The meeting was fruitful and the issues raised by us were taken well cognizance of by RBI side.

- Met with Mr. Nicholas Talbot, Chief Executive, International Valuation Standards Council (IVSC) at

Mumbai to discuss the role of Cost Accountants in Valuation Standard related matters.

- On 25th January, 2018 at Delhi Officeof the Institute discussed about the important mattersrelated to professional qualifications and professionaldevelopment programmes with Mr. Jeffrey C. Thomson, President and CEO and Mr. Jim Gurowka, Vice President, International Business Operations of Institute of Management Accountants [IMA].

- In a meeting with officials from CPAAustralia at Delhi Office of the Institute and discussedabout possibilities of mutual recognition of the professionalqualifications and professional development programmesoffered by both the Institutes.

- On 1st March, 2018, meeting called by MCAon the Action Plan on Champion Services Sectors forwardedby Department of Commerce to the Ministry. The Institute examined the Action Plan and worked out strategy for implementation and same was presented before the Ministry.Union Cabinet has recently approved the proposal of Department of Commerce to give focused attention to 12 identified Champion Services Sectors to promote their development and realise their potential. Since India's services sector has immense potential for employment; such an initiative will enhance competitiveness in the sector through the implementation of focused and monitored Action Plans. This will in turn boost the GDP too, creating jobs and promoting exports. Ministry of Corporate Affairs called the 2nd meeting on the Action Plan on Champion Services Sectors forwarded by Department of Commerce to the Ministry. The Institute worked out a comprehensive strategy for achieving the vision 2022 in respect of accounting and finance sector and the same was presented in the meeting.

- Discussion Meet with Mr. Paul Smith, President and CEO and Mr. Nick Pollard, Managing Director, Pacific of CFA Institute on 13th April, 2018 at Delhi Office of the Institute and discussed about possibilities of mutual recognition of the professional qualifications and professional development programmes offered by each Institute.

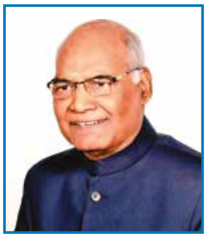
The Institute of Cost Accountants of India

(Statutory body under an Act of Parliament)

Platinum Jubilee Celebrations

CMA@75 : Inspiring Towards Centenary

Chief Guest



Shri Ram Nath Kovind

Hon'ble President of India

Date: July 14th, 2018 (Saturday)

Time: 9:30 AM Onwards

Venue: Vigyan Bhawan,New Delhi

CMA SANJAY GUPTA

PRESIDENT,
THE INSTITUTE OF
COST ACCOUNTANTS OF INDIA

GLIMPSES OF SOUTH ASIAN FEDERATION OF ACCOUNTANTS (SAFA) INTERNATIONAL CONFERENCE 2018 ON 'PROFESSIONALS OF THE FUTURE: THOUGHTS ON 2018 & BEYOND', JUNE 29, 2018, NEW DELHI

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ICAI-CMA SNAPSHOTS

❶ ❷ Shri Bhupender Yadav, Member of Parliament (BJP), Rajya Sabha and National General Secretary of Bharatiya Janata Party being felicitated by CMA Sanjay Gupta, President and CMA Niranjan Mishra, Council Member of the Institute during his visit at CMA Bhawan, New Delhi during "Sampark Abhiyan"

❸ ❹ ❺ Glimpses of National Seminar on the theme "New Eras in CMA Profession: Goods & Services Tax and Insolvency & Bankruptcy Code, 2016" organized by Bilaspur Chapter of the Institute on 10th June 2018 at Bilaspur

❻ ❼ Glimpses of Programme on 'Company Law & NCLT' and Members' meet with President organized by the Hyderabad Chapter of the Institute on 08th & 9th June, 2018 in Hyderabad

ICAI-CMA SNAPSHOTS

❶ CMA Sanjay Gupta, President of the Institute, presenting Momento to Dr. Mamata Suri, Executive Director, Insolvency and Bankruptcy Board of India during the Programme on 'Company Law & NCLT' organized by the Hyderabad Chapter of the Institute on 08th & 9th June, 2018 in Hyderabad

❷ Heartiest Congratulations to Team CMA for winning "CMA Challenger Cricket Cup 2018" by beating Hewlett Packard -HP Team in Finale held in Delhi on 2nd June, 2018

❸ CMA Niranjan Mishra, Chairman, Taxation Committee of the Institute inaugurating the second batch of GST Course at Chennai, SIRC

CMA H Padmanabhan, Vice President of the Institute and Chairman SIRC, CMA Dr A Mayil Murugan are also seen

❹ CMA H Padmanabhan, Vice President of the Institute addressing during inauguration of second batch of GST Course in Chennai SIRC

From Left: CMA Dr A Mayil Murugan, Chairman SIRC, CMA Niranjan Mishra, Chairman Taxation Committee, CMA K Suryanarayanan, RCM SIRC and CMA S Subhashini , Resource Person are also seen on the dais

❺ CMA H Padmanabhan, Vice President addressing at ICAI Members Meet at SIRC Chennai

CMA Niranjan Mishra, Chairman Taxation Committee, CMA Dr A Mayil Murugan Chairman SIRC and CMA K Suryanarayanan RCM SIRC were also present

❻ ❼ Release of Research Bulletin, Vol 43 No IV, January 2018 at the seminar on 'GST-Concept & Applied Aspects' on 9th June, 2018 jointly organized by Directorate of Advanced Studies of the Institute and Institute of Business Management, Jadavpur University at Jadavpur University Campus, Kolkata

ROLE OF COST ACCOUNTANTS IN INDIAN RAILWAYS

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The role of Cost Accountants in Indian Railways has gained phenomenal prominence over the years. There has been emphasis for Costing analysis and control of activities by maintaining Cost records from early days. The process of change from mere cost accounting to aiding the Management in crucial decision making has been narrated stage-wise in this article. This article is intended to high light the ever-increasing role and potential of CMAs in Cost and Management Account practices.

Some Railway Terminologies for Quick Reference:

RS: ROLLING STOCK
POH: PERIODICAL OVERHAUL
LOC: LABOUR ON COST
MOC: MATERIAL ON COST
DEMU: DIESEL ELECTRICAL MULTIPLE UNIT
RSP: ROLLING STOCK PROGRAMME
M&P: MACHINERY AND PLANT
URC: UNIT REPAIR COST
IMMS: INTEGRATED MATERIAL MANAGEMENT SYSTEM
AIMS: ACCOUNTING INFORMATION MANAGEMENT SYSTEM
PER: PERAMBUR
KRCL: KONKAN RAILWAY CORPORATION LTD.

Inception of Costing:

Until 1996, the scope of Costing in Indian Railways was restricted to production units and production activities carried out in workshops. Most workshops in Railways, engaged in carrying out Rolling stock maintenance activities, were manufacturing spares used for POH. Table 1 explains below, the year-wise implementation of various types of costing in Workshop Accounts of Railways.

Table 1: Year-wise implementation of Costing in Indian Railways until 1992

COSTING SYSTEM	YEAR	PURPOSE
Job Costing	1962	Production activities in the workshop
Batch Costing	1965	Wagon production at Golden rock workshop
Process Costing	1992	Costing of Foundry & Sawmill shop activities- Now dispensed with consequent to closure of shops.

Scope of the Article

The core activity of Railways is transportation. However, the scope of this article covers the Cost and Management practices practiced in Workshops, the domain I am familiar with for the past two decades. To keep the Rolling Stock track worthy, day to day maintenance at running sheds, Intermediate Overhaul at Depots (Open line) and Periodical Overhaul (POH) at Workshops are being carried out at stipulated intervals.

System of Costing for Rolling Stock Maintenance in Indian Railways

Figure 1: Costing system for arriving at URC of Coaches and Wagons

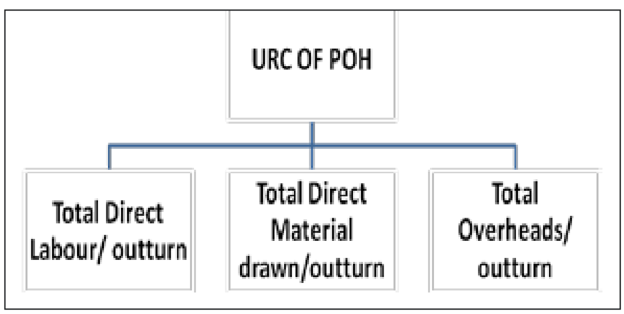

Figure 2: Costing system for arriving at URC of AC Locos

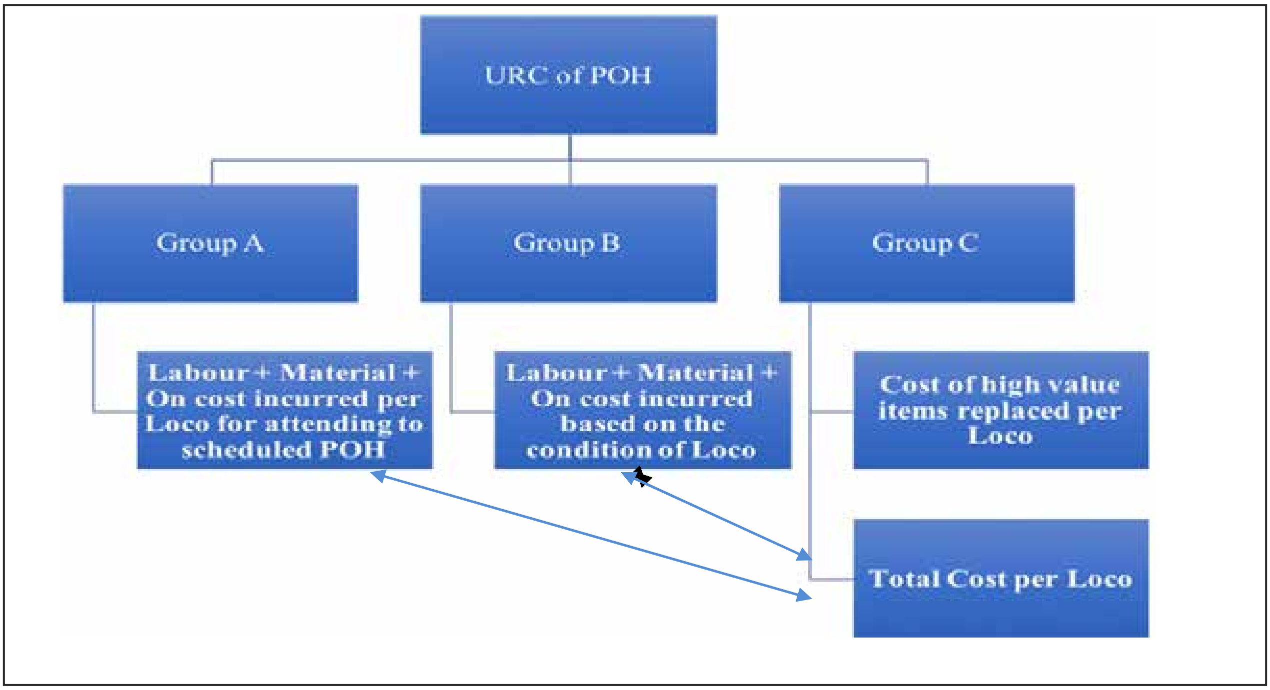

Table 2: Extension of Costing to Repair Activities

COSTING SYSTEM	YEAR	PURPOSE
Revised Costing System	1996-97	Contemplated by RITES for Electric Loco wise costing in Fox pro
Uniform Costing	2010-11	Developed "in-house" software application in Oracle D-2k
DEMU Costing	2013-14	DEMU wise costing for POH/ special re-pairs in Oracle D-2k software application forms.
Coachwise Costing	2017-18	Coach wise type wise costing for POH and other repairs in Ora-cle - similar module.

Revised Costing System:

This system of costing contemplated by RITES in Fox Pro was used for arriving at the POH cost incurred per loco. This has been implemented in respect of Electric Loco at Loco Workshop/PER and Diesel Loco at Golden rock workshop. This is the first system introduced to arrive at unit repair cost in respect of major repair activity whereas the rest of the systems were only for ascertaining production cost. The salient features are:

The cost incurred is divided into three categories viz. Group 'A', Group 'B' & Group 'C':

I. Group 'A' cost is usually the scheduled repair to be attended to in respect of all locos and hence the total cost incurred under this group is averaged among the locos turned out during that month

II. Each sub-activity is identified as a cost center and the cost will be collected cost center wise.

III. Group 'B' cost is the cost incurred on each loco based on the condition of the individual loco.

IV. Additional expenditure on account of re-cabling and modifications carried out are collected and accounted under different cost centers.

V. Group 'C' cost reflects the high-value items replaced in respect of individual loco turned out during the month.

VI. All expenditure booked cost center wise are apportioned to the locos turned out during the month based on standard Pre Determined ratio (based on equated output).

VII. The greatest advantage of this system is that the material cost is related to consumption per Loco.

VIII. The Inter Railway POH bills for Electric Locos are generated based on this RCS system.

IX. This enables comparison of the unit activity cost of Electric locos repaired every month.

X. For comparison purpose, Group 'A' cost alone is taken as standard POH cost

However, this was not linked to financial Accounts and could not be continued in the outdated software.

Uniform Costing System:

The shortcomings noticed in the Revised Costing System were addressed and on the similar lines Uniform Costing System, a software application was developed in Oracle and D-2k forms "In-House" and implemented from June 2010 for POH of Electric Locomotives done at Perambur Locomotive Workshops. In this system, averaging Group A cost among all Locos turned out during the month has been dispensed with and specific consumption of materials to each Loco is billed. This system is linked to Financial Accounts.

Evolution of Demu Wise Costing:

Workshops in Railways are more keen on achieving their targeted outturn than the cost associated with it. A study on POH of one rake of DEMU owned by KRCL -(Diesel Power Car & 3 Trailer Coaches) was done. Outcome of the study revealed more than 50% under absorption of cost based on the average Costing system. This Financial implication was explained to the staff concerned at Loco workshop/ PER and immediately costing on real-time basis was agreed to be implemented for DEMU activity. Workshop Accounts/ PER Computer section developed an in-house software application for DEMU wise costing in Oracle and D-2k forms and is fully operational from 2013-14.

Coach Wise Costing System

Similar module for Coach Wise Costing at Loco Workshop/PER has been implemented from January 2018. All diversified activities of Loco Workshop/PER have been brought under the network of Costing system.

Benefits of Rolling Stock Wise Costing (Poh Repair Activity)

- Controls Overcharging of Revenue Head to reflect realistic Operating Ratio.
- Eliminates undercharging other railways ensure effective clearance of WMS (Workshop Manufacture Suspense) balance.
- Meaningful comparison of inter Railway cost of POH (URC).
- Actual consumption of material and labour booking for each coach is billed.
- Modification works undertaken during the course of POH- booked to respective RSP or other relevant Head.
- Arrive at cost of Coach POH type wise
- Stores and labour data can be imported to this module from IMMS/AIMS.
- Each section is considered as a cost center for the collection of expenditure.

Periodical Special Studies

The following studies were made and reported in the last few years:

- The Rolling Stock of Railways viz. Coaches; Wagons and Locomotives are due for POH at Scheduled period of 18 months, 54 months and 72 months respectively. POH given before the prescribed due dates are termed as premature POH.
- The impact of premature POH of wagons and other Rolling stock were studied and reported to Mechanical Department. This has now resulted in drastic reduction in the arising of premature POH.
- A detailed report on under-utilization of High-Value Machines was submitted highlighting the probable loss to railways. This data will be useful for planning M&P procurement in ensuing years.
- An outsourcing proposal to rebuild Wagons was averted. The surplus manpower availability executing the work in the workshop was proved and has resulted in enormous savings to Railways.

- Benefits on the introduction of new group incentive scheme by replacing the old scheme introduced in 1962 highlighted probable recurring savings and benefits to the organization.
- Life Cycle Cost of few high-value machines was worked out and submitted to Board at Board's instance under thematic study.
- Individual study on Manpower requirement Vs availability for each activity/ shop done at various stages.
- A detailed study was conducted on wide variation in URC of common POH activities among various workshops of Southern Railway.
- This lead to some standardization of man-hours for scheduled POH in 3 Mechanical workshops of Southern Railway.
- Coordinated for bringing out revised Code (Operational guidelines) for Mechanical Department.

Of late, fresh outsourcing proposals are also routed through CMA to assess the exact manpower requirement Vs availability in pre and Post outsourcing periods.

The above studies imply the **switchover of the role of Cost Accountant in Railways from mere Cost accounting to Management Accounting in line with the change of name of our Institute**.

The role of CMA in Railways is to highlight and guide the top Management to take right decisions at right time on the following issues.

- Identify the areas requiring better utilization of available resources.
- Whether to continue "in-house" or outsource old or new activities.
- If outsourcing is preferred, what quantum and when to outsource.
- Alternate use of spare available resources.
- Identify areas of avoidable expenditure and monitor their non recurrence.
- Ensure correct allocation and apportionment of expenditure to various activities.
- Suggest ways and means in pruning down overhead expenditure
- Assess the actual cost of each activity carried out.
- Aid in effective inventory control to avoid locking up of funds.
- Suggestions to augment railway earnings from traffic and other avenues.
- Assist in implementation of ERP in future.

Conclusion

Every one will appreciate that Indian Railways is a huge Capital Intensive Organisation involving large amounts of Operational Outlay. The need for achieving Excellence in Managing Costs in such an Organisation will be apparent. The Scope for Contribution by Cost Management Professionals here is immense in areas like Capacity Planning, Resoure allocation and utilisation, Investment Decisions, Measurement of Operational efficiency, Outsourcing decisions, Waste elimination, Cost Conscious Shop Floor Practices, Cost control iniatives etc.,

I venture to make this presentation as a member of the Cost Management Profession Employed in the Railways. MA

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COST AND MANAGEMENT ACCOUNTANT

A SILVER BULLET FOR INDIAN RAILWAYS

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"Desh ko Gati bhi Rail se milegi aur pragati bhi"-
Hon. Prime Minister Shri Narendra Modi.

Cost and management accountant can act as a catalyst in "Gati" and "Pragati" of India with the implementation of cost reduction and cost controlling techniques and strategic management. Railway envisages being an engine for India's growth and development by building robust infrastructure to support 40% modal freight. It aims to be near "Zero fatality" performance leveraging latest technology and taking proactive approaches to ensure sustainability. Indian Railway is a crown jewel of India and makes Indian feel proud at global arena as Indian rail network is the fourth longest network in the world with operating route length more than 68,525 km. The United States has the world's longest railway network (over 250,000 km), followed by China (124,000 km) Russia (86,000 km) and India (68,525 km) [Source: erail.in]. Cost reduction and cost control stand imperative for all industries irrespective of the nature of market like monopoly or perfect competition. Reduction and controlling of cost will enable Railways to pass the benefit to the society at large. Cost and management accountant can be the best resource person to make researches and suggest measures for cost control and other strategic management methods for enhancing operational efficiency thereby acting as a game changer for the pride of India.

Theme COST FOCUS in Vision 2017-19 of Indian Railways:

Vision and plans 2017-19 of Indian Railways aim to provide safe mode of transport and to be key driver for the growth and development of our country with financial viability and sustainability. The strategic roadmap to achieve the vision of 2017-2019 has been divided at four levels.

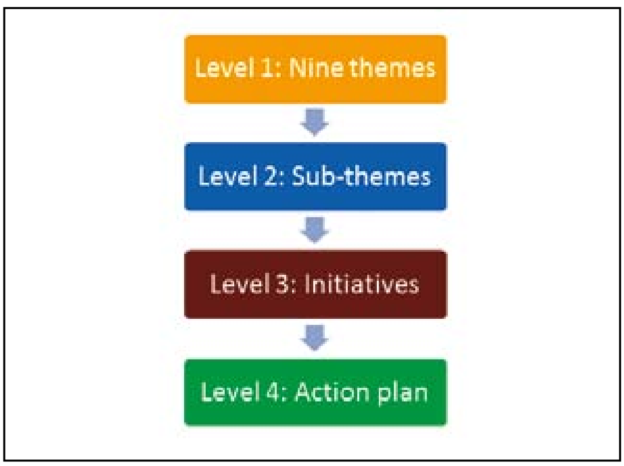
Level 1:
The vision has been segregated into nine themes. Eight themes have been derived from Rail Vikas Shivir and one theme is additional for developing sustainability.

Level 2:
Nine themes have been divided into sub themes.

Level 3:
The strategic initiatives have been identified for each sub theme.

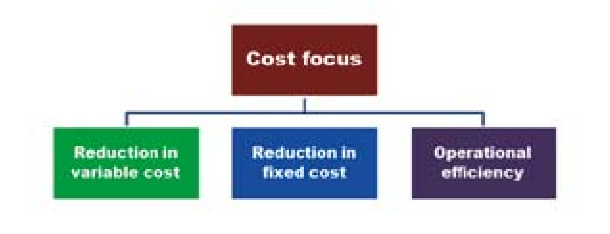
Level 4:
Action plan has been prepared for each initiative.

Figure 1: Four levels of theme cost focus



Cost focus is one of the nine themes of Indian Railways Vision 2017-2019. The cost focus targets to reduce operational cost by 10% in five years. The cost focus has been divided into three sub themes.

Figure 2: Sub-themes of Cost focus



These three sub-themes have been identified with several strategic initiatives. These initiatives and their action plans of Vision 2017-19 are as follows:

Figure 3: Theme Cost focus of Vision 2017-19 of Indian Railways

COST FOCUS		
Sub-theme	**Initiatives**	**Description**
Variable cost reduction	Reduction of fuel cost	Reduction of fuel cost by 20% with the electrification of wagon and out sourcing of power to reduce per unit cost.
	Saving fuel costs in diesel locomotives	Application of Advanced Fuel Efficiency Kit (AFEK) and Guidance for Optimised Loco driving (GOLD) module will be issued with targeted fuel savings of 8-10%.
	Procurement efficiency	Target to achieve procurement efficiency for top 10 spend items other than fuel.
Fixed cost reduction	Adoption of EOTT	Installation of End of Train Telemetry to replace Goods Train Guard.
	Right sizing	Optimisation of manpower by multi-skilling, deployment and intake reduction. Skills can be bundled for roles.
Operational efficiency	Accounting reforms	Implementation of accounting reforms will ensure correlation between inputs and outputs.
	Asset utilization	Implementation of programs to enhance asset utilisation like wagon utilisation and coach utilisation.
	Regulatory	Setting up regulator to recommend passenger and freight fares.

The COST FOCUS aims to reduce the operating expenses with several initiatives and action plans.

Operating ratio of Indian Railways:

Operating ratio is the ratio of operating expenses divided by operating revenues. It helps to determine the amount spent in order to earn one rupee. Lower operating ratio is desirable for better financial health. The operating ratio for financial year 2018-19 has been estimated to be 92.8% as against 96% in year 2017-18. But operating ratio for the financial year 2017-18 dipped to 98.5% and marked as worst operating ratio since the year 2000-2001 (98.3%). Ministry of Railways blamed to 7th pay commission for increase in operating expenses due to increase in payment for salaries (increased payment by Rs. 20,000 crore). And, Railways could raise only Rs. 10,000 crore out of Rs. 20,000 crore set as the revenue target from the land monetisation. The best operating ratio for Railways remained 74.7% for the year 1963-64. The operating ratio is computed in the following manner:

$$\text{Operating ratio} = \frac{\text{Gross working expense}}{\text{Gross earnings}} \text{x}100$$

Gross working expenses and gross earnings are computed in the following manner:

Gross earning=Coaching earning + Goods earning + Other earning (less refund)

Gross woking expenses=Ordinary working expenses + Appropriation to Depreciatation reserve fund + Appropriation to pension fund

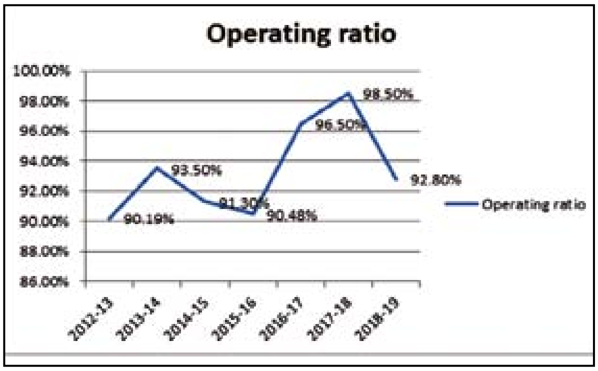
The pattern of operating ratio for Indian Railways can be viewed as follows:

Figure 4: Operating ratio of Railways

Year	Operating ratio
2012-13	90.19%
2013-14	93.5%

Year	Operating ratio
2014-15	91.3%
2015-16	90.48%
2016-17	96.5% (however, CAG said it to be 99.54% after including payment for pension)
2017-18	98.5%
2018-19	92.8% (targeted)

Figure 5: Graph of operating ratio



The operating ratio has been declining and it was worse off in the year 2016-17. Comptroller and Auditor General of India (CAG) said that the fixation of passenger fares and freight charges should be based on the cost involved. CMA can help to improve the operating ratio which is most desirable for Indian Railways. The operating expenses can be reduced and operating ratio can be lowered with the help of certain cost control techniques.

Analysis of revenue of Railway:

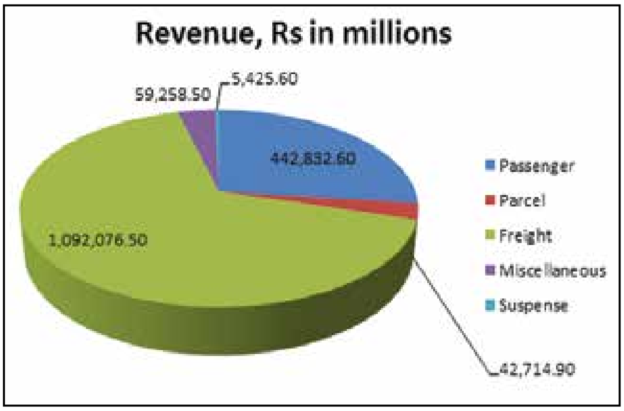
The revenue earned by Railways has recorded the increase in 0.6% in the year 2016-17 than 2015-16. The revenues earned by Indian Railways from different segments can be seen as follows:

Figure 6: Gross Tariff receipts of Railways (Source: Indian Railways website)

REVENUE (Rs. In millions)						
Year	Passenger	Parcel and other coaching	Freight	Misc.	Suspense (Bills receivable)	Gross tariff receipts
1980-81	8,274.7	1,157.1	16,175.2	820.8	-187.6	26,240.2
1990-91	31,475.0	3,363.8	84,078.7	2,417.6	-370.2	120,964.9
2000-01	105,150.7	7,641.6	233,051.0	7,032.5	-4,071.0	348,804.8
2010-11	257,056.4	24,698	628,447.2	34,182.7	101.7	945,356.3
2015-16	442,832.6	43,714.9	1,092,076.5	59,258.5	5,425.6	1,643,335.1
2016-17	462,804.6	43,120.0	1,043,385.4	103,680.4	-68.4	1,652,922.0

The share of revenue earned by Railways from different segment can be viewed as follows for the year 2016-17:

Figure 7: Pie chart for revenue earned for 2016-17 from different sources

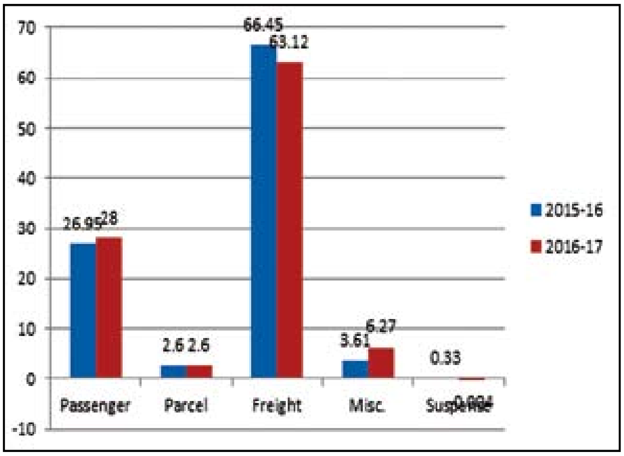


The percentage of revenue from different segments during the year 2015-16 and 2016-17 has registered the following record:

Figure 8: Comparative analysis of Revenue earned from different segments for 2015-16 and 2016-17

		Passenger	Parcel	Freight	Misc.	Suspense	Gross tariff receipt
2015-16	Revenue (Rs. In millions)	442,832.6	43,714.9	1,092,076.5	59,258.5	5,425.6	1,643,335.1
	Percentage of gross tariff receipt	26.95	2.60	66.45	3.61	0.33	
2016-17	Revenue (Rs. In millions)	462,804.6	43,120.0	1,043,385.4	103,680.4	-68.4	1,652,922.0
	Percentage of gross tariff receipt	28.00	2.60	63.12	6.27	-0.004	

Figure 9: Graph comparing percentage of revenue earned by different segments



Freight revenue constitutes major share in total receipt of Railways. The revenue earned from freight constitutes 66.45% of total revenue earned by Railways for the year 2015-16 while it declined and constituted 63.12% of gross tariff receipt for the year 2016-17. The earnings from freight should be more focussed. However, the freight traffic revenue showed consistent increase over the past years. The increase in freight traffic revenue per tonne kilometre showed the following trend:

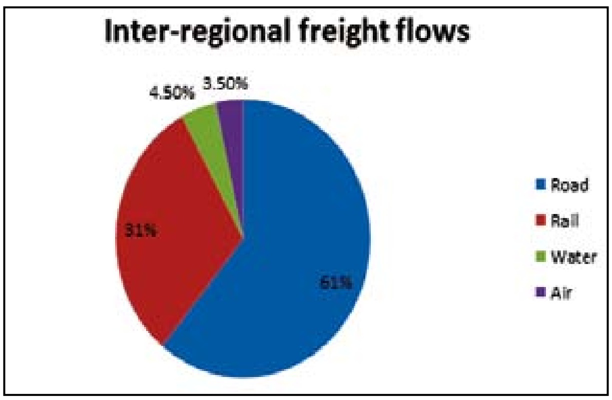
Figure 10: Revenue per tonne km (Source: Indian Railways website)

Year	Revenue per tonne km (in Paisa)
1980-81	10.50
1990-91	35.0
2000-01	73.78
2010-11	96.99
2012-13	128.50
2015-16	163.40
2016-17	164.51

The share of Railways constitutes 31% in inter-regional freight flow while its share is included among 3% in intra-regional freight flows. The freight flow market share by rail transport is nearly half of road transport. The share of different modes of transport can be seen as follows:

Inter-regional freight flow

Figure 11: Share Inter regional freight flows of Railways



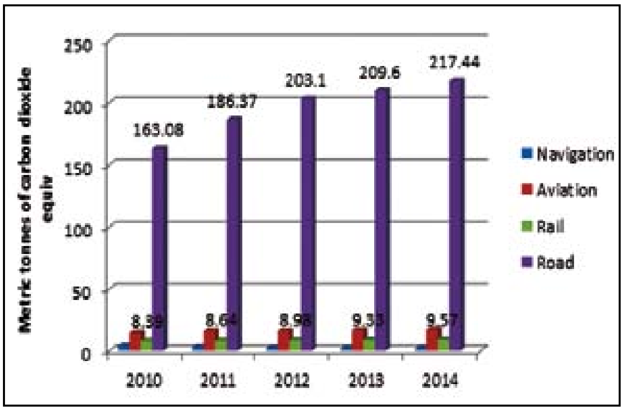
97% of intra-regional freight flows has been captured by road transport and rest 3% is covered by rail, water and air mode of transport.

However, the greenhouse gas emissions are highest for road transport which increases the risk of global warming. Rail transport will help to reduce the emission of green house gases. The data of greenhouse gas emissions can be viewed as follows:

Figure 12: Green house gas emissions by different mode of transport

	2010	2011	2012	2013	2014
Navigation	4.18	3.25	2.38	2.17	2.17
Aviation	14.84	16.19	16.15	16.87	17.32
Rail	8.39	8.64	8.98	9.33	9.57
Road	163.08	186.37	203.10	209.60	217.44

Figure 13: Comparative analysis of green house gas emissions (Source: Report of WRI India)



It can be observed that carbon dioxide emissions from road transport are number of times higher than rail transport.

Passenger revenue of Railways:

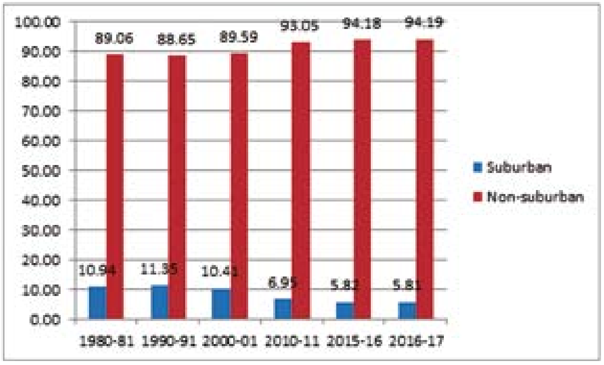
The passenger revenue earned by Railways comprised of 26.95% of gross tariff receipt and it reached to 28% for the year 2016-17. The passenger earnings can be viewed under sub-urban earnings and non-suburban earnings.

Figure 14: Passenger Revenue from different sections (Source: Indian Railways website)

PASSENGER REVENUE (Rs. In millions)			
Year	Suburban	Non-suburban	Total
1980-81	905.2	7,369.5	8,274.7
1990-91	3,569.8	27,877.4	31,447.2
2000-01	10,911.4	93,920.2	104,831.6
2010-11	17,862.8	239,193.6	257,056.4
2015-16	25,752.2	417,080.4	442,832.6
2016-17	26,894.4	435,910.2	462,804.6

The revenue earned by Indian Railways from passenger scored highest for the year 2017-18 and clocked a 4.2 per cent increase to Rs 490 billion from nearly Rs 463 billion during the financial year 2016-17. The percentage of revenue earned from suburban and non-suburban areas can be viewed as follows:

Figure 15: Graph comparing revenue earned from suburban and non-urban areas



From the above graph it can be observed that the majority share of passenger revenue earned by Indian Railways is constituted by non-suburban area and it has been consistently increasing. The facilities given to the customers in non-suburban areas should be enhanced to make the rail transport more lucrative for the passengers over other modes of transport.

Analysis of operating expenses:

The operating expense has been increasing over the past years however the percentage of operating expense in total expense has been decreasing:

Figure 16: Chart showing working expenses incurred by Railways (Source: Indian Railways)

EXPENSES (Rs. In millions)				
	2013-14	2014-15	2015-16	2016-17
General superintendence	55,854.3	60,225.6	61,162.9	70,930.8
Repairs and maintenance	289,594.3	317,625.5	336,777.0	384,590.5
Operating expense	540,234.7	574,451.5	562,132.8	603,331.1
Staff welfare	52,420.8	59,609.1	52,960.7	57,722.6
Misc. Working expense	43,246.3	51,399.4	56,119.8	59,029.8
Suspense	-2,795.2	-3,610.4	5,425.6	-68.4
Total working ordinary expense	975,707.6	1,059,958.8	1,077,359.3	1,188,296.1
Contribution to funds	327,500.0	370,000.0	401,000.0	402,000.0
Total working expense	1,303,207.1	1,429,958.8	1,478,359.3	1,590,296.1
Other misc. Expense	11,440.9	11,828.8	13,152.0	14,398.7
Gross working expense	1,314,648.0	1,441,787.6	1,491,511.3	1,604,694.8

Figure 17: Comparative analysis of % of operating expense in gross working expense

Year	2013-14	2014-15	2015-16	2016-17
Operating expense (Rs in millions)	540,234.7	574,451.5	562,132.8	603,331.1
Gross working expense (Rs in millions)	1,314,648.0	1,441,787.6	1,491,511.3	1,604,694.8
Percentage of operating expense in gross working expense	41.09%	39.84%	37.68%	37.59%

Methods for increasing operational efficiency:

CMA is well versed with the tools and techniques used for enhancing the operational efficiency and controlling of cost. CMA can help Railways to apply different tools like standard costing, performance budgeting, lean manufacturing, TQM, JIT purchasing, and other methods.

Lean manufacturing:

According to Womack and Jones, "lean" connotes the utilization of all inputs in lesser quantities. Lean manufacturing refers to the reduction or elimination of waste (known as muda in Japan) or any activity which is supposed to be waste or not adding any value to the process with the help of lean manufacturing tools and techniques. The process of lean manufacturing will be in this way:

Figure 18: Process of lean manufacturing

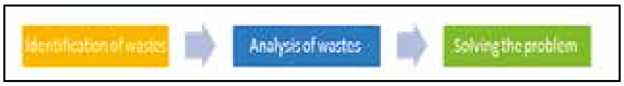


Figure 19: Seven wastes of lean manufacturing

1. Transport: The transport expenses incurred to bring the material from the point of storage to shop floor or cost incurred for the movement of materials from one location to another.

2. Inventory: The unnecessary inventory will increase the storage, and handling charges. It will increase the working capital requirement.

3. Motion: Motions are unnecessary movements of man or machine from start point to work point.

4. Delays: Waiting of workers for raw materials, or setting up of machinery causes delays in the production and increases idle time.

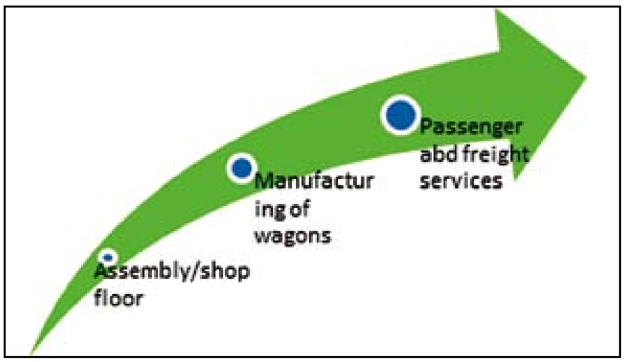
5. Over-Processing: Over-processing is excessive work on one part than required. It increases labour cost and wastage of time.

6. Excess-production: Excess production is production of goods in excess of estimated demand or production before time.

7. Defects: Quality control is an important regime in the production process. The rework process increase labour cost and time.

Lean manufacturing is applicable in different stages of Railways:

Figure 20: Applicability of lean manufacturing at different stages



Advantages of applying Lean Manufacturing in Railways:

Lean manufacturing can be helpful for Railways. The reduction in the cost of manufacturing wagons will reduce the fixed cost of Railways. Cost and Management Accountant is well equipped with the managerial skills and application of cost controlling techniques at different stages of manufacturing and providing services.

- Reduction in cost.
- Improvement in quality and Reduction in rejections and rework.
- Lesser space requirement for storage due to reduction in level of inventory.

Total Productive Maintenance (TPM)

TPM is the system devised for the maintenance of plant and equipment to improve its efficiency. It targets to improve the efficiency and effectiveness of plant and equipment to achieve zero defects, zero accident, and zero breakdowns. The introduction of TPM follows four main phases:

1. Initialization: Conducting awareness programme and informing about the introduction of TPM. Quality circle of employees can be made to carry out this programme.

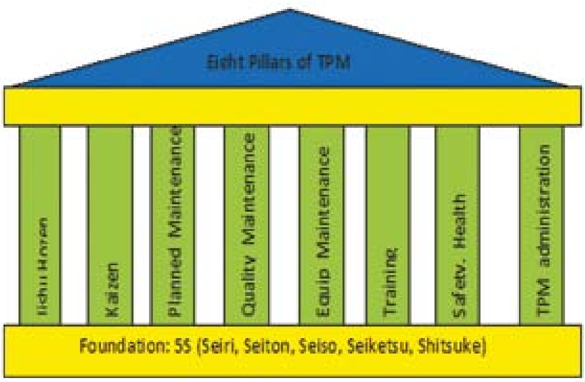
2. Introduction: Initialization of TPM, Information to suppliers, sister concerns, and customers.

3. Implementation: This is done with the help of eight activities referred as eight pillars of TPM.

4. Review and Control

TPM strategy focuses on eight pillars of success with 5S strategy as foundation.

Figure 21: Eight pillars of TPM with 5S as foundation



Activity Based Costing:

ABC is a costing model that identifies the cost pools and activity centres in an organization. It assigns costs to products and services (cost drivers) based on the number of events or transactions involved in the process of providing a product or a service. Hence, the shareholders value can be maximised and performance can be improved with the help of ABC model. In order to set up ABC costing, the resource cost should be identified and classified in direct and indirect costs. Direct costs can be allocated directly to the services provided by the particular rail. However, the indirect costs are used by multiple rail services and it can be allocated by specific cost distribution procedure.

Innovations:

Innovation is a backbone for any industry and keeps the industry vibrant. Without innovation and product development an organization seems to be lifeless and torpid. The innovations help to fight the fierce competition with road freight transport faced by Indian Railways. The focus should be made on the employment of skilled manpower and identifying the latent talent. Some of the roles played by **Cost and Management Accountant** in innovations can be summed up as:

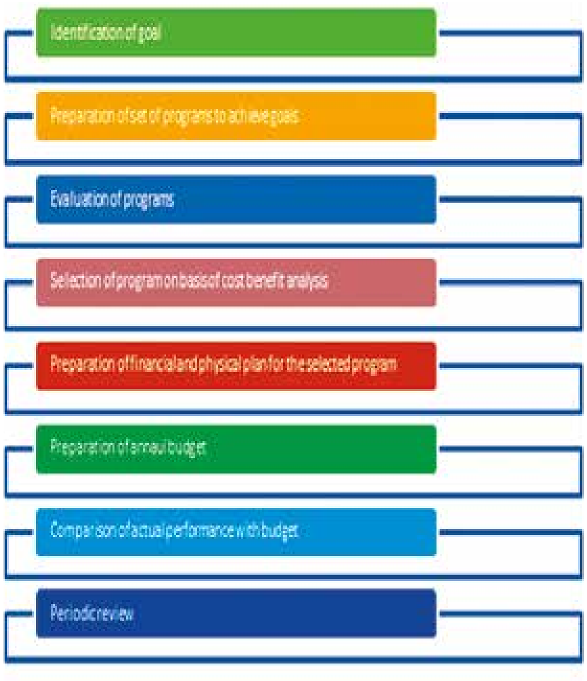
- Acts as a part of value-added team or innovation team.
- Active participation in the formulation and implementation of innovative strategies.
- Helps to translate strategic intent into operation.
- Provides feedback on quality improvement efforts.
- Helps to set priorities for investment and improvement activities.
- Helps in evaluation of innovative project and suggests measures for cost reduction.
- Guides for product mix decisions, helps to choose raw material supplier, and structuring the target market.

Performance budgeting:

The accounting reform project of Indian Railways has been divided into three modules. Module II is related to the development of performance costing framework that could help to assess costs of various activities undertaken by Railways. It will facilitate online availability of costing data. The appropriate costs of different profit centres will be identified and costs will be allocated to different profit centres. It will bring transparency, and will help management to take decisions on pricing. The Institute of Cost Accountants of India is likely to submit deliverables on Performance costing by October or November 2018.

Performance or outcome budgeting along with performance costing will prove as an important management tool that will enable Indian Railways to be the market leader and to gain maximum market share in transport sector. Performance budgeting is the preparation of budget based on performance, and activities of project. It identifies, analyses and simplify the objectives to be achieved over the given time period. The resources are allocated according to the performances and objectives. Cost and Management Accountant can help in the deployment of performance budgeting in railways. The different stages will be identified by CMA while making performance budgeting:

Figure 22: Stages of performance budgeting



Conclusion

The major challenges before Indian Railways is to achieve economies of scale, reduction in cost to improve operating ratio, remove bottlenecks, automation of work, and proper deployment of resources. The application of lean manufacturing, total quality management, six sigma, digitalisation, captive power generation and none the less other tools will help to leapfrog the operating expenses thereby improving operating ratio. Freight revenue constitutes major share in gross receipts of Railways. The revenue earned from freight constituted 63.12% of gross revenue earned by Railways for the year 2016-17. But the market share captured by Railways in inter-regional freight is only 31% of total inter-regional freight flows (2,555.35 million tonnes). CMA can help to suggest measures for increasing market share of freight transport by Railways. The innovations in the different facets will enable Indian Railways to be cost competitive and the benefits will be surpassed to the customers. ***Cost and Management Accountant*** plays an important role in the innovations and can act as a marshal. He or she can actively take part in formulation and implementation of innovative strategies. CMA can analyse the operating expenses and revenues and can suggest the measures to improve the operating ratio and operational efficiency. Above all, ***"Behind every successful business, there is a CMA"***. MA

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Letter to Editor

Congratulations for reintroduction of issue of printed copies of Journal to Members. This has restored the link between Members and the Institute once again.

The topics chosen are very appropriate, specially the one on Block Chain Technology.

Thanks to you and CMA Biswarup Basu, CCM for this.

D N Banerjea FCMA

COVER STORY

A LONGITUDINAL STUDY OF TARGET COSTING AT INDIAN RAILWAYS

A CASE STUDY

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Indian Railways is merely government enterprise; it is operating and functioning through the Ministry of Indian Railways. It is a world largest network and play monopoly role in rail transport services. Currently, Indian railways looking for endlessly develop new services while meeting customer demand for better cost management, delivery of services, quality and flexibility. The quality and cost advantage of the services emanates from the intensity of technological innovation, and the use of advanced strategies and tools of costing techniques. More or less every organization is to be required to propose the right products or services with the right prices at the right time, as well as must administer their cost and profit to remain profitable.

In compare to the extremely regulated techniques of financial accounting, cost and management accounting provides a collection of non-directive techniques that can be adopted, implemented and redundant at the organization determination. As far as those techniques are retained by managers merely as they are considered to be result useful. Besides, one of the most important techniques of cost management effective in this regard is target costing system. Target costing is a strategic technique in cost management which largely focuses on cost management and on the potential profit planning. Target Costing (TC) model has establishing in the direction of costs and revenue analysis in Indian railways because it can adopt in ensuring services competitiveness with the supplementary than railways transport in terms of price, services design and structure development. These three elements are the main concern of TC in ensuring the targets of high quality services in Indian railways.

Target Costing (TC)

Target costing (TC) technique is a Strategic Management Accounting (SMA), which originated in the Japanese manufacturing industry in the early 1970's, since a reply to the challenges faced by consumer demand for more diversity and shorter product life cycles. The Target Costing execution helps the Japanese companies to supervise their strategies and operate rapidly at a cost-effective margin. Target costing consider a practical cost management technique and that is price-driven, customer-focused, design-centered, and cross-functional. Sakurai (1989) define target costing as a cost management technique for reducing the overall cost of a product or services over its entire life cycle with the help of the concern department of production or services, engineering, Research & Development, marketing, and accounting'. However, another American definition for target costing is value engineering. The value engineering technique, at first developed by General Electric, is a model that tends to maximize product attributes while minimizing their costs (Feil et al., 2004).

Target costing distinguish method according to the expansion stage and corporate business nature, this system primary objective is to examine all cost saving potential from the sources in order to achieve the target cost as made planned. Besides, it is the procedure of making particular plans for a product or services that enable to meets customer needs, deducting the target cost from the target profit of the new product or services, and estimating the actual cost of product or services to verify whether the target cost has been achieved in the value engineering aspect. Target costing refers as value engineering and it is different from the traditional cost method, consequently, based on standard costing method follows that present imaginative strategy for reducing the standard of the production or services cost.

The employ of target costing extend as increased competition, and shorter life cycles of the products or services, in comprehensive markets intended that companies needed to manage costs from the inception stage design forward, and launch products/services at prices to attract customers and anticipate reproduction. The managerial decisions which require resource allocations may depend on the management accounting techniques adopted by the organizations, even though the extent to which specific techniques are used to support resource allocation decisions is an organization specific alternative. Consequently, target costing employ to achieve these aims and expand to all over countries of manufacturing, services and transport facilities providing industries because their competitive cost accounting technique. As results of introducing target costing to the Indian railways to cost and revenue analyses and investigates, utility and purposes, its difference with the traditional approach of cost management. As well target costing as a multidisciplinary approach to managing Indian Railway costs from the initial stages and this method complemented by techniques such as process re-engineering and Total Quality Management (TQM). Target costing is a method of determining the necessary cost of product or services based on its market selling price and a required gross margin. The target cost is obtained through the target price minus the target margin. Ascertaining the target cost is a quite simple calculation. Generally, Target costing is ascertained as follows:

Target cost = Selling price – Gross margin

Review of Literature

Most of the studies explain that several established Japanese companies utilized Target Costing method and implementation was helped the Japanese companies to administer their strategies and function promptly at a profitable margin. Therefore, TC ensures products and services are adequately profitable when launched by managing the cost during the design stage while ensuring the products meet the quality and reliability standards, and other customers' needs (Kato, 1993). In the same line Target Costing is a procedure and it would ensuring with the aim of a product launched with precise functionality, quality and sales price can be produced at a life-cycle cost that generates a adequate level of profitability(Cooper and Slagmulder .,1997). Besides, Target costing system is a dynamic capability gives a plan through which to see how management accounting techniques can be used to leverage organizational resources. The application of specific management accounting techniques to improve substantive capabilities in the use of resources can be seen as a dynamic managerial capability (Adner & Helfat, 2003). In additionally, Target costing system has developed, the perspective of TC also shifted from a cost reduction tool to a profit management tool (Feil et al., 2004). Target Costing model is based on the price decide approach or toward the support approach where the target selling price of the product is lay down by the market before the product is being designed (Ansari et al., 2007). In the finally, target costing is a cost management technique that strategic decision maker use during product design to make efforts for progress intended at reducing the product/services future manufacturing costs (Kaplan and Atkinson, 1998).

Need for Target Costing at Indian Railways

The most important aim of target costing is to facilitate management to utilize proactive cost forecast, cost management and cost reduction practices where costs are planned and designed early in the design and development stage, moderately than during the later stages of production/ manufacturing or services developed stage. As far as target costing successfully employed in such industries are Automotive manufacturing industry, Fast Moving Consumer Goods (FMCG), construction and real estate, healthcare, and power as competition is so severe, therefore, prices of products and services are determined through supply and demand in the market, and hence, producers cannot supervise selling prices. They can only control the costs of production/services, so management's focus is to influence every component of the costs. However, Indian Railway doesn't not constitute any competition but, require able to meet customer satisfaction in terms of delivering services. Target Costing enables Indian railways to manage their services costs and ultimately expectation profit target by determining the products or services features at which Indian railways is to provide the products or services to potential customers.

Objectives of the Study

The primary objective of Target costing implementation predominantly for Indian railways is critically important. By implementing TC, their services would be differentiate as being of higher quality, acceptable price, and shorter services time hence, creating their customers value and sustain their competitiveness with other than railways. In additionally the study consists secondary objectives are as follows:

1. To explore the Target Costing implementation process in Indian Railways through hypothetical model.
2. Performance analysis of Indian Railways through Target Costing during the study period.
3. To analyses the volume of traffic and earnings from services of Indian Railways during the study period.

Test of Hypothesis

In order to prove the study objectives formulated the following hypothesis and this process is enable to examine the target costing can determine the services pricing strategy of Indian railways.

H_o: There is no significant impact of Target costing over determine the prices of Indian Railways services.

Data Sources and Research Methodology

The present research is a longitudinal case study approach is selected to execute the current study. In addition, it is an exploratory study of Target Costing implementation in Indian Railways. Present case study is most suitable in the Target Costing practice especially use full in the case of come to a decision over service prices and this practice is not widely being implemented. This study merely depends on secondary data of Indian Railways. Study focal point on quantitative or statistical data of Indian railways to formative the services prices and this process is difficult to analyze. Process data is predominantly complex because it often involves various levels and involves several level of analysis. In this connection the present study analyses data and it is utilizes annual reports, statistical reports, corporate and social responsibility reports and Indian railway website. Indian Railways data would be analyses though the simple averages and growth ratios. On the other hand present study employed t- Test to test the significance of Target costing over determines the prices of Indian Railways services. The study is conducted for a period of 5 years i.e., 2012-13 to 2016-17.

Target Costing Steps

In order to obtain accurate results over competitive environment through the implementation of target costing in any organization which are relevant six steps procedure and recommend by Sani and Allahverdizadeh (2012). Thus, the following six steps are as follows:

Step 1: Set up the target market price for products or services

Step 2: Ascertain the target profit margin and cost to attain

Step 3: Determine the possible cost of existing and new products or services.

Step 4: Ascertain the target cost for specific product or services

Step 5: Achieve the target cost of product or services

Step 6: Apply cost reductions strategy once production or service has started

About Indian Railway

Indian Railways is the largest rail network in Asian continent along with second largest in entire world. Indian national Railways system operates by the Ministry of Indian Railways. The first train services started in India on 16th April 1853 between Bombay and Thane. Currently Indian Railways transports approximately 2.5 Crore passengers daily in the course of the various services. In terms of services Indian Railway consist of freight, passengers, tourist, suburban rail systems, toy train and luxury trains. Indian Railways has 1,15,000 km of track length and operating 12,617 trains to carry over 23 million passengers daily which is equal the entire population of Australia. Indian Railways concerning more than 7,172 stations in the entire country. Besides, among the stations Indian capital of New Delhi Railway Station has held a place in the Guinness Book of records for maintain the world's largest route communicate Interlocking System. On the other hand, Indian Railways is separated into 17 zones and Locomotives trains are electric and diesel locomotives. Which are operates services by way of multi-gauge network, broad gauge, and narrow gauges.

Indian Railways governed by seven members of Railway Board whose chairman represent to the Ministry of Indian Railways. Each and every zone managed by general manager who report respect zone information to the Railway Board. Railway zones are further subdivided into 68 operating divisions and which are governed by divisional railway managers (DRM).The divisional officers are further divided as engineering, mechanical, electrical, signal and telecommunication, stores, accounts, personnel, operating, commercial, security and safety. Each and every branch report to their respective DRMs and maintain with the operation and assets of Railway division. Station masters control individual stations and train movements through their particular stations' territory. In addition, there are a number of various production units, training and establishments, public sector enterprises and other Offices functioning under the control of Railway Board. Indian Railways is one of the world's eighth largest employees strength around 1.4 million people.

A separate budget proposed to the Indian Railways and which was recommended by the 10 members of British railway economist William Acworth Committee during the 1920-21. Consequent his report, the India railways budget were separated from the Indian general government budget during 1924. As a reform in Indian Railways, the Railway

Indian Railways endeavor to strive for high quality services to the passengers with optimum utilization of resources and ensure timely redress of their grievances or problems. Accordingly, Target Costing maximizes utilization of the Indian Railways resources that control over operational costs. Moreover, Target Costing attempts to escalate the trend of profits and minimizes costs of the Indian Railways services over life cycle and lead to make clear the purpose of cost reduction practically, rationally and objectively. Railways services and their related prices are determined by the customer's needs. In order to convince the customer requirements in terms of tolerable pricing of services, target costing system require to moving toward into account in the early stages of services development. On the other hand, the present study focuses on the Target Costing implementation process as well as its relationship with the customer-orientation, teamwork, its method of implementation in Indian Railway. Therefore, this case study approach is suitable to pursue the study objectives and, in particular, to explore and answerable Why Target Costing technique is essential and how to be successfully implement in Indian Railways

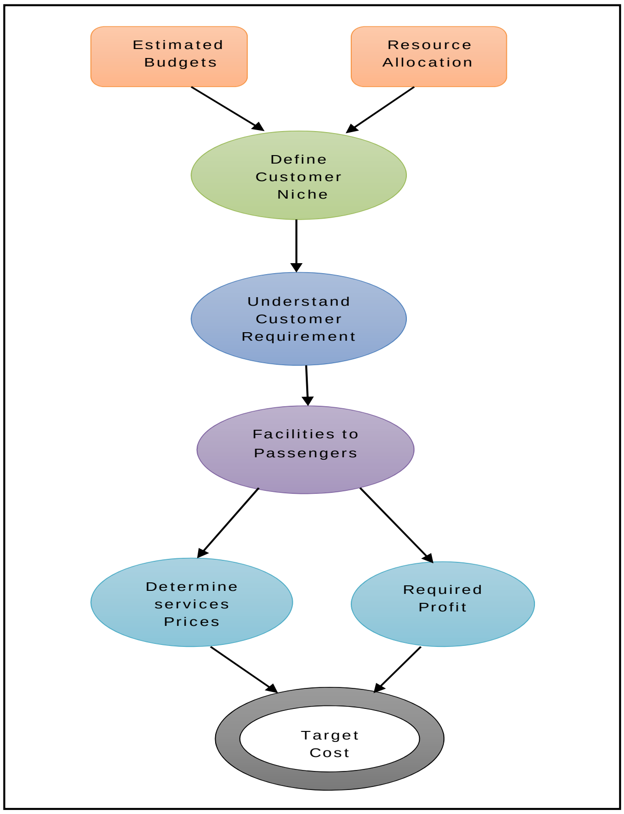
Budget has taken merged with the Union Budget 2017-18 as against the convention of presenting it separately since 1924 on the basis of recommendations of the Acworth Committee. In support of financial year 2017-18 comprehensive budget as regards ₹ 1,31,000 Crores which include total capital and development expenditure for Indian Railways. In which Indian government contributed ₹ 55,000 Crores. The main intention of railway budget of 2017-18 proposes for several measures to improve services, infrastructure and amenities in Indian railways.

Target Costing Implimentation Process for Indian Railways

Target costing implementation process should be determined based on the quantity of resources utilization and strong attempts necessary to make a product or services successful at Indian railways, whereas if all the exploitation were removed from the process. Moreover, price setting is an iterative process in Indian railways product and services because this process depends on the time consume and types of services. For instance, in the case of manufacturing concern many companies decide target selling prices based on the potential customers needs and what they accept as true the market price will tolerate. Therefore, to decide the target selling price requires the strong effort backwards, to determine tolerable costs to ensure an adequate profit margin for any new product or services. So that results indicate with the intention of once the product or services targeted cost has been determined, it would be allocated to various parts and components of the Indian Railways.

Thus, implementation process is important for Indian Railways services once the Target Cost has been attain. This stage involves continuous improvement efforts for monitoring Target Cost to be maintained. It shows top level administrator commitment to process improvements and services innovation to attain target profit advantage. Cooper and Slagmulder (1997) defined that products or services may not be produced until the Target Cost is attained. However, it is most suitable stage in Target Costing practices because with the passage of time, the railways operations improve drastically as well it considers the customers' requirements and their preference towards Indian Railways services (See figure 1).

Figure 1: Implementation process of Target Costing in Indian Railways



Source: Research Work

Performance Analysis of Indian Railways through Target Costing

Table 1 represents the performance analysis of Indian Railways through Target Costing from financial years 2012-13 to 2016-17. First and foremost component is Revenue from operation in the financial year 2012-13 reported as ₹ 1,26,180.43 Crores to constantly increased to ₹ 1,68,379.60 Crores in the financial year 2015-16 due to railways administration efforts are steadily being made to make railway operations. In the same line of revenue from operations during the financial year 2016-17 decreased to ₹1,65,382.48 Crores because passenger earning trend decreased by 4.96 per cent over the financial year 2015-16. In terms of Margin from operations in the financial year 2013-14 decreased by 0.1370 per cent over the financial year 2012-13 due to the impact of asset financing by Indian railways was achieved when its cumulative funding to the Rail Sector crossed the magical figure ₹1,00,000 Crore mark during the financial year 2012-13. Margin from operation in the subsequent financial years 2014-15 and 2015-16 increased by 0.4331 and 0.1419 per cent respectively because increased earnings from freight operation. On the other hand margin from operation drastically declined by 0.7444 per cent over the financial year 2015-16 because total freight earnings in the first eight months from April to December during the financial year 2016-17 stood at ₹ 66,004.34 Crore which shows a decrease of ₹ 5,182.01 Crore (-7.28%) over the earnings of the previous year.

Indian Railways target costing reported in the financial year 2012-13 ₹ 1,12,565.24 Crores, which is increased by ₹ 1,31,464.80 Crores in the financial year 2013-14 due to the uncertain global financial environment and moderation in the growth of Indian economy led the target costing increased by 0.17 per cent. Consequently, target costing had increased by 0.0967 per cent during the financial year 2014-15 because Indian Railways continued to perform well in both freight and passenger earnings continued to grow year after year. Subsequently, Target costing during the financial year 2016-17 increased by 0.0758 per cent over the financial year 2015-16 due to employees costs component has continuously increased from 2005-06 to 2014-15 at a an average rate of 13.3 per cent per annum. Therefore, expenditure on employees is extremely high and uncontrollable.

Target costing occupied significant proportionate entirely over the study period in generating revenue from operation reported during the financial year 2012-13 by 89.2097 per cent and subsequent year 2013-14 it was increased by 91.80 percent over the financial year 2012-13. As results during the financial years 2014-15 and 2015-16 decreased by 90.2097 and 88.58 per cents respectively but in the same line it is increased by 91.2097 per cent during the financial year 2016-17. Besides, Target costing generated margin from operations during the financial year 2013-14 decreased by 8.9370 per cent over the financial year 2012-13. Similarly, subsequent financial years 2014-15 and 2015-16 increased by 11.6788 and 12.8919 per cents respectively, but target costing generated margin from operation in the financial year 2016-17 declined by 3.0616 per cent. However, overall all result shows from Target costing of Indian railways steep growth during the study period (See table 1).

Table 1: Target Costing of Indian Railway during the study period from 2012-13 to 2016-17

Particulars	Financial Years (₹ in Crores)				
	2012-13	**2013-14**	**2014-15**	**2015-16**	**2016-17**
Revenue from operations	1,26,180.43	1,43,213.87 (0.1349)	1,61,017.25 (0.1247)	1,68,379.60 (0.05)	1,65,382.48 (-0.18)
Less: Margin from operations (Profit /Loss)	13,615.19	11,749.07 (-0.1370)	16,838.49 (0.4331)	19,228.48 (0.1419)	4,913.00 (-0.7444)
Target Costing	1,12,565.24	1,31,464.80 (0.17)	1,44,178.76 (0.0967)	1,49,151.13 (0.0344)	1,60,469.48 (0.0758)
Target Costing Per cent in Revenue from Operation **(1)**	89.2097	91.80	90.2097	88.58	91.2097
Target Costing Per cent in Margin from operations **(2)**	12.0953	8.9370	11.6788	12.8919	3.0616
Target Costing Percentage differences (3=1-2) **(3)**	77.1143	82.8590	78.5308	75.6883	88.1481

Source: Statistical and Financial reports of Indian railways

Table 2 represents Volume of traffic and Earnings from services of Indian Railways during the study period from 2012-13 to 2016-17, Target costing analysis concern passenger traffic reported declined by 0.0028, 0.0206 and 0.0142 per cent in the financial year 2013-14, 2014-15 and 2015-16 respectively over the financial years 2012-13. But, passenger traffic increased by 0.00111 per cent in the financial year 2016-17 due to the Indian railways introduced differential pricing in select premium trains, added 1.01 Crore berths and introduced various categories of trains. Despite that a year-on-year passenger increases and the number of passengers Kms (in millions) increases, it is in the financial year 2012-13 reported 1,098,103 million Kms to increased by 1,149,835 million Kms in the financial year 2016-17.

On the other hand, passenger earnings from traffic has been reported increased trend, which is in the financial year 2012-13 was ₹ 31,322.84 Crores and which is increased by ₹ 46,280.46 Crores during the financial year 2016-17. But, Indian Railways unable to achieved its target in the financial year 2016-17 due to decline its revenue target in the same year and Gross traffic receipts (GTR) stood at ₹ 1,63,718 Crores and it is down by 3.28 per cent from the revised estimate announced in the recent Budget. According to analysis Average rate per passenger per Kms (in paise) was in the financial year 2012-13 by 28.5 paise per Kms which is increase by 40.3 paise per Kms because that the national transporter needs to increase its passenger fares across the board to improve its revenue to meet at least its operational costs.

Indian Railways second category sources of earning is freight Traffic, Tonnes originating (in millions) Increased during the financial year 2013-14 by 0.8952 per cent over the financial year 2012-13 due to 2013-14 Indian Railways loaded 1,058.81 million tonnes of freight traffic of which 1,051.64 million tonnes was revenue-earning and 7.17 million tonnes of non-revenue earning, and achieved total net tonnes kilometers (NTKMs) of 667 billion as against 651 billion over the financial year 2012-13.Subsequent financial year 2014-15 it is increased by 0.3678 per cent because Indian Railways carried 1097.57 million tonnes of commodity-wise freight traffic included non earning freight during fiscal 2014-15 as compared to 1053.56 million tonnes carried included non earning freight during the financial year 2013-14, it was registered an increase of 4.18 per cent. Similarly, freight Traffic, Tonnes originating (in millions) reported increased trend during the financial year 2016-17 by 0.0042 per cent over the financial year 2015-16 due to Indian Railways carried 1,110.95 million tonnes of total freight, the bulk comprising revenue-earning traffic of 1,106.15 million tonnes in which excluded Konkan Railway. It had reported the transport output in terms of Net Tonne Kilometres (NTKms.) was 621 billion.

Besides, Revenue earning traffic of Net tones' Kms (in millons) registered during the financial years 2013-14 and 2014-15 increased by 0.0248 and 0.0238 per cents over the financial year 2012-13 due to maximize loaded in every train, the loading density on all major freight bearing routes of Indian Railways will be upgraded to 22.82 tonnes axle loads. On the other hand, during the financial years 2015-16 and 2016-17 resisted negative growth by 0.0399 and 0.0524 per cents respectively over the financial year 2014-15 due to the Indian economy reported freight loaded had seen a dramatic decreased since last two corresponding financial year's almost consistent negative year-on-year growth over the financial year 2014-15. It is the evidence of Indian railways robust data approach on the heels of a 0.4 per cent drop in industrial production and 8.7 per cent reduction in cement output reflecting the impact of demonetization. Moreover, Total traffic Earnings from freight carrier of Wharfage & Demurrage charges reported in the financial year 2012-13 was ₹ 83,478.83 Crores and it was tremendously increased by ₹ 1,06,940.55 Crores in the financial year 2015-16 due to overcoming several probability in its ways, the Indian Railways have registered a rise in its freight revenue. However, total traffic earnings from freight carrier of Wharfage & Demurrage charges declined during the financial year 2016-17 because even though continuously increase in the number of passengers ferried but goods transported in the financial year 2016-17 Indian Railways missed its revenue target in the year.

Average lead-Total traffic (in Kms) registered in the financial year 2012-13 was 642 Kms and it was declined to 559 Kms in the financial years 2016-17 caused by the railways decreased average lead distance goods travel and despite the transporter offering 7% discount in charges for long leads. The share of freight carried by the railways has fallen from around 90% in 1950 to around 30% now, and most of the lost traffic has moved on the roads, which offer competitive rates. In additionally, Average rate per tones Kms (in paise) had reported in the financial year 2012-13 by ₹ 128.5 paise per Kms and it is increased constantly by ₹ 164.51 paise per Kms in the financial year 2016-17 due to make the rail transportation attractive to its customers, various initiatives were taken from the financial year 2012-13 to financial year 2016-17 which includes tariff rationalization, classification of new commodities, expansion of freight basket through containerization, new delivery models like

RORO services, rationalization and simplification of rate policies such as weighment policy, etc. Total Earnings from Services which includes Passenger earnings and earnings from freight was registered in the financial year 2012-13 by ₹ 1,14,801.67 Crores and it is constantly increased by ₹ 1,51,223.81 Crores in the financial year 2015-16 caused by the signs of recovery in financial health of the Indian Railways, its operating ratio indicated the amount it spends to earn each ₹ 100 continues to remain high at around by 95 per cent send-off for safety and maintenance of the projects. Thus, Total Earnings from Services in the financial year 2016-17 declined by 0.0192 per cent due to the Indian economy growth has declined along with that the Indian Railways may have earned more in passenger revenues in 2016-17 when compared to the previous year, but it has fallen short of its own budgeted estimates (See table 2).

Table 2: Volume of traffic and Earnings from services of Indian Railways during the study period from 2012-13 to 2016-17

Particulars	**Financial Years (₹ in Crores)**				
	2012-13	**2013-14**	**2014-15**	**2015-16**	**2016-17**
Passenger traffic No. of passengers originating (in millions)	8,421	8,397 (-0.0028)	8,224 (-0.0206)	8,107 (-0.0142)	8,116 (0.00111)
Passenger Kms. (in millions)	1,098,103	1,140,412 (0.0385)	1,147,190 (0.0059)	1,143,039 (-0.0036)	1,149,835 (0.0059)
Passenger Earnings(₹in Crore) (1)	31,322.84	36,532.25 (0.1663)	42,189.61 (0.1548)	44,283.26 (0.0496)	46,280.46 (0.0451)
Average lead (in Kms.)	130.4	135.8 (0.0414)	139.5 (0.0272)	141 (0.0107)	141.7 (0.0049)
Average rate per passenger per Km. (in paise)	28.5	32 (0.1228)	36.8 (0.15)	38.7 (0.0516)	40.3 (0.0413)
Freight Traffic					
Tonnes originating (in millions): Revenue earning traffic	1,008.09	1,051.64 (0.8952)	1,095.26 (0.3678)	1,101.51 (0.0057)	1,106.15 (0.0042)
Total traffic	1,014.15	1,058.81 (0.0440)	1,101.09 (0.0399)	1,108.62 (0.0068)	1,110.95 (0.0021)
Net tones' Kms. (in millons): Revenue earning traffic	6,49,645	6,65,810 (0.0248)	6,81,696 (0.0238)	6,54,481 (-0.0399)	6,20,175 (-0.0524)
Total traffic Earnings from freight carrier of Wharfage & Demurrage charges (₹ in Crore) (2)	83,478.83	91,570.85 (0.0969)	1,03,100.15 (0.1259)	1,06,940.55 (0.0372)	1,02,027.82 (-0.0459)
Average lead-Total traffic (in Kms.)	642	630 (-0.0186)	620 (-0.0158)	591 (-0.0467)	559 (-0.0541)
Average rate per tones' Km. (in paise)	128.5	137.53 (0.0702)	151.24 (0.0996)	163.4 (0.0804)	164.51 (0.0067)
Total Earnings from Services (1+2) (Passenger Earnings + Earnings from freight) (₹ in Crore)	1,14,801.67	1,28,103.10 (0.1158)	1,45,289.76 (0.1341)	1,51,223.81 (0.0408)	1,48,308.28 (-0.0192)

Source: Statistical and Financial reports of Indian railways

Hypothesis Testing

The present case study often followed several methods and combines many steps were conducted to achieve the research objectives. Thus, Target costing impact over determine the prices of Indian Railways services is examined through t-Test. In order to prove hypothesis results the present study established the relationship between the target costing and earnings from services of Indian Railways during the study period. The results of Target Costing and Earnings from services of Indian Railways can be presented through the following table (See table 3).

Table 3: Target Costing and Total Earnings from services of Indian Railways during the study period from 2012-13 to 2016-17

Financial Years	Target Costing (₹ in Crores)	Total Earnings from services (₹ in Crores)
2012-13	1,12,565.24	1,14,801.67
2013-14	1,31,464.80	1,28,103.10
2014-15	1,44,178.76	1,45,289.76
2015-16	1,49,151.13	1,51,223.81
2016-17	1,60,469.48	1,48,308.28

Source: Compiled Data

Hypothesis Testing Results

t-Test: Two-Sample Assuming Equal Variances		
	Variable 1	*Variable 2*
Mean	139565.882	137545.324
Variance	336194557.5	242336970.4
Observations	5	5
Pooled Variance	289265763.9	
Hypothesized Mean Difference	0	
df	8	
t Stat	0.187842045	
P(T<=t) one-tail	0.427838757	
t Critical one-tail	1.859548033	
P(T<=t) two-tail	0.855677514	
t Critical two-tail	2.306004133	

Source: MS-Excel v 2007

The results of t-Test revealed at 8 degree of freedom at 5% significance level that the calculated value with one tail is 0.427838757 and two tail value is 0.855677514 whereas, Critical values of one tail 1.859548033 and two tail 2.306004133. Hence, null Hypothesis is accepted because the calculated value is less than the critical value. Therefore, it can be concluded that there is no significant impact of Target costing over determine the prices of Indian Railways services. Hence, it is the evidence exhibit that the Target Costing may not determine services prices of Indian Railways.

Conclusion

The main intention of the present study is to compare the existing theoretical approach on the subject of Target Costing with the practice of Indian Railways and the major factors influencing the design of Target Costing implementation process. Target costing system is to be effective in supporting decision making process in Indian Railways, and the departmental heads come together in order to strike their creativity and achieve goals of organization. In order to reduce cost of services should set target cost, how the Indian Railways allocate resources to each department, and external cost report grounding to obtain information it require collaboration of procurement and supplier of concern department to exchange necessary information. As a matter of fact, target costing is a procedure that determines the best services price designed for Indian Railways according to the needs of customers, status of road and air transport competitors and profitability. It is also maintain a great role in not only reducing costs and creating value of Indian Railways and increasing shareholders' wealth.

It is found though the research that the target costing is not able to determine the prices of Indian railways services because it is influence with the other factors such as population size, geographical factors and government subsidy policies to the customers. Obviously, conducting the current case study paves the way for practical insight to the potential implementers of various departments in Indian Railways environment context to understand the major factors that may influence the design of Target Costing implementation process with more successful. This modus operandi useful technique for Indian Railways and conclude that adapt the method to their specific requirements. MA

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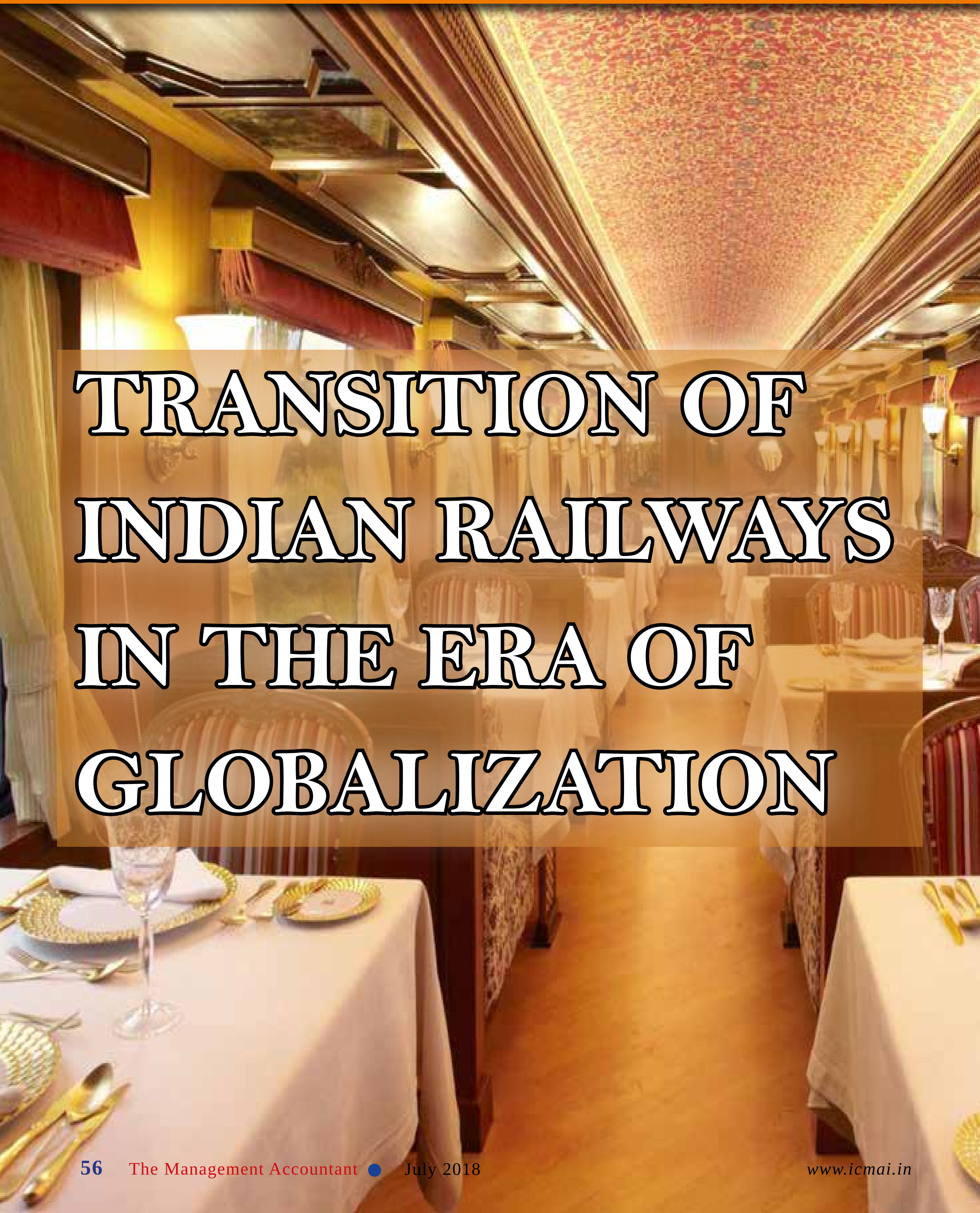

TRANSITION OF INDIAN RAILWAYS IN THE ERA OF GLOBALIZATION

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Railway was a product of the Industrial Revolution and afterwards became a predominant mode of inland transport in all countries and India is no exception. Initially railway solved two problems (i) transportation of bulky materials and bulk material (ii) it provides people with access to workplaces and education facilities, recreational, community and medical facilities. Founded on 16th April, 1853 the Indian Railways (IR) commenced their journey with a 53 kms distance between Mumbai and Thane. The British Raj railways were an overwhelmingly private network with 52 companiesrunning a bunch of trains on their own respective with their own rules, exclusively for profit. The Acworth Committee (formed in 1920) recommended the consolidation and nationalization of the Indian Railways. Based upon the recommendations of Acworth Committee, the Finances of Railways were separated in 1924 and thus from 1924 onwards, the Railway Budget is separated from the General Budget. During 1924 the Railway Budget was about 84 per cent of the general budget as Railway revenue was the only major contributor for the nation's GDP. After independence of India, all companies had to be nationalized, integrated and merged and a central authority had to be created which would run the Railways. While the first two Five Year Plans were meant to rehabilitative the railway system from the ravages of Second World War and the effects of the partition of the country, the next three Five Year Plans were meant to consolidate the railway system. It is only in the Sixth and Seventh Five Year Plans that some efforts could be made by the Central Government to bring some semblances of growth in the railway system. To sum up, in the last 165 years, the Indian Railways have grown into a vast network of lines linkages between the economically forward and backward areas of the country.

Generally speaking an efficient railway system should strive towards attainment of the following major objectives:

(i) to provide a fast, reliable, punctual, reasonably priced and satisfactory transport services to the people.
(ii) to earn adequate financial returns by increasedrevenues through expansion of business.
(iii) to control expenditure i.e. the capital cost and working expenses of the railway system, so as to reduce the operating ratio to the minimum and
(iv) to foster economic and social progress at the national and regional level.

This paper is intended to analyse the attainment of the above objectives by the Indian Railway system form the year 1950-51 onwards, as the year coincides with the launching of the national Five Year Plans.The assessment of the satisfactory transport services to the people is to be measured by the expansion in the running track, growth in the number of stations, growth in the number of wagons and passenger coaches etc. As against this, the assessment of the financial returns is to be measured by the operating ratio i.e. ratio between working expenses and gross revenue receipts.

Present Status

The network spans 121,407 km of track length, while the route length is 67,368 kmas on 31.3.2017. As a consequence India has the fortune to possess the world'sfourth longest railway network after those of the United States257,722km, China 127,000km and Russia 85,513km respectively. Indian Railways has 7,349 stations and 69332 coaches. Indian railways provided affordable transport services almost 12 million passengers during 2016-17.The financial value of assets was ₹5,376.70 billion during 2016-17. The revenue earned from freight traffic has registered a sustained increase from ₹15,509 million in 1980-81 to ₹1,020,278 million in 2016-17. Passenger revenue was ₹462,804.6million, though it formed only about 28% of the total earnings of the Railways in 2016-17.

Table 1: Indian Railways at a Glance

Items	1950-51 (As on March 31)	1960-61 (As on March 31)	1970-71 (As on March 31)	1980-81 (As on March 31)	1990-91 (As on March 31)	2000-01 (As on March 31)	2010-11 (As on March 31)	2016-17 (As on March 31)
Total Investment (₹ in cr.)	855.2	1,868.6	4,099.4	7,448.4	22,200.5	63,341.01	2,31,615.25	4,71,776.39
Gross revenue receipts (₹ in cr.)	263.30	460.42	1,006.95	2,703.48	12,451.55	36,010.95	96,681.02	1,65,382.48
Working expenses incl. depreciation, etc. and miscellaneous expenses	215.74	372.55	862.22	2,575.99	11,337.77	34,939.72	90,334.88	1,60,469.48
Net revenue receipts (₹in cr.)	47.56	87.87	144.73	127.49	1,113.78	1,071.23	6,346.14	4,913.00
Excess (+)/Shortfall(-) (₹ in cr.)	(+)15.05	(+) 32.01	(-) 19.84	(-) 197.87	(+) 175.67	(+) 763.59	(+)1,404.89	(+)4,913.00
Passenger earnings (₹ in crore)	98.2	131.6	295.5	827.5	3,144.7	10,483.2	25,705.64	46,280.46
Route kilometres (Broad Gauge, Metre Gauge, Narrow Gauge)	53,596	56,247	59,790	61,240	62,367	63,028	64,460	67,368
- Of which Electrified	388	748	3,706	5,345	9,968	14,856	19,607	25,367

Items	1950-51 (As on March 31)	1960-61 (As on March 31)	1970-71 (As on March 31)	1980-81 (As on March 31)	1990-91 (As on March 31)	2000-01 (As on March 31)	2010-11 (As on March 31)	2016-17 (As on March 31)
Running Track KMs	59,315	63,602	71,669	75,860	78,607	81,865	87,114	93,902
(Broad Gauge, Metre Gauge, Narrow Gauge) - Of which Electrified	5,976	6,523	7,066	7,035	7,100	6,843	7,133	48,239
Number of stations	5,976	6,523	7,066	7,035	7,100	6,843	7,133	7,349
Passenger Originating (in Millions)	1,284	1594	2435	3613	3858	4833	7651.1	8116.1
Passenger KMs (in Millions)	66,517	77700	118100	208600	295600	457000	978500	1149830
Average lead Passenger traffic (Kms.)	51.8	48.7	48.6	57.7	76.6	94.6	127.9	141.7
Average lead all goods traffic (Kms.)	470.0	561.0	648.0	720.0	711.0	626.0	676.0	559.0
Operating ratio (per cent)	81.00	78.75	84.13	96.07	91.97	98.34	94.59	96.5

Source: Indian Railways.

Andhra Pradesh (includes Telangana) has the highest per capita rail route km (0.1 meters/person)and thestate with lowest per capita rail route km is Kerala (0.03 metre/person). State with highest rail density is West Bengal (0.11 metres of rail track/sq km)and state with lowest rail density isChattisgarh (0.01 metres of rail track/sq km).

Major Challengesfacing Indian Railway (IR)

Railways being the largest public sector undertaking has varied and complex problems. Some of them are -

- The main challenge facing Indian Railways nowadays is its inability to meet the demands of its customers, both freight and passenger. Presently Indian Railways suffers from a severe and chronic under-investment. Despite the quantum of investment, quality of delivery is also an issue. Cleanliness, network expansion and modernization, punctuality of services, safety, quality of terminals, capacity of trains, quality of food, security of passengers and ease of booking tickets are issues that appeal urgent attention.There are unmanned level crossings 7,701 in number still exist,about 28% as on 01.04.2017.
- The earnings from freight traffic has increased but the IR has been losing out on market share, particularly in retail commodities, which is a major cause for worry. The share of IR in freight traffic has fallen from 88 per cent in 1950-51 to approximately 36 per cent in 2013-14.
- The high density networks of the Indian Railways are facing acute capacity constraints coupled with a low passenger fares thereby leading to increases in freight tariffs to cross subsidize passenger revenues. However, that only enables recovery of costs and does not leave enough resources for investment in network expansion and replacement of assets. Low speed of train e.g. Maximum speed of a passenger train in India is about half of the Chinese Railways at 160kms/ hr and Chinese has express trains with speeds of 300kms/hr.

Recent Developments

The 92-year old tradition of holding a separate Railway Budget was eliminated by Modi government on 21st September, 2016 and the finance minister presented the combined Union Budget 2017. In 2018-19, the gross budgetary support from central government is proposed at ₹55,088 crore. This is a 38% increase from the revised estimates of 2017-18 (₹41,813 crore).

The Japan International Cooperation Agency (JICA) has inked a formal development assistance loan agreement with the Government of India (GoI), for providing the first tranche of ₹4, 553 crore (US$ 739 million) for the Mumbai Metro III Cuffe Parade-Bandra-SEEPZ project. The scope of the agreement includes construction of Mumbai Metro Line - 3 (32.5 km long underground line) including tunnels, stations, allied facilities, rolling stock, system component and consulting services. The project, to be executed by Mumbai Metro Rail Corporation, is expected to be complete in 2020. The State Government is planning to implement the project under engineering procurement construction (EPC) model and not through build operate transfer (BOT) mechanism.

Social Obligation

Indian Railways directly provides jobs to over 13.08 lakh employees and also offers means of living to many more lakhs of people in India. To the latter group belong innumerable licensed and unlicensed hawkers earning their livelihood from Indian Railways platform zone and inside the trains throughout the year.Indian Railways play a pivotal role for the entire lower and upper middle class sectoral travel segment. It serves as the most economical mode of transport among the prevailing travel modes in India.

Rail transportation has a number of favourable characteristics as compared to road transportation. It is six times more energy-efficient than road and four times more economical. The social costs in terms of environment damage or degradation are significantly lower in rail. Rail construction costs are approximately six times lower than road for comparable levels of traffic. It is the only major transport mode capable of using any form of primary energy.

Indian passenger tariffs are one-fourth of China and are one-ninth of Russia and they are nearly one-twentieth of Japan (12th Five year Plan). Indian Railways bears social service obligation every year by carrying passenger and goods services below operation costs. The IR are providing Concessions to various categories of passengers like Physically Challenged persons, Patients, Senior Citizens, Izzat Monthly season tickets, students, press correspondents, sports persons, war widows (53 such concessions) etc. Accordingly, Railways are making large revenue losses in passenger traffic both in suburban as well as non-suburban segments. Railways incurred losses of ₹33,491 crore on passenger operations in 2014-15 while in 2015-16 the figure was ₹35,918 crore. Indian Railways spends nearly ₹77,000 crore on passenger operations while it receives only ₹46,280crore from passenger fares during 2016-17. The losses ₹39,608 croreduring 2016-17accruing from such operations, which are justified for meeting wider socio-economic objectives, are termed as 'Social Service Obligation'.

The number of coaches and their capacity has grown over the years keeping in view the increasing passenger demand.

Table 2:Number of Coaches and their Capacity

Year	EMUCoaches		Conventional Coaches		Other
	No.	Capacity	No.	Capacity	Coaching Vehicles
1980-81	2,625	5,00,607	27,478	16,95,127	8,230
1990-91	3,142	6,09,042	28,701	18,64,136	6,668
2000-01	4,526	8,59,701	33,258	23,72,729	4,731
2010-11	7,292	13,64,948	45,082	32,54,555	6,500
2015-16 (revised)	8,805	15,78,868	53,171	37,94,954	6,704
2016-17	9,125	16,46,880	53,483	39,37,039	6,714

Includes standing accommodation, @ Includes rail cars, Includes luggage vans, mail vans etc., Includesnumber of DEMU/DHMU coaches and their capacity,

Source: Indian Railways (IR).

Table 3: Losses for Social Service Obligation
(₹in millions)

Item	2016-17
Loss on essential commodities carried below cost of operation	421
Loss on coaching services	341,766
(a) Non-suburban (take account of loss of ₹18,553 millions on uneconomic branch lines) (b) Suburban	53,888
Total loss	3,96,075
Net social service obligation (excluding staff welfare and law & order costs of ₹99,678 million)	296,397

Source: Railway Board, Ministry of Railways.

A study headed by BibekDebroy of NITI Aayog points out that exclusive focus on social service obligations fails to acknowledge issues such as "inefficiencies incost structures, impact of competition". "In a competitive market where demand for transport is elastic, Indian Railways will have a limitation increasing fares."

Table 4: Share of Transport Sector in Overall GDP (%)

Items	2008-09	2009-10	2010-11	2011-12	2012-13 (1st RE)
Overall Transport of which	*6.6*	*6.6*	*6.5*	*6.6*	*6.7*
Railways	1.0	1.0	1.0	1.0	0.9
Road Transport	4.7	4.7	4.6	4.8	4.9
Water Transport	0.2	0.2	0.2	0.2	0.2
Air Transport	0.2	0.2	0.3	0.3	0.3
Services incidental to transport	0.4	0.4	0.4	0. 4	0.4

Source: Railway Board, Ministry of Railways.

The share of IR in overall GDP has been stagnant at 1% only and has, actually, gone down to 0.9% in 2012-13.With an Operating Ratio, which has remained above 90 per cent, the amount of funds available with the IR for investment purpose is insufficient. To come across these investment requirements, governments are utilizing the capabilities of the private sector in a big way.

Private Participation in Building Rail Connectivity

From 1853 to 1924, the Indian Railways consisted of a number of privatelyoperated railway lines all of which were, taken over by the British Indian Government in 1924. Foreign Direct Investment (FDI) inflows into Railways related components from April 2000 to December 2017 were US$ 897.09 million. For successful implementation of PPP projects; appropriate risk allocation between public and private needs to be done. Experience indicates that private sector is averse to taking all construction, financing and traffic risk in rail infrastructure projects. The report of Expert Committee on Modernization of Indian railways formed through a notification dated 21-09-2011 under the chairmanship of Dr. Sam Pitrodia released February 2012 had laid heavy emphasis on involvement of private in sector in modernization activities. The report had identified key areas which would need to be taken up under as part of PPP initiative. The list of the key areas are Elevate rail corridors, Captive power generation, High speed rail corridors, Leasing wagons, Loco and coach manufacturing units, Merchandizing, Private freight terminals, Railway hospitals and schools, Renewable energy projects (solar, wind etc.), Stations and terminals. Private sector investment in railways infrastructure is expected to be approximately ₹0.92 lakh crore (around 20% of the total investment) during the plan period of 2028-32 up from 7% for the plan period 2013-17.

As metro rail projects are extremely capital intensive, it is challenging to fund metro rail projects from Government exchequer only. In this context, in order to create an ecosystem for proliferation of metro rail in country, the Government of India has notified Metro Rail Policy, 2017. The policy imbibes on the learnings from international examples and bridges the much needed gap for enhancing the feasibility of metro rail projects from economic, social and environmental perspective (Economic Survey 2017-18). The policy opens a big window for private investments across a range of metro operations making PPP component mandatory for availing central assistance for new metro projects. Private investment and other innovative forms of financing of metro projects have been made compulsory to meet the huge resource demand for capital intensive high capacity metro projects.

Conclusion

Indian Railways is labelled as the lifeline of India. It not only transports passengers and goods but it also connects the entire nation with a common thread. Almost all Indians are directly or indirectly connected to the Indian Railways. The Indian Railways will swim or sink down depending on how well they can control costs and survive in a competitive market. Indian Railways has to determine to get the related infrastructure and ancillary services at par with international standards. As Indian Railways promotes clean and compact way to move millions of passengers and millions of tons of goods across, greater investment for new and modern techniques, technological up-gradations in time and regular monitoring of the operations will augment capacity and quality of service delivery which will have to generate own resources for its future development. After decades of under-investment, the railway sector is finally going through a much-needed course of corrections. NDA-II led Governmentin their first Rail Budget 2015-16 has been proposedto invest of ₹8,56,020 crorefor the next 5 Years (2015-19) to enable expansion, restructuring and up-gradation of the magic wheels was a noble decision for balanced socio- economic growth in India. MA

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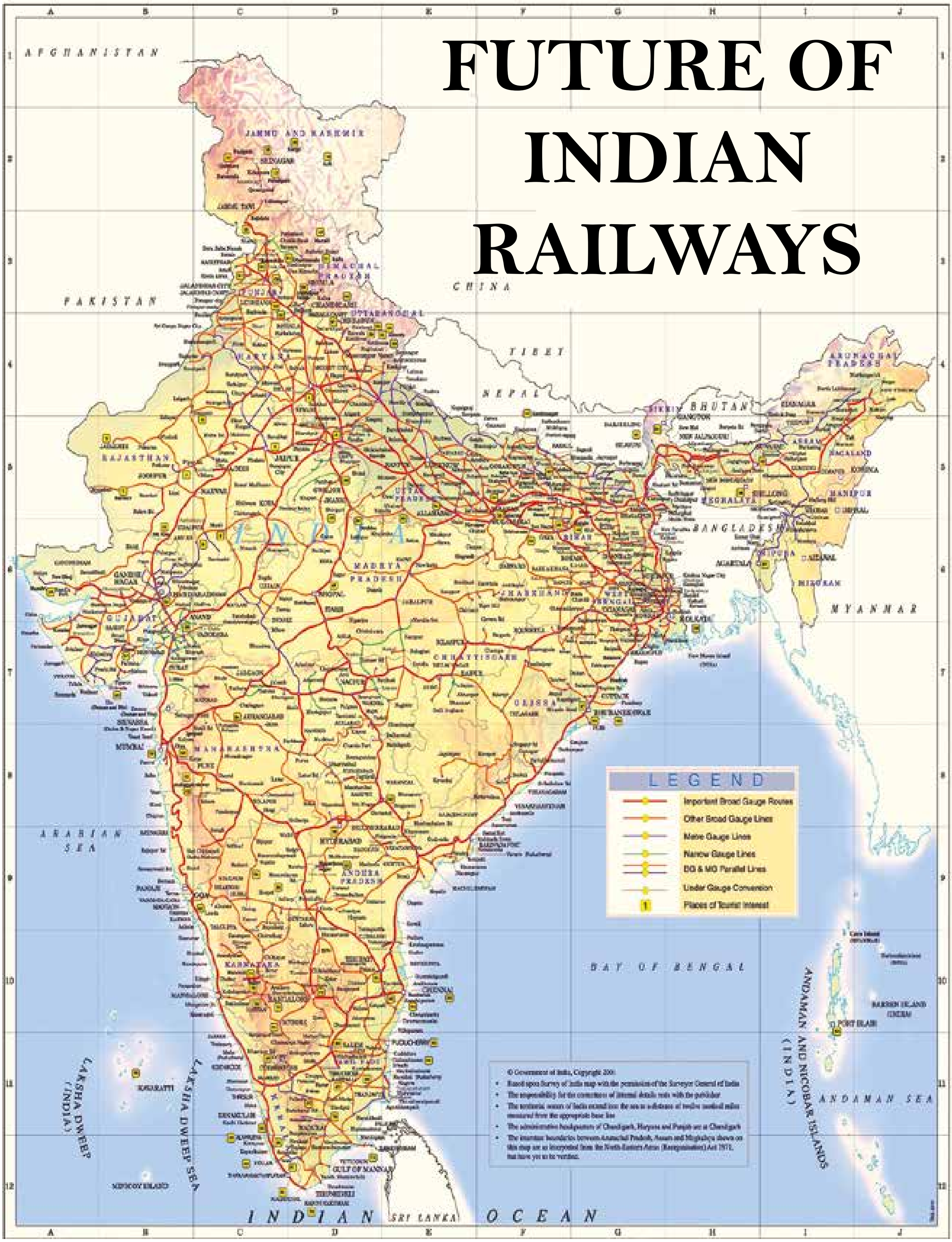
At the Helm

Our heartiest congratulations to CMA Suraj Prakash, a fellow member of the Institute for taking charge as the Director (Finance) of M/s. BEML Limited from May 10, 2018. Prior to this, he was the General Manager (Finance) of M/s. BHEL Limited. He has rich and varied experience in Indirect Taxation, Tax Management, Tax optimization, System improvement, formation of consortiums, technology collaborations, merger & acquisition, evaluation/ appraisal of investment in JVs and capex investment etc. He was also the Chairman of Noida Chapter of the Institute.

We wish CMA Suraj Prakash the very best for all his future endeavours.

FUTURE OF INDIAN RAILWAYS



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Finances of Indian Railways

Internal revenue generation has been declining

The railways' internal revenue for 2018-19 is estimated at Rs2.01 trillion, 7% higher than the revised estimates for 2017-18. The majority of this comes from freight and passenger traffic, estimated at around Rs2 trillion. However, over the last few years, railways' internal revenue has been falling due to a drop in the growth of both freight and passenger traffic.

Expenditure on salaries and pension has been increasing

Railways' operating expenditure for 2018-19 is estimated to be Rs1.88 trillion, up 4% from 2017-18. About 66% of this goes towards the payment of salaries and pensions. This component has been gradually increasing, with a jump of about 15% in the last two years due to implementation of the Seventh Pay Commission recommendations. The pension bill is expected to increase further in the years to come, as about 40% of the railways' staff was above 50 years in 2016-17.

Rs500 crore has been allocated towards the Depreciation Reserve Fund, which provides for the cost of new assets replacing the old ones. This is significantly lower than last year's allocation of Rs5,000 crore.

Consequently, operating ratio has been on the higher side

Operating ratio is the ratio of working expenditure (expenses arising from day-to-day operations) to revenue earned from traffic. A higher ratio indicates a poorer ability to generate surplus that can be used for capital investments such as laying new lines and deploying more coaches.

The operating ratio for 2018-19 is projected at 92.8%. In 2017-18 (revised estimates), it was 96%. In the last 10 years, the operating ratio has been around 94% on average, which means the railways has been spending 94 paise on every rupee that it earns

Revenue Generation and prevention of leakages in Revenue.

Indian Railways though it has its own social cause , it has to be run on profitable basis to sustain itself. The fear that it might get extinct in near future of next 20-30 years is always there if it is run in similar manner.

Usage of technology should be improved further, with India being the IT capital of the world it should be leveraged further, with shut down of ticket issuing counters and encourage of more mobile based. As being given now the IR should encourage by giving discounts to bring in more number of passengers.

Following are the Suggestions for improvement in Railways Finances and Services.

- Pricing of fares should be done in a systemic manner and transparently
- Pricing of AC fares should be done that it is tempting for the passengers not to fly, rather go in for train journey
- Discourage passengers from going to Railway stations similar to Airports, to increase the platform tickets
- IR should encourage Companies to use the Freight wagons on their terms and importance of Freight wagons should be increased in running.
- Doubling and electrification should be accorded the highest priority, as this would IR the capacity to increase its revenue generation.

Indian Railways (IR) is the fourth largest railway network in the world by size with 121, 407 kilometers of total track over a 67,368 kilometer route track. Forty nine percent of the routes are electrified with 25KV AC electric traction while over one third of them double or multi tracked.

IR runs more than 13,000 passenger trains daily on both long distance and suburban routes, from 7,439 stations across India. The trains have five-digit numbering system . Mail or express trains , run on average speed of 56 KM per hour . As of March 2017 IR's rolling stock consisted of 277.987 freight wagons 70,937 passenger coaches and 11,452 locomotives. It employs approximately 1.3 Million employee as of March 31, 2017.

- Ticket fares for Second Class, Sleepers should be increased in line with inflation especially suburban fares, which has not been hiked for more than a decade, with lowest fare being at Rs 5, which is very low and it would not be sustainable in the long term

- Capital expenditure should be shared between the IR and relevant State Government to increase rate of completion of projects. Projects should be undertaken only after the land acquisition is being made

- IR should concentrate only on running its core values, and should exit from running hospitals, schools, etc. even though these are of social causes, these should be run by the respective Ministries and State Governments.

- Tickets issued at the counters should also be encouraged to cancelled on line. It should also be seen that even after Chart has been prepared the passenger should be allowed to cancel tickets.

- Current booking after the chart prepared should be such that it should be done through online, instead of the current practice of booking at specified Stations only.

- Supervision of ticket less travel should be increased to discourage ticket less travel and heavy penalty/fines should be levied.

- Increase more staff in Safely, mechanical and Commercial Departments as these are core areas of the IR. The staff increase should be encouraged/assessed based on the revenue generated by them, or prevention of revenue leakage. This way the staff would look innovative ways of prevention of revenue leakage.

- IR should look ways in having close monitoring with State Government to improve the capital expenditure proposals and should encourage the partnership from State Government to improve the speed at which the proposal can be completed.

- Cleanliness , Safety, Punctuality should be the MANTRA for IR for the next decade to improve its patronage.

IR should encourage on its finances not depend on subsidies, Government Support to run, as always the sustainability of IR will always come into picture with competing with several modes such as UDAN where air connectivity to small towns have been stared with fare of just Rs 2500 and increasing volumes in sales of automobiles.

Above all indicates that share of IR in Indian Economy is falling and in near future would very difficult to sustain in future. It should not happen such that IR pictures are seen only in books and exhibitions instead of reality. All the best for the future! MA

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'JAN DHAN' TO 'JAN GAN'- LOOKING BACK AND BEYOND

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Is the 'Jan Dhan' bank account capable of holding savings of the poor people?

How meagre an amount of ₹2500 may be as one's only bank balance! But, this is the story in India that after much hype of black money having injected in the Jan Dhan accounts, which however may be true, the average balance in such accounts is ₹2544 as calculated very recently on May 30, 2018. This fuels the question how far a bank account under Pradhan Mantri Jan Dhan Yojana (PMJDY) has been capable of holding savings of the poor people.

But, if we travel towards past in the history, when the PMJDY was announced in August, 2014, it was seen that the knowledge of common people was orchestrated with a rumour that the government was planning to deposit a lump sum into such accounts immediately after opening of the same. This led to long queues for opening such accounts, even in some cases buying of the account opening form from outside in absence of the requisite availability of the same in a bank. As it is commonly argued by the proponents of financial inclusion in its favour that the bank account is the primary step for an individual towards financial stability and prosperity. It is also highlighted by them as a kind of fundamental right.

India, like any other developing country with a low level of financial literacy, suffers from the problem of the basic lack of understanding of banks and banking activities even among many of her better-off section of people. The G20/ OECD INFE Report (2017)[1] on adult financial literacy has awarded a score of 11.9 to a lowly ranked India against a maximum possible score of 21 in a survey among the G20 countries, the average score having been found 12.7. The various indicators of financial inclusion considered in this Report show wide variation in terms of formal product awareness and use, and the reliance on family and friends. Across the G20 countries, 19% of respondents had turned to family or friends to provide them with informal savings or credit facilities, rising to over half of respondents in India (54%). Thus, many people are found not even aware of the need of being a part of the formal financial system. The target group of financial inclusion is in a further worse state to understand the need of getting financially included and falls prey quite easily under the money lenders when they need fund and to the chit funds when they invest fund.

How far these Jan Dhan accounts are capable of holding poor people's deposit could also be linked with the earnings of these people. Many of them are daily earners, thus having little amount to deposit too. The all India annual average wage rate for the unskilled manual workers or MGNREGA[2]workers is ₹172.20/day w.e.f. April 01, 2014 (Source: Website of Ministry of Agriculture & Farmers Welfare, Govt. of India). In present situation, there is not much scope to save money by these people to be kept in a bank account out of this earning as depicted above, considering the irregularity of such income and that too so small, family size of the earners, and unforeseen contingencies over and above the normal livelihood expenses. Further, they may consider of the time needed and expense involved, direct or indirect, in visiting a bank branch and get them involved in the banking transactions to deposit the minimum amount of surplus if any.

The progress of Jan Dhan under scanner

As of now (May 30, 2018), about 317 million accounts have been opened with ₹807.17 billion balance in Jan Dhan accounts and 1,26,000 Bank Mitras (Customer Service Providers or Banking Correspondents) delivering branchless banking services in sub-service areas (Source: PMJDY website). In some cases, even a person has opened a bank account for the second time, either concealing the earlier opened account or on an advice even from the bank official to conceal the earlier account for showing a better statistics of PMJDY accounts being opened in the particular bank or not knowing the ineligibility for opening a PMJDY account in case s/he has an already existing bank account. The earlier bank account could also remain non-operational to an individual due to a variety of reasons like distance, lack of understanding and easiness with banking transactions or not having a minimum financial capacity for running a bank account with a requirement of minimum deposit in most of the cases. The MicroSave assessment surveys show that duplication of customer accounts has been increasing over time in the Jan Dhan scheme and that in 2015-end only 67% accounts have been found to be the first accounts of the accountholders[3].

The hidden reasons behind the popularity of the PMJDY scheme as narrated by a few initial surveys are publicity of the scheme, in some cases even the wrong publicity in form of rumour as said earlier, along with the target being set for the bank officials. It is also reported in studies that public sector banks have been exerted with the pressure of the PMJDY programme by setting high targets of opening such accounts. Chopra, Prabhala and Tantri (2017) have tracked activity in 3000 PMJDY accounts from August 2014 to October 2016 to reach similar conclusion[4].

World Bank's Global Findex Report, 2017[5] has shown that adults holding bank accounts in India as 80% in 2017 vis-à-vis 35% in 2011 and 53% in 2014. Such a high rate of financial inclusion for India has not been reflected ever in any survey with in the country or outside till now. The arithmetic success of financial inclusion could have undoubtedly been engineered by the PMJDY success. But, at the same time, the Report has stated 48% of the PMJDY accounts remaining inactive. The Report also shows that only 7% of the accountholders use the PMJDY accounts for savings.

Apart from providing the bank account ownership, Jan Dhan account was supposed to provide an overdraft of ₹5000 after successfully the account being run for six months from the date of opening. Providing such an overdraft without any collateral remains its uniqueness. Also, it had another uniqueness of covering life risk, although of a very moderate amount of ₹30000 automatically with the accounts to be opened till January 26, 2015. A RTI response as published by Sinha and Azad (2018)[6] reveals that only 3.139 million beneficiaries could avail the overdraft facility till December 27, 2017, which was about 1% of the total such accountholders. Further, they also report that only 4500 beneficiaries, which was a dismal 0.5% of the estimated eligible population, could avail the life insurance cover on death of the primary accountholder, which should have been 1.1 million instead if the death rate of 3.4 for the age group of 15-59 was applied on 1230 million accountholders (taking such figure as on January-end, 2015).

The government's dream of developing a trinity in the form of JAM that would link Jan Dhan accounts with Aadhaar and Mobile phone so as to bring the people "into a common financial, economic and digital space" is thus yet far away because of the primary reasons of so many accounts remaining inactive. Further, the government's inability to convince the apex court about the need of the Aadhaar linkage which resulted in extension of the deadlines a number of times keeps it further back-footed[7].

The dubious distinction of Jan Dhan accounts: sheltering black money during demonetization

Now, it is an interesting fact to note that during demonetization (November-December, 2016), PMJDY accounts became a shelter in many places for siphoning black money. Several media reports came one after another in this regard (India Today, 2016[8], Business Standard, 2017[9]). The apparently dry accounts in terms of deposits started to obtain huge deposits. Cash deposits in PMJDY accounts reach around ₹870 billion in the first 45 days post demonetization. In the first week after demonetization deposit was ₹202.24 billion. After the first two weeks the inflow was below ₹50 billion per week and thereafter it got reduced to about ₹10 billion per week. It is estimated that almost 20% of the estimated black money to be wiped out was siphoned to the PMJDY accounts. The finance ministry's statement says, "As on 16 August 2017, the number of PMJDY accounts stands at 29.52 crore with rural accounts comprising 60% of it. Thanks to demonetization led efforts, zero balance accounts under PMJDY declined from 76.81% in September 2014 to 21.41% in August 2017"[10, 11]. PMJDY website based progress report if analyzed reveals an average deposit balance per such account rising from ₹1780 on November 02, 2016 as last obtainable just before the announcement of demonetization decision on November 08, 2016 to ₹2643 on January 04, 2017 as immediately available after the expiry of the window period on December 30, 2016. Hence, the rise in average balance on the expiry of the window period seems to be quite abnormal. The government was not ready for this boomerang and was rather rightfully busy with supplying new currency notes to the monetary system.

The government finally cautioned Jan Dhan account holders that they would be prosecuted under the Income Tax Act for allowing misuse of their bank accounts through the deposit of black money in scrapped currencies during the 50-day window till December 30, 2016[12]. However, it remains a doubt how many among the target group of population could be reached through these circulars in the printed format in the newspapers. The government had already set a basic limit in deposit of ₹50,000 in the Jan Dhan accounts. Bank officials were rather in a dilemma to redesignate the Jan Dhan accounts into basic savings bank deposit (BSBD) accounts as balance in many such accounts exceeding the upper limit.

The role reversal in Jan Dhan account: from wealth distribution to wealth creation?

PMJDY had aimed to send a feeler publicly through the overdraft facility that assistance was being provided to the poor with the purpose of wealth creation and that the scheme was not just about fulfilling the government's commitment to wealth distribution like direct benefit transfer. The Union Budget, 2018 announces that that the government "will expand the coverage under PMJDY by bringing all sixty crore basic accounts within its fold and undertake measures to provide services of micro insurance and unorganized sector pension schemes through these accounts". Ordinarily, the BSBD accounts may act as good as Jan Dhan accounts if could be opened with zero balance and if issued with a Rupay card[13]. RBI has also started to send text messages to the mobile phones of the citizens irrespective of any target group of population to open such accounts if s/he may stick to an withdrawal policy of not more than four times a month from such accounts. Thus, the use of PMJDY as a vehicle for micro-insurance policies as well as pensions will be "an opportunity as well as a challenge" to the banks.

The IRDA Micro-Insurance Regulations, 2005 exists for the economically vulnerable sections of society, with a sum of up to ₹50,000 assured as life (covering term insurance, endowment insurance or health insurance) or general (covering hut, livestock, instrument, personal accident or health) insurance. The micro insurance scheme, so far prominently run by LIC, did not, however, have much response to it. Further, the Pradhan Mantri Jeevan Jyoti Bima Yojana and Suraksha Bima Yojana, with provisions of auto-debit from the beneficiary accounts, respectively of ₹330 and ₹12 annually for separate life and accidental coverage of ₹200,000, could augment the insurance coverage of the target population. Also in Swavalamban (now, upgraded to Atal Pension Yojana from June 2015), a co-contributory pension scheme for the unorganised sector, launched in September 2010, the government would contribute up to ₹1,000 up to March 2020 annually in each National Pension System account if opened before December, 2015. There is a recent proposal of raising the upper monthly limit of pension in Atal Pension Yojana from ₹5000 to ₹10000 and of the maximum age level from 40 to 50 to join[14].

Paying small insurance premium or contributing towards the pension scheme from the bank accounts of the target population creates a culture of saving. Time has come now that the underlying philosophy of Jan Dhan scheme is being reformed from wealth distribution to wealth creation. The critics may argue why not earlier and why now when the scheme is nearing completion. The government may counter-argue that its principal aim through the scheme was to promote financial inclusion first. But, undoubtedly, an extension of the scheme would match the government's recent change of stand from wealth distribution to wealth creation.

PMJDY – whither?

As per the government declaration in the PMJDY booklet, the financial inclusion scheme is supposed to be implemented in two phases: Phase I, from 15th August, 2014 to 14th August, 2015, and Phase II, from 15th August, 2015 to 14th August, 2018. Hence, PMJDY, if not extended by the government through any fresh notification is going to be withdrawn. But, recently, the government and the banking sector are plagued with the problems of cheating by economic offenders (some of them turning into fugitive) in the banking sector and worsening performance of the banking sector to make good of such losses. Hence, financial inclusion is no more in the priority list of the government and the banks as a broader policy. Even if at the branch level, it is strange to notice that the banks have no option of opening account under the PMJDY scheme at present although the scheme is not officially closed. Rather, some of the banks are offering zero balance BSBD account for the poorer people with no overdraft facility attached to these accounts. In general, a Rupay card is being issued like that of the Jan Dhan accounts to support these accounts with ATM facility and more importantly an accidental insurance coverage of ₹100000.

The government's larger aim to make the poor people self dependent with the help of micro enterprise supported by credit facility offered by the bank could not be achieved through the PMJDY scheme as it offers loan upto a paltry ₹5000 and that too could be availed by so few people. Contrary to expectations, the government did not double the overdraft limit in the scheme in the Union Budget,2018[15]. Meanwhile, the government had announced a new scheme in the name of Pradhan Mantri Mudra Loan Yojana by which much bigger amount of credit could be given for starting new enterprises upto a maximum amount of ₹1 million[16]. At present, banks appear to be very interested in providing such loans which have a business prospect, although understanding huge risk in view of the mounting NPAs already existing with them.

Here, however, a question remains. Has the Jan Dhan scheme as meant for fulfilling the overall vision of the government to protect Jan Gan[17] with a safe place to keep their hard-earned money, coupled with the facilities of receiving credit support and covered with an accident insurance against any such risk, been able to achieve the vision of the scheme nearing the proposed time of its conclusion? For a long time, the government has been finding an effective way of direct benefit transfer (DBT) or providing subsidies to the right persons and not in any fictitious name or not to any person who is not eligible to receive the same. Presently, there are as many as thirty six schemes linked under the DBT through which government is transferring various benefits directly to beneficiaries. Reportedly, due to plugging through bank account leakage has been reduced generating savings to the government[18]. The government had even once declared about all the DBT accounts for conversion into Jan Dhan accounts[19]. It may be concluded therefore that PMJDY when introspected appears to be largely successful in increasing bank account ownership, thus creating a suitable place for the government for DBT but not being successful in respect of more vital needs of deposit and credit of the target group of people even within the ambit of the scheme's initial plan, leave apart the idea of wealth creation emanated later. Still, it is not advisable for the government to discontinue the scheme after an announcement having made only in the last budget to link micro insurance and pension; rather it should look into as to why the banks presumably took a decision for premature burial of the scheme before its scheduled closure.

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FootNote

[1]*http://www.oecd.org/daf/fin/financial-education/G20-OECD-INFE-report-adult-financial-literacy-in-G20-countries.pdf*

[2]*The Mahatma Gandhi National Rural Employment Guarantee Act, 2005 provides direct supplementary wage employment to the rural poor through public works, thus giving a guarantee for 100 days of employment at minimum wages to at least one able bodied person in every rural household.*

[3]*Sharma, Manoj, Giri, Anuradha and Chadha, Sakshi, 2016, "Pradhan Mantri Jan Dhan Yojana Wave III assessment", MicroSave, retrievable from https://www. MicroSave.net/files/pdf/PMDY_WaveIII_ Assessment_ Microsave.pdf*

[4]*Chopra, Y., Prabhala, N. and Tantri, P. L., 2017, "Bank Accounts for the Unbanked: Evidence from a Big Bang Experiment" retrievable from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2919091*

[5]*https://globalfindex.worldbank.org/*

[6]*Sinha, Dipa and Azad, Rohit, 2018, March 31, "Can Jan Dhan Yojana achieve financial inclusion?", Economic and Political Weekly, Vol. LIII, No. 13, pp. 165-171*

[7]*Supreme Court of India has opined on the issue of deadline on March 31, 2018 as last set by the government in respect of Aadhaar linkage that without any transfer of benefit the government cannot force such linkage upon the people*

[8]*India Today, 2016, November 17, "Exposed: Crooks Turning Kala Dhan into Jan Dhan"*

[9]*Business Standard, 2017, Jan. 03, "Jan Dhan account deposits swell to Rs 2400 cr in Odisha post note ban"*

[10]*Bose, Prosenjit, 2017, Sept. 02, "Demonetisation Post-Truths", EPW Engage, Vol. 52, Issue 35, retrievable from https://www.epw.in/engage/article/-demonetisation-post-truths*

[11]*Yadav, Shyamlal and Mazoomdar, Jay (2016) quoted in a newspaper report that in a game of improving statistics, the banks themselves had transferred 1-10 in the Jan Dhan accounts maintaining a zero balance, just to turn those into accounts having a non-zero balance (Source: Indian Express, Sept. 13, 2017)*

[12]*PTI, 2016, November 18*

[13]*The Rupay card was devised as India's attempt to counter that of the global giants such as Mastercard and Visa. While the scheme was sanctioned in 2012, it picked up pace with Jan Dhan Yojana's rollout, as Rupay cards were to be given to each account holder.*

[14]*Hindu Business Line, 2018, June 12, "Atal Pension Yojana: Govt mulls hiking pension limit to up to Rs.10,000/month"*

[15]*Business Standard, 2018, Jan. 23, "Budget 2018: Govt to extend Modi's flagship PMJDY scheme, double overdraft"*

[16]*MUDRA stands for Micro Units Development and Refinance Agency which speaks for itself and the MUDRA Bank was formally launched in April, 2015.*

[17]*India's national anthem has the first two words Jan Gan which mean the people.*

[18]*The Economic Times, 2018, March 23, "Savings from direct benefit transfer pegged at Rs. 83,000 crore"*

[19]*FirstPost, 2016, Jan. 20, "Why Modi-government's move to convert DBT accounts to Jan Dhan is a right step"*

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APPROVAL OF RESOLUTION PLAN

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The Insolvency and Bankruptcy Code, 2016 ('Code' for short) brings revolution in resolution process of corporate insolvency. The role of insolvency professional is very important in this process. The preparation and approval of resolution plan is an essential part in corporate insolvency resolution process. The Adjudicating Authority is to approve the resolution plan. The Adjudicating Authority shall approve if it is satisfied that the resolution plan confirm to the requirements or otherwise it may reject the plan. The approved resolution plan shall be binding on corporate debtor and its employees, members, creditors, guarantors and other stakeholders involved in the resolution plan.

Steps for approval of resolution plan

The following are the steps involved in the approval of resolution plan in a corporate insolvency resolution process-

- ✰ Preparation of an information memorandum by resolution professional;
- ✰ Preparation and submission of resolution plan by resolution applicant to the resolution professional;
- ✰ Scrutiny of resolution plans by resolution professional;
- ✰ Submission of resolution plans by resolution professional before Committee of creditors;
- ✰ Approval of resolution plan by Committee of creditors;
- ✰ Submission of resolution plan approved by Committee of creditors before the Adjudicating Authority by the resolution professional;
- ✰ Approval of resolution plan by Adjudicating Authority.

Preparation of Information Memorandum

Section 29 of the Code provides for preparation of Information Memorandum by the resolution professional. The resolution professional shall prepare an information memorandum in such form and such manner containing such relevant information as may be specified by the Board for formulating a resolution plan..

The resolution professional shall provide to the resolution applicant access to all relevant information in physical and electronic form, provided such resolution applicant undertakes-

- to comply with provisions of law for the time being in force relating to confidentiality and insider trading;
- to protect any intellectual property of the corporate debtor it may have access to; and
- not to share relevant information with third parties unless the above are complied with.

The expression "relevant information" means the information required by the resolution applicant to make the resolution plan for the corporate debtor, which shall include the financial position of the corporate debtor, all information related to disputes by or against the corporate debtor and any other matter pertaining to the corporate debtor as may be specified.

Eligibility for resolution applicant

Section 29A of the Code provides that a person shall not be eligible to submit a resolution plan, if such person, or any other person acting jointly or in concert with such person-

(a) is an undischarged insolvent;

(b) is a willful defaulter in accordance with the guidelines of the Reserve Bank of India issued under the Banking Regulation Act, 1949;

(c) has an account, or an account of a corporate debtor under the management or control of such person or of whom such person is a promoter, classified as non-performing asset in accordance with the guidelines of the Reserve Bank of India issued under the Banking Regulation Act, 1949 and at least a period of one year has lapsed from the date of such classification till the date of commencement of the corporate insolvency resolution process of the corporate debtor; the person shall be eligible to submit a resolution plan if such person makes payment of all overdue amounts with interest thereon and charges relating to non-performing asset accounts before submission of resolution plan;

(d) has been convicted for any offence punishable with imprisonment for two years or more;

(e) is disqualified to act as a director under the Companies Act, 2013;

(f) is prohibited by the Securities and Exchange Board of India from trading in securities or accessing the securities markets;

(g) has been a promoter or in the management or control of a corporate debtor in which a preferential transaction, undervalued transaction, extortionate credit transaction or fraudulent transaction has taken place and in respect of which an order has been made by the Adjudicating Authority under this Code;

(h) has executed an enforceable guarantee in favor of a creditor in respect of a corporate debtor against which an application for insolvency resolution made by such creditor has been admitted under this Code;

(i) has been subject to any disability, corresponding to clauses (a) to (h), under any law in a jurisdiction outside India; or

(j) has a connected person not eligible under (a) to (i).

Section 29A is not applicable to-

- a scheduled bank; or
- an asset reconstruction company registered with the Reserve Bank of India under section 3 of the Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002; or
- an Alternate Investment Fund registered with the

We have not single law dealing with insolvency and bankruptcy till the Insolvency and Bankruptcy Code, 2016 has been enacted. The object of the Code is for the maximization of value of assets of such persons, to promote entrepreneurship, availability of credit and balance in the interests of all stakeholders including alteration in the order of priority of payment of Government dues. The Code provides the process of corporate insolvency resolution process in a time bound manner. The resolution professional plays a vital role in this process. The preparation and approval of resolution plan is essential in this process. This article deals with the procedure of approval of resolution plan and also discusses the essential criteria for the approval of resolution plan with the decided case law

Securities and Exchange Board of India.

Submission of resolution plan to resolution professional

A resolution applicant may submit a resolution plan to the resolution professional prepared on the basis of the information memorandum.

Scrutiny by resolution professional

The resolution professional shall examine each resolution plan received by him to confirm that each resolution plan-

- provides for the payment of insolvency resolution process costs in a manner specified by the Board in priority to the repayment of other debts of the corporate debtor;
- provides for the repayment of the debts of operational creditors in such manner as may be specified by the Board which shall not be less than the amount to be paid to the operational creditors in the event of a liquidation of the corporate debtor under section 53;
- provides for the management of the affairs of the Corporate debtor after approval of the resolution plan;
- the implementation and supervision of the resolution plan;
- does not contravene any of the provisions of the law for the time being in force.
- conforms to such other requirements as may be specified by the Board.

Submission of resolution plan to the Committee of Creditors

The resolution professional shall present to the committee of creditors for its approval such resolution plans which confirm the conditions as discussed as above.

Approval by Committee of Creditors

The committee of creditors may approve a resolution plan by a vote of **not less than seventy-five per cent. of voting share of the financial creditors**, after considering its feasibility and viability, and such other requirements as may be specified by the Board.

The committee of creditors shall not approve a resolution plan, submitted before the commencement of the Insolvency and Bankruptcy Code (Amendment) Ordinance, 2017 where the resolution applicant is ineligible under section 29A and may require the resolution professional to invite a fresh resolution plan where no other resolution plan is available with it.

Where the resolution applicant is ineligible, the resolution applicant shall be allowed by the committee of creditors such period, not exceeding thirty days, to make payment of overdue amounts in accordance with the proviso to clause (c) of section 29A.

The resolution applicant may attend the meeting of the committee of creditors in which the resolution plan of the applicant is considered but the resolution applicant shall not have a right to vote at the meeting of the committee of creditors unless such resolution applicant is also a financial creditor.

Submission before Adjudicating Authority

The resolution professional shall submit the resolution plan as approved by the committee of creditors to the Adjudicating Authority for its consideration.

Approval by Adjudicating Authority

If the Adjudicating Authority is satisfied that the resolution plan as approved by the committee of creditors meets the requirements as referred to the conditions prescribed in section 30, it shall by order approve the resolution plan. The approved resolution plan shall be binding on the corporate debtor and its employees, members, creditors, guarantors and other stakeholders involved in the resolution plan. Where the Adjudicating Authority is satisfied that the resolution plan does not confirm to the requirements it may, by an order, reject the resolution plan.

After the order of approval-

- the moratorium order passed by the Adjudicating Authority under section 14 shall cease to have effect; and
- the resolution professional shall forward all records relating to the conduct of the corporate insolvency resolution process and the resolution plan to the Board to be recorded on its database.

Appeal

Section 32 of the Code provides that Any appeal from an order approving the resolution plan shall be in the manner and on the grounds laid down in sub-section (3) of section 61.

Essential for approval of resolution plan

The following are the essential key factors for approval of the resolution plan-

- The resolution applicant is to submit the resolution plan which fulfills the conditions as prescribed in the Code;
- Committee of creditors is to approve the resolution plan with not less than 75% voting of committee of creditors;
- The Adjudicating Authority is to satisfy that the resolution plan complies with the provisions of the Code.

Approval by not less than 75% voting – mandatory?

The approval of resolution plan is to be done by the Committee of Creditors after analyzing the said plan. The resolution plan should be approved b y not less than 75% of voting power. This is mandatory. The same has been upheld by the Adjudicating Authority in 'ICICI Bank Limited V. Innoventive Industries Limited' – (2018) 143CLA 97 (NCLT). In this case the applicant, a resolution applicant, in the corporate insolvency resolution process against M/s Innoventive Industries Limited, submitted a proposed resolution plan for Rs.284.3 crores. The Committee of Creditors has not been voted in favor of the resolution plan with 75% vote sharing of the Committee of Creditors. Since 66.57% of the Committee of Creditors voted in favor of the resolution plan the same has been rejected by Committee of Creditors.

Against this decision, the resolution applicant filed a miscellaneous application before the Adjudicating Authority. The prayer of the applicant is that the applicant shall be permitted to submit revised resolution plan after reducing the time earlier envisaged for obtaining shareholders' approval for change of period or making cash payments, consequently to direct resolution plan to present the modified resolution plan before Committee of Creditors, basing which the Committee of Creditor be directed to cast vote on such modified resolution plan.

The applicant has given the following justifications for seeking the above said relief-

- The corporate debtor provides employment to 1200 workmen.
- The turnover of the corporate debtor for the years ended 31st March 2015, 31st March 2016 and 31st March 2017 is Rs.372 crore, Rs. 368 crore and Rs.337 crore respectively, besides this, the corporate debtor has contributed approximately Rs.70 crore towards taxes for the years ended 2015-16 and 2016 -17.
- The applicant is aggrieved of the wrongful rejection of the plan without giving an opportunity to the applicant to give revised plan after considering the effect of the circular given by Ministry of Corporate Affairs on 25.10.2017.
- The salient features of the proposed resolution plan are-
  - There would be compulsory change in the management of the original respondent.
  - Immediate cash payment (within 12 months) of Rs.180 crore.
  - Conversion of loan into Cumulative Convertible Optionally Redeemable Preference Shares, redemption of which would be guaranteed by the promoters of the corporate debtor.
  - The plan contemplated funds through Rights Issue/preferential allotment of shares which requires shareholders' approval under the provisions of the Companies Act, 2013.
  - The value of the resolution plan being more than double to the net liquidation value of Rs.135.40 crore, it is the only viable alternative for liquidation.

The applicant further submits-

- The requirement of 75% vote in favor of a resolution plan is directory and not mandatory.
- The rejection of the plan amounts to arm twisting tactics by the dissenting financial creditors and holding up the corporate insolvency process of the corporate debtor.
- The rejection of the plan would result in loss-loss situation for all stakeholders of the corporate debtor including the workmen and employees of the company.
- The dissenting financial creditor shave not given any reason for rejection of the proposed resolution plan despite the fact that implementation of this plan would lead to higher recovery as against to

recovery through liquidation.

- The Code is meant for maximization of value of assets and balance the interest of all stakeholders, that being so, since the object of the Code contemplates ease of doing business facilitating more investment leading to higher economic growth and development, if this plan is not approved, all the objects behind enactment would get defeated.
- The time period of 270 days as contemplated under section 12 of the Code is to be conceived as directory because the insolvency resolution process is a complex process that required assessment of business viability, preparation of resolution plan, discussions and negotiations with various stakeholders.
- The strict adherence to the period would result in value destruction of the business of the corporate debtor.
- The inherent power conferred upon NCLT under rule 11 of the NCLT Rules is equally applicable to this Adjudicating Authority to prevent abuse of process because the ultimate object of the Court is not liquidation of asset but to save the business of the company.

The Adjudicating Authority held that the Code in clear terms has stated that any decision that has been taken by Committee of Creditors in the corporate insolvency resolution period shall be a resolution with 75% voting shares of Committee of Creditors. The Adjudicating Authority analyzed various provisions of the Code which dealt with the approval of the Committee of Creditors and the resolution plan.

In Section 21(8) of the Code, it has been mandated that all decisions of the Committee of Creditors shall be taken by a vote of not less than 75% of voting shares of the financial creditors. Neither a proviso nor is there any exception carved out to this section saying this mandate is exempted in so and so situations.

The Adjudicating Authority further held that if anybody wants to venture into interpretation of a statute, first it has to be ascertained that reading of a section is not giving any meaning or meaning that comes out of such section is absurd and inconsistent with the remaining part of the legislation. After having come to such conclusion that section is unable to reflect anhy meaning, then heading of the meaning is to be seen, if the heading of the section is also of no meaning, then to see the heading of the respective chapter, after dong all meaning then to see the heading of the respective chapter, after doing all these exercises, even then also, if one is unable to construct the meaning of the section, then go to the statement and objects of the statute and then to see Committee reports to find out as to what the intention of the enactment in respect to the section that is unable to give right meaning.

In law 'right meaning' means not the meaning the Adjudicating Authority felt right, it is the meaning contemplated in the statue. Here it is out and out visible that the approval of the resolution by Committee of Creditor means, approval with 75% voting by Committee of Creditors, not otherwise. Therefore, the Adjudicating Authority cannot put its neck into, to say that the approval of the Committee of Creditors with less than 75% amounts to approval of resolution by Committee of Creditors.

It has already been held that there could not be any occasion to the Bench to look into a resolution plan that has not been approved by the Committee of Creditors with 75% majority as set out in the Code, the Adjudicating Authority is given power to examine as to whether the plan approved by the Committee has complied with section 30(2) of the Code or not, if complied with, it has to be approved by the Adjudicating Authority, if not complied with, to reject the resolution plan approved by the Committee with not less than 75% voting share of the company.

To invoke the jurisdiction of Adjudicating Authority, there must be a resolution plan approved by the Committee with 75%. So, there is total prohibition upon the Adjudicating Authority to go into as to whether approval of 75% is required or not and as to whether the resolution plan approved by the Committee is otherwise correct or not, except as mentioned in section 31 of the Code.

Since, in this case, the insolvency resolution process of 270 days is already over by 14.12.2017, and since no resolution plan has been received by the Adjudicating Authority, the Adjudicating Authority, as contemplated under section 30(6) of the Code, ordered the corporate debtor to be liquidated in the manner laid down in this Code. MA

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APPRAISAL – A CURSE OR A BOON

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Annual appraisal and yearly performance rating in professional career brings out different expressions to different employees. Some people are so well prepared and confident that they really look forward for such moment. To them it is that time of the year when the results shall be disclosed and they can draw up plans to celebrate; could be with the rewards that are likely to follow the appraisal. On the contrary, to some, mere thought of appraisal gives rise to so much of anxiety and pain that it often leads to serious health issues.

Tell me, how does it feel when a person speaks not so well about you? You feel dejected – isn't it? Now my second question. How often do you use this feedback as a tool for improvement? Any guess? Let me explain. Research papers have pointed out that most of us hardly prepare ourselves for unpleasant feedbacks. Actually we fail to believe that we have our own limitations. It could be that we had never uncovered some of our hidden deficiency before. Thus when expectations and assessment results are not in sync, it leads to utter disappointments. Frankly speaking these stressful conditions are directly linked to our inability - our inability to deal with adverse feedbacks. As a result, when any shortcoming is pointed out, we feel let down.

Can you tell me, why do we fail to take advantage of unpleasant feedbacks? Actually we tend to look at 'whys' in that adverse situation. Like, why is the poor rating given to me? Why did the evaluator fail to acknowledge my good work? Why did that colleague get superior rating, which I did not get? Why is Almighty always unkind to me? A barrage of self demoralizing questions. Listen, you will never get any right answer to all these whys of yours. Even if, you somewhat manage to get an answer to that why, you won't be satisfied. According to me, the right way to deal with adverse appraisal situations would be to remain positive and redirect our thoughts. Instead of focusing on the 'whys', we need to look at the 'hows' in those situations and 'what' you could do to overcome these setbacks. Like, how did I go wrong in my own assessment? How do I bridge the gap between my own assessment and that of the evaluator? To improve my performance ratings hereinafter, what are the different alternatives that I can think of? In the given circumstances, what could be the most appropriate option for me? Believe me, if you view assessment situations, in a process driven approach, you would find it easier to handle, benefit immensely.

Let me share one of my personal experiences at work. Some years back, for no reasons of mine, a senior colleague lectured me on my so called weakness. He went on to comment, "Look, this is not the way how the situation should be handled. You need to learn the tricks of the trade, buddy." Honestly speaking, I was very upset and hurt. His strong words continuously reverberated in my ears and created a huge turmoil within me. Had it been my younger days, I would have protested vehemently. I would have tried all my oratory skills to convince (or should I say prove) that he was wrong in his judgement. Surprisingly, this time, I kept quiet and controlled my immediate outburst (emotions). I do not know why, but it so happened. I wonder today, whether such measured response had something to do with greying of my hairs or not. Whatever might be the reason, I am happy that good sense had prevailed in me which prompted me to leave the place quietly. Trust me I was very much eager to find out how and why his assessment had differed from my own judgment. Whole night I could not sleep. Lying down on the bed, I tossed and turned from one side to another, but the actual answer eluded me. The said incident provoked me to think deeper, to introspect.

Every one of us would agree that at times, we all are victims of ill judgment, but then, how to get out of this sinking feeling and continue to move forward. I wish to present a few assessment scenarios and the ways that you could try out, for dealing with such events.

The right way to deal with adverse appraisal situations would be to remain positive and redirect our thoughts. Instead of focusing on the 'whys', we need to look at the 'hows' in those situations and 'what' you could do to overcome these setbacks. Like, how did I go wrong in my own assessment? How do I bridge the gap between my own assessment and that of the evaluator? To improve my performance ratings hereinafter, what are the different alternatives that I can think of? In the given circumstances, what could be the most appropriate option for me? Believe me, if you view assessment situations, in a process driven approach, you would find it easier to handle, benefit immensely.

Situation 1

Assessment is correct. It is very difficult to accept one's own shortcomings. It pains a lot to deal with such immediate setback. My take is, one should neither feel dejected nor lose hope. There is no point crying over the spilled milk. One should rather work hard to get rid of the deficiencies that are pointed out. I agree, it is easier said than done. But tell me friends, "Is there any short cut to eliminate deficiencies other than equipping yourself with requisite skills?" We all need to practice this inner control. I am sure, over time we can overcome our shortcomings. It's a matter of choice.

Situation 2

Assessment is incorrect. It could be a genuine mistake on the part of the evaluator, which you have no option but to accept. After all the evaluator is also a human being and is entitled to his share of mistakes. Instead of arguing with him or trying to prove your point that he made a wrong judgment, it is better to leave it there. I am sure, the appraiser will definitely realize his mistake and rectify the same on his own, may be in the next available opportunity. So why do we get upset? It is only a passing phase.

Situation 3

Assessment is prejudiced. It could be that he has deliberately made a flawed assessment. Could be his intentions were either to hurt you or to satisfy some of his hidden agenda. In such a scenario, if you argue to prove your point, you can be rest assured that all your efforts will fall in his deaf ears. Your arguments can never have the desired result. On the contrary, two things could happen.

1. Expressing your dissatisfaction could make him happier and hurt you more, and

2. By losing your cool, you may be playing in his hand. Any such misadventure may empower him further to prove his point that he has made the right assessment about you. He can add on to the list of your weaknesses like being arrogant, disrespectful and disobedient or any other negative trait, for that matter.

Thus, it is better to keep calm. No matter how bad you feel, it is most unlikely that he is going to change his opinion about you immediately. If you are really concerned about your health and mental peace, you could let go that situation. This evaluation cannot be the end of the road. You continue your good work and I am sure, going forward your efforts shall definitely get recognized. May not be by him but could be by someone else. Who knows, your efforts could even catch the eye of his superiors. At that time, his wrong judgment about you shall not matter.

Let us cheer up. Things will unfold in the way it is destined. Ensure that you make yourself mentally strong to handle all kinds of unpleasant appraisal ratings gracefully. Go through life's grind. Keep on improving yourself. Channelize your efforts to make a gem out of your own self. Enrich yourself, acquire new skills, develop competencies, transform knowledge into wisdom and evolve as a superior human being. I agree that from time to time we all need that appreciation to keep ourselves motivated, but my sincere advice to you would be, "Do not always look for other's appreciation. If it comes in the way, it is very good. And if it does not, it hardly matters. Heaven is not going to come down crashing." Remember one thing, "Your value doesn't decrease based on someone's inability to see your worth." I recommend, "Let us prepare our minds and prevent from disappointments, otherwise rest of our life would be spent in seeking forgiveness and restoring that lost ground." If we intend to be happy and progress in this fiercely competitive world, let us deal with assessment results (external stimuli) with self-belief. Don't react, analyse. Evaluate various pros and cons and respond judiciously. At no point of time, you should handover the remote controller of your happiness to others. MA

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" MARGIN OF SAFETY (MOS)" - A BIG MYTH

HOW TO TACKLE WITH AUTOMATION AND INGENUITY

Safety Factor (SF) or Margin of Safety engineering (MOS) is a term describing the load carrying capacity of a system beyond the expected or actual requirement. Essentially, the factor of safety is how much stronger the system is than it usually needs to be for an intended load. Many systems are purposefully built much stronger than needed for normal usage. This tendency has become widely popular and started using in several situations. We have identified that this MOS syndrome indeed works well in bridges or buildings but in other areas it is actually causing huge irreparable damages unless properly estimated and cross verified with ingenuity and automation

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In the course of business, we take various decisions relating to selection of machines, determination of capacities, planning of head count, contracting of utilities like power, gas, and water etc. As per the requirement we may also enter into joint ventures like manufacturing or marketing of products. Also explore into new businesses or undertake mining contracts / gas exploration contracts, telecommunication spectrum or airport development contracts.

Before taking the above kinds of decisions, generally the functional managers compute the basic computations as per the expected requirement and they try to add some extra load to the basic quantity as a part of 'margin of safety'. When the proposal goes to next level manager for review, he may further add some more load as per his MOS tendency to the proposal. When the is taken to final level for decision the decision maker further add an additional load. Likewise, people tend to opt for higher loads than the real requirement and forget to note the burden of operating costs or penalties associated with such extra loads at each time. Though MOS is good in some circumstances but it is counterproductive if markets do not support such extra loads and finally may lead to underutilization.

Think Big

"Think Big" is a buzz word and people are very much fascinated to use everywhere without critical thought process before opting for additional loads etc. The top management also tends to accept higher loaded capacities and willing to take risk because of this phenomenon. The practical scenario is not always as per our Thinking big philosophy and very much volatile w.r.t changes customers' demands and tastes, substitute technologies. If we critically analyze the current 'Operating Costs', of different companies the 'MOS' often seems to be burdensome and turns the profit businesses in to loss making because of extra fixed costs for underutilization etc.

During our 20 years of research on wastages, it has been found that several companies are paying unnecessary huge money on account of unused charges.

The study also showed that MOS is more prevalent in manpower planning, utilities contracting or selection of machines relating to heating, ventilation, and air conditioning, Boilers, Water systems and other refrigeration systems.

Examples

- Capacity Utilization: In Pharma sector alone, around 30% to 35% underutilization in bulk drugs and 50-55% in Formulations at the global level.
- Gas Exploration Contract: One of the big contracts in India, it is estimated that the output would be more than 70 mmscmd of gas from Field-1 and 3 and now actually fallen to 10 -20 mmscmd and facing demand notice from govt for minimum commitment charges of about $1-2 Billion Dollars.
- Utilities: Several companies are paying huge unutilized minimum commitment charges since from the ages.
- Machine Operating Costs: If we keenly observe, in every company we may find the wastage of power because of excess capacities than the real utilization of the system.
- Manpower Planning: The typical example is that line manager puts some extra 10% in the manpower planning budget for absenteeism and next level manager adds further to be more safer and put additional 10% head count in the planning estimates.

Overall around 20% additional head count is hired as per the plan. In actual situation this manpower may become idle and organizations start thinking of lay off's

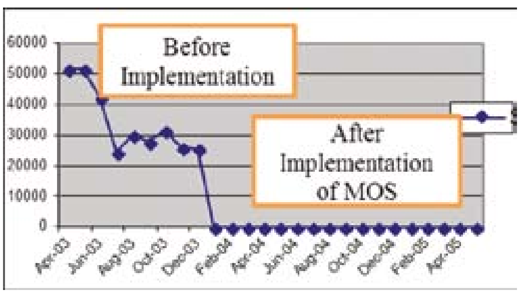
Generally, managers are habituated and feels very much comfortable to have more loads and accept the proposals and overlook the life cycle costs. The following is to overcome the syndrome of 'MOS-Margin of Safety.

Data

1) ABC Company Gas Demand Trend

Unutilized Gas Demand Charges	
a) Initial Contracted Demand of NG (Sm3)	155000
b) Peak Demand in the past 24 months (Sm3)	146716
c)Average Consumption per month (Sm3)	105910
d)Median Consumption (Sm3)	109009
e) Rectified Contract Demand (Sm3)- **Post implementation of MOS**	124000
Savings per annum (Rs)	**1615630**

2) XYZ Co Power Demand Charges Trend



3) Retrofitted old high capacity with advanced screw chillers with Variable Frequency Drive mechanism – Post MOS concept.

5C's Concept to combat MOS Syndrome

1. Critical Thinking: We need to critically review the basis of margin of safety loaded in the proposals and take right decisions. We also need to check the fixed operating costs involved in different capacity utilizations Also need to evaluate various financial models before taking appropriate decisions.

2. Creativity and Automation: Need to adopt the latest technologies available in the market which helps to provide the systems that can able to operate different levels of capacities with appropriate energy consumption instead of wasting of power. Ex: Automation and variable frequency systems and DCS automation systems.

3. Cloud Computing: Adopt the similar technology for different business requirements. Pay for what we use rather pay for full.

4. Co-operation: Inter department co-operation is required to adopt new technologies and we have to brainstorm innovative ideas that can reduce the underutilization.

5. Communication: Need to put a clause in the contracts such a way that minimum commitment charges do not become burdensome. Need to maintain constant communication with the stakeholders about the possibilities of changing contract demands and calibrating it as per actual utilization trends rather than paying huge unutilized charges for long time.

Though they are some pitfalls in Margin of safety thinking but it is not the sole factor for unutilized losses. It is one of the reasons for underutilization. In several times the MOS helps to withstand any sudden spurts in market demand. Here the object of the study to change the thinking on MOS. It's better to evaluate the proposals critically with the above mentioned 5 C's concept rather than suffering from side effects of MOS Syndrome. MA

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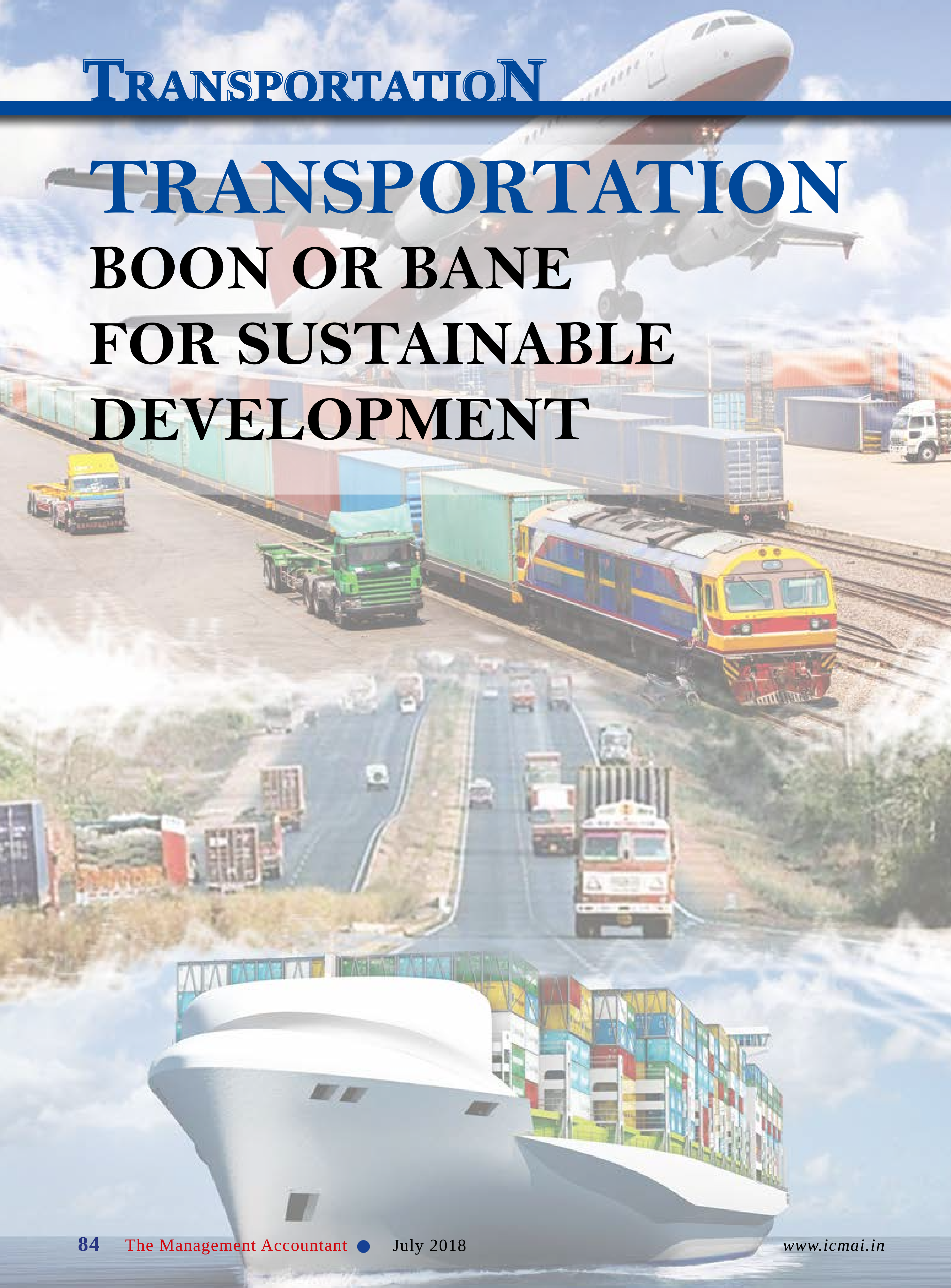
TRANSPORTATION
BOON OR BANE FOR SUSTAINABLE DEVELOPMENT



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Development is a dynamic, holisticand multidimensional concept whose significance varies across the time and space.Although not certified, "development" is implicitly intended as something positive or desirable. Connecting the same with the socio economic system, development generally means betterment or improvement either in the general situation of the system, or in any of the part of which system is composed. It is a phenomenon which traverses through various sciences and several disciplines.The concept of development dates back to 19th century and has been used in several fields including natural sciences, social sciences and physical sciences (Abercrombie, Hill& Turner, 1994; Cliché, 2005). However, in the field of social sciences, the concept of development emerged during the 1950's and 1960's following the end of World War II (Harris, 2000; Hettne, 2002). Accordingly the concept has been associated with many disciplines such as economic development (Schumpeter, 1911; Romer, 1986; Todaro, 2000), social development (seers, 1969), human development (UNDP, 1990, Sustainable development (Brundtland, 1987; Adams, 2006), Territorial development (FAO, 2005)and development as freedom (Sen, 1999).

Since the concept of development is associated with many fields and disciplines which necessitates us to provide the operational definition of concept to be used in this study. In field of social science it has been described differently by varioussocial scientists which make it imperative for us to go through these different views in order to draw the operational definition of the concept. Development is substitutedwith increased rate of economic growth measured in terms of national income which could be amplified through more investments (Rostow, 1960; Ghatak 2003&Sant' Ana, 2008). To some, the degree of industrialization is regarded as development (Lewis, 1954; Kuznets, 1966; Chenery, 1960). Seers, Myrdal, Streeten & Ul haq accepted the view point of Lewis and Kuznets but further adds that it is a broad based concept which also incorporates eradication of abject poverty, decrease in malnutrition and improvement in employment situation. Development is a process which maximizes the people's choices in terms of a long and healthy life, better education and access to resources needed for decent standard of living (Human Development Report [HDR], 1990).It is the capability to function that really matters for who is poor and non poor, logically economic growth can't be treated as an end in itself rather development has to be more concerned with enhancing the lives we lead and the freedoms we enjoy (Sen, 1999). Development is a multidimensional concept which not only signifiesthe monetary benefits but also results in poverty alleviation. As per MDG's, development composed of eight goals with 21 time bound targets. The target based concept of development focuses on eradication of extreme poverty and hunger, universal primary education for all, gender equality and women empowerment, reduction in child mortality rates, maternal health improvement, combating with life threatening diseases like HIV AIDS, malaria etc., care for sustainable environment and developing global partnership for development. Development is also defined as meeting the needs of present without compromising the ability of future generations to meet their own needs (Brundtland, 1987). In other words economic growth accompanied by social and intergenerational equity characterizes the process of development.

Thus to conclude the development debate, it is evident from the above different views that development is a perpetual and holistic phenomenon, dealing with multidimensional issues pertaining to economy, society and environment. There are different sectors of the economy which act as harbinger to the development and prosperity of the nation like real estate, construction, finance, transport, communication etc. whose share to the Gross Value Added (GVA)for the fiscal 2013-14 was 13.98, 8.29, 5.82, 4.98 and 1.69 percent respectively (Statistics Times). Transportation being one of thevitalsectors plays an important role in the economic development of the nation.

Transportation and economic development

Transportation, one of the aids to trade, is regarded as an engine of growth (Wegner, 1997). It contribution to the economic development can be seen both directly, through

There is no doubt in the fact that economic prosperity of a nation largely depends on its communication and connectivity. One of the important means of connectivity is transportation which is a double edged sword. On one side it makes possible for nations to ascend to the high altitudes of economic development through movement of passengers and merchandise while as on the otheraffects our society and environment by various ways like consumption of non renewable resources, emission, congestion, accidents etc. India being world's second populous country stands at third in global emission only after China and USA and this emission largely emanates from the transportation sector. Therefore, the study is primarily aimed at highlighting the tribulations of Indiantransportation sector in terms of its hazardous emission. This has been accomplished by going through various academic and non academic publications and an integrated view is presented. The findings exhibit that transportation sector is largely driven by road transportation which is characterized by motorization. Furthermore, road transportation is found to be dominated by private vehicles whose emission per capita is comparatively high. Finally various suggestions are put forth to contain and reduce the share of personal and motorized transport from the total pie which will shield the economy from the ripple effects of hazardous emissions and will ultimately pave way towards sustainable development.

investment in transport infrastructure thus resulting into addition to its physical capital, and indirectly by providing its services to other sectors to use their inputs efficiently. It acts as a catalyst to the economic growth of a nation. Transportation being fundamental to trade is generally used to carry passengers as well as merchandise from one place to another either through mechanized modes or non-mechanized ones. This sector being an important component of economy determines the location of industries and thus has a bearing on the country's employment level.It provides economic and social opportunities and benefits in terms of accessibility to markets, employment,freight movements and connectivity.Transport network is akin to the neural system of human body which makes movement of resources possible to the remotest area that too in the quickest possible time. Alder(2014), in an empirical analysis on transport infrastructure in India concluded that investment project launched by union Government in 2001 for connecting four mega economic hubs of the nation viz, Delhi, Mumbai, Chennai and Kolkata by Golden quadrilateral resulted an increase in aggregate GDP by 2.4 – 3.5 percent in 2009 than the counterfactual in addition to the construction cost of investment.For the achievement of broad range of social, economic and environmental objectives, a good transportation network is prerequisite (Gwilliam, 2008). Economic output of a nation is significantly determined by its transportation investment made in the past which also have spillover effects that goes on decreasing as we move away from the investment location (Ozbay, Ertekin, Berechman; 2007). Sylvie, (2000) conducted an empirical study to sort out the reasons of regional disparities in China and concluded that transport facilities are the key differentiating factor for explaining the regional disparities in twenty four provinces of china. While addressing the question that whether transport infrastructure investment promotes economic growth or not, Banister and Berechman, (2001) came out with findings which indicated positive relationship between the two andformer affecting the later through more employment generation and factor productivity.In totality it can be inferred that improved mobility is associated with development in the economy as has been argued by the researchers across the globe.

Indian Scenario

India has a privilege of having a large and diverse transport sector. Its transport network is one of the largest and densest in the world.The contribution of this sector to the country's GDP was about 5.5 percent in 2007 (The World Bank, 2013).Generally it is observed over worldwide that there exist primarily three modes of transportation viz, road, air and water. According to India Transport Report (2014), transport portfolio in India is dominated by road and rail network which accounted for 87 percent of freight traffic in the country in 2007-08. For the passenger traffic as well, rail and roads continue to be the dominant modes which provided mobility to 90 percent of the total passengers in 2011-12 leaving negligible share for air and water transport (ITR, 2014).Total contribution from transportation sector was found to be 4.98 percent to the total GVA for the fiscal 2013-14 of which road transportation accounted for 65 percent (Statistics Times). Road transport is vital for socio economic development and is being preferred for both passenger and freight mobility in India over other modes of transportation due to its easy accessibility, flexibility of operations, door to door service and reliability. India stands at 3rd rank in its road length, next only to China and the United States while in terms of density its roads are akin to United States and far denser than those in China or Brazil (The World Bank, 2014).According to Total Transport System Study on Traffic Flows and Modal Costs, conducted by RITES on behalf of the then Planning Commission, the modal share of the road transport in total freight traffic for the year 2007-08 was 50.12 percent and that of rail 36.06 percent leaving pea nuts for other modes, thus indicating the lions share occupancy of road transport. One of the causes behind the dominant share of road transportation in both freight and passenger conveyance can be a remarkable increase in the total number of registered motor vehicles in India during the period 2001-11 as depicted in table 1.

Table 1: Number of motor vehicles registered in India as on 31stMarch

Year	Two Wheeler	Light Motor Vehicles (passengers)	Jeeps	Cars	Taxis	Buses	Goods vehicles	Miscellaneous	Total No. of vehicles
2001	38556026	1777130	1126148	5297219	634357	633900	2948300	4017946	**54991026**
2002	41581058	1878261	1177245	5748036	688204	635006	2973740	4242787	**58924337**
2003	47519489	2113781	1180057	6594166	825416	720696	3491637	4562042	**67007284**
2004	51921973	2167324	1282113	7267174	901889	767593	3748484	4661385	**72717935**
2005	58799702	2337264	1307926	8072650	939738	678521	3877622	5488296	**81501719**
2006	64743126	2492726	1376744	9109855	1039845	762341	4274984	5818646	**89618267**
2007	69128762	2697449	1460364	10146468	1042347	1098422	5118880	6014568	**96707260**
2008	75336026	2903821	1547825	11200142	1201862	1156568	5600938	6405672	**105353854**
2009	82402105	3146619	1638975	12365806	1307805	1205793	6040924	6843006	**114951033**
2010	91597791	3615086	1760428	13749406	3615086	176642	6431926	7552876	**127745972**
2011	101864582	4016888	1974253	15467473	1789417	1238245	7064495	8045441	**141865607**

Source: Transport Research Wing, Ministry of Road Transport & Highways, Govt. of India

From the figures given in table 1, it has been analyzed that during 2001-2011 CAGR of total number of vehicles has been 9 percent approximately while as during the same decade CAGR of two vehicles has been 9.25 percent approximately slightly more than that of the total which can be root cause for many problems we face today like emission of green house gases and other toxic pollutants, congestion, accidents reduced travel speeds etc. Furthermore, the composition of two wheelers in the total number of vehicles registered in India as on 31st march 2011 was approximately 72 percent which may be either due to the absence of public transport facilities or personal satisfaction of the riders. The trend in transportation demand profile also depicts an increasing demand of personal transport (two wheelers, jeeps andcars) whose share as on 31st march 2011 was approximately 84 percent.

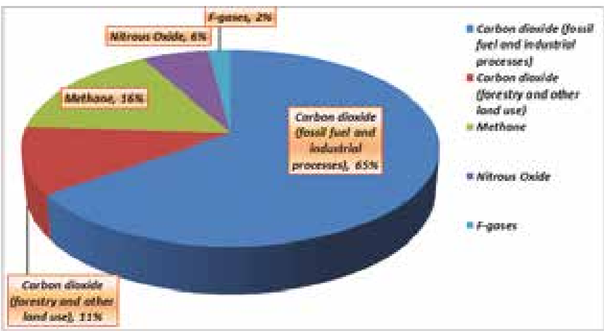
The story does not end here however; National Transport development Policy Committee (2013) has forecasted the growth estimates in passenger and freight mobility by road transport. As per these estimates road freight is expected to grow at about 9 percent per annum and the passenger traffic at about 17 percent over next 20 years. Taking cue from the burgeoning forecasted rates of freight and passenger traffic along with the existing lion's share of rail and road transportation in the total transportation it is predicted that on the one hand India will budge on its path of development swiftly but at the same its impact on environment and ecology will be unimaginable in terms of energy requirement and emission levels. As (Eberts, 2000) also puts it right that there is no doubt in the significance of relation between transportation and economic development but there is need for further comprehension between them for the strategists so that not only public expenditure in terms of transportation investment is justified but also other associated aspects like land use, air quality etc. are investigated.

Increased motorization is not all blessing in itself rather it has resulted in a number of associated problems like congestion, air pollution, energy consumption, reduced travel speeds, and accidents. Although all the problems need to be redressed but given the resource constraints this paper will mainly focus only on pollution aspect of transportation.

Transportation and air pollution

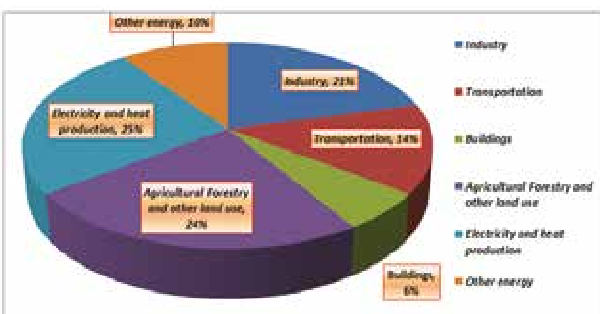
Climate change is defined as the long term change in earth's climate due to natural, mechanical and anthropogenic processes which result in emission of green house gases like CO2, methane, NO2 , HFC's, and other pollutants like particulate matter (PM)etc. According to a survey conducted by Intergovernmental Panel on climate Change (IPCC) on global emission from 2010 the key green house gases globally are carbon dioxide (CO2), methane (CH4), Nitrous Oxide (N2O) and Fluorinated gases (F-gases) like HFCs, PFCs and SFe as depicted in figure 1.

Figure 1:Share of different Green house gases globally in 2010



For further analysis and policy measures the total global emission has been decomposed into different contributing sectors which are portrayed in figure 2.

Figure 2:Sector wise emission of Green house gases globally in 2010



Transportation sector being vital for socioeconomic development is the fastest growing major contributor to global climate change (Rao et al., 2010). As evident from figure 2 it accounted for 14 percent of global green house gas emissions slightly different from another study which showed its emission contribution pegged at 13 percent. Furthermore the study also unfolds that globally transportation sector driven by fossil fuel consumption emits 23 percent of total carbon dioxide (CO2) emission and surprisingly road transportation is held accountable for 75 percent of the total emission from the overall transportation sector (Rao et al., 2010). The same is true with the Indian transportation sector also. Comparing the sector wise contribution to air pollution in India, transportation sector is the primary and most connected one (Guttikunda, Goel & Pant; 2014). With reference to energy related CO2 emission in India, transport sector contributed14 percent in 2007 (MoEF, 2010) and in future the pie of CO2e emission from transportation is anticipated to be escalating (Shukla et al., 2015; Dhar & Shukla, 2015). In 2011 United States Environmental Protection Agency (UNEPA) conducted a study on global green house gas emissions and ranked India fourth top emitter of CO2 only after China, USA and EU. A study was conducted in the recent past by Yale and Columbia University to gauge the environmental performance of the 132 countries and the survey ranked India at 126th position indicating its less concern for the fragile environment. Another study was conducted in six Indian cities by Central Pollution Control Board which made transport sector responsible for more than 30 percent of the ambient air quality in these cities. It is estimated that the transport sector in India will emit approximately 15 percent of total CO2 emissions and of 57 percent of total emission in the country will emanate from combustion and burning of oil. It is also reiterated that among all the oil consuming sectors, CO2 emissions from transport are increasing at the fastest rate, at more than 6 percent per annum (CSE, India; 2015). The carbon dioxide (CO2) concentration in the atmosphere, one of the main greenhouse gas (GHG) emissions, has drastically increased from 280 ppm at the start of the industrial revolution in the year 1800 to 380 ppm in 2011. The threshold level of CO2 emission is predicted to be 550 ppm; if it exceeds this level, it may lead to severe problems such as melting of the polar ice caps, a sea level rise of up to 1 m by the year 2100, an increased frequency of extreme climate events, permanent flooding of coastal cities, disruption of the ecosystem and extinction of species (IPCC). The transport sector is increasingly becoming a major contributor to deteriorating air quality in cities (Guttikunda & Jawahar, 2012). The global burden of disease study estimated 695,000 premature deaths in 2010 due to continued exposure to outdoor particulate matter and ozone pollution for India (Guttikunda, Goel & Pant; 2014). According to a global study conducted by WHO in 2014 India was found home to the large number of cities registering high levels of air pollution. Study also reveals that on the basis of PM 2.5 levels the four most polluted cities were found in India, and among the top 100 polluted cities 33 were also found to be Indian.High levels of PM2.5 and NOx lead to increasing morbidity (Guttikunda and Jawahar, 2012). Over time, there is an observable trend shift as levels of PM10 and NOx are increasing in a number of cities (Shukla, Garg, & Dholakia, 2015). In an assessment by the Central Pollution Control Board of 164 cities, over 75 per cent were found to have high or critical levels of PM10 (CPCB, 2014), while more than half of the 164 cities had moderate to critical levels of NOx. Emission form road transportation has positioned India globally as one of the biggest emitters of atmospheric pollutants (Baidya & Kleefeld, 2009).

Cost - benefit analysis

Service sector performs an important role in invigorating the prosperity of the nation. Among all the developed and developing nations more than half of the economic output is derived from this sector alone. Transportation, one of the principal service industriesabridges the disparity between developed and underdeveloped nations by promoting economic development.Being an antecedent to prosperity of the nation it becomes imperative to gauge the Indian transportation on the cost benefits scale so that endeavor will be made to minimize its costs and maximize the benefits derived from it. Transportation benefits economy directly as well as indirectly. By investing in the transportation infrastructure i.e., vehicles, roads, machines, equipments etc. employment is generated and livelihood to the lakhs of people associated with this industry is guaranteed. Although not verified the benefits accruing from the direct channel may be large but in comparison to its indirect benefits they stand low. By indirect benefits we mean to say the benefits of transportation as a service industry when used to conveyinputs to the large number of industrial establishments which are the forerunnersof the economic development along with their output delivery to the markets also. Its indirect benefits can be alsovisualized in terms of providing mobility to the employees to their work places, thus supporting the functioning of other industries. It nurtures the social fiber of the country by providing platform for social interaction through bringing people of two distant places closer to each other thus resulting to social dividends also. All this doesn't come free of cost. Rather its benefits get override largely by its costs. Like benefits, costs can also be segregated into two categories viz, source and effects. Source costs can be elucidated in terms of consumption of different nonrenewable energy resources which are shrinking by every day passing. Inefficient energy consumption erodes the value of its benefits to a large extent. Impact costs associated with the transportation has caught the attention of all the countries worldwide baring few due to their serious payoffs. Green house gases and obnoxious pollutant emission, congestion, reduced travel speed, accidents etc can be grouped among the impact costs.

Conclusion and recommendations

Development being perpetual process, its pace can be accelerated as well as dwindled by the transportation. In nutshell it can be summarized that growing motorized transport is surmounting a huge threat to the climate change through high level emission of various green house gases which needs to be arrested immediately and effectively. To this end following recommendations are put forth here as under:

1. Awareness programmes on televisions and radios need to be broadcasted so that general public is made aware about the externalities of using personaltransport.

2. Public expenditure in transport infrastructure needs to be expedited so that private vehicle owners are provided with the choice of using public transport.

3. Business houses should be incentivizedto explore and carry the business of energy efficient and environment friendly transportation vehiclesthrough inclusion of such business in specified business u/s 35AD of the Income Tax Act, 1961.

4. While considering the application for private vehicle loan, banks should, in addition to their routine procedure,ensure that the applicant is not already in possession of any vehicle.

5. Limited number of personal vehicles should be granted registrations each year to curb the high growth rate of personal transport.

6. Public parking rates should be made costly to discourage the use of private transport.

7. Private transportation should be banned in all institutions; Universities and departments rather respective organizations should provide public transport facilities for its people through the assistance of banks.

8. Separate corridors need to be built and designated for non motorized transporters like bicycle riders and pedestriansto lessen congestion faced by motorized vehicles.

9. Disallow private transport completely on Sundays.

10. Macadamize the roads properly and put up speed limits for different places in order to avoid congestion.

11. Make the use of ICT to pool the data of private transport passengers to utilize the capacity of private vehicles.

12. Congestion pricing can be used during the peak hours for using public roads by private vehicle users which will ultimately force them to travel by public transport at least during such rush hours.This requires a highly built public transportation network and the parking lots near the places where the public transport can be accessed.

13. The share of road transportation should be reduced from the total transportation portfolio by making use of existing Inland water transport at least for freight mobility. To this end, water transport infrastructure investment in terms of developing additional national water ways for navigation, ports, boats, etc needs to be made on large scale. MA

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DETERMINANTS OF NON-PERFORMING ASSETS IN INDIAN BANKING SECTOR

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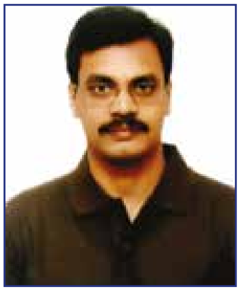

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The Indian banking sector comprises of one of the largest conglomerates in terms of banking network. The sector spans with a total over 6,300 commercial bank branches in the country as of March, 2017. The Indian financial system has predominantly been bank dominated. Households as well as corporates have largely been dependent on the banking sector as a medium of raising credit to meet various consumption and investment needs. The outstanding loans and advances in the banking sector during 2017-18 stood at 81,162 billion rupees and the credit to deposit ratio was around 75%.

With this huge dominance as well as dependence on the banking sector comes significant risks. The most predominant risk associated with lending being credit risk. Since 2013, the central bank of India has initiated several measures to curb the perilof credit risk and credit risk eventually becoming non-performing assets (NPAs). The steps primarily revolved around reviewing and improving the asset quality which included measures such as corporate debt restructuring (CDR), formation of joint lenders forum (JLF), flexible structuring for long term projects or (5/25), strategic debt restructuring, sustainable structuring of stressed assets or (S4A), and the most recent action being referring delinquent corporate loan accounts to the National Company Law Tribunal (NCLT).

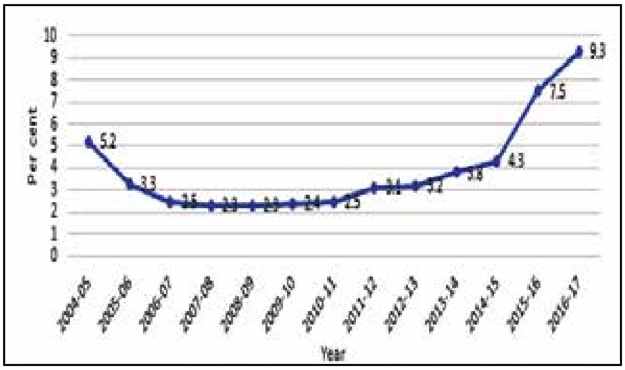
The present paper attempts to identify the bank specific and macro specific factors that impact the rise or decline in NPAs within the Indian banking system and to suggest the possible steps to control the rapid rise in defaulting of loans.

Trend Analysis of NPAs (2004-17)

There area number of studies undertaken to understand the trends in NPAs in the banking system in various countries including India. Joseph and Prakash (2014), have analysed the trend in NPAs across public and private sector banks in India and concluded that NPAs act as an indicator of the financial health of the banking industry and can have a direct impact on the profitability of the bank. Malepati and Gowri (2005) undertook the study of NPAs across priority sector and non-priority sector in public and private sector banks in India. The findings reveal that priority sector lending in private sector banks was lower as compared to public sector and as a result the NPA position was rather better in private when compared to public sector banks. Sharma(2005) was of the view that NPAs not only affect the performance of banks but also cause irreparable harm to the economy. Therefore, suggested that there should be an efficient legal framework, improvement in credit appraisal and a strong political will to control the rise in NPAs.

The following figure no. 1 depicts the trend in Gross NPAs as a % of Gross Advances in India during the period 2004-17.

Figure No. 1
Gross NPA as a % of Gross Advances 2004-17

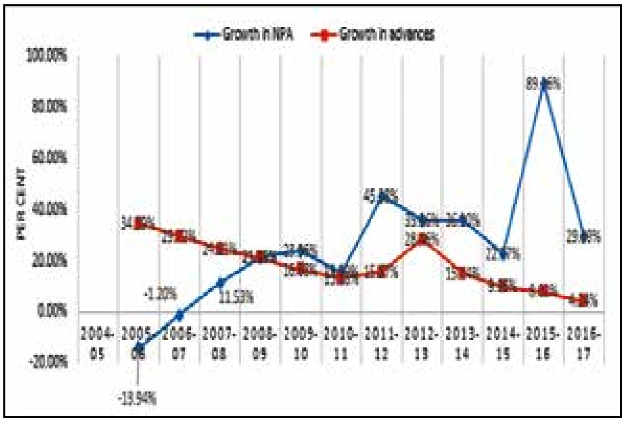


Source: Reserve Bank of India

The gross NPAs as a percentage of gross advances was

5.2% in 2004-05 and from2005 to 2013 hovered around 2.5% to 3%. Yet, post 2013 banks have witnessed an unprecedented rise in NPAs as a % to gross advance from 3.8% to 9.3% in 2016-17. This can be attributed to the significant changes with respect to asset quality review and the enforcing of correct classification of NPAs.

Figure No. 2
(%) Growth Rate of Gross NPA and Gross Advances (2004-17)



Source: Reserve Bank of India

From figure no. 2 it can be seen that the growth rate of NPAs have increased substantially from around 11% in 2007 to around 30% by 2017 while compared to the declining growth rate of advances from around 24% in 2007 to around 4% in 2017. The trend line reveals that with the rise in NPAs there is a reduced level of credit growth in the banking sector.

Literature Review

Determinants of NPAs – Country Specific

Gezu (2014), examined the determinants of nonperforming loans (NPLs) of commercial banks in Ethiopia based on panel data analysis for the time period 2002 to 2013. Fixed Effect Model was used to analyse the data. NPLs showed a downward sloping trend in commercial banks in Ethiopia during the study period. The results of fixed effect regression model revealed that return on equity (ROE), return on assets (ROA), capital adequacy ratio (CAR), lending rate, and effective tax rate had statistically significant effect on the level of NPLs but loan to deposit ratio and inflation rate had an insignificant effect on the level of NPLs of commercial banks in Ethiopia for the period under consideration.

Ghosh (2015), conducted a study to understand the impact of state-level banking industry factors and region level factors on NPLs within banking and saving institutions across 50 US states and DC. The researcher made use of fixed effects and dynamic-GMM (generalised methods of moments) estimations and found that within the bank specific factors greater capitalization, liquidity risks, poor credit quality, greater cost inefficiency and banking industry size significantly increase NPLs, while greater bank profitability lowers NPLs. While within the region level factors higher state real gross domestic per capita (GDP), real personal income growth rates, and changes in state housing price index reduce NPLs, while inflation, state unemployment rates, and US public debt significantly increase NPLs.

Messai and Jouini (2013), tried to analyse the determinants of non-performing loans for a sampleof 85 banks in three countries (Italy, Greece and Spain) for the period of 2004-2008. All the three countries faced macro-economic financial problems in 2008 as a result of the subprime crisis. The variables used as determinants were divided into macroeconomic andbank specific variables. The macroeconomic variables used were the rate of growth of GDP, unemployment rate and real interest rate and with respect to bank specific variables the study used the return on assets, the change in loans and the loan loss reserves to total loans ratio (LLR/TL). By means of the application of panel data method, the results showed that the problem loans vary negatively with the growth rate of GDP, the profitability of banks' assets and positively with the unemployment rate, the loan loss reserves to total loans and the real interest rate.

Khemraj and Pasha (2009), carried out a study to understand the sensitivities of non-performing loans to macroeconomic and bank specific factors in Guyana.The variables employed as macro-economic factors were annual growth in real GDP, real interest rate, annual inflation rate, real effective exchange rate while bank specific variables used were bank size, annual growth in loans, and ratio of loans to total assets. The tool used to analyse the variables was panel dataset and a fixed effect model. The results revealed that GDP is inversely related to NPL, however appreciation in the local currency, higher interest rates and excessive lending is directly related to NPLs. The findings of the paper were used to develop a framework for measuring and assessing credit risk.

Fofack (2005) tried to explore the causes for non-performing loans in Sub-Saharan Africa for the period

The banking sector in India has been reeling under the pressure of mounting non-performing assets (NPA) over the past 8 years. This can be seen in the growth rate of NPAs as a ratio to total advances which was 3.22% in March, 2013 now stands at 24% as of March, 2018. The study of NPAs has been extensively conducted by several researchers across various countries in the world by analysing the impact of bank specific and macro-economic factors on NPAs. The current paper endeavours to analyse the determinants of NPAs in the context of the Indian banking sector. The period of study is from 2004-05 to 2016-17. Fixed effect panel data regression was employed to gain insights about the relationship between bank-specific and macro-specific factors and NPAs.The results of the study reveal that NPAs tend to increase with return on banks' assets. There is also a positive relation between provisions for bad and doubtful loans to total advances and NPAs. Meanwhile, banks with high level of total loans & advances and lending rate are associated with a reduced level of non-performing assets. On macro front, NPAs vary negatively with the annual average inflation rateand gross domestic product and positively with the tax rate.

1993-2002. A total of 16 countries were examined which were further divided into 7 CFA (Communauté financière d'Afrique)/ ("Financial Community of Africa")and 9 non CFA countries. The motivation for the study was due to the fact that NPLs were believed to have fuelled the banking crisis which affected many banks and financial institutions in the sub-Saharan African countries. The data was examined using correlation and causality analysis across various macroeconomic variable such as Per Capita GDP, inflation, interest rates, changes in real exchange, interest rate spread and broad money supply. The micro economic variables consisted of ROA, ROE, net interest margin (NIM), Net income and interbank loans. The results reveal a negative association between real GDP per capita and NPL expressed as a % of loans loss provisions. The variables that are significant are real exchange rate, interest rates and growth rate of GDP per capita, while inflation does not appear to be particularly significant in explaining the dynamics on non-performing loans.

Lokare (2014), has tried to understand the relationship and cause behind the rise in commercial banks NPLs in India by means of an empirical analysis using a panel regression model. The major finding was that terms of credit variables, changes in cost of credit in terms of expectations of higher interest rate induce rise in NPAs. However, the horizon of maturity of credit, better credit culture, and favourable macro-economic and business conditions can help in lowering NPAs.

Boudriga, Taktak, and Jellouli (2010), examined the relationship between bank-specific, business-environment, and institutional environment variables and NPAs in MENA countries for the period 2002-2006. The pooled panel regression approach was used to analyse the data. The results reveal that credit growth rate and ROA are negatively related to NPAs. While lagged loan provisions and CAR are positively and significantly related to problem loans. With respect to business environment factors, growth in GDP is negatively and significantly related to NPAs. The paper stresses on the importance of institutional environment in arresting banks' ballooning bad loans.

Ekanayake and Azreez (2015), studied the determinants of NPLs in the commercial banks of Sri Lanka for the period 1999-2012. The findings of the paper reveal positive and significant relation between loans to assets ratio and NPL, while negative relation between ROA, loan growth and size with NPA. With respect to macro-economic variables, GDP and inflation reveals negative impact while unemployment rate shows positive impact on NPL.

Objectives of the Study

1. To understand the impact of macro-economic factors on NPAs in Indian Banks

2. To understand the impact of bank specific factors on NPAs in Indian Banks

3. To suggest suitable steps in order to control the rise in NPAs in Indian Banks

Scope of the Study

The study is conducted across a total of 39 banks, comprising of 20 public sector and 19 private sector. The period of study is during 2004-05 to 2016-17.

Methodology

Data and Sources

In this study, we examine how bank-specific factors and macro-specific factors impact the NPAs in India across a group of 39 banks, which include 20 public sector and 19 private sector banks for the period 2004-05 to 2016-17. The database for the study is from secondary sources. The data used in this study is taken from three main sources:

a) Bank-specific variables data are obtained from CMIE ProwessIQ database and Reserve Bank of India (RBI). The bank specific variable include, total loans and advances, total lending, provisions for bad and doubtful loans, return on assets, capital adequacy ratioand lending rate. The data related to total loans & advances, total lending, provisions for bad and doubtful loans &advances, were collected from ProwessIQ. While data on return onasset, capital adequacy ratio, lending rate are drawn from RBI database.
b) The study considered three macro-specific factors as variables that have an impact on NPAs. They are gross domestic product (GDP), inflation rate, and tax rate. The data on GDP is collected from RBI database.
c) While data on tax rate and inflation rate are taken from Trading Economics, Labour Bureau.

Based on the set of literature review conducted, the above mentioned bank-specific and macro-specific factors were selected and fixed effect panel regression model was employed to analyze the impact of bank-specific and macro-specific factors on NPAs in the Indian banking sector.

Descriptive Statistics

The table no. 1 shows the descriptive statistics of the selected variables used in the study. The mean of NPA to total loans and advances is 0.039, which means banks could not collect 3.9% of every loan given. The lowest value of NPA to total loans is 0.001 and the highest is 0.249. Similarly, the table describes the mean, minimum and the maximum value for all bank-specific and macro-specific variables taken in the study.

Table No. 1
Descriptive Statistics of Bank and Macro Specific Variables

Variables	Observation	Mean	Standard Deviation	Minimum	Maximum
NPA to Total Loans & Advances Ratio	505	.039	.034	.001	.249
ROA	470	-.202	.735	-4.605	.757
Provisions to Total Loans & Advances Ratio	498	.011	.009	.000	.055
CAR	507	2.57	.198	2.02	4.03
Total Loans & Advances	507	12.87	1.55	8.19	16.57
Lending Rate	507	2.42	.230	2.07	2.88
GDP	507	7.662	1.342	5.4	9.6
Inflation rate	507	1.917	.441	.912	2.48
Tax rate	507	3.528	.0289	3.48	3.59

Source: Authors computations

Model

The present paper has used bank specific variables and macro specific variables to analyse the impact on NPAs in the Indian banking system by analysing a total of 39 banks. Based on the literature examined the bank-specificvariables used are ROA (Ghosh, 2015; Messai, 2013), loans and advances (Khemraj, 2009; Messai, 2013) provisions (Boudriga 2010), capital adequacy ratio and lending rate (Gezu 2014; Sari 2015). The macro factors GDP(Ghosh 2015, Fofack 2005; Lokare 2014; Ekanayahe 2015), inflation rate (Khemraj 2009; Fofack 2005; Messai 2013)and tax rate(Gezu 2014) are used as control variables.

The model used is given below:

$$NPLit= \beta 0 + \beta 1(Provisions)_{it} + \beta 2(CAR)_{it} + \beta 3(ROA)_{it} + \beta 4(TLA)_{it} + \beta 5(INF)_{it} + \beta 6(GDP)_{it} + \beta 7(TR)_{it} + \beta 8(LR)_{it} + \varepsilon_{it}$$

Where:

NPL= ratio of nonperforming assets to total loan & advances of bank 'i' in year t

Provisions= lag of ratio of provisions for bad& doubtful assets to total loans & advances of bank 'i' in year t

CAR= Log of capital adequacy ratio of bank 'i' in year t

ROA= Log of return on asset of bank 'i' in year t

TLA= Log of total loans & advances of bank 'i' in year t

INF= Log of inflation rate of bank 'i' in year t

GDP= Gross Domestic Product of bank 'i' in year t

TR = Log of tax rate of bank 'i' in year t

LR= Log of lending rate of bank 'i' in year t

β_0 =intercept

Hypothesis have been developed with regard to all the above mentioned variables and the expected relationship between dependent and independent variables are presented in the table below:

Table No. 2
Expected Signs of Bank and Macro Specific Variables

Variable	Description	Expected Sign
NPL	ratio of nonperforming assets to total loan & advances	
Provisions	lag of ratio of provisions for bad & doubtful assets to total loans & advances	(+)
CAR	Log of capital adequacy ratio	(+)
ROA	Log of return on asset	(-)
TLA	Log of total loans & advances	(-)
INF	Log of inflation rate	(-)
GDP	Gross Domestic Product	(-)
TR	Log of tax rate	(+)
LR	Log of lending rate	(-)

Source: Authors computations

Provisions and CAR are employed as indicators that serve as a cushion against risk that banks maintain to meet their future contingencies and are expected to have a positive relation with NPA (Boudriga 2010). The ROA represents efficient utilisation of assets and poor utilisation of banks' assets results in higher NPA (Messai 2009; Boudriga 2010). Lending rate is the cost of borrowed funds which has a direct bearing on NPAs which leads to a negative impact on NPAs (Gezu 2014). The macro factors such as GDP, tax rate, and inflation rate (Ghosh 2015; Messai 2009; Fofack 2005; Lokare 2014; Boudriga 2010) have been consistently used as macroeconomic indicators in several countries to understand its impact on NPAs

Result and Findings

The fixed effect regression model has been used to examine the determinants of NPAs with respect to 39 banks, comprising of 20 public sector and 19 private sector for the period 2004-05 to 2016-17.The table below presents the results of fixed effect regression model used to examine the determinants of NPA, by using NPA as a dependent variable and eight independent variables. The regression results are as follows:

Table No. 3
Results of Fixed Effect Regression Model

Explanatory Variables	Coefficient	Robust Standard Error	t-statistics	Probability
Bank Specific-Factors				
ROA	-.0170	.0031	-5.43*	0.000
Provisions to Total Loans & Advances ratio	.4705	.1577	2.98*	0.005
CAR	.0177	.0091	1.95**	0.059
Total loans and advances	-.0118	.0024	-4.93*	0.000

Explanatory Variables	Coefficient	Robust Standard Error	t-statistics	Probability
Lending Rate	-.0225	.0071	-3.17*	0.003
Macro-Specific Factors				
GDP	-.0007	.0007	-0.99	0.327
Tax Rate	.1028	.0463	2.22*	0.033
Inflation rate	-.0105	.0039	-2.64*	0.012
Constant	-.1510	.1631	-0.93	0.360
R^2: within = 0.5950 Between = 0.0045 Overall = 0.2309 Number of Obs 461 Number of Groups 39 Rho .6865 Prob>F 0.0000				

Source: Authors computations

Note: *significant at 5%, **significant at 10%

The results of the model developed to examine the determinants of NPA in this study is as follows:

NPA = -.1510 -.0170ROA +.4705Provisions +.0177CAR -.0118TLA -.0225LR -.0007GDP +.1028TR-.0105IR+ e

As shown in table no. 3, both bank-specific and macro-specific factors are examined to determine their impact on NPA. The regression results intable no. 3 reveals the significance of the factors studied in explaining the dynamics of NPAs. The R- square within regression is .5950, which shows that 59.50% variation in the dependent variable i.e., NPA is explained by the independent variables taken.

Bank-Specific Factors

At bank-specific level, all the variables considered have significant impact on NPA, as indicated by their p-value being less than 0.05, which signifies that the variables have an explanatory power over NPA. Return on asset (ROA), lending rate and total loans & advances shows a negative relationship with NPA as expected.This finding is similar to the findings of Sari, Priyarsono and Anggraeni, 2015; Ekanayake and Azreez, 2015.

While provisions for bad & doubtful assets shows positive and significant impact, similar to the findings of Boudriga, Taktak and Jellouli, 2010; Ekanayake and Azreez, 2015(positive but insignificant); but contrary to the expected sign and findings ofMessai and Jouini (2013).The coefficient estimates of capital adequacy ratio is positive and significant at 10% level.

Macro-Specific Factors

With respect to the macro-economic factors that are examined namely, gross domestic product, inflation rate and tax rate. GDP has negative and insignificant impact on NPA which is similar to the findings Sari, Priyarsono and Anggraeni, 2015; Boudriga, Taktak and Jellouli, 2010(negative and insignificant) yet contrary to the findings of Ekanayake and Azreez, 2015(negative and significant). While tax rate has positive and significant effect on NPA. Inflation rate shows a negative and significant impact on NPA.

Thus, contrary to the researcher`s expectation, GDP from macroeconomic factors did not show any significant impact on the level of NPAs of public & private sector banks in India.

Limitations of the study

While the study considered micro and macro variables which were quantitative in nature there are certain other critical factors that can have an impact on NPAs such as credit quality, managerial effectiveness, governance of board members, bank size, changes in economic policies related to industries that have a large share in bank advances are few which this study has not be able to capture in its analysis. Thus, there can be a study to analyse the impact of qualitative as well as quantitative factors on NPAs in Indian banking sector.

Conclusions

The purpose of this paper is to study the impact of bank-specific and macro-specific variables on NPAs in India over the period 2004-05 to 2016-17. Recent years have witnessed sharp increase in bad loans of the public as well as private sectors banks. The problem of surging bad loans creates a vicious cycle, and hence understanding the factors impacting the non-performing assets becomes important. The results of this study indicate that among bank-specific factors, provision for bad and doubtful assets acts as a cushion against expected losses in future. Thus, higher loss loan provisions are associated with higher NPAs. Due to high provisioning the bank sustains alower return on assets and thereby bears higher bad loans.

With respect to macro-specific factors,the findings reveal that high gross domestic product translate in lower bad loans, as expected but does not have significant bearing on NPAs.Nevertheless, in case of tax rate, the results confirm that high tax rate is associated with high NPA.

Some of the possible steps that can be taken to control the rise in NPAs is to strengthen the credit quality review system, effective credit monitoring and supervision, structural reforms in management standards, good andstrong governance, and tracking and proper reporting of stressed assets can help reduce the problem to a large extent.

Further study is required to better understand the factors influencing non-performing assets.

For instance, qualitative factors such as banks' governance mechanism and cultural factors that substantially influence the fabric of the banking system especially in the case ofloans and advances. A sector wise analysis of non-priority lending and its impact on NPAs can be another interesting area to identify further causes that contribute to bad loans. MA

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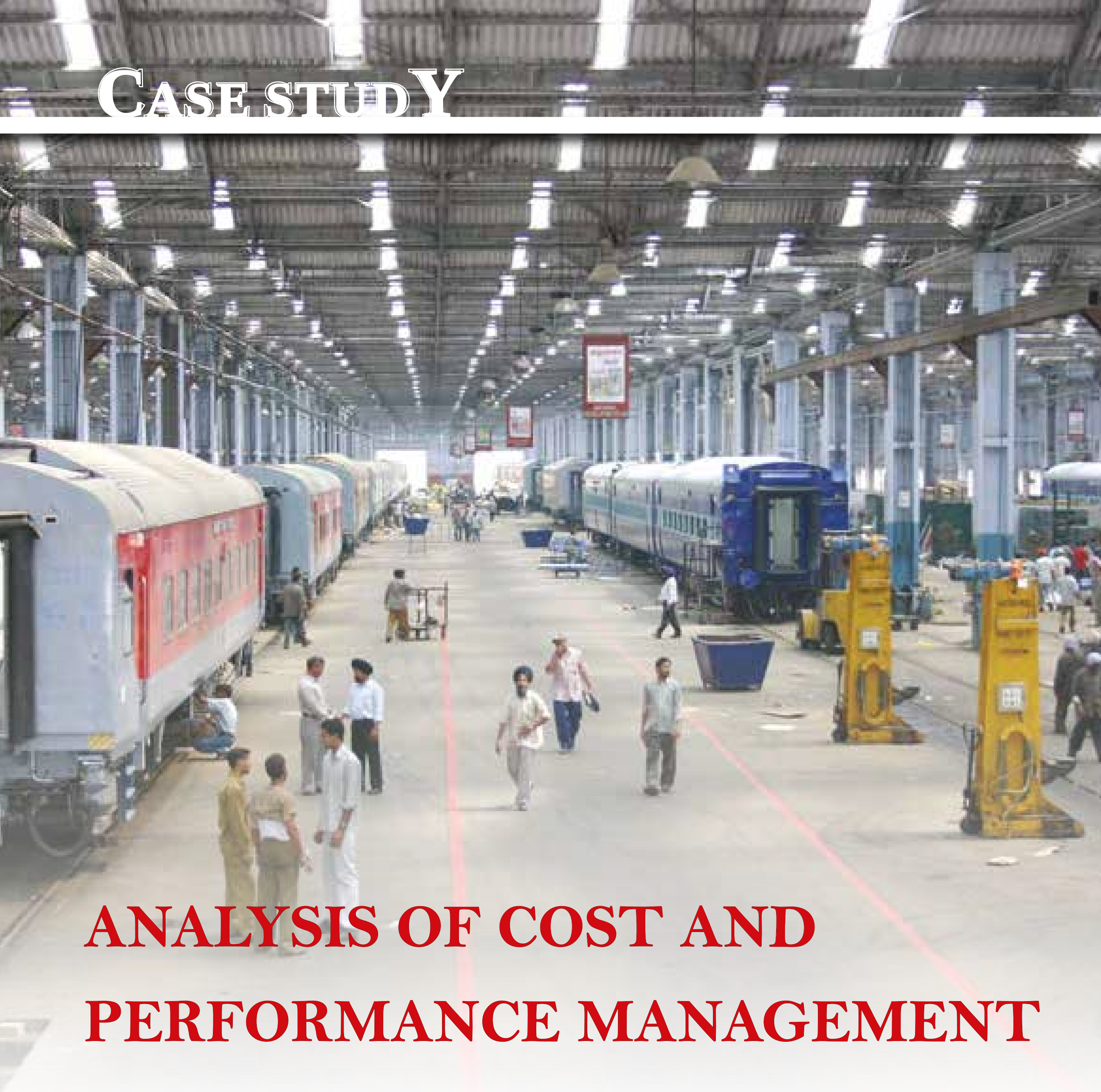

ANALYSIS OF COST AND PERFORMANCE MANAGEMENT OF A CENTRAL HEAVY ENTERPRISE PSU



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1. Introduction of The CPSU

Braithwaite was established in 1913 as the Indian Subsidiary of Braithwaite & Co. Engineers Limited (U.K.), for undertaking fabrication of Structural Steel Works. The Clive works in Calcutta commenced manufacture of wagons for Indian Railways from 1934.

In the meanwhile the Company was incorporated in erstwhile Bengal as Braithwaite & Co (India) Ltd on February 28, 1930. In the year 1960 Braithwaite's Angus Works located at Bhadreswar, Dist. Hooghly was setup for manufacture of Cranes, Foundry products, Machinery Components etc. The Project Division at Calcutta was established in 1978 to execute turnkey projects for material handling plants. In 1987 Victoria Works was taken over, which is equipped with all facilities for manufacture of Pressure Vessels, Railway Wagons and Heavy Structurals for Bridges and other engineering applications.

Braithwaite & Co Limited (BCL) was registered and incorporated on 1st December 1976 as a fully owned Govt. of India Undertaking. The company today has three units - Clive Works, Victoria Works both in Calcutta and Angus Works (in Hooghly District), West Bengal. With effect from 6th August, 2010 the administrative control of the company has been taken over by the Ministry of Railways.

2. BUSINESS SCENARIO

The main wagon requirements of the country always come from the Indian Railways. Till 1980s Railways used to place entire wagon order to wagon builders. At that time, number of wagon builders were few, namely, Braithwaite & Company Limited, Burn Standard Company Limited, Bharat Wagon Engineering Company, Jessop, Texmaco, Cimmco etc. After liberalisation of the economy and opening of markets in 1990s Indian Railways started adoption of wagon procurement through tenders. As such, with passage of time, numbers of wagon builders have increased causing steep competition. As a result, both prices of wagon and delivery time fell sharply. Particularly, PSU manufacturers faced severe difficulties. All of them became sick immediately after liberalization and were referred to Board for Board for Industrial & Financial Reconstruction (BIFR).

3. Causes of Business Decline

As per available record, till date no study has been made on how and why these PSU wagon builders faced difficulties due to liberalization and fallen sick. However, only Braithwaite & Company Limited, though became sick, came out of sickness and turnaround. In this study this company has been selected as a case study and its sickness and turnaround strategies have been critically analysed. The study is relevant because the requirement of rolling stock, i.e., wagon for Indian Railways is ever increasing. As such, the main revenue of Indian Railways comes on account of freight business. Wagon loading per day of Indian Railway has increased from 41633 in 2010-11 to 48259 in 2014-15 denoting an improvement of 15.92%. This has enabled the substantial increase in Freight Earnings.

Other than Indian Railways, many industrial units, like, NTPC, SAIL, BHEL, NALCO etc. also buy wagons for their plant requirement. Apart from that, there is ever lasting demand of wagons from international market, particularly from African counties. Hence, sustaining in this sector by the wagon manufacturing PSU companies is the need of the hour.

The operational and financial performance of BCL was not very encouraging over the years. Owing to continuous losses over the years, the company was referred to BIFR in 1992 and was declared sick. Major reasons of sickness were

This is a classic example of a PSU going into the bleak of sickness, gradually limping back to break even & turning around into a profitable venture. The commitment of the management, cooperation from its employees & an impetus from the Government made it possible to bounce back into business. The factors which contributed to the revival of the company are primarily technological advancement, employee management, Improvising on market conditions, diversification, financial restructuring & better marketing strategies. The study of the roller coaster ride of the company is more relevant in today's time when Govt. is giving a boost to local industry under the flagship of Make in India concept & ease of doing business

strategic issues, organizational issues, operational issues, marketing issues, technology issues. BCL remained sick upto 2004-05 mainly due to outdated technology, dependence on single customer, un-remunerative price, and depletion of skilled manpower, lack of motivation among employees, delay in order execution and lack of vendor's confidence. BCL management revived the company and turned it around with their strategies and policies like augmentation of infrastructural facilities, thrust in increasing productivity, thrust on marketing and diversification, human resource planning, technology tie-up, financial management. As recognition of turnaround BCL was awarded Turnaround CPSE Award by BRPSE in 2010 by GOI.

4. Period of Study

The period of study was from 1991-92 to2013-14 (23years). The entire period of study was divided into three periods for the purpose of comparison which were:

Falling sick and refer to BIFR: 1991-92 to 2004-05 (loss period) – Period of 14 years

Turnaround period: 2005-06 to 2009-10 (Marginal net profit period) – Period of 5 years

Post Turnaround Period: 2010-11 to 2013-14 (Good net profit period) – Period of 4 years

5. Revival of BCL

5.1 BIFR scheme and its outcome

BIFR approved a revival scheme on 17.10.1995 and Government of India approved its implementation on 01.07.1996.

BCL exhibited initial turnaround after implementing the Revival Scheme and earned profit in 1996-97, 1997-98 and 1998-99. But performance of BCL again deteriorated and the company incurred loss in 1999-00, 2001-02 and 2002-03.

5.2 Outcome of first revival of BCL

The sanctioned revival package was declared failed in 2003. The reason of such failure was attributed to:

a) Inadequate working capital

b) Delay in implementation of capital projects

c) Higher internal charges coupled with execution of railway orders at un-remunerative prices.

5.3 Second Revival of BCL

Union Cabinet approved the financial restructuring of BCL in January 2006 and the following financial relief/ concession/assistance had been granted.

a) Rs.4 Cr in the form of equity.

b) The interest amount to Rs.43.61 Cr of Govt. of India loan till 31.03.05 was waived. Further no interest to be levied beyond the cut off date 31.03.15 till date of approval.

c) Govt. of India loan as on 31.03.05 amounting to Rs.69.30 Cr was converted into equity

d) Reduction in equity capital to the extent of Rs.167.30 Cr by way of adjustment of accumulated losses.

5.4 Performance improvement of BCL after second revival/ turnaround

Consequent to approval of BRPSE recommendations for financial restructuring by Govt. of India, BCL was discharged from the purview of BIFR in 2006.BCL therefore, ceased to be Sick Industrial Company and is on the path of turnaround since then.

Table 1
Turnover vis a vis net profit

Year	Turnover(Rs. in lacs)	Net Profit(Rs.In lacs)
2006-07	5471	56
2007-08	5120	55
2008-09	6788	150
2009-10	12761	175
2010-11	16971	618
2011-12	26123	689
2012-13	29424	715
2013-14	36711	1042

5.5 Major benefits after financial strategy of BCL

- Net worth become positive.
- Improved net worth has helped to submit pre-qualification of Mega Bridge Projects.
- Improvement of capital worthiness.
- Increase in credit limit of non-funded facilities by the bank.
- Improvement of profitability by reduction of interest burden.

5.6 Strategies adopted for revival of BCL

- Revival through the process of BIFR and financial restructuring through BRPSE recommendations.
- Organizational and Business restructuring.
- Manpower rationalisation through VRS
- Improved marketing strategies
- Cost control measures.

6. COST MANAGEMENT:

A detailed status of the cost structure of the company from 1991-92 till 2013-14 is given in Table 2. The Total cost has an increasing trend with bulk of the cost being material cost. The loss period is showing erratic profitability with marginal profits in some financial years. This is the time when the company was going through a major upheaval.

ROI is an important tool to measure profitability based on investments made by shareholders. It can be seen from the table below that ROI from 2005-06 is positive and investors are getting a steady Return on the Investments made. Prior to this period the investors were not getting any return or returns were marginal.

Table 2
Total Cost and its Components Cost (Rs.in lacs)

Year	NET PROFIT/ (LOSS) AFTER TAX-PAT	Material Cost	Labour Cost	Total Factory Overhead	Sales , Marketing and other Overhead	Total Cost	ROI %
1991-92	-225.91	2549	2408	70	2099	7126	1.87
1992-93	-164.88	2848	2548	72	1977	7445	1.48
1993-94	-7457.3	2045	2145	72	2757	7019	-39.13
1994-95	-3602.7	1843	2029	87	2767	6726	-7.58
1995-96	-3127.06	4178	2496	82	661	7417	-15.91
1996-97*	68.61	5016	2228	111	2303	9658	4.70
1997-98*	214.05	5938	2523	118	1854	10433	4.17
1998-99	41.14	6306	2736	131	3253	12426	2.96

Year	NET PROFIT/ (LOSS) AFTER TAX-PAT	Material Cost	Labour Cost	Total Factory Overhead	Sales , Marketing and other Overhead	Total Cost	ROI %
1999-00	-1412.82	3290	2638	496	813	7237	-5.78
2000-01	173.79	5154	2733	545	2715	11147	3.98
2001-02	-3355.47	1780	2343	521	1511	6155	-9.65
2002-03	2921.72	1795	1189	514	2188	5686	5.05
2003-04	-2355.91	1467	632	507	269	2875	-0.36
2004-05	-2190.67	1841	658	500	105	3104	-18.71
2005-06	221.15	2319	722	515	389	3945	65.08
2006-07	56.22	3150	852	603	270	4875	45.2
2007-08	55.25	2660	888	583	492	4623	67
2008-09	150.28	3482	1064	630	846	6022	40.05
2009-10	175.31	9879	1139	716	1131	12865	31.77
2010-11	617.94	13375	1286	732	777	16170	38.72
2011-12	689.17	21555	1321	766	1375	25017	20.41
2012-13	715.29	24330	1390	919	1719	28358	19.68
2013-14	1042.75	29011	2758	1119	2122	35010	21.57

* In the year 1996-97 & 1997-98, Interest to the tune of Rs. 8158.93lakhs & Rs.62.32 lakhs respectively were waived on account of Government loan which has been excluded from the business profit while evaluating the financial results of the loss period.

In Table 3 we see that though the employee strength is gradually decreasing, simultaneously the production is increasing. This reflects significant improvement in labour productivity. This is because of certain better HR policies like placing the right man in the right place, imparting training & introducing Voluntary Retirement policies.

Table 3
Comparative Analysis of Sales/ Profit/ Employees for last 14 years

Particulars/Years	Gross Production (Rs in Lacs)	Gross Sales (Rs in Lacs)	Net Profit / Loss (Rs in Lacs)	No of Employees
2000-01	9700	11183	174	2357
2001-02	3901	4052	(-) 3355	1132
2002-03	3465	3544	(-) 2922	703
2003-04	2889	2892	(-) 2356	572
2004-05	3268	2992	(-) 2191	550
2005-06	4436	4493	221	546

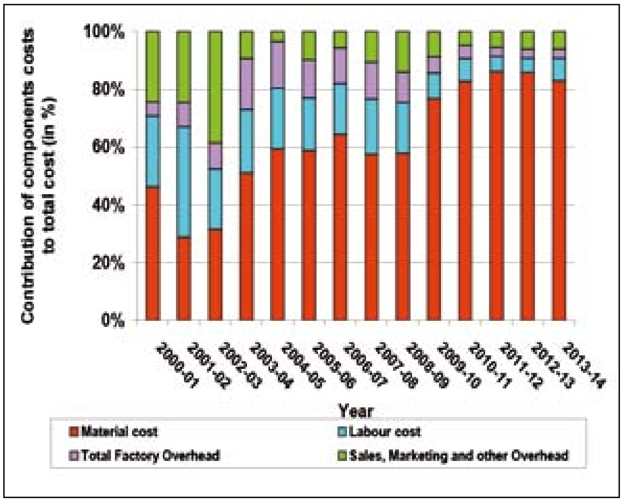
2006-07	5342	5471	56	525
2007-08	4842	5120	55	495
2008-09	6351	6788	150	472
2009-10	12319	12761	175	443
2010-11	16920	16971	618	412
2011-12	25309	26123	689	392
2012-13	28596	29424	715	353
2013-14	35666	36711	1043	328

Table 4 below gives an overview of the cost structure. The major cost components are material followed by labour & marketing overhead. It is observed that there is a considerable increase in material cost while the other costs have declined.

Table 4
Percentagewise Cost Breakup for last 14 years

Year	Material Cost	Labour Cost	Total Factory Overhead	Sales, Marketing and other Overhead
2000-01	46%	25%	5%	24%
2001-02	29%	38%	8%	25%
2002-03	32%	21%	9%	38%
2003-04	51%	22%	18%	9%
2004-05	59%	21%	16%	3%
2005-06	59%	18%	13%	10%
2006-07	64%	17%	12%	6%
2007-08	58%	19%	13%	11%
2008-09	58%	18%	10%	14%
2009-10	77%	9%	6%	9%
2010-11	83%	8%	5%	5%
2011-12	86%	5%	3%	5%
2012-13	86%	5%	3%	6%
2013-14	83%	8%	3%	6%

Figure 1: Percentage contribution of each component cost to the total cost



Labour cost, Total Factory Overhead and Sales, Marketing and other Overhead cost decreased in the post-turnaround in comparison to turnaround period. However, material cost increased due to increase in the production.

Labour Productivity ratio (Gross Production/ labour cost) which was 6.31 in 2002-03 has increased to 20.60 in 2013-14. Over the years, though the productions have increased but the labour cost has decreased. This implies that labour productivity has increased. In 2001-02, the labour component was 25 % of total cost which reduced to 8% of the total cost in 2013-14.

Similarly, total factory overhead & sales and other overheads which were 8 % & 25 % of the total cost in 2001-02 have reduced to 3 % & 6% in 2013-14 respectively. The company was judicious enough to reduce its overall cost. Optimum mix of all the components like labour, material & overhead had been achieved, as a result of which production increased significantly.

The company relied more on its own fund than loan fund as a result Debt ratio (Total long term debt/ total assets) & Debt equity ratio (Total liabilities/Shareholders fund) are showing decreasing trend. Interest payment was the key factor in the loss of the company. The company has been able to trade off its high cost debt in favour of low cost debt, thereby could able to reduce the overall cost of capital. Another reason for the favourable debt equity ratio is waiver off loan including interest by Government of India. The company also met its long term obligations in a prudent way. Both, the short term & long term solvency of the company improved gradually. Gradually the company went into a better position to repay its short term debts & meet its long term liabilities which in turn created a positive image of the company in the eyes of the investors & stake holders.

Table 5

Solvency	2001-02	2006-07	2013-14
Debt Equity ratio	-1.35	4.24	0.65
Interest Payable	528	228	215

The Current Ratio & Acid Test Ratio (are favorable over the years and showing increasing trend, e.g.

Table 6
Important Ratios

	2001-02	**2006-07**	**2013-14**
Current Ratio	0.75	1.18	1.34
Quick Ratio	0.62	0.82	1.90
Net Profitability Ratio	-83%	1%	3%

This clearly implies that Short term assets have increased and/or short term liabilities have decreased. The working capital of the company has improved & the company has been able to repay its creditors in a timely manner. With this credibility of the company has improved & vendors/suppliers started reposing faith in the company.

The Net Profit Ratio is the indicator of overall profitability of the business.

Table 7
Regression Co-efficient of Net Profit

Independent Variables	Co-efficients	Standard Error	t-statistic	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-4549.853	2867.923	-1.586	0.147	-11037.546	1937.840	-11037.546	1937.840
Material cost	-0.114	0.110	-1.024	0.332	-0.364	0.137	-0.364	0.137
Labour cost	-2.642	0.770	-3.428	0.007*	-4.386	-0.898	-4.386	-0.898
Total factory cost	9.378	5.786	1.620	0.139	-3.711	22.467	-3.711	22.467
Sales marketing & other overhead cost	2.550	0.679	3.752	0.004*	1.012	4.087	1.012	4.087

* Statistically Significant

Thus the regression model of Net Profit/Loss is given by:

Net Profit= -4549.853 - (0.114*Material Cost) - (2.643*Labour Cost) + (9.378*Total Factory Cost) + (2.55*Sales Marketing & other Overhead Cost). This model can be applied to any unknown similar factory. Using same parameters we can increase Net Profit by improving the cost components.

It is observed from the above statistical analysis that the material cost component (having co-relation coefficient of -0.114) have lesser significant effect on net profit as compared to labour cost (having co-relation coefficient of -2.643), factory overhead (having co-relation coefficient of 9.378) and sales, marketing & other overhead (having co-relation coefficient of 2.55). The major impact on net profit will arise by adopting suitable cost reduction devise with focus on labour and overhead components to arrive at the desired results.

Moreover to achieve optimum result, saving in labour cost has led to higher profitability whereas sales and marketing overhead have been commensurate with sale growth and profitability.

7. PERFORMANCE MANAGEMENT

In enhancing productivity and profitability of an engineering organization, management policies play a key role. A successful turnaround is achieved only when management policies are strategized in an effective manner. It boost individual performance, enhance team productivity and motivate for a new achievement which ultimately improve both top line and bottom line of an organization.

New management team implemented certain policies which resulted into enhancement of productivity and profitability and finally ensured turnaround of the company. The main focus of the management was capital infusion for purchase of latest technology machines, in-house production of critical wagon components, introduction of modern project management techniques, venture into new field of activities, manpower rationalization, compliance with latest customer specification and working capital management.

To improve the performance of BCL, the management stressed on the following six broad activities for increased productivity, business promotion and through that achieve targeted growth:

7.1 Augmentation of Infrastructural Facility

- Providing plant and machinery for meeting requirements of Railways,
- Infrastructure for manufacturing of stainless steel wagons, coupler projects,
- An effort of forward and vertical integration,
- Implementation of latest Enterprise Resource Planning (ERP) system,
- Capital infusion for purchase of latest technology machines,
- Introduction of Computerised Numerical Control (CNC) machines in production process.

7.2 Thrust on Increased Productivity

- Outsourcing/sub-contracting for bulk manufacturing,
- In-house production of critical wagon components,
- Annual maintenance contract (AMC) to reduce downtime and loss of production hours for various machines.

7.3 Thrust in Marketing and Diversification

- Manufacture of non-Railway/Export wagons,
- Venture into new fields of activities, i.e. fabrication of bridge girders outside plant area, manufacture of stainless steel wagon, manufacture of frameless tank wagon, refurbishment of wagons,
- Up-gradation/AMC for cranes,
- Manufacture of bogie and couplers,
- Manufacture of pressure vessels.

7.4 Human Resource Planning

- Manpower rationalisation achieved through introduction of Voluntary Retirement Scheme (VRS).
- Redundancy has been avoided which is the prime reasons for success of restructuring proposal.
- Improved relationships with unions by inviting them in certain decision making.
- To improve employee's motivation through revision of pay scales, release of arrears and rationalisation of perks.
- Increased the age of retirement to 60 years from 58 years.

7.5 Technology Tie Up

- Compliance of G-93 specifications given by Railway Board.
- Procurement of 5 Tonnes Arc Furnace.
- Collaboration/ tie up for manufacture of low tare wagons and modern freight wagons.
- In-house manufacturing of wagons components like dished ends, valve components, brake items etc.
- Thrust for technology collaboration and strategic alliance wherever required.

7.6 Financial Management

- Adequate provision for working capital towards inputs for augmenting products.
- Increase in limits of various fund/ non fund based facilities for meeting bank guarantee/LC requirements, working capital etc.
- Ensuring minimum purchase of inventory and overall cost reduction.

The study finds that for successful turnaround of a sick company, first of all the root cause of the sickness have to be ascertained. Taking into account the root causes of sickness, right combination of turnaround strategies have to be selected based on organisational strength & weaknesses. Here the top management has an important role to play. They must take all the stakeholder's confidence. Their commitment and cooperation gives great advantage in successful implementation of the turnaround strategies.

8. Conclusion

Management took effective operational decisions like improved human resource management, cost cutting/ reduction etc., sharp business acumen etc. They have also taken effective financial decisions like cost optimization, loan swapping, optimizing leverage between debt-equity, capital budgeting etc.

The above operational and financial decisions have led to the complete transformation of the organization.

We can also see that post 2004-05, the company has been able to achieve a certain degree of stability in the market after breaking the viscous cycle of loss of the initial periods. By overcoming the turbulent periods, it is now continuously growing at a steady rate. The company which made a loss of whopping Rs 33.55 Cr in 2001-02 had registered a profit of Rs.10.43 Cr in 2013-14. This change has only been possible because of the successful policy implementation and relentless efforts of the management.

A successful turnaround is achieved only when management policies are strategized in an effective manner. It boost individual performance, enhance team productivity and motivate employees to improve both top line and bottom line of the organization through performance improvement of the team which in turn takes the company

to a new height.

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EASTERN INDIA REGIONAL COUNCIL

EIRC organized a seminar on Annual Return & GST Audit on 17th May 2018. CMA Chiranjib Das, GST Consultant was the resource person. CMA Shyamal Kumar Bhattacharjee, vice chairman EIRC and CMA Pranab Kr. Chakraborty, chairman EIRC were also present on the occasion. Another seminar was organized by EIRC on Valuation Rules 2018 on 20th April 2018. Shri Hansraj Jharia was the resource person. A seminar on Companies Act 2013 was organized by EIRC on May 12, 2018. CMA Prof Goutam Mitra was the resource person. The Region organized an inaugural session of 2nd batch of certificate course of GST on 17th June, 2018 at EIRC seminar hall. CMA Debajit Sen, Director, Finance, Marathon Electric Motors (I) Ltd., Shri Manmohan Daga, and CMA Pranab Chakraborty, Chairman, EIRC were present during the session. The course was inaugurated by CMA Pranab Kr Chakraborty, chairman, EIRC. The Region organized 'Overview of Recent Amendments under the Companies Act' on June 20, 2018 where CS Sanjay Gupta, CMA Pranab Kr Chakraborty, Chairman, EIRC and CMA Bibekananda Mukhopadhyay were among the eminent dignitaries present in the session.

The Institute of Cost Accountants of India-Ranchi Chapter

The Chapter arranged a workshop on E Way Bill under GST on June 17, 2018 at Ranchi. Keynote speaker CMA Sanjay Singh, Senior Manager Finance CCL lucidly explained various provisions of the subject. Participants from GAIL, BHEL, ONGC, MECON, SAIL, ECL, HEC, DVC and practicing members from Ranchi, Ramgarh, Koderma, Hazaribag, Patna, Dhanbad participated enthusiastically. Welcome address was delivered by Chairman of the chapter CMA Bidydhar Prasad. CMA Umar Farooque, RCM EIRC informed participants that in this year the chapter will arrange series of programs for capacity building measures of members.

NORTHERN INDIA REGIONAL COUNCIL

The Institute of Cost Accountants of India-Jaipur Chapter

The Chapter organized a seminar on 'Personal & Professional Excellence' and 'GST E-Way Bill & ISD Mechanism' on 28th April, 2018 at its premises. In the first technical session, Dr. Satish Batra, Dy. Director, Bhavan's College of Communication and Management addressed the participants and explained smart way of living and stress management. In the second technical session, CMA Sanjay Arya, Practicing Cost Accountant, Gurugram explained various provisions related to E-Way Bill and ISD Mechanism. A Campus Placement programme was held at New Delhi in

April 2018. Qualified students from Jaipur who got selected in campus placement were felicitated at the chapter on 9th May 2018. The Chapter celebrated 59th CMA Foundation Day at its premises on 28th May 2018. Children of Sewa Bharti Sansthan were provided with stationery items and dresses under the charity initiative for which donations were given by the esteemed members of the chapter. Tree Plantation Program was also organized on this occasion in which members of the chapter, management committee members and staffs took part with great enthusiasm.

The Institute of Cost Accountants of India-Srinagar Chapter

The Department of Commerce, Amar Singh College, Srinagar organized a one day career awareness programme on Cost and Management Accountancy, on May 26, 2018 in collaboration with Srinagar Chapter of the Institute. Prof (Dr) Yasmeen Ashai, Principal of the college inaugurated the event. CMA Bashir Masoudi , Former Head Finance, Rourkela Steel Plant, Steel Authority of India Ltd and chairman of the chapter, CMA Ghulam Jeelani Tak, Administrative Officer, LIC were among the eminent dignitaries who were present during the programme. Another seminar on GST was conducted by the chapter in collaboration with Kashmir University on May 29, 2018 and CMA Bashir Masoudi , CMA Padhi, Prof Sangmi and CMA Qaisor were present during the programme.

SOUTHERN INDIA REGIONAL COUNCIL

The Institute of Cost Accountants of India -Trivandrum Chapter

The Chapter jointly with Trivandrum Management Association successfully conducted the Professional development Programme on "Recovery of Corporate Debts based on Insolvency and Bankruptcy Code, 2016 & Developing Jurisprudence out of decided case laws under the code" on 8th June ,2018 in their conference hall. Adv Asish Mohan and CS Bijoy P Pulipra were the speakers on the theme.

The Institute of Cost Accountants of India -Cochin Chapter

The Chapter on May 27, 2018 organized a seminar on "Disruption for Reinventing Business" and Shri K. Harikumar, Managing Director, Travancore Cochin Chemicals Ltd was the speaker of the seminar. On June 6, 2018 another seminar on Discussion on "Cost Accounting Standards and Cost Audit 2017-18" was organized and CMA P. Raju Iyer, Council Member & Chairman, Cost Accounting Standards Board of the Institute was the speaker of the programme. The Chapter conducted session inauguration of educational course on valuation at CMA Bhawan, Center for Excellence on 16th June, 2018 and the session was inaugurated by Dr. V. T. Jalajakumari, Asst. Regional Director, Indira Gandhi National Open University, Ernakulam. As part of the campaign, the Chapter observed 4th International Yoga Day at CMA Bhawan, Cochin on June 21, 2018 under the guidance of Shri Sanjeev, Yoga Master, Karma Yoga Research and Training Institute, Cochin.

The Institute of Cost Accountants of India -Visakhapatnam Chapter

The Chapter on April 21, 2018 organized a professional development programme at its premises on 'Cloud Computing From CMA Perspective' at CMA Bhawan. Speaker CMA TCA Srinivasa Prasad explained the cloud computing characteristics etc. The Chapter observed 4th International Yoga Day on June 21, 2018 at CMA Bhawan attended by members, staffs and students.

The Institute of Cost Accountants of India -Bangalore Chapter

The Chapter organized two professional development meets on April and May, 2018. On May 11, 2018, Practitioners' Meet was organized on Cost Audit Discussion on CRA-1 and on June 5, 2018 another Meet was organized on International Environment day programme at Shamanna Park and Seshadripuram College and also CMA Sanjay Gupta, President of the Institute interacted with the chapter members on occasion of World Environment day at its premises and CMA Prasanna Kumar, Practicing Cost Accountant and CMA Sanjay Gupta, President of

the Institute, CMA Jagan Mohan Rao, Council Member were the speakers of the programmes. On June 16, 2018 a seminar on Cost Audit was held at its premises and Shri Dr.DN Panda, Former Judicial Member, Customs, Excise & Service Tax Appellate Tribunal was the speaker of the seminar. A training on Communication and Soft Skills (CSS) for intermediate oral students was organized on April 21 and 22, 2018 by the chapter. An industry oriented training programme for final students was conducted by the chapter from April 29, 2018 till May 3, 2018 at its premises

The Institute of Cost Accountants of India- Coimbatore Chapter

The Chapter entered into MoU with PSG College of Arts & Science, Coimbatore for conducting classes for intermediate course. The chapter conducted a communication and soft skill program for intermediate students from 12th May, 2018. The chapter organized 49th Annual General Meeting on May 26, 2018.

WESTERN INDIA REGIONAL COUNCIL

The Institute of Cost Accountants of India- Pimpri Chinchwad Akurdi Chapter

The Chapter conducted a full day seminar on "Compulsory Audit (u/s 35), Audit by Tax Authorities (u/s 65), Special Audit (u/s 66) of CGST Act" on May 10, 2018 at CMA Bhawan. CMA Ashok Nawal, Council Member and CMA L D Pawar, RCM & Vice-Chairman, WIRC were the speakers of the seminar. CMA L D Pawar, RCM and vice chairman, WIRC highlighted changes made under GST. CMA Ashok Nawal briefed on the topic Audit under GST. The Chapter conducted a seminar on 'IBC 2016 – Game changer for Corporate & Professional' on 19th May, 2018 at CMA Bhawan and CMA L D Pawar, Insolvency

Professional, RCM & vice chairman, WIRC was the key speaker of the seminar. CMA L D Pawar briefly highlighted on background of IBC 2016 and existing laws therein. The Chapter celebrated 59th Foundation Day of the Institute on May 28, 2018 at CMA Bhawan. The Chapter also conducted a seminar on 'Innovative use of Excel' on 28th May, 2018 at CMA Bhawan. CMA Pradeep Deshpande was the key speaker of the seminar. He briefly highlighted the importance and need of Excel at various fields like corporate offices, companies, small scale industries, traders, brokers, public & government sectors etc.

The Institute of Cost Accountants of India- Nasik Ojhar Chapter

The Chapter completed the first batch of GST Course in coordination with Tax Research Department of the Institute, Kolkata. The first session was taken by Ms. Rashmi Kachi. She explained the GST in Accounting Environment with special reference to Tally and the second session was taken by Mr. Sanjay Pokharkar, Dy. Commissioner, GST Nashik. Dr. Shilpa Parkhi was the coordinator of the entire course of GST Certificate.

The Institute of Cost Accountants of India- Ahmedabad Chapter

The Chapter organized campus placement on May 17, 2018 and May 18, 2018 at its office. CMA Manas Kumar Thakur, Immediate Past President & Chairman of Training & Placement Committee of the Institute was the chief guest of the function. CMA K M Mehta, vice chairman of the chapter, CMA Manas Kumar Thakur, chief guest briefed about the objective of campus placement program. A press meet for campus placement was also organized on 17th May, 2018.

Memberships

Admission to Associateship, Effective Date is JUNE 05, 2018

Membership No	Name
44574	Jagannath Panda
44575	Ritika Srivastava
44576	Venkata Vijayalakshmi Somisethy
44577	Ramakrishnan N
44578	Yewale Keshav Machindranath
44579	Sunil Kochhar
44580	Shriram V
44581	Naresh Kumar
44582	Sonu Devi Gupta
44583	Aditya Yellajosyula
44584	Goutham Katepalli
44585	Pradip Kumar Shaw
44586	Sagar Pramodrao Dasharathe
44587	Bhuvanasri V
44588	Sidharth Agarwal
44589	Suyog Hanumant Gavali
44590	Gaurangbhai Lavjibhai Chovatiya
44591	Swagata Dutta
44592	Dadaso Nanaso Kakade
44593	Lakshman Prasad Chaurasiya
44594	Rangaswamy Gari Gangadhar
44595	Arun Vishwakarma
44596	Kiran Surender Singh Rawat
44597	Sriram Seshadri
44598	Venkata Anusha Gulakaram
44599	Parveen Dutt Sharma
44600	Pooja Saha
44601	Namrata Goyal
44602	Mamta Gupta
44603	Govind Singh Bisht
44604	Dnyanda Jayant Limaye
44605	Shilpi Yadav
44606	Uma Shrestha
44607	Anil Kumar Jajoo

Membership No	Name
44608	Kochukoshy Thomas Manalil
44609	Venkata Rupesh Kumar Chenna
44610	Subaramaniiam C V
44611	Kamal Kishore
44612	Prashant Payagonda Nidagundi
44613	Kranthi Allenkala
44614	Abhishek Jain
44615	Pradeep Velayudhan
44616	Tiruveedhula Anusha
44617	Ikramuddin Ahmed
44618	Jayprakash Babulal Sharma
44619	Saurabh
44620	Sanchari Basu
44621	Siddharth Gusain
44622	Mukesh Kumar Rajpat Bhai Dube
44623	Vinita Ashok Patankar
44624	Chhavi Saxena
44625	Rupali Santosh Khandal
44626	Narayana Swamy Kuruba
44627	Avdesh Bansal
44628	Jaydev Saha
44629	Akshay Ankit
44630	Pratik Madhusudan Joshi
44631	Ashish Anand
44632	Gopinath Pinnaka
44633	Harshil Rajeshbhai Parmar
44634	Anup Kumar Shaw
44635	Tikam Singh Chauhan
44636	Narendra Challakolusu
44637	Shivchand Bishram Prajapati
44638	Himanshi Narula
44639	Santosh Kumar
44640	Ashis Kumar Sahoo
44641	Saroj Kumar Hati

Memberships

Admission to Associateship, Effective Date is JUNE 05, 2018

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44642	Prayas Kumar Pradhan
44643	Shailesh Vasant Chavan
44644	Rupa Sanjay Rele
44645	Mrudul Chillarige
44646	Ramanprit Kaur
44647	Dil Nasheena Shaik
44648	Soumya Sarkar
44649	Prakash Giri
44650	Maharajan Suganthi
44651	Shalu
44652	Anna Thiru Bagavathi Subbiah
44653	Nagi Reddy Buthukuri
44654	Abdul Rahiman Pathaya Kanakkasseri
44655	Mohammad Rahil
44656	Ankush Kumar
44657	Amol Ramkrishna Pawar
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44666	Dayashankar Shivlal Sharma
44667	Ravi Teja Guntupalli
44668	Sapana Baliram Metha
44669	Abhishek Ramdas Dalvi
44670	Rajesh Ranjan
44671	Mandeep Singh
44672	Manikandan Ramamoorhy
44673	Shashank Garg
44674	Nitender Kumar Sharma
44675	Manish

Membership No	Name
44676	Sultan Saini
44677	Sunil Samota
44678	Rajan Ranjan Sahu
44679	Ajeet Pal Singh
44680	Sravanthi Mullapudi
44681	Reena Pranav Damania
44682	Girish Chillapali
44683	Ramana Reddy Sirammagari
44684	Umashankar Pichaimani
44685	S Kasi Viswanathan
44686	Shikha Gupta
44687	Mamta Kamal Chellaramani
44688	Rakesh Ramachandran
44689	S M Amir Hamza Askari
44690	Hemant Rana
44691	Sanvedi Parag Rane
44692	Veera Venkateswararao Konakala
44693	Harish Andavarapu
44694	Gaurav Gautam Ramteke
44695	Pinal Chunilal Pichholiya
44696	Kiran Kanth Kesireddy
44697	Tamanna Raheja
44698	Shankar Dayal Singh
44699	Priyanka
44700	Prathamesh Suresh Hariyan
44701	Venkatesh S
44702	Rambabu Dompaka
44703	Ashish Jain
44704	Ravneet Kaur
44705	Reemi C Shah
44706	Hima P R
44707	Habeebulla Mp
44708	Jegatha K
44709	Pankaj Kumar

Memberships

Admission to Associateship, Effective Date is JUNE 05, 2018

Membership No	Name
44710	Choudhury Sandeep Parida
44711	Gorakati Poornima Reddy
44712	Anukriti Mehta
44713	Ravi Shankar Kaky
44714	G Chinna Reddy

Membership No	Name
44715	Rajagopal Reddy Dunnuthala
44716	Shifali Jand
44717	Pankaj Sharma
44718	Nithya P A
44719	Muzaffar S A

Advancement to Fellowship, Effective Date is JUNE 05, 2018

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11146	Elavarthy Kesava Reddy
13482	Shyam Sunder Chandak
17187	Sanjib Kumar Mitra
17628	L Augustin Amaladas
18616	Vinay Prakash Mathur
19309	Madhu Sudhan Rao Bayana
19719	Prosenjit Dutta
22852	Rakesh Chandra
23019	Ali Ahmed Khan
24100	Somesh Chatterjee
24600	Swaraj Sewri Bhattacharjee
25367	Rajesh Kumar Umak
27187	Iswar Chandra Kundu
28087	Anupama Ramani
30051	Nidhi Sinha
30950	Babul Bhadra

Membership No	Name
31013	Murali Mohan
31086	Harsh Satish Udeshi
31535	Sudhir Negi
31726	Vamsi Krishna Kota
31750	Manjiri Satish Patankar
32561	Thangiah Ponraj Thangaprabhu
32625	Manoj Kumar Sharma
32710	Nagarjunrao V S Akula
32753	L Arun
33059	Yamini Padmavati Thodeti
33572	Pavan Kumar Vishwabramhana
33744	Lakshmana Pavan Kumar V
33776	S Senthil Nathan
34118	Wajid Mohammad
34340	Sachin Sudhakar Jagdale
34386	Trivedi Nehalkumar Pankajkumar
34506	Pradeep Miglani

INDIAN RAILWAYS - CMAs AS GAME CHANGERS

- **Performance Costing:**

Performance Costing will enable the Indian Railways to take correct business decisions and to improve resource utilization, cost competitiveness, profitability, and sustainability of the organization. All this will make the Railways an efficient organization and a viable entity. Performance or outcome budgeting together with performance costing is a powerful management tool that has evolved in response to the ineffectiveness of traditional ways of budgeting and cost accounting and cost management practices. This combination is perhaps the only way that the Railways can achieve the milestones like-

- Re-position itself as 'market leader' in the transport sector by capturing the market share from other transport sectors;
- Rationalize the existing tariff structure;
- Make strategic investments in expansion of the rail infrastructure;
- Induce foreign and indigenous private players to invest in rail infrastructure;
- Improve capacity utilization and revenue earnings from both passenger business and freight business; and
- Become the 'first choice' of all customers in the country.

The Institute is actively involved in this great exercises and closely working with Indian railway to achieve this national priority.

- **Goods and Services Tax (GST):**

CMA with his academic knowledge and professional expertise can play a crucial role as a Consultant and a catalyst for due compliances of law relating to goods and services tax and spread tax-literacy and GST awareness to the employees of Indian Railways for better handling logistics. CMAs are recognized to make representations before the Appellate Tribunals for Dispute Resolution in this regard. The Institute of Cost Accountants of India (ICAI) has opened a Goods and Services Tax (GST) helpdesk to assist professionals acquire proper knowledge about the new tax structure. The Institute successfully carried out workshops for the employees of Eastern and South-eastern Railways to impart knowledge on GST.

- **Green Audit:**

The Indian Railways, going green is a commendable effort and a great example of the government body setting an example in eco-friendly practices. With a view to improving aesthetic ambience along the track close to the approach of major stations, creation of 'Green Curtains' at Agra and Jaipur stations is being undertaken on pilot basis, conservation of energy by using renewable sources to reduce carbon footprint; Bio-toilet set-up, launching digital contract, etc. CMAs can support these initiatives by sorting out the discrepancies of availability and allocation of Government funds sanctioned for these projects. CMAs with their multi-disciplinary and techno-commercial skills; are the apt professionals to conduct Green Audit to ensure Compliance of Environmental Laws, effective assessment of Environment Cost, Environment Impact Assessment and Carbon Credit.

● Recent Initiatives taken by the Institute:

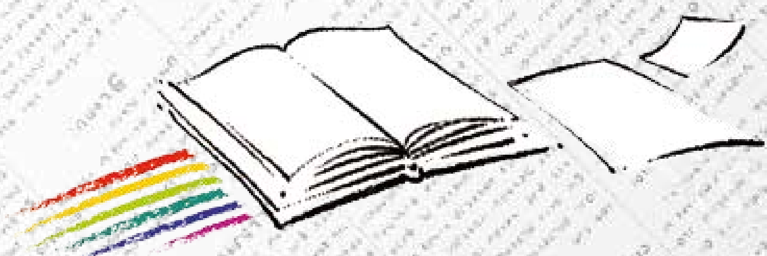
The demand for cost accountants is expected to be rise exponentially in the coming years with various State governments and ministries striving to improve efficiencies on the costing front. ICWAI Management Accounting Research Foundation (ICWAI MARF), a Section 8 Company, promoted by the Institute of Cost Accountants of India and Indian Railways entered into a path breaking MOU on 30th January 2017 wherein the ICWAI MARF will undertake a comprehensive study of existing Costing System in Indian Railway and develop a suitable up-gradation of the existing system to ensure managerial analysis of costing data for efficiency improvements in key performance areas. The Institute is intended to implement 'Accounting Reforms' (AR) in the Railways. The project is expected to be rolled out by the third quarter of 2018.

● Activity-Based Costing (ABC):

Applying ABC Technique, CMA s reduce the wastages of resources and can measure real cost sustained for every operation to link at every activity cost to their respective performance. CMAs act as a catalyst to the management to initiate timely action for effective use of resources to enhance productivity, profitability and best utilization of capacity.

● Logistics Management:

Introduction of GST will benefit the logistics sector including railways by removing the need for businesses to maintain multiple warehouses across states to avoid CST levy and state entry taxes. Transport service rate of GST at 5 per cent will be anti-inflationary and give a much-needed boost to rail freight. Reduction in cost of transportation of goods will lead to reduced prices. CMAs help in accurately determining proper queuing of transportation and logistics towards achieving minimum cost of operation of all the activities. They can assist in analyzing and reviewing all qualitative and quantitative issues pertaining to Logistics Network Designing and Supply chain management.



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