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COST MANAGEMENT STRATEGY *for* ECONOMIC SUSTAINABILITY

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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 first established in 1944 as a registered company under the Companies Act with the objects of promoting, regulating and developing the profession of Cost Accountancy.

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

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

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

MISSION STATEMENT

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

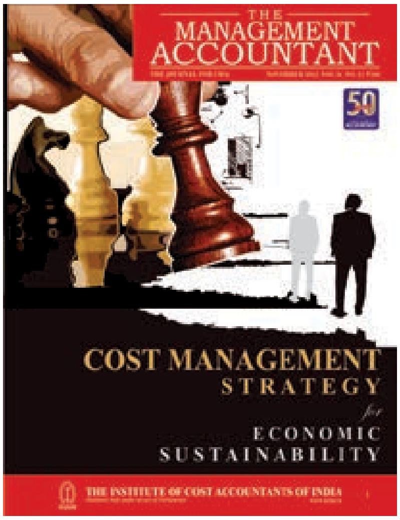
VISION STATEMENT

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

IDEALS THE INSTITUTE STANDS FOR

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

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



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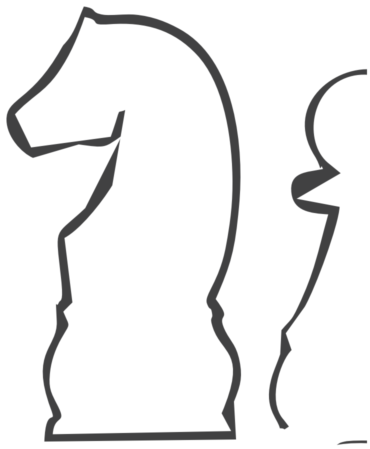
November 2015

In Side

COVER STORY



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EDITORIAL

Sustainability enables a nation to raise living standards through profitable products subject to less environmental hazards by minimization of wastage of wealth, optimum utilization of resources etc. A widely-used approach is to represent sustainability in the context of three pillars — ecological, social and economic.

Sustainable Economic Development Strategies generate substantial economic and employment growth and sustainable business and community development by demonstrating that innovation, efficiency, and conservation in the use and reuse of all natural and human resources is the best way to increase jobs, incomes, productivity, and competitiveness.

We may highlight the role of some relevant sectors of economy to bring Economic Sustainability of a nation:

Micro, Small and Medium Enterprises sector: MSME plays a crucial role for economic growth of a nation with their effective, efficient, flexible and innovative entrepreneurial spirit. Contribution of MSMEs to economic development is highly remarkable as compared to any other sectors of the economy. Its role towards employment generation, Investment, export, GDP, etc is highly remarkable.

Healthcare sector: Health care sector can play significant roles not only in improving access to medicine but also in expanding Economic Sustainability in developing countries. Although the major aim of healthcare sector is to provide health care services to the citizens but they also contribute to economic development of a nation through job creation, capacity building, training etc.

Tourism & Hospitality industry: Travel & Hospitality is the world's largest industry and creator of jobs across national and regional economies. Due to its less impact on natural resources and the environment than most other industries, Travel & Hospitality industry is able to contribute to development which is economically, ecologically and socially sustainable.

Telecom industry: Telecom industry acts as an engine of economic growth of a nation. It is one of the prime support services needed to promote growth and modernization of various sectors of an economy. There is a positive relationship between growth of telecommunication sector and economic growth.

Education sector: Education is one of the most important drivers of social and economic development. The education system executes following main tasks: first, it secures the basic and higher education; second, it provides better opportunities of income; third it improves the standard of living and accelerates social development.

Insurance sector: This sector also has important contribution towards economic sustainability of a nation. For economic development, investment is necessary and investments are made out of savings and here the insurance sector plays a crucial role by mobilization of savings.

Transport sector: Transport sector can be described as a backbone to bring economic sustainability of nation because without strong transport system, it is almost impossible to build a healthy economy. Transportation provides market accessibility by linking producers and consumers so that business transactions can take place. It also has significant impact on employment generation, Investment, export, GDP, etc.

This issue also presents a good number of articles on the cover story theme 'Cost Management Strategy for Economic Sustainability' by distinguished experts and authors as well as interview from industry stalwart. 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.

CMA Pramodkumar Vithaldasji Bhattad
President
The Institute of Cost Accountants of India

The price of success is hard work, dedication to the job at hand, and the determination that whether we win or lose, we have applied the best of ourselves to the task at hand.

--- Vince Lombardi

My Dear Professional Colleagues,

Namaskaar.

An Insight of GST in India

I am pleased to inform you that the Taxation Committee of the Institute has come out with the technical literature titled "An Insight of GST in India". I take this opportunity to congratulate Chairman and Members of the Taxation Committee of the Institute for their commendable effort for development of this technical literature. I trust that the suggested "place of supply rules" would facilitate the readers and stakeholders including tax policy makers in framing the legislation. The lucid presentation and series of illustrations has made it more unique than as compared to any other similar existing literatures. The Institute is geared up to facilitate the biggest tax reform in the country.

Members in Industry Fortnight

I wish to inform that the Chairman of Committee on Members in Industry - Training & Placement, has taken an initiative to organise programs across the Country through Chapters and Regional Councils to attract the Members in general and the members in the Industry in particular. This is the first initiative from the Institute targeting the specific sector. In order to make the program a great success, Members in Industry Fortnight is being celebrated from 26th October to 9th November 2015 and during this period Chapters and Regional Councils of the Institute are organising programs on emerging and contemporary topics which are of professional importance. I would like to assure that the Institute will bring out innovative programs keeping the expectations from the members in Industry in view. I congratulate the Chairman of Committee on Members in Industry - Training & Placement for his efforts in bringing industry closer to the Institute.

Celebration of Corporate Cost Management Week and CPD Activities

The Institute celebrated the 'Corporate Cost Management Week' during 12th to 18th October 2015 on the theme 'Business Excellence through Cost Management' across country. The deliberations on Business Excellence through Cost Management, Achieving operation objectives through Risk Management, Cost Management in Service Industry and Cost Management in MSMEs were well received by the participants. This initiative was very much appreciated by members. Our Regional Councils and Chapters actively organised many programs in their respective cities. There was overwhelming participation of members in practice and in industry at all places. I am happy to note that more than one thousand & five hundred members attended the sessions during the week. The Institute was associated with Institute of Directors as 'Associate Partner' for organising the 15th London Global Convention 2015 on Corporate Governance and Sustainability during 7-9 October 2015 at London. I am pleased to note that our Regional Councils and Chapters are organizing various programs, seminars and discussions on the topics of professional relevance and importance for the members. I am sure that members are immensely benefitted with such programs.

Advanced Studies

The Directorate has been conducting advanced diploma courses namely, Business Valuation, Internal Audit and IS Audit and Control since 2014-15 only for members of the Institute to enable them update their skill and knowledge in this ever changing world of finance and accounting. The Directorate is now mulling over introducing short term certificate courses for the benefit of members in the areas of contemporary interest. You are likely to hear on this in detail very shortly.

CAT Department

CAT Committee has taken initiatives to expand CAT Course in other States based on the experience in the State of Kerala and Rajasthan. Through this initiative, our Institute will be able to reach the un-reached.

International Affairs Department

I wish to inform that the CAPA events were held during 26-29th October 2015 at Seoul, Korea and the Institute was represented by the Chairman, PD Committee and Chairman, Cost Auditing & Assurance Standards Board along with the Technical Advisor in CAPA Board. Toronto Overseas Centre of the Institute in association with American Centre of the Institute is organizing 2nd CMA Global Connect webinar on 7th November 2015 on the theme "Financial Modeling Using Advanced Excel: Tools & Tips". The details are available on the website of the Institute. Members are requested to attend in large numbers and make it a success. WTO, International Affairs and Sustainability Committee organized a roundtable discussion on the theme "Role of Professional in Building Responsible Business" on 10th October 2015 at Delhi office of the Institute. The round table discussion was very successful. Chairman, WTO, International Affairs and Sustainability Committee chaired the discussion. The IFAC SMP Committee has recently launched the 2015 IFAC Global SMP Survey to gather as many responses as possible. The details are available on the website of the Institute. Members are requested to file their responses.

Membership Department

The Members' Facilities & Services Committee is continuing with its efforts to simplify and increase the online facilities available on the Institutes website for members. Members will be able to login and update profile information like email address and mobile number among other fields. To avail the benefits of the Members Benevolent Fund of the Institute (MBF), I call upon members to become life members of the MBF.

Placement Department

The campus placement program for the June 2015 qualified students is underway. I am happy to inform that the Placement directorate has made 'placement' a continuous activity for the benefits of students and members of the Institute and Corporate at large.

Professional Development Department

This is to inform you that the PD Department will come out very shortly with Guidance Notes on 'Cost Accounting Records and Cost Audit under the Companies Rules 2014' and 'Reporting on Fraud under the Companies Act, 2013', which could be of great importance for the members. Both the drafts are under review and expected to be finalised shortly. As an initiative for Capacity Building of Members on regular basis, the PD Department has developed a format for members to update their details. The updated profiles of members will be forwarded to corporate and government departments or agencies, as and when required. I hope this exercise will give a boost to the opportunities for members.

Research & Journal Department

I wish to inform that the Committee on Banking & Insurance and the Committee on Research, Journal and IT of the Institute in association with Financial Express as media partner, organized a seminar on 1^{st} October 2015 based on the Discussion Meet of 'Risk Management in BFSI' at ICAI Auditorium, Kolkata. R&J Directorate in association with NSDA, Commerce Alumni Association of Calcutta University and EDI Gujarat organized a National Seminar on 'Fostering Sustainability through Skill & Entrepreneurship Development' at ICAI Auditorium, Kolkata on 10^{th} October 2015. Padma Bhushan Shri S. Ramadorai, Chairman, NSDA & NSDC was the Chief Guest of the Seminar. National Skill & Entrepreneurship Development workshops were held at NABA Ballygunge Mahavidyalaya, Kolkata and University of Burdwan. ASSOCHAM and the Institute jointly organized the National Summit on 'Exploring the Roadmaps to corporate profitability across Economy' on 28^{th} October 2015 at New Delhi. Knowledge Study Report on "Profit Reengineering: Roadmaps to Corporate Profitability Across Economy" prepared by the Directorate got released during the summit.

Tax Research Department

It is matter of pleasure that under the guidance of the Taxation Committee about 35 programs on GST Awareness have already been conducted and many other are scheduled. There were already seven National Conference held on GST in association with ASSOCHAM wherein Institute was the Diamond Partner. Response on GST Business Process Reports on Registration, Refund, Payment and Returns has been submitted to the Ministry of Finance. The Taxation Committee has also submitted Suggestions on Union Budget 2016. Representations on GST and Union Budget 2016 have been uploaded on the website. It was a privilege to felicitate CMA Upender Gupta, IRS on his elevation to the post of Commissioner (GST). We are confident that his guidance will be available to the Institute on the matters relating to GST.

Technical Department

The Cost Auditing and Assurance Standards Board of the Institute met on 5^{th} and 6^{th} October 2015 at Kolkata and approved the Exposure Draft of Standard on Cost Auditing on 'Materiality in Planning and Performing a Cost Audit' which has already been uploaded on the website for obtaining views and suggestions. The Board has also finalized the Exposure Draft of Standard on Cost Auditing on 'Cost Auditor's Responsibility Relating to Fraud in an Audit of Cost Statements' which will be hosted on the website for obtaining views or suggestions very soon. I urge upon the members to come forward and send their views and suggestions on the Exposure Drafts to the CAASB Secretariat within due date.

I wish prosperity and happiness to members, students and their family on the occasion of Diwali, Kali Puja, Laxmi Puja, Bhaiya Duj, Children's Day, Chhath Puja and Guru Nanak Birthday.

With warm regards,

(CMA P.V. Bhattad)
1^{st} November 2015

President CMA P V Bhattad, & Vice President, CMA Manas Kr. Thakur meeting Secretary MCA, Shri Tapan Ray, IAS, on 4th September,2015

CMA B.K. Das, Chairman, PD Committee of the Bhubaneswar Chapter deliberating at the seminar on ‘Goods and Service Tax (GST)’ held on September 19, 2015. From left: CMA B.B. Nayak, Chairman of the Chapter, CMA Manas Kumar Thakur, Vice President, CMA Ashok B. Nawal, Chairman, Taxation Committee of the Institute, CMA Niranjan Swain, G.M (Finance), OPGC Ltd and CMA Jagatjyoti Biswaranjan Nayak, Secretary of the Chapter on dais

CMA Arnab Chakraborty, Sr. Director and Secretary to Region & Chapter Coordination Committee of the Institute deliberating during Regional and Chapter Coordination Committee meeting held at Bhubaneswar chapter on September 20, 2015. From Left: CMA N. Mishra, Chairman, Region and Chapter Coordination Committee, CMA Manas Kumar Thakur, Vice President of the Institute, CMA Shiba Prasad Padhi, Chairman, EIRC & CMA B.B. Nayak, Chairman of the Chapter on the dais

CMA Ashok Nawal, Chairman, Taxation Committee and Council Member of the Institute, with other delegates deliberating at a half day seminar on 'Proposed Goods and Service Tax in India' organized by Durgapur chapter on October 10, 2015

Professional Development Committee, Taxation Committee and Chandigarh Chapter jointly organized GST Conclave at Chandigarh. From Left: CMA Preet Mohinder Singh, Chairman Chandigarh Chapter, CMA Balwinder Singh, Chairman, Cost Accounting Standards Board of the Institute, CMA Vijender Sharma, Chairman, Professional Development Committee of the Institute, CMA Ashok Nawal, Chairman, Taxation Committee and CMA Rakesh Singh, past President of the Institute

CMA BB Goyal, former additional Chief Advisor (Cost), Govt. of India addressing members during the Interaction Session at SIRC. Also seen on the dais CMA V. Kalyanaraman, former President, ICAI & SAFA and Central Council Members CMA H Padmanabhan, and CMA P Raju Iyer and Regional Council members of the Institute with other delegates

Glimpses of the National Seminar on "Fostering Sustainability through Skill and Entrepreneurship Development", Kolkata, October 10, 2015

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PAPERS INVITED

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

Issue Month	Themes	Subtopics
December 2015	Green Accounting and Sustainability	• Welfare measurement and reporting practices • Health, Safety and Environmental (HSE) Reporting • Environmental accounting (EA) and auditing • Green Accounting for Corporate Sustainability • Current practice and future prospects of EA • Green issues in developing countries • Green Accounting and Role of CMAs
January 2016	Strengthening Indian Banking System	• Cure to stressful assets • Strategic Cost Management • Basel Accords & Risk Management • Project Financing • Forensic Accounting and Auditing • SME Lending Models of Public sector banks • Emerging areas like Small / Payment / Mudra Banks • Role of CMAs
February 2016	Agricultural Innovation and Sustainability	• Agricultural entrepreneurship • Agro-tourism • Organic farming • Innovation, productivity & food security • Sustainability indicators • Role of co-operatives • Agricultural Value Chain Development • Agro-producers and Supermarkets in India
March 2016	Cost Management in Pharmaceutical Industry	• Sustainable Cost Management in Pharmaceutical Industry • Cost Management tool box for Competitive Advantage • Product Life Cycle Management • Risk Management in Pharmaceutical Industry • Pharmaceutical Pricing Strategies • Multidimensional role of CMAs in the Pharma Sector • Case Study

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.

Directorate of Research & Journal

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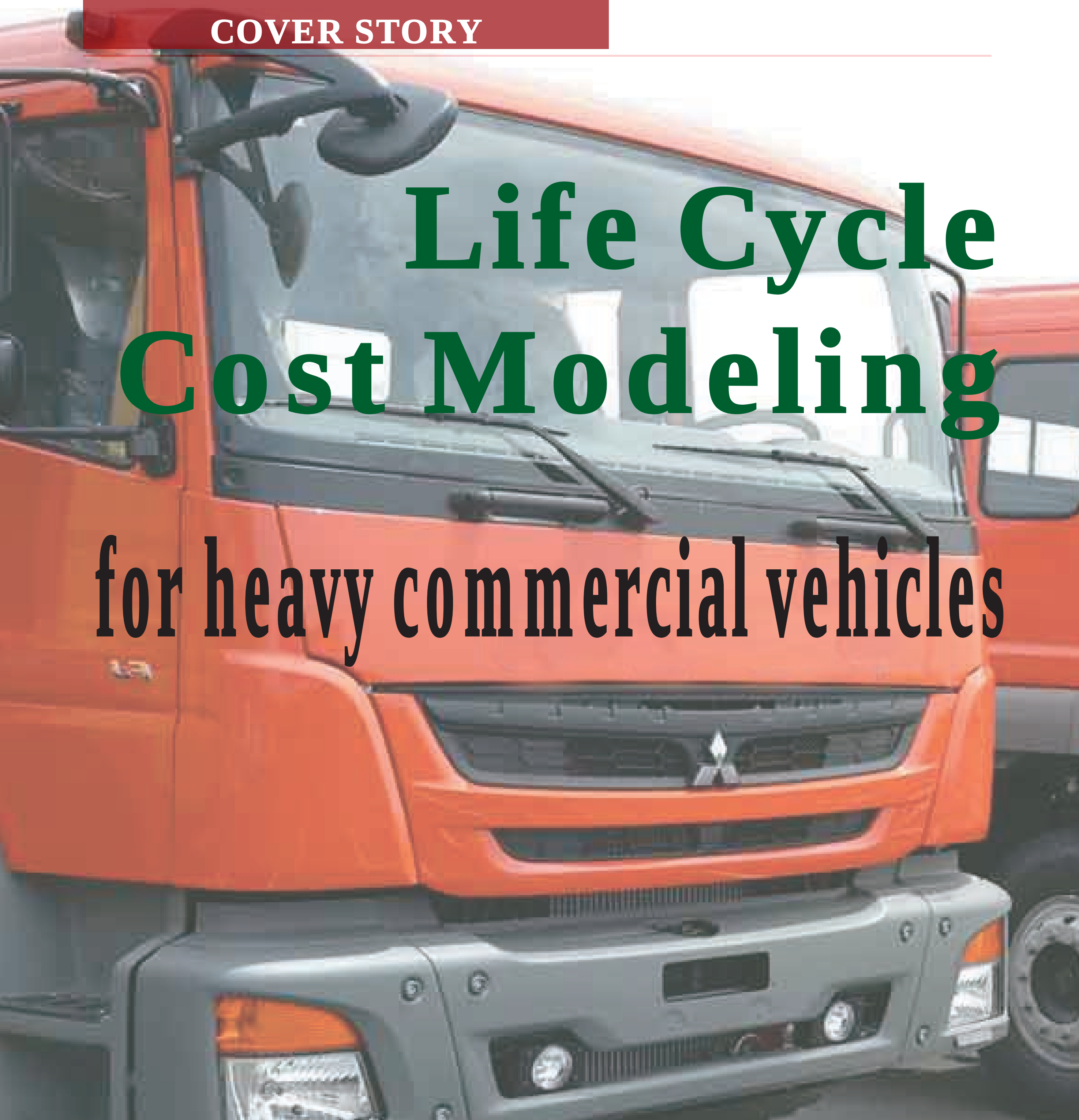


Life Cycle Cost Modeling

for heavy commercial vehicles

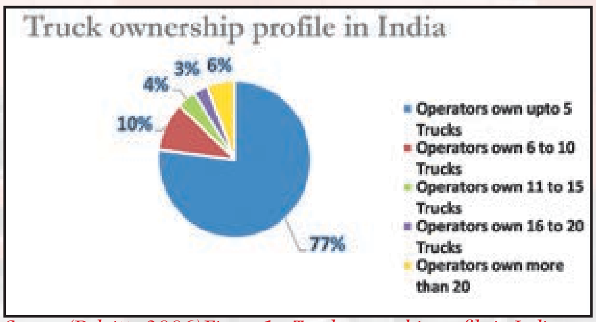
CMA L. Goverthanan
GM-Finance, Ashok Leyland Ltd., &
Research Scholar,
Birla Institute of Technology, Mesra, Ranchi

Dr. Arbind Kumar
Professor, Birla Institute of Technology,
Mesra, Ranchi

Commercial vehicles play a very important role in the economy of our country with road transport accounting for 60% of goods movement. With substantial investment in Road transport by 2020, the number of vehicles and goods movement will go up. Scientific use of resources is to be encouraged not only from economic perspective but also from the environmental point of view besides conservation of resources for future generation. A survey conducted among some fleet operators showed that most of them are not using scientific principles in fleet augmentation or fleet replacement. To do that properly, the issues in developing a LCC model for HCV under Indian conditions identified and the methodology for overcoming it using reliability analysis and point process models discussed. Finally a framework developed for estimating corrective maintenance cost by using Non-homogenous Poisson process power law model in estimating expected failures sub-system wise using RBD approach and building LCC Model for HCV Fleet operators.

Commercial vehicles play a very important role in the economy of our country. Nearly 60% of the goods transportation takes place by road. According to 'India Vision 2020[1], the investment in road transport will go up by Rs.2.80 Lakhcrore by 2020. With better connectivity across the length and breadth of the nation, the movement of goods is expected to increase by seven times. The number of vehicles needed to move the goods will go up substantially. The fleet operators, whether big or small, would be able to save substantially and conserve resources, if scientific techniques in fleet augmentationand replacementare followed. A survey conducted across the country among some fleet operatorshaving an aggregate strength of about 4000 vehicles shows that most of them don't use scientific models for replacementorfleet augmentation.

This is to be seen in the context of profile of fleet operators shown inFigure 1. A sizeable number of fleet operatorshave less than 5 vehicles. These significant fleet operators (77%) may not be able to afford the services of professionals to support decision making. Nevertheless, scientific approach, if followed by them will result in a huge savings to the economy& to them.



Source:(Deloitte 2006)Figure 1 Truck ownership profile in India

Therefore, an effort has been made to identify issues and develop a Life Cycle Cost (LCC) model suitable for Indian conditions for commercial vehicles. Life cycle cost (LCC) may be defined as all the costs incurred from inception till disposal. To convey its intent, it is also described variously as "Womb to Tomb cost", "Cradle to grave cost"[2]. LCC is a technique to determine Total cost of ownership (TCO) of an Asset. It may also be stated as a methodology for the systematic economic evaluation of life cycle costs over a period of its entire life or any stage or any part thereof.

LCC may be represented as: LCC = Acquisition cost + Operating cost – Disposal cost, where Operating cost equals running costs plus maintenance costs. Maintenance costs comprise preventive maintenance cost and corrective maintenance costs.

Each of these cost categories has many cost elements, which varies according to the asset chosen for LCC and the environment in which it operates. These cost elements can be listed comprehensively using cost break down structure(CBS). For Commercial vehicle, a CBS is shown in Figure 2.

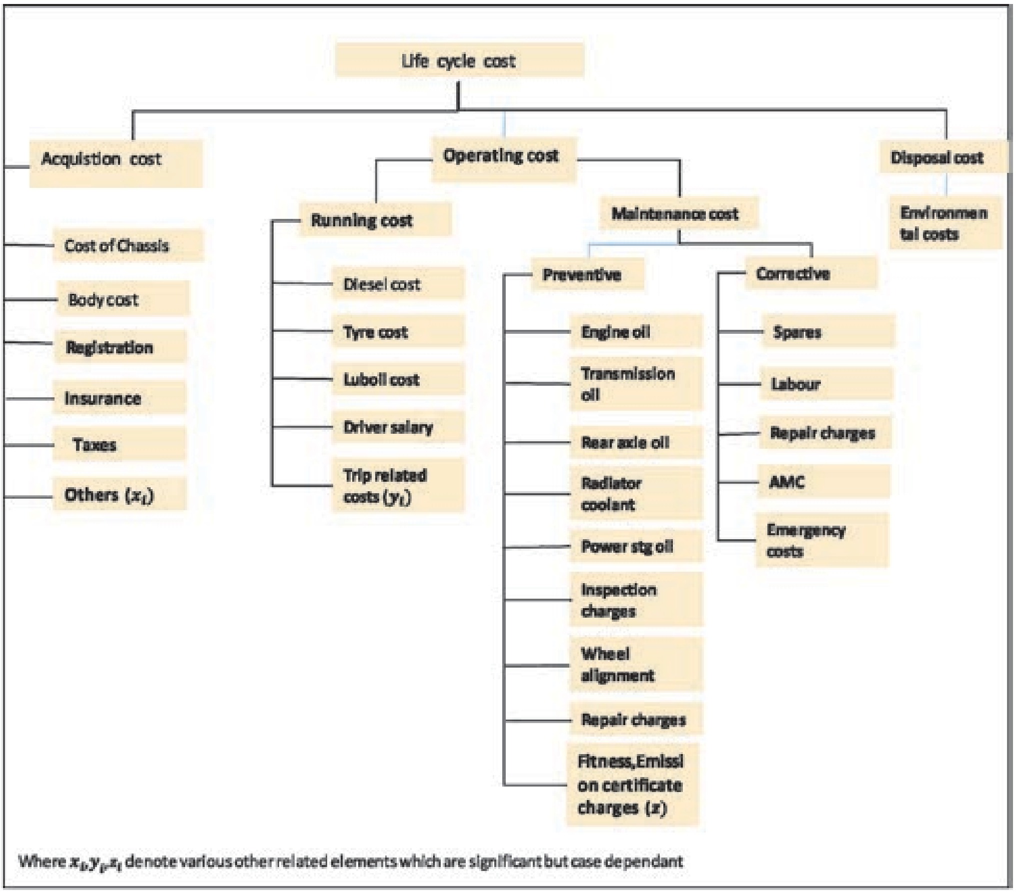


Figure 2 Cost Break down Structure

As LCC involves cost capturing across its useful life, one need to ensure completeness in the cost capturing exercise to get useful results. At the same time, too much effort should not be spent in computing and capturing very minute cost elements which will be a negligible % of LCC. On balance, one needs to ensure that all cost elements except insignificant ones are considered to get a realistic result.

When LCC should be used?

LCC is most suitable for the assets where the operating cost is many times that of acquisition costas shown in Figure 2. It is widely used in advanced countriesfor Repairable systems such as Vehicles, Machines, Industrial plants, Air craft, Rail engine,Buildings etc. It is not uncommon among vehicle owners in India to continue to use the vehicle as long as it is usable unmindful of economic useful life. Economic service life or useful life may be defined as the period of useful life that minimizes the annual equivalent costs of owning and operating the vehicle. Usage of vehicle beyond its economic useful life cuts into their profits unknowingly through drop in efficiency, enhanced repair cost, frequent breakdowns, customer dissatisfaction etc. Use of LCC improves the cost awareness and promotes efficiency and effectiveness in getting enduring value for money. Considering economic useful life and adverse impact on the environment, Prescription of End of Life for vehicles (EOL) – has been implemented in many countries leading to mandatory scrapping of Vehicles beyond prescribed useful life. In determining EOL, LCC method plays a significant part.

In India no such legislation is in place for EOL and disposal standards are not prescribed for such vehicles to prevent damage to environment. With the result, some owners use very badly damaged vehicles unmindful of environment health and public safety. Economic use of resources is the duty of everyone towards future generation. Frivolous use of resources will only deprive the future generation ofvital resources earlier than expected and thus put them to difficulty.

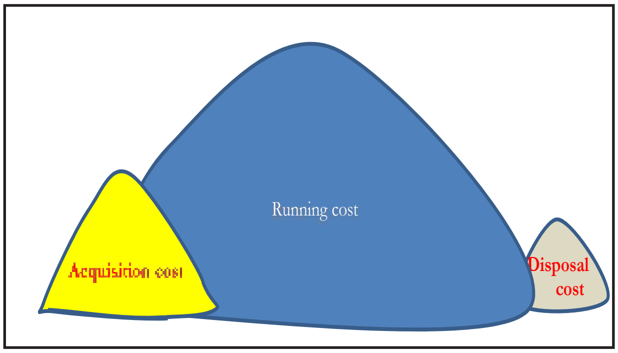


Figure 3 Life cycle cost Profile

LCC models, where used in India in HCV industry, has a combination of one or more following deficiencies.

1. Corrective maintenance cost is not scientifically computed
2. Inflation is not considered in the cost flows occurring over time
3. Annual Equivalent cost not considered
4. Cost breakdown structure not completely defined

While most of the deficiencies can be addressedby improving the model to consider inflation factors, adequately detailing Cost breakdown structure and incorporating Annual Equivalent costs formulae, the estimation of corrective maintenance cost scientifically requires special approach and methodology.

Breakdown or corrective maintenance cost is not easy to estimate as it is dependent on many factors such as age of the vehicle, load carried, distance travelled, driving pattern, road conditions, climatic conditions, type of cargo carried, type of preventive maintenance carried out, use of genuine sparesetc. In replacement point determination and overall equipment availability, maintenance activity plays a significant role. To understand how many breakdowns will happen by ' t ' hours of operation, how much stock of spares of various components to be maintained for servicing, what would be the likely repair cost etc., one need to draw techniques from Reliability Analysis, where queries like Mean failures up to 't' hours of operation, Expected failures between time intervals, Breakdown rate, availability of equipment etc. are dealt with.

Reliability and Repairable systems

Reliability may be defined as probability that a system will perform its specified functions under stated conditions for a stated time without failure. The bathtub curve is used to represent failures across the life of the system which gives a better perspective of the tools and techniques required for failure estimation at various stages of life of the asset. Reliability principles, tools and techniques are widely used for more than half-a-century and substantial benefits have been derived in the Industry in terms of improved availability, predictability and enhanced useful life. Hence use of such techniques in failure estimation cost will be more appropriate.

Reliability Block Diagram (RBD)

Block diagrams are widely used in many different forms in engineering and science. They can also be used to describe the inter-relationship between the components and to define the system. RBD is a logical, operational or functional diagram which depicts the various connections between the sub-systems in a vehicle as contrasted with the physical connections. Order in RBD is not very important and thus any order will lead to the same conclusion [3]. RBD for HCV is shown in Figure 4.

It is used for the purpose of failure analysis at sub-system level. It is common to see that when RBD is used in reliability analysis, after establishing the Block diagram, the series or parallel reliability method is used to compute the overall system reliability using the Blocks. However, we have made a small change in the use of RBD. It has been used only to establish the sub-system of the complex RS with a view to compute the expected failures etc. The use of RBD has helped create 11 sub-systems in HCV. This has improved the utility of reliability analysis. Since HCV has thousands of components, RBD is a better method forsimplifying the complexity of Repairable system (RS) through sub-system approach and estimating failure cost.The other methods would be of a) estimating failure rate for each of the components in a vehicle, but this is not easy and straight forward for drawing inference for corrective and preventive action[3] b) treating entire vehicle as a single system which will not be helpful for maintenance planning and lacks adequate detailing. Thus RBD approach reduces complexity in the estimation of failures with adequate detailing as compared to other methods.

Repairable system

Repairable system is a system which upon failure (Break down) is restored to operation otherwise than by way of replacement, whereas Non-Repairable system (NRS) is replaced upon failure. Failure(Breakdown) may be defined as any defect which result in the inability of system to perform its stated function.[3] Failure data analysis relating to non-repairable systems is known as life data analysis and that relating to repairable systems is known variously as Repair data analysis, Recurrentevents data analysis and Recurrence data analysis[4].In the case of non-repairable system, a probability distribution is sufficient to describe its failure which occurs first time and only one time in its life. Whereas, in the case of RS,a series of successive failures have to be dealt as it is repaired and put into operation upon failure necessitating the use of a modeling process as against the use of a distribution of time to a single failure in NRS. The analysis of subsequent failures with constant, monotonically increasing or decreasing Rate of Occurrence of Failures (ROCOF) is a challenge. Again when it is repaired, the condition of restoration provides different choices, e.g. same as new, same as old, minimal repair etc., which leads to several challenges and assumptions during modeling of failures. The time between successive failures of a RS is modeled by a sequence of distribution functions, known as stochastic process[5-7].

Stochastic process

A stochastic process X is a collection of random variables, i.e. $X= \{x(t), t \in T\}$, which is defined as a probability model to describe the physical failure process occurring in a time period. RV is used to represent a) Breakdown time b) Inter-arrival time c) time to failure from origin. When a repairable system is put into operation at time $t=0$ and the system fails, it will be repaired to restore its functionality.[8]The repair time is assumed as negligible considering its running time. When the second failure occurs, the system will again be repaired and restored. When this process continues, we get a sequence of breakdown times. If the number of breakdowns in the time interval $(0,t)$ is denoted as $N(t)$,a random variable, then $[N(t), t > 0]$ is the counting process which includes both the number of failures in $(0,t)$ denoted as $N(t)$ and the instants T1,T2,T3 ... at which they occur.

Many authors [9-13]have used stochastic point process models to effectively represent failures in RS. There are many point process models applicable for RS. The widely used models are: a) Homogenous Poisson Process(HPP) b) Non-homogeneous Poisson Process (NHPP) c) General Renewal process(GRP). As HCV is a complex repairable system, one may have to identify the model most suitable to help determine expected failures. Let us use deductive approach in deciding on the model applicability.

HCVis a repairable system which is subjected to minimal repair and thus restored to 'as bad as old' condition. As such it is a deteriorating system where the failures are

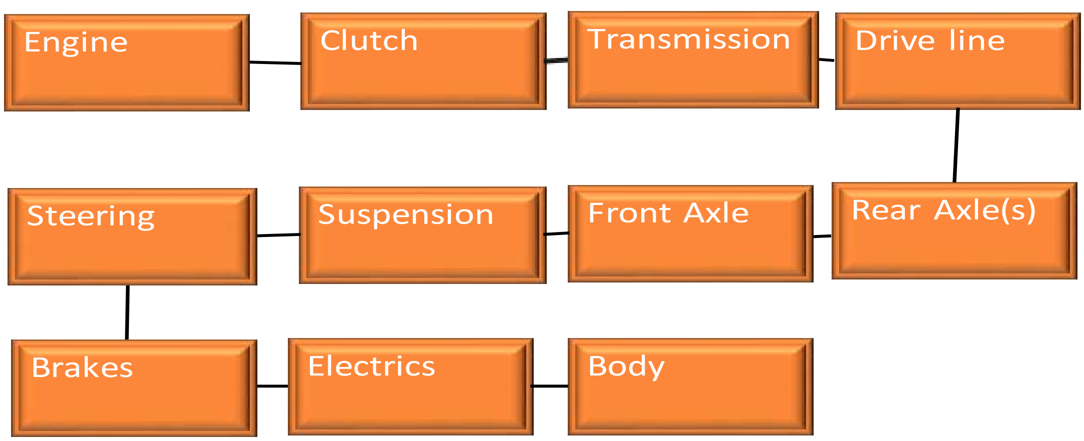


Figure 4 Reliability Block Diagram for Heavy Commercial Vehicles

dependent on age as repair effect is assumed as minimal or negligible compared to its running time. Hence the breakdowns are n ot stationary, i.e. the numbers of failures are not constant in a fixed duration and as such HPP models can't be applied to HCV to estimate reliability parametersincluding expected failures.

To apply GRP, the condition of making the system new after repair is to be satisfied. HCV has thousands of parts in it. By replacing a failed component at say "2 years of age" may not make the HCV as good as new as the rest of the components in thousands continue to be old. Hence it may not be appropriate to use the GRP model to represent the failure process of HCV.

Therefore, we need to consider models where failure events are not assumed to be independent and identically distributed (IID).i.e.,The Models where ROCOF, rate of occurrence of failures, alternatively, known as intensity function, is capable of representing the likelihood of a failure at or around t hours of operationare to be applied. The choice falls on NHPP Models. The following NHPP Model with power law is widely used in RS analysis.

$$\lambda(t) = \left(\frac{\beta}{\theta}\right)\left(\frac{t}{\theta}\right)^{\beta-1}, \theta > 0 \; and \; \beta \geq 0$$

Where **β** represents shape parameter and θ scale parameter and **λ** (t) the intensity function at time t. By integrating the intensity function, we get the expected number of failures up to time t by using the equation $(t) = \int \lambda(t) = \left(\frac{t}{\theta}\right)^{\beta}$ By fitting the model to the history of failuressub-system wise taken from the maintenance records of the fleet operator and validating the goodness of fit, one can satisfy the adequacy of fit. One can also use simulation and confirm the adequacy of the model with more data points. Once that is proven, the failures can be estimated using this model. Then the failure cost can be arrived at by valuating the expected number of failures with component price& repair charges for all sub-systems and summing up for various time points or years of operation gives sub-system wise period wise corrective maintenance costs. Total corrective maintenance cost is given by $\sum_{i=1}^{11}\sum_{j=1}^{n} f_{ij}$ where f_{ij} is the failure cost for period of sub-system.

Substituting the actual corrective maintenance cost thus obtained in the LCC equation referred in the definition makes the LCC complete once inputting other relatively easily identifiable costs such as acquisition costs and disposal costs are over.

Conclusion

The use of LCC Model in a) evaluating alternatives for new acquisition and b) determining replacement point based on economic useful life for HCV by using reliability principles and point process models for failure cost estimation, will result in optimal use of resources in CV industry. Based on actual use of such LCC Models, The Government, Fleet operators, CV industry and Research Institutes may jointly arrive at EOL for various categories of commercial vehicles in the reasonable future both for environmental protection and also for conservation of resources which will bring benefits to all sections of society - Fleet owners,Manufacturers, and Road users. *MA*

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Sustainability Management: Indian Telecom Industry

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Abstract

A cost reduction process and culture among all employees must be in place to continuously challenge the existing costs. Indian Telecom Operators need to develop specific cost management skills to optimize the Operational costs. Strategic saving measures are to be implemented in specific time frame. Cultural Change is required in the telecom organizations. Following the traditional way of cost reduction will not work and creative thinking and implementation of cost reduction strategies is the need of the Hour. The consolidation impacts on all key business aspects, such as sales/marketing (outlet consolidation), customer care (call center consolidation), IT (system consolidation), shared services (Logistics consolidation), Managed Services (Network Operations outsourcing) should be taken up for optimizing the costs. In addition application of new technology will result in OPEX saving.

Telecom services have been recognized as asignificantdevice and key service for socio economic development of any country. Globalization has made telecommunication an integral part of the infrastructure in Indian economy. India has the second largest telecommunication network based on telephone users, and hasone of the lowest call tariffs and it is placed third-largest Internet user-base in the world. Factors facilitating growth of the Telecom Sector in India are mainly through the Liberalization, growing affordability of Handsets,more prepaid Subscribers, no incoming charges, and Increased Competition & Declining Tariffs. Major services of the Indian telecommunication industry are voice, internet and television broadcasting.

In this paper, main focus is on the revenues and costs categorization of the telecom sector in India. The paper describes the importance of costs and the strategy to be adopted in the current scenario.Data has been collected from multiple sources including annual reports, journals, and websites(TRAI and COAI etc).

With the tele density in urban areas reaching 150% and in rural areas 49%, there is a huge competition among the top players of the industry which resulted in the reduction of tariffs. Total telecom subscribers in India as of 30thJune 2015 are 1006.96 million (urban 584.21 million and rural 422.75 million). India's overall tele density is 79.98% (urban 149.70% and rural 48.66%).

Table 1: Current subscriber base as of June 2015 of TRAI report.

Particulars Wireless Wire line in India	Total
Total Telephone Subscribers (Million)	1006.96
Urban Telephone Subscribers (Million)	584.21
Rural Telephone Subscribers (Million)	422.75
Overall Tele-density	79.98
Urban Tele-density	149.7
Rural Tele-density	48.66
Share of Urban Subscribers	58.02%
Share of Rural Subscribers	41.98%
Broadband Subscribers (Million)	108.85

Slumping Revenues

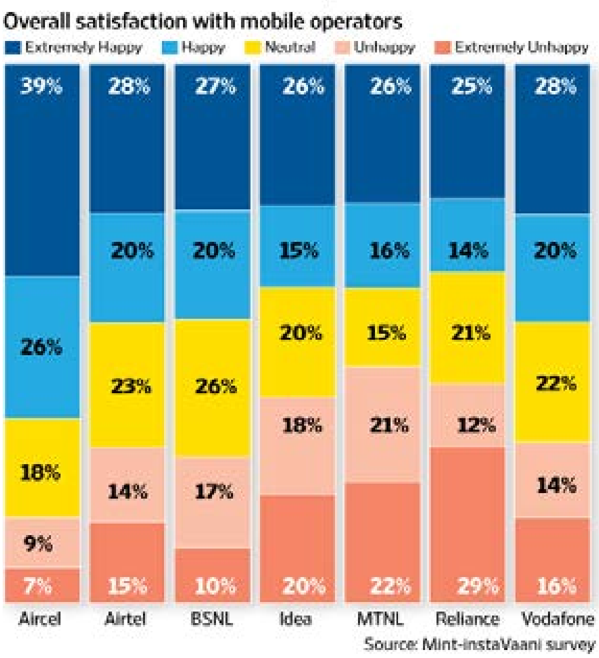
Competitive intensity has triggered the price war among industry players thus affecting the Revenue. The Indian wireless market competes with 12 operators across 23 wireless circles and 6 to 8 competing operators in each circle. The auction of3G/4Glicenses and the introduction of mobile number portability (MNP) invigorated the competition in the industry. With the percentage of new subscribers slumping particularly in urban areas, the operators are playing the game of churning out the customers of other operators into their network. The pricing strategy per second billing has taken the price war to the next level and put consequential pressure on the industry revenue growth and also on margins. The revenue growth curtailed as compared to the earlier years because of high tele density in urban areas,high subscriber acquisition costs and lower ARPU customers.

Another factor affecting the revenue is Churn rate. Many of the new customers are churning out of networks within two to three months with the intention of benefiting from schemes provided by the telecom operators at the time of acquisition which includes free SIM, bundled talk time etc. In addition, the channel is given more incentives to acquire new customers. Some channel partners misuse these incentives by activating the SIMs without real customers to get the benefit of the incentives. Even though the subscribers as per HLR (home location register) are high there is gap as compared to VLR (visitor location register). In June 2015 wireless subscribers peak VLR was 881.09 million even though the HLR was 1006.96 million.

Table 2: Revenues and ARPUs of Indian Telecom industry for Last two years.

Quarter	Total Revenue for the Quarter (Rs cr)	ARPU for the quarter Rs.	% Change over previous quarter revenue	% Change over previous quarter ARPU	Revenue Growth per month	ARPU Growth per month
Jul-Sep 2013	21392.36	125.56				
Oct-Dec'2013	22294.04	128.25	4.21%	2.14%	1.40%	0.71%
Jan-Mar'2014	23134.04	127.50	3.76%	-0.58%	1.25%	-0.19%
Apr-Jun'2014	25212.39	133.98	8.98%	5.08%	2.99%	1.69%
Jul-Sep'2014	24906.46	128.8541	-1.21%	-3.82%	-0.40%	-1.27%
Oct-Dec'2014	26167.64	131.393	5.06%	1.97%	1.69%	0.66%
Jan-Mar'2015	27061.42	130.8627	3.41%	-0.40%	1.14%	-0.13%
Apr-Jun'2015	29414.99	138.0358	8.70%	5.48%	2.90%	1.83%

Customer Connect



Once the operators really provide Value(the least cost for service at the desired time and place with quality and reliability) to the customers with best customer connect, the customers will stick to the operators for long. Present scenario of customer connect of top players in India proves that. **Falling ARPU (Average Revenue perUser)**cut throat pricing by operators has resulted in declining ARPUs. Further, in rural areas they are not witnessing a commensurate increase in revenues. In fact, the risk increases as the telecom companies penetrate rural markets which are having lowincome, low-usage customers. The decline in ARPU poses a risk of reduction in margins of service providers. They exposed to regulatory risks alsowith the increasedsubscriber base. Companies with good rural coverage, better operational efficiency, and superior quality of service are likely to stay ahead of competitors.Operators are concentrating on Mobile Value Added Services (MVAS) and also Data to Increase the ARPU.

Major opportunities for enhancing the revenue include increasedrural telephony, 3G/4G Services, WiMAX, Value Added Services in addition to Infrastructure sharing and Managed Services. Mobile data services play a pivotal role in tackling key issues in major sectors like Education, Health, Finance, Agriculture and governance in India. Supplementing the government services provided on web and mobile phones onus of creating infrastructure, promoting digital literacy, increasing electronic manufacturing capability all lie on the shoulders of telecom industry.

EBITDA

EBITDA is a fundamental measure for the company's stakeholders.The telecom scenario shows flat or declining voice volumes while the cost of promotional discounts to attract new customer'sincreases. As a result revenues and EBITDA margins are under pressure.Product mix i.e. postpaid and prepaid customers is also effecting the revenues.

Smartphone adoption

Revenue per smartphone is higher than mobile phones' revenue. India will see tremendous data growth at 30% smartphone penetration with even more adoption of data hungry applications and services on mobile devices. But the country's internet penetration stands at about 19%, which is low compared to internet penetration in other major economies, such as the US and China. India is likely to have 314 million mobile Internet users by end of 2017 and expected to be 650 million by 2020 from the present level of 159 million users as the usage in 2G, 3G, fixed broadband and 4Gand SMAC (social media, mobility, analytics and cloud) as Indians became the biggest followers of Facebook, What's app and Twitter specifically on mobile. Indian enterprises and SMEs are adopting cloud-based computing services to increase the quality.

Soaring Costs

Cost management has to become an inherent core competence of telecom operators. Before going into the details of cost reduction and strategies to be followed, the categorization of costs of Telecom Industry are to be analyzed in detail.

High fixed costs& High Spectrum Charges (Auction)

Telecom is a capital-intensive industry. It requires an extensive network infrastructure to provide services. High fixed costs result in high operating leverage. The cycle of upgrading networks is shorter for wireless companies. The cycle is shorter due to reasons ranging from technological innovations to managing increased network traffic. All players in the telecoms market will be forced to reduce their long term costs. Indian government received total payment commitment of Rs. 109,874.91 crore from seven leading telecom operators in spectrum auction which ended in March 2015.The major heads of costs in telecom industry can be categorized into the following.

1. Regulatory Charges

The regulatory charges in the telecom sector have a complicated structure because of multiple levies. This includes mainly the **Revenue Sharing, License fee and Spectrum charges and microwave charges.** Every Telecom Operator has to pay 8% of their AGR (Adjusted Gross Revenue) as Revenue share to the Government. In addition they pay between 2-6% of their AGR towards the spectrum charges depending on the region and the type of service offered.

2. Inter Connect Usage (IUC) Charges

Carriage charges are to be paid by the operators to other operators for carrying the calls using others network. These charges were fixed in 2003 and reviewed in 2006 and also in 2008 finally stipulated a ceiling of Rs. 0.65 per minute. There is huge variation with some NLDOs offering carriage charges as low as 9p a minute while a few others charge at the ceiling rate of 65p a minute. Due to this, the authority thought it would be reasonable to fix the ceiling for carriage charges at 35 paise per minute from March 2015. It also has reduced the interconnect usage charge (IUC) from 20 paise to14 paise on calls made from mobile phones. IUC charges on calls made from landline phones were done away with from the earlier 20p. Termination charges for international incoming calls have been increased to 53 paise per minute, from the current 40 paise.Total license fees charges,spectrum charges and access charges total up to 30-35% of the total revenue.

3. Penalties by Regulator

The operations of the Telecom industry are regulated by different telecom authorities which include Ministry of Communications and Information Technology, DOT, (Department of Telecommunications), Telecom Regulatory Authority of India, etc. They are supervising and also imposing penalties on Telecom operators for the deviations, for example monthly verification of customer applications by DOT.

4. Finance charges

Other major cost to the telecom operators is the Interest cost as most of the operators have very high debt.**Telecom operators in the country had a total debt of Rs 2,42,896 crore on their books in the year 2013-14.** As per the financial statements for the year 14-15 of the operators,RCom record high debt of Rs 31,876 crore and Idea cellular had a debt of Rs.25,875 crore.Industry debts include foreign exchange loans also and finance charges is huge burden on the telecom operators.

5. Network operating costs

Network operation costs are major costs in telecom industry. It includes mainly, Tower Rentals, power

& fuel, Passive infrastructure charges, surveillance vehicles, Repairs & Maintenance of MCN's, IS & Optical Fiber and Telecom towers, depreciation of network assets and manpower cost of Network. This cost comprises of around 40% of the total revenue.

6. Other costs include Customer acquisition and Customer Care costs, Billing and collection costs, Manpower costs, Marketing and Selling costs and Administration costs.

Cost Reduction Strategies

Cost reduction strategies mainly include Cost Savings, Cost Avoidance, Cost Containment and Value Enhancement. As regulatory charges cannot be reduced, focus should be on optimizing the Operational costs. Significant cost reductions are only possible with substantial changes in the business/operating model. Other strategies include manage the product Portfolio with effective marketing strategies, traffic offloading to micro sites, focus on productivity, and effective Asset management.

Total Cost Ownership and Cultural Change is the need of the Hour

A cost reduction process and culture among all employees must be in place to continuously challenge the existing costs. Indian Telecom Operators need to develop specific cost management skills to optimize the Operational costs.Strategic saving measures are to be implemented in specific time frame. Cultural Change is required in the telecom organizations. Following the traditional way of cost reduction will not work and creative thinking and implementation of cost reduction strategies is the need of the Hour. The consolidation impacts on all key business aspects, such as sales/marketing (outlet consolidation), customer care (call center consolidation), IT (system consolidation), shared services (Logistics consolidation), Managed Services (Network Operations outsourcing) should be taken up for optimizing the costs. In addition application of new technology will result in OPEX saving.

Infrastructure Sharing – A Profitable Proposition

The rapid expansion in subscriber base has brought new idea of sharing for upgrading the telecom infrastructure, to maintain quality of services in new service areas. It has emerged as a profitable proposition for both the parties involved, as for the tenant it lowers capex and opex, and for the owners, it is an additional source to earn revenue time required for new roll outs will be minimum in the rural areas. The tower industry players i.e.Indus Towers, Bharti Infratel, BSNL, Reliance Infratel, Viom Networks, GTL, ATC Tower Vision are key enablers for such models by allowing sharing of infrastructure along with operational excellence.Industry tenancy is expected to grow from 1.77 (FY2015) to 2.48 by 2020 primarily due to focus on data. The 3G and 4G sites are very low in numbers and the whole 4G network need to be put in place. There is huge opportunity for the growth of 3G and 4G tenancies as the data capacity requirement increases and operators start putting in capacity sites. Overall site tenancies (2G, 3G & 4G all inclusive) are expected to increase to 1,487,000 by FY2020.

Energy efficiency

Energy Efficiency reduces the operating costs and there is public and regulatory pressure to reduce telecom towers' energy consumption and pollution, especially from diesel generators.. Tower companies in India have already started testing and adopting alternative and renewable sources of energy like solar photovoltaic cells (Solar Power BTS), fuel cells of biomass and biofuel.

Cost Audit a way of reducing costs

Cost Audit is mandatory from the financial year 2011-12. Activities covered under Telecom Industry are process, procedure, function, operation, technique, treatment or method employed in relation to telecasting, broadcasting, telecommunicating voice, text, picture, information, data or knowledge through any mode or medium. This process will give scope for reduction of costs.

Conclusion

In the current scenario of cut throat competition, low ARPU customers, low margins, high spectrum charges and other costs, telecom operators have to optimize the costs not following traditional way of cutting costs but innovatively adopting costing strategies for survival in the industry. MA

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COST MANAGEMENT STRATEGY IN HIGHER EDUCATION

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Cost Management Strategy

Cost management strategy is a programme for business use in order to regularly identify and analyze cost drives to lower the costs and to maximize total value. By implementing the effective cost management strategy an institute can not only lower their costs but also create a strategic competitive advantage. There are three components of cost management strategies. The first one includes its core functions which comprises of nature of business, planning, product development and research. The next one includes added value activities like customer service, technical support, marketing, sales and manufacturing. And the last one deals with those activities that support core activities like IT, human resources, general administration, accounting etc.

Cost and performance are like the blood and bone of an organization. Every service evolves to address consumer desire with greater degree of specialization and customization. The cost and performance experts adhere to the constraints of a single cost of performance management paradigm. Management specialists work to influence organizational executive to adopt their new ideas and methods for improving perceive cost and performance shortcomings without including the cost.

An institute has to prepare a project budget and must implement effective project cost management strategies to ensure that changing requirements do not drive up costs. If the cost rise beyond the initial projections, available resources should be reallocated. This will be a very useful cost management strategy that keeps the project on budget while addressing potential shortcomings. Awareness and creativity are the core principles of effective cost management.

The concern must follow the changes in project cost and keep a close eye on those. Accordingly make possible adjustments that can keep the project on budget. Effective cost management strategies can be adopted through online training programme.

Non-profit or public organizations like higher education institutions work towards long-term sustainability of education. The higher education institutes have to utilize resources properly so as to control costs and stretch rupee as far as possible.

Higher Education for Economic Sustainability

Higher education plays a leading role in the attainment of sustainable development. The universities and colleges are commited towards transforming the higher education experience, but they are currently facing the economic sustainability issues to some extent. The higher education institutes have to understand these threats in the short-term, medium-term and long-term. An economically sustainable sector, in our opinion is not merely surviving, but it is growing vigorously and will be buzzing centre of knowledge, producing valuable outputs. Though history of higher education in India remembers us the name of Nalanda, Takshashila but at present no University of India came within top 200 global universities. We believe that for the Indian economy, when, our Prime Minister has introduced 'Make in India' programme and has been inviting business big houses around the world to invest in India, to stay globally competitive, then good quality higher education is of utmost importance. The benefits of higher education is intangible and difficult to quantify. The effects of higher education improves the quality of the society.

At present the higher education system of India includes both public and private universities. Fund of public universities (central and state universities) comes from Govt. of India and State Governments. On the other hand private universities are mostly supported by various bodies and societies. University Grants Commission (UGC) recognizes universities and its affiliated colleges. In addition to that 15 professional Councils have been established for controlling and supervising different aspects of accreditation and coordination.

As per UGC (Establishment and Maintenance of standards in Private Universities) Regulations, 2003 UGC regulates the Private Universities in India. Private Universities have been established in 18 states out of 28 states. In Rajasthan higher number (39) of private universities have been established. As on 11th September, 2015 there are 225 private universities out of 734 universities in India (www.ugc.ac.in). In West Bengal out of 27 Universities, 7 are private. All these 7 universities were established in 2012 and onwards. When the Governments, both State and Central, are unable to provide facilities to the youths who are interested in higher education, then they started framing regulations to invite private organizations to provide higher education to the young generation. At the same time when the universities are unable to absorb all honours students in Post Graduate Courses run by the universities, then the universities also decided to extend the facilities of Post Graduate (PG) courses in their affiliated colleges with certain terms and conditions. But all those PG Courses must run as the self-finance courses. At the time of assessment by National Assessment and Accreditation Council (NAAC) deputed by the UGC the peer team also insisted and motivated even recommended in its report to introduce self-finance PG Courses. So, it is observed that the Government wants to shed financial liability from its shoulder to the colleges and ultimately to the concerned students.

When the courses of Higher Education are run by the Govt. funding then the introduction of cost management strategy is not so important because nearly total education expenses borne by the Government either State or Central Government. But the private universities and the colleges running self-finance courses have to obviously think about cost management strategy for their economic sustainability. Now we turn our study to the Self Finance Post Graduate Courses run by the colleges.

Self-Finance Post Graduate Courses in West Bengal and Cost Management

As per policy of the Government of West Bengal and the Universities, colleges with adequate infrastructure may introduce self-finance Post Graduate courses to extend more facility of higher education to the society. A college may apply to the West Bengal State Council of Higher Education (WBSCHE) and the concerned affiliating university with requisite fees for introduction of P.G Courses in that college. Then the college submits filled up Form with Budget to the concerned university and W.B. State Council of Higher Education. Then the WBSCHE and the concerned university separately send inspection team to verify whether the adequate infrastructure is available in that college or not. On the basis of inspection report the WBSCHE and the concern university will decide about the justification of introduction of PG courses in that college.Though it is not an easy test to get permission to introduce the PG Courses in a college but it is most important to run the courses in a long run. In other regular courses economic sustainability gets no importance because almost all expenses borne by the Government. For better analysis we are presenting in Table 1 a budget placed by a college to the university.

Table 1

Estimate of Annual Expenditure and Income for the Proposed M.A. Course in Bengali for Two Batches : 1st and 2nd year (session : 2014-2015 & onwards) No. of Seats: 60 in each year

Expenditure	Amount Rs.	Income	Amount Rs.
Remuneration to teachers (2 full time teachers Rs. 25000*12m*2=Rs.600000 plus Guest faculties- Rs. 500*344 classes = Rs.1,72000)	7,72,000	Course Fee ($1^{st\ year}$ Rs.13,000 *60+ $2^{nd\ year}$ Rs.12,000 *60)	15,00,000
Remuneration to Coordinator	72,000		
Remuneration to Library Work	12,000		
Remuneration to 2 Office Assistant	48,000		
Remuneration to :			
Darwan	12,000		
Contingency	60,000		
Books & Journals	2,00,000		
Examination charge	80,000		
Excess of Income over Expenditure	2,44,000		
	15,00,000		15,00,000

Source: Office Record of a college applied for P.G Course

It is observed from the Table 1 that so many tentative expenditures have not been included under expenditure heads. In addition to that, amount allotted for individual expenditure is not appropriate. In Income side, income is shown for all seats assuming all the seats will be filled up. If cost management strategy was introduced in preparing the project budget and ensure that changing requirements do not drive up cost then the picture would be quite different. A Cost Accountant is able to show the no surplus/no deficit point or breakeven point i.e. the minimum number of students required to offset the expenses for running the course and identify the areas where cost may be reduced to a certain extent without comprising with the quality of education. In self finance course a surplus position is essential because in each and every years all seats may not be filled up then the surplus fund may set off the deficiency.

The university issued a letter of Grant of Permission to that college for introduction of Post graduate course in Bengali subject to fulfillment of certain terms and conditions. Some of them are as under:

1. Intake capacity for the course must not exceed 55

2. Course fee is to be fixed at not more than Rs. 15,000 per student per year and examination fees @ Rs. 500 per semester.

3. Five poor but meritorious students be granted free-studentship.

4. The college should update and augment the library.

5. The college must appoint two whole time contractual teachers for the said course.

6. The college should appoint 3 contractual non-teaching employees for the proposed course.

The university also mentioned in the terms and conditions that a report of compliance may kindly be submitted to the university as early as possible.

After getting the permission to introduce P.G Courses a college needs a specialized person's assistance to make a revised budget with fulfilling the terms and conditions imposed by the concerned university.

Though the college has applied for 60 seats but the affiliating university allotted only 55 seats out of which 5 meritorious but poor students will get free studentship. For running the PG Course 2 full time teachers and adequate number of Part-time teachers as well as 3 non teaching employees should be appointed.

Now we may prepare a revised Project Budget as per terms and conditions imposed by the university.

We may assume that all the seats (60 seats per

Table 2

Revised Project Budget for Self Finance Course in Bengali Language an Literature for an Academic Year

Expenditure	Amount Rs.	Income	Amount Rs.
Remuneration to teachers		Course Fee:	
-2 full time teachers@ Rs. 40000*12month*2=Rs.600000	9,60,000	50 students *2 years *Rs.15,000	15,00,000
		5 students * 2 years * Nil	Nil
-Guest faculties@Rs.500*344 classes= Rs.1,72,000	3,60,000		
Remuneration to 3 Non-Teaching staffs (Rs.35,000*12)	4,20,000	Examination Fee:	
		55 students @Rs.500 (Rs.500*4semesters)	1,10,000
Library Books & Journals	50,000		
Examination Expenses	55,000		
Stationary	50,000		
Electricity	50,000		
Miscellaneous Expenses	50,000		
		Deficit	3,85,000
	19,95,000		19,95,000

year) have been filled up. In that case total income is Rs. 16,10,000 but the total expenditure as per requirement of the university's terms and condition Rs. 19,95,000 and deficit per year Rs. 3,85,000. It is absurt to run the course in a long run because it is not economically sustainable.

But it is interesting to note that more or less all the colleges have been continuing the self finance courses. But how is it possible? As per Calcutta University circular/guidelines for running the self finance P G courses, a Subject Expert Committee has to be formed by the concerned college with 2 nominees of the Vice Chancellor, 3 nominees of the Principal (normally all are university teachers) and teachers of the college willing to take classes in PG section to look after all the academic aspects and forward their suggestions to the college authority. The college authority is expected to honour the committee's suggestions.

But in maximum colleges, PG classes are taken by Guest Faculties who are either university teachers or senior college teachers of different colleges. In some colleges one or two contractual teachers have been appointed with duly constituted Selection Committee, but their remuneration is much below the UGC scale though their qualification is obviously as per UGC norm. Generally, remuneration paid to Guest Faculties @ Rs. 500 or Rs. 400 per class of one hour. Names of those Guest Faculties approved by the PG Expert Committee. When all classes taken by Guest Faculties, then total expenses for remuneration of teachers fall drastically. As per usual university norms 100 classes will be allotted for a paper of 100 marks or 50 classes for a 50 marks unit. Then total number of 900 classes required for two years including two special papers in second year and total remuneration for teachers is Rs. 4,50,000 (900 * Rs. 500). If the college appoints two contractual whole time teachers with UGC qualifications and UGC scale and 3 part time teachers with W.B Govt. Scale then the total remuneration of teacher would be Rs. 13,20,000 (Rs. 9,60,000 + Rs. 3,60,000) vide Table 2.

So, it is observed from the above calculation that the affiliating university not considered at all the financial aspect of running Self Financing PG Courses. The university only considered the ideal situation of academic side. Under no circumstances a Self- Finance Course runs year after year in loss. To overcome the situation the college and at the same time the affiliating university have think in depth the financial aspect also along with academic side for an economic sustainability.

To fill up the gap of demand and supply of PG studies the universities give affiliation to so many colleges for PG Courses. Since affiliation has been given as a Self-Finance Course, here is the need of cost management strategy. The colleges offering PG Courses have to compete themselves to collect students. As per market economy those colleges will get maximum students which offer good quality teaching with minimum course fee.

No doubt the course fee is much below the fee of private university. This is due to the fact that no new infrastructure is required for introducing PG Courses in the undergraduate colleges. Those colleges run the PG Courses in the same shift or if sufficient rooms are not available then PG Courses run in another shift. Ashutosh College, Lady Braborne College, Bangabasi College, Schotish Cherch College etc. run PG courses in the day shift along with undergraduate courses.

On the other hand Naba Ballygunge Mahavidyalya, Rammohan College, Jogomaya Debi College etc. run the PG Courses in another shift due to shortage of infrastructure in the same shift. Since those colleges do not use separate land, building and other fixed assets for running PG Courses but only additional variable costs are required. That's why those colleges can run the PG Courses with much below the course fee of private university because those universities require totally new infrastructure. These colleges offer the facility of higher studies to the society with minimum course fee in relation to private universities. If the existing college introduces two or more Self Finance PG courses, then the fixed expenses for non-teaching employees etc. will be distributed among all courses and ultimately total cost of running an individual course will obviously be reduced.

Observations and Findings

- Existing public and private universities are not sufficient to allow all the willing students in PG Courses.

- Course Fee in public universities is least since the universities run by Govt. Grants.

- Course Fee of PG Section under Self-Finance Course in affiliated undergraduate colleges is higher than the affiliating university but much below than that of private university.

- Colleges does not think seriously about financial side of the Self-finance Course for economic sustainability.

- The affiliating University only considers the quality of teaching but not think about economic sustainability of those courses in short-term, medium-term and long-term.

Recommendations

Introduction of more PG courses in one college will reduce total cost of running individual PG course. For economic sustainability of Self-Finance courses the college should introduce cost management strategy for short-term, medium-term and long-term. If the college has no expert in this area then it can easily outsource it. Experienced cost accountants may extend their expertise help to the college.

The affiliating university should see the economic aspect of the Self-Finance Course along with the academic side of the course before imposing terms and conditions for introducing the Self-Finance Course so shat the Course can be economically sustainable. MA

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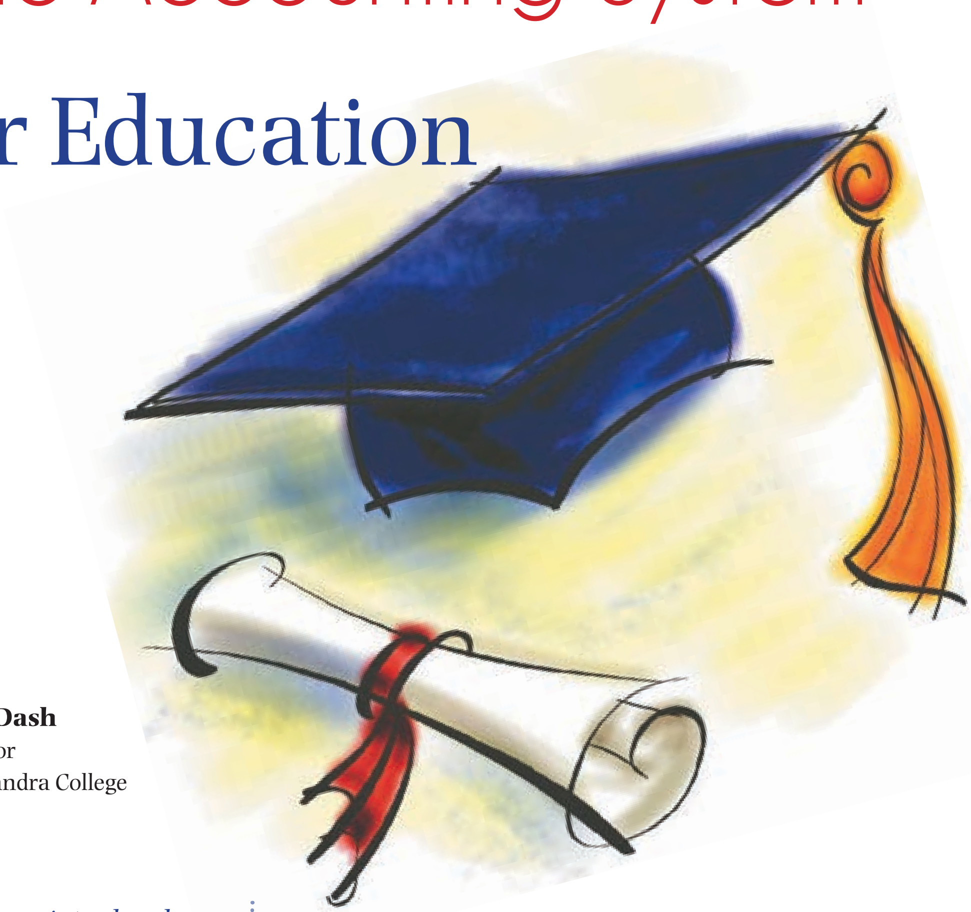
Academic Accounting System in Higher Education



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Academic Accounting System was introduced more than hundred years ago in the United Stated to quantify schooling and provide a means of measuring what is learned in 1890s. Now, it includes capturing various organizational arrangements for instruction, measuring cost per student for a course, accounting of instructional arrangements for planning and designing instructional programs by faculty within known financial parameters. Ranking of Higher Education Institutions (HEIs), assessment and accreditation by third party and academic audit are also similar to academic accounting. But in the absence of any uniform framework or principles it is difficult to obtain valid reliable academic information. In India, NAAC accredits HEIs by grading in four categories. But a prospective student cannot make a choice among courses on the basis of their outcome or choosing institutions accredited with same grade. A suitable Academic Accounting Model may guide prospective student consumers to choose the course and institution fitting his need and resources by providing necessary academic information. The study made a search for a model of academic accounting for capturing, reporting and disclosure of information. The model is structured considering the norms set by various regulatory bodies. The proposed academic accounting model provides information on Physical Infrastructure, Teaching-Learning Process and Instruction /Course Outcome. Different parameters used are measurable, verifiable and comparable. In Teaching-Learning Process, No. of classes taken, students' average attendance and study materials provided are some of them. To measure the outcome of a course students' progression has been divided into four subheads namely, moving to next higher course, entering into job market, adopting self employment route and entering into unemployed labour force. From this piece of information the true inner story of a course comes out and almost all decisions could be taken by the stakeholders. The redundant course curriculum responsible for increase in unemployable labour force can be identified.

Introduction

Accounting aims at capturing of changes in any institution/economic unit originating from its own activity, financial or otherwise, and / or activity of any outside agent. The term accounting is now used in all spheres of life to generate information on any particular event or a series of related events. It is not confined to the sphere of commerce and industry. The information prepared by the accountant and/or expert is on the basis of a set of principles, assumptions, conventions, concept and knowledge pool related to a specific discipline (s) belonging to the event or series of events to be reported. It provides a basis for preparation of information. The validity, authenticity, genuineness and accuracy of information are established by its scrutiny and certification by a third party and such activity includes all aspects starting from collating data to preparation of report. This scrutiny is known as auditing. Auditing adds value to the information by enhancing its reliability, validity and authenticity. So, theoretically audited information is widely acceptable to the users.

In knowledge based society, the role of education in the economic development of a country is of utmost importance. The honourable President of India opined that 'a sound education system is the foundation of an enlightened society' (http://presidentofindia.nic.in/speeches-detail.htm?324, 2014). He also commented that the 'higher education network of over 720 degree-awarding institutions and 37,000 colleges, the quality of standards in many is a cause for concern' and not a single education institution is in the top 200 universities in the world (http://presidentofindia.nic.in/speeches-detail.htm?324, 2014). From the above, it is inferred that the affairs of the academic institutions are not fulfilling the aspirations of the society. The performances of the higher education institutions should be measured and through proper analysis, the inadequate areas of teaching-learning process may be identified and corrective measures may be taken in this regard. The academic accounting may play a pivotal role to bring out true inner story of an education institution. The term 'higher education' is defined in the All India Survey on Higher Education as "the education, which is obtained after completing 12 years of schooling or equivalent and is of the duration of at least nine months (full time) or after completing 10 years of schooling and is of the duration of at least 3 years. The education may be of the nature of General, Vocational, Professional or Technical education". (Ministry of Human Resource Development, Government of India, New Delhi, 2013) The term 'academic accounting' was earlier used to quantify schooling and provide a means of measuring what is learned for an increasingly mobile population in United States (US). The Carnegie Unit, an academic accounting system was introduced over a hundred years ago (Smethurst & Wood). In 1892 the US National Education Association appointed a group called the "Committee of Ten" and it led the collective effort of American educators to systemize the then chaotic variety and quality of American schooling. By 1910, almost all high schools measured academic work by Carnegie Units (Shedd, 2003). The academic accounting system had gone through various stages of evolution. Now, it is not confined to quantifying of academic work, but also provides tools for measurement of physical infrastructure of an education institution for the purpose of planning, budgeting and allocation of resources to a programme. The objectives of academic accounting system developed Miami-Dade Junior College (Florida) are to:

(1) compare various organizational arrangements for instruction;

(2) provide a basis for the development of a cost effectiveness analysis system for instruction;

(3) provide a system for planning various instructional arrangements; and

(4) provide faculty with tools for planning instructional programmes within known financial parameters (Miami-Dade Junior Coll., Florida., 1971).

The first objective of the academic system developed by the Miami-Dade Junior College (Florida) is designed to assess the organizational arrangements for a particular course. The Academic Accounting system is defined as 'a system designed to define standards for faculty workload and to monitor productivity' (Bibby, 1983). In my study of academic accounting system, an attempt will be made;

i) to prepare a design for assessment of organizational infrastructure of a particular course,
ii) to set standards for faculty workload and

iii) to find out a suitable method for measuring its productivity in Indian context.

Perspective and Objective of this Study

The National Policy on Education-1986, revised in 1992 (NPE) prescribes that every Indian of requisite merit regardless of their origin be provided with equal access to every higher education institution of India (Ministry of Human Resource Development, Government of India). One prospective student can move from one part of the country to another only when true valid information about the HEIs are available for making a choice. Our country has witnessed tremendous growth in the field of higher education since independence by increasing the No. of universities by 29 times to 574, 71 times of No. of colleges to 35539. The reported enrollment in these institutions in the year 2011-12 was 203.27 lakh. In 2011-12 there were 13507 AICTE approved Technical Institutions with approved intake capacity of 30.14 lakh (Ministry of Human Resource Development, Government of India). Public expenditure on education has also increased to 4 % of GDP in 2011-12. The quality of higher education institution has not reached the desired level of expectation of our society.

The academic accounting may play a role of catalyst to the policy makers in finding out the reasons behind it and ensure adequate control over them. In India the academic accounting concept gained momentum in a different shape i.e. external quality assurance and in the name of assessment and accreditation of higher education institution in 1990s. The University Grants Commission (UGC) set up National Assessment and Accreditation Council (NAAC), an autonomous institution to ensure quality assurance in higher education institution of India in 1994. The vision and mission of NAAC are 'i) to arrange for periodic assessment and accreditation, ii) to stimulate the academic environment for promotion of quality in teaching-learning and research, iii) to encourage self-evaluation, accountability, autonomy and innovations, iv) to undertake quality-related research studies, consultancy and training programmes and v) to collaborate with other stakeholders for quality evaluation, promotion and sustenance of higher education' (National Assessment and Accreditation Council, June 2013). The assessment is done by grading the HEIs in four categories; namely,

A (Very Good Accredited),

B (Good - Accredited),

C (Satisfactory - Accredited) and

D (Unsatisfactory - Not Accredited).

But the assessment procedure does not provide any basis of comparison between two institutions having the same grade. This assessment does not provide any yardstick for comparison between two courses offered by any one or different institution(s) in term of its outcome. In commercial higher education market, a student consumer expects valid and perfect information on the quality of academic programmes offered by any HEI to choose the suitable one. This free flow of information on quality and price will enhance the quality in higher education. There has been mushrooming of commercial university league tables in all corners of the world in the last 25 years. It indicates an increasing presence of market competition in higher education. In Germany, CHE University Ranking , CHE Research Ranking, CHE Excellence Ranking, CHE/dapm Employability Rating, the NSSE in the United States and Australian student surveys are mostly based on views collected through running a structured questionnaire. They are not always free from personal bias, prejudices, region-specific ethnic values and etc. Academic Ranking of World Universities (ARWU) is prepared by the Center for World-Class Universities at Shanghai Jiao Tong University considering alumni and staff winning Nobel Prizes and Fields Medals, Highly Cited Researchers, articles indexed in Science Citation Index-Expanded (SCIE) and Social Science Citation Index (SSCI) (http://www.shanghairanking.com/ARWU-FIELD-Methodology-2012.html). They are prepared following a different set of principles or methodology. The ranking methods do not provide institution specific information on various parameters relating to quality and outcome of an academic course to enable prospective students making choices that fit his requirement.

The academic quality rankings have little influence on the students' actual choice of a subject or institution. In reality, 'a wide variety of educational, social, and personal factors in addition to academic quality' influence the choices of first degree students of mass system. Even the consumption benefits arising out of pleasures of living in attractive university surroundings and the appeal of university social life that contributes little to the society, influence a student's choice of institution and subject (Reflections and Conclusions: Beerkens, 2013). However, there is no globally accepted standard model/framework/format/design of presenting information of any academic course and institution for guiding the prospective student in choosing the suitable course and institution fitting his requirement. The present study makes a search for a model for reporting and disclosures of valid and verifiable, uniform, comparable and quantitative academic information of HEIs in India.

Methodology

The academic accounting aims at identifying and quantifying important parameters of physical infrastructure, teaching – learning process and final outcome of an academic course. In India, there are many acts, notifications and pronouncements of the central and state governments and regulatory bodies namely, UGC. AICTE, MCI to ensure quality in HEIs of different field/ subject (s). In the endeavour for searching suitable parameters of academic activities of HEIs these have been considered as base. The **parameters are considered for periodic assessment and accreditation by the NAAC** have been used as standard parameter wherever is required and applicable. The study mainly focuses on the affiliated colleges as they cater to 86.7 % students enrolling in to HEIs in India (Planning Commission, Government of India, 2013). The University Grants Commission (UGC) Regulations, 2003 on the Minimum Standards of Instruction for the Grant of the First Degree through Formal Education prescribes various standard parameters regarding Faculty, Working Days, Syllabus, Examination and Evaluation, Physical Facilities, Award of Degrees and Information (University Grants Commission, 2003). The general accounting principles are to be applied in presenting and disclosing information on physical infrastructure to make them comparable and uniform. The recommendations of the Committee under Prof. J.A.K. Tareen, constituted by UGC on the norms for faculty to student ratio for various disciplines / programmes in Central Universities and UGC-maintained institutions have been considered standard wherever it is applicable (Ministry of Human Resource Development, Government of India, 16-March-2011). One study was made by Richard F. O'Donnell to measure the productivity of faculty and their cost to the organisation in 2011 (F.O'Donnell, 2011) . The technique used by him to measure cost per students have been useful in our endeavour of reporting and disclosure of academic accounting information.

Search for a New Academic Accounting Model

The proposed model intends to focus on meeting the needs of prospective student consumer, policy makers, faculty and management of HEIs. The proposed model is divided into three segments/ statements to fit information on I) Physical Infrastructure, II) Teaching-Learning Process and III) Instruction /Course Outcome. They are reported and disclosed through (I) Statement on Physical Infrastructure for the Academic Year 20xx-xx, (II) Statement on Evaluation of Teaching-Learning Process for the Academic Year 20xx-xx and (III) Statement on Instruction /Course Outcome for the Academic Year 20xx-xx respectively. There are sub-parameters under each segment. There is flexibility to add any new sub-parameters for accommodating various important piece of information that may form integral part of any course.

Parameters for accounting, reporting and disclosures of performance in research/ innovation in humanities will certainly vary from that of any science/technology/engineering discipline. This is also equally true in case of necessary requirement of physical infrastructure in various academic courses. Information on every parameter is given on three subheads namely, X = International /National / Regional Standard [whichever is applicable], Y= Institutional Data and Z = X-Y= Variance (in %). Information under subhead X provides standard accepted and recognised at International /National / Regional level. Under subhead Y= Institutional Data is provided and Z subhead indicates surplus or deficiency of infrastructure on a particular parameter. Z subhead is expressed in terms of percentage to make information comparable and uniform. In addition to the three subheads one remarks column may be used to express anything that cannot quantified as for example a Nobel Laureate is a permanent faculty of any department. Learning Resources is considered the most important area of concern in

HEIs from the prospective students' perspective. So the model considers it in the first segment. Availability of Instructional Area / Per Students (in sq. m.) is one of the important criteria. It includes Class Rooms Tutorial Rooms, Laboratories, Library & Reading Room, Seminar Halls, Guest Room and Kitchen / Canteen. The requirement of Instructional Area may vary from course to course. At least in all situations there must be class rooms with minimum space of 1.1 sq. m. carpet area/per student taking class size of 66sq.m./ per class for 60 students as per AICTE norms (http:// www.aicte-india.org/downloads/performance.pdf). There may be colleges offering degrees with unlimited intake without minimum seating arrangement for students. Abysmally negligible figures indicate that the HEI has turned into a registration and / or enrollment centre. The Committee under Prof. J.A.K. Tareen prescribed the Teachers to Student Ratio for PG Programme is 1:10 (Science Programme, Media & Mass Communication), 1:15 for Humanities/Social Sector/ Commerce & Management, for UG Programme 1:30 (Social Sciences) 1:30, for Sciences, for B.Ed. as per NCTE norms and 1:30 for Media & Mass Communication (Ministry of Human Resource Development, Government of India, 16-March-2011). Availability of information and communication technology (ICT) in class room, 24x7 internet access, teacher- student ratio and percentage of faculty members who fulfil minimum criteria and appointed on ad hoc basis are some of the parameters of physical infrastructure considered in this segment. These parameters are not absolute and it may be extended to include other facilities which may be integral part of a particular course.

Curricular Aspect is one of the parameters in assessment and accreditation by the NAAC and more important from the view point of regulator(s) and institute. The quality of an academic course is reflected in its final outcome. So this descriptive part is not accommodated in the model for two reasons, firstly the problem of quantifying quality of up-graded curriculum and affiliated colleges do have little authority in coursework designing. Teaching-Learning Process, the most important area, is included in the second segment of this model. There may be adequate physical infrastructure, but utilising them effectively and efficiently is a separate aspect. Time has come to expose the academic performance of HEIs for public scrutiny by making reporting and disclosure of yearly academic statement mandatory, assessment and accreditation by third party and / or enlisting programmes with various ranking institution. No. of teaching days available per semester, compliance of academic calendar, syllabi covered, No. of classes allotted per semester/ courses, No. of classes taken per semester/ courses, Average students' attendance (in %) and study materials provided by the faculty to students (in%). There must be documentary evidences in support of each entry. For cross checking and validating the information on academic activity, students' feedback covering all related parameters may be used and the feedback system should be examined and scrutinised by academic auditor and he may apply observation procedure of substantive test to ensure quality in feedback system. If any student's average attendance is 30%, then it can be crudely understood that 70% of the syllabi is learnt on his own or with the help of a private tutor. If 50 % course curriculum is covered by institutional study material, then student has to depend either on the library facilities or private tutor. While choosing any course a prospective student may consider his past experience whether he can study on his own or needs a private tutor. The cost of education will increase where private tuition will be needed.

The model has the following features:

- The model provides a reporting frame work for the first time in an integrated manner.
- It can be applied for all institution engaged in different disciplines and courses.
- It provides comparable uniform information in quantitative and concrete terms.
- It avoids descriptive information to reduce ambiguity to a great extent.
- It is based on established standards or parameters.
- It model is simple and easily understood.
- Important piece of information of descriptive type in remarks column can be added to bring flexibility in the model.

Academic Accounting Model of a Higher Education Institution (HEI)

(I) Statement on Physical Infrastructure for the Academic Year 20xx-xx

Sl. No	Name of The Parameter	X = International /National / Regional Standard [Whichever is Applicable]	Y= Institutional Data	Z= X-Y= Variance (in %)	Remarks, If Any
1	Availability of Instructional Area / Per Students (in Sq. M)	66 Sq.m/Per Class For 60 Students [1] = 100%	(Average Size of Class Rooms in Sq. m / No. of Student Per Class) X 100		
2	No. of Class Rooms Required	No. of Courses Running Simultaneously = 100 %	No. of Class Rooms Available / No. of Courses Running Simultaneously		
3	No. of Class Rooms Fitted With ICT	100 %	(No. of Class Room Fitted With ICT / No. Class Room)X100		
4	Availability of 24x7 Internet Access to Every Students (In Hours)	24 hours = 100%	(Internet Access in Hours/ 24) X 100		
5	Availability of Laboratory Instruments: a) in No.s b) At Present or Replacement Value (in Rs.)	a) No. of Instruments Required b) Present or Replacement value of All Instruments Required	a) No. of Instruments Available b) Present or Replacement Value of all Instruments Available		
6	Library Facility (Availability of Books Per Module Per Student)	100%	Total No. of Books in the Library/ (No. of Modules X Total No. of Students) X100		
7	Teacher- Student Ratio[2]	20 as per XI Plan [3]	Actual Data		
8	Faculty Members Who Fulfill Minimum Criteria as per UGC Regulation (in %)	100 %	Total No. of Faculty Fulfills the Criteria /(Total No. of Faculty) X100		
9	No. of Faculty Appointed on Contract Basis to No. of Total Faculty (in %)	0 %	No. of Faculty Appointed on Contract Basis /(Total No. of Faculty) X100		
10	Cost Per Student Per Semester/ Course (in Rs.)	Course Fees Charged Per Course/ Semester = 100%	Cost Per Student Per Semester/ Course (in Rs.)		

Sources:

1. *AICTE norms source: http://www.aicte-india.org/downloads/performance.pdf*
2. *No. of Part time/ Temporary Faculty to be converted to Full Time Faculty by using their weighted workload against their full time counterpart.*
3. *Prof. J.A.K. Tareen Committee Norms for Teachers Student Ratio may be accepted as standard.*

(II) Statement on Evaluation of Teaching-Learning Process for the Academic Year 20xx-xx

Sl. No	Name of the Parameter	X = International /National / Regional Standard [whichever is applicable]	Y= Institutional Data	X-Y= Variance (in %)	Remarks, if any
1	No. of Teaching Days Available Per Year/Course	180 days[4] = 100%	(No. of Teaching Days Available/ 180 Days) x100		
2	Compliance of Academic Calendar	Full Compliance – 100 %	(No. of Deviations / Total Items in the Academic Calendar) x100		
3	Syllabi Covered	100%	(No. of Units Taught by Faculty/ Total No of Units in the Course)x100		
4	No. of Classes Allotted and taken Per Semester/ Courses	30 hours per week, out of which 20 direct contact hours[4] =100 %	[Total No. of class hours taken / (180*20/7)]x100		
5	Students' Average Attendance Per Class (in %)	100 %	(No. of classes attended by all students/ Total No. of Classes Held X Total No. of Students)X100		
6	Study Materials Provided by the Faculty to Students (in %)	100%	Total No. of Units Covered in the Study Material of a Course /Total No. of Units Taught in a Course)x100		

Sources: 4. UGC Norms

Evaluation of Instruction / Course Outcome is final product of all inputs pressed into the academic system. It is the principal factor influencing the choice of a prospective student. After completion of any academic course one student may have several options. The selection of any one option is influenced by the level of knowledge, skill and competence acquired, need for seeking employment, attitude to higher study and other socio economic factors. However, one passed out may get admitted to the next higher course, take employment, adopt self employment route or enter into unemployed labour force having no other option in general. The sum of all will become always 100%. The knowledge, value, skill and competence acquired from any course are accounted in this segment. Every institution must have a separate unit to collect data from each passed out. Poor result in this segment may be due to various factors such as redundant course curriculum, faulty designing of curriculum offered in the course, deficiency of infrastructure, incompetence and negligence of faculty, no linkage between knowledge and skill development, lack of skill and competence arising out of inadequate training programme, deficiency in the curriculum, the skill and competence imparted through the course is of abundant supply in the economy and does not have any opportunity at present. In case of a research institution, the No. of publications in the top 1 % of cited journal and in other journal, No. patent obtained, research grant received, awards won by alumni and faculty etc. may become the outcome of the institute. These parameters may be added to the academic outcome segment in case of research institution. Whatever is the reason of the poor outcome, after completion of any course the students' progression will be poor. In our country there is no established and standardised mechanism of compilation of data on this front, but absence of any data on any particular student, he/ she must be added to the No. of students that does not fall in the category 2, 3, and 5. There are several pertinent questions that will arise in regard to compilation of data for sub heads under segment III. Some of these are; a) one student gets a job after one year from the end course completion, b) one pursues two or more courses simultaneously and c) one refuses to take employment because of personal reasons. In the first case, as the statement is prepared at the end of one year at the time of preparation of it the student is in the unemployed labour force. The status of the student pursuing two courses simultaneously at time of preparation will be considered. In the last case, the candidate must be included in the subhead two of segment III.

(III) Statement on Instruction /Course Outcome for the Academic Year 20xx-xx

Sl. No	Name of the Parameter	X = International /National / Regional Standard [whichever is applicable]	Y= Institutional Data	X-Y= Variance (in %)	Remarks, if any
1.	No of Students Successfully Completed the Course (in %)	100 %	(No of Students Successfully Completed/ No of Students Admitted)x100		
2	No. of Students entered into next higher course (in %)	Data of Alternatives Course/ Institution May be Used by Prospective Students for Comparison	(No. of Students entered into next higher course/ No. of Students Successfully Completed Course) X100		
3.	No. of Students Got Placement After Completion of the Course (in %)	Data of Alternatives Course/ Institution May be Used by Prospective Students for Comparison	(No. of Students Got Placement / No. of Students Successfully Completed Course) X100		
4.	Average salary offered (in Rs.)	Data of Alternatives Course/ Institution May be Used by Prospective Students for Comparison	Actual data		
5.	No. of Students Became Entrepreneur After Completion of the Course (in %)	Data of Alternatives Course/ Institution May be Used by Prospective Students for Comparison	(No. of Students Became Entrepreneur/ No of Students Successfully Completed Course) X100		
6.	No. of Students Does Not Fall in Category 2, 3, and 5 (in %) (1-2-3-5)	Data of Alternatives Course/ Institution May be Used by Prospective Students for Comparison	(No. of Students enter into unemployed labour force (=1-2-3-5) / No. of Students Successfully completed course) X100		

Conclusion

In the competitive market of higher education, information provided by Academic Accounting will help a prospective student consumer to find out the best education institution. HEIs by providing true valid information will attract best talents for pursuing high end research activities. Management of HEIs will be able to identify the areas in which they are scoring poorly and accordingly will be able to devise strategies to score better on these fronts. In our country, public-funded higher education institutions cater to a sizable portion of population by seeking higher education and offer stereotype courses and fail to adjust curriculum with changing demand of the job market. All India Survey on Higher Education Report 2010-11 reveals that 'only 15 Programmes out of approximately 150 cover 82% of the total students enrolled in higher education' (Ministry of Human Resource Development, Government of India, New Delhi, 2013). It is due to non availability of choices. In market economy, HEIs have to be flexible in designing courses for their mere survival. Course curriculum should be redesigned keeping in mind the requirement of the job market on any particular specialized field. Information generated by academic accounting will help the prospective students to make a comparison between two courses, to know the possibility of entering into the job market successfully after completion of a course and moving to a higher course. When the job market for passed outs of a particular course becomes saturated it will be reflected in the information on the Statement on Instruction /Course Outcome. Accordingly, courses with poor placement opportunity or other opportunity will be wound up and a new course has to be designed and offered using the same infrastructure. It will increase the employability of our prospective work force. To survive faculties will be compelled to develop them on a continuous basis. The government and management will have to provide training to their faculties to keep pace with the changing demand for newly introduced courses. Academic accounting report will ensure optimum utilization of fund allocated by the society. Introduction of academic accounting will provide necessary information to management of HEIs to decide on allocation and reallocation of institutional resources to different courses. It will help to identify an idle infrastructure and to bring necessary changes by remodeling them to meet the requirement of newly introduced courses. It will assist the government in framing its policies by providing necessary inputs to take decision whether a new general degree college or a polytechnic college will be set up in a region having low gross enrollment ratio. *MA*

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Sustainable Growth of MSMEs : Cost Alignment and Business Strategy

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In the Indian economy the MSME's are playing essential role of raising the country in terms of providing employment, producing goods and services. Micro, Small and Medium Enterprises (MSME) sector has emerging as a highly energetic and forceful sector of the Indian economy. MSMEs not only play key role in providing large employment opportunities at relatively lower investment cost than big industries but also assist in industrialization of rural & backward areas, thereby, dropping regional imbalances, assuring more fair distribution of national income and prosperity. MSMEs are opposite to large industries as ancillary units and this sector contributes extremely to the socio and economic development of the country. And this study aims at developing the MSME's through the cost alignment along with the business strategy, the growth is measured in terms of expansion, diversification, enlargement of business activities of MSME's which includes procurement of machinery, recruitment of personnel, labor, technology and improving product/ service quality. All these activities are internally linked with cost, there is a needs finance, that should be aligned along with the business strategy where optimum utilization of resources can generate sustainable business in the market.

When the MSME's should be sustainable in the competitive market there should be the clear understanding about the problems of MSME's, thereby the suitable solutions can find to solve that problems.

Problems of MSMSE's which affects in rising costs of production and expenditure

- Timely availability of Finance and credit
- Infrastructural constraints
- Raw materials availability
- Machines and other equipments
- Problems of marketing
- Adverse effect of economic reforms and globalization
- Extreme competition
- Poor technology base
- Lack of skilled workers
- Delayed payments

- Gradual withdrawal of reservation policy
- Mindset problems
- Outflow of wealth
- Neglected social welfare areas

As the study mentioned above are prime reasons of MSME's which have direct impact on production cost and quality. To overcome the stated problems of MSME's the study suggested few implications:

1. Transform Human capital.
2. Grow and create competitive advantage
3. Stimulate innovation
4. Strengthen trust and Business transparency
5. Secure assets
6. Navigate Risk and Regulatory complexity
7. Create unique customer experience
8. Accelerate Digital and Technological impact

Transform Human Capital

Pioneering human capital management technologies provide organizations opportunities to reorganize aging applications and transform processes, where the needless inactive human capital either can transform into functional capable human capital.

Growth and create competitive advantage

India is anticipated to come out as one of the leading economies in the world over the next decade in the glow of a optimistic political and economic situation. The Micro, Small & Medium Enterprises (MSME) sector is anticipated to play a important responsibility in the materialization of the Indian economy. The improvement of this segment is enormously vital to meet the national imperatives of monetary enclosure and creation of considerable levels of employment across urban and rural areas crossways the country. Further, it can nurture and bear growth of new age entrepreneurs who have the possible to create globally viable businesses from India.

Share of MSME in the economy, there are about 46 million Micro, Small and Medium Enterprise sector enterprises across a variety of industries, employing 106 million people. in general, the MSME sector accounts for 45 percent of Indian manufacturing production and 40 percent of exports. While the majority of the sector is un-organized (approximately 94 per cent), unofficial, to be more enterprises registered are sound ongoing. The contribution of the MSME sector to India's Gross Domestic Production at present stands at 8 per cent for 2011-125, and is rising at a rate higher than the expected Gross Domestic Production growth rate. The involvement of MSME sector to the Gross Domestic Production in some of the global economies is in the 25-60 per cent choice. MSME in India has the budding to increase the share of involvement to GDP from the existing 8 per cent to about 15 per cent by the year 2020.

Stimulating Innovation

A holistic and incorporated center on building a nationwide entrepreneurial network can redesign India's socio and economic background in the next decade and improve its socio-economic extent of growth. Countrywide entrepreneurship development with suitable scale scope and advance will make all the difference.

Statistics are already raising on the increasing significance of innovation and it scale and range amongst the country's firms today. A National Knowledge Commission of India lessons reveals that 42% of huge firms and 17% of MSMEs have introduced 'new to the world' innovations during their trade. Seventeen per cent of the huge companies' grade innovation as the top tactical priority and 75% grade it among the top three priorities.

Focuses on growing competition as part of improving its investment environment, supported by stronger skills, enhanced information resources, and more finance–public and private sector.

- Strengthens its hard work to create and commercialize information, as well as enhanced diffuse existing global and local knowledge and enlarge the capacity of minor enterprises to attract it. If all enterprises could achieve national best practices based on facts already used in India, the productivity of the economy could boost more than five-fold.

- Fosters more narrow innovation, by promoting official R&D hard work for poor people and more innovative grassroots efforts by them, and by improving the capacity of informal enterprises to develop existing knowledge.

Strengthen trust and Business transparency

Customer faith is a serious achievement factor for any business. Research conducted by Edelman, a worldwide public associations firm, shows that "trust and transparency are as significant to corporate character as the worth of products and services. Building customer faith in your company and your products and services is the key direction to building a successful business. Much of this trust centers on communications with employees. Strong customer-employee associations can build customer assurance. Companies can further care for trust by seeking and performing on customer feedback to improve the company's value proposal.

Secure assets

Unlike narrow liability entities, the liability of the shareholder is controlled to the extent of the involvement made or due from him, in the proprietorships or partnerships there is no partition of personal and business liability. When a business fails, not only do the resources of the business but the entrepreneur's personal assets also acquire attached to pay off big business dues. Further, all guarantors which are drawn from the serious social safety net of the small entrepreneur, get personally concerned and in the contingency of failure they also get concerned and the whole safety net crumbles.

Navigate Risk and Regulatory complexity

In the financial globe today, risk management should not be an afterthought. Banks are facing growing agreement requirements that make a holistic risk detection and assessment increasingly difficult. At the same time, in a world of rising competition and declining margins, risk management becomes a key tool to care for comparatively low returns and risk behavior capacities and assure sustainable success. Against that backdrop, banks cannot give to continue relegating risk management to being a back office task. Instead, banks today must carry risk managing to the front and middle of their decision making procedure, integrating it with overall bank strategy in terms of how to move ahead. That will involve them to transform how they feel risk across their business, developing toward a more complicated understanding of the risks that they face. Banks that do have a more evolved risk management approach and operating model have seen the profit with market value growing by up to 24% as shareholders turn into more positive in the institution's future direction.

- Integrating Risk and Capital Management Within Overall approach

Our employment with primary financial services companies in Anglosaxon, European and Asian countries has given us an evolved outlook of how risk and capital management should be incorporated in a bank's overall approach and management procedure. A key initial point for risk scheduling within a bank is for the executive board to classify its risk desire for the organization. When the board has written such a report, the company can build up a risk strategy that integrates with the financial institution's on the whole strategy and investment limitations. The risk strategy integrating risk implications of the bank's business map against its risk appetite statement.

The risk plan is then tested by related situations to create stress tests and other investigation to show how the institution will carry out if bad case and worst-case scenarios emerge. Such scenarios might comprise terrible events such as a hurricane in the US, a major failure to pay by a counter party, capital market actions such as changing interest rates, or a macro event such as a key global collapse combined with a regional economic crash. Effective scenario management should comprise consistent information from peer banks with a related model and in a similar market situation so executives can see their risk profile in the perspective of a broader, competitive environment. Today's leading financial institutions must operationalize risk scenarios into their funding and risk control offices and come up with in depth effects on performance. They also must reason in fiscal conditions and regulatory capital implications as well as concerns about liquidity. Bank leaders then must shape out how to most effectively sum up and communicate these vast streams of data to the top management that allows for clear insights and easy decision making.

Create unique customer experience

Creating unique customer experience is one of the best ways to attain sustainable expansion, particularly in industries that are stagnating. If telco, a utility, or an insurance company can create a greatly differentiated customer knowledge that turns unhappiness or indifference into pleasure, will recruit an army of vocal advocates online and offline, achieve market share, and produce revenue growth.

Thanks to social networks, price assessment websites, and online reviews. The typical customer has higher expectations and superior knowledge than ever before. Besides, regulators, latest technologies, and new commerce have limited switching obstacles; it is easy for customers to skip to new service providers.

As awareness of the importance of the customer understanding grows, companies normally respond in at least one of three ways: 1. Establish retention teams to try to discourage people from cancelling their subscription. 2. Set about identifying potential defectors and recommend them a better deal.

Accelerate Digital and Technological impact

Technology implementation is a catalyst not only for development among India's MSMEs, but for the development of the Indian economy as a whole. Many stakeholders, together with the Government of India, technology companies and MSME leaders, recognize that roadblocks concerning to infrastructure, technology and skilled labor must be eliminated to maintain the growth of MSMEs and ensure their sustained contribution to India's industrial production, economic growth and employment.

Despite India's worldwide technology case study and best practices, at present small business in India is basically not realizing the full potential technology can fetch as a game-changer to the older traditions of doing things in their businesses. Although technology implementation significantly increased during the performance of the Government of India's 11th Five Year Plan with its spotlight on creating a technology infrastructure and progressing out technology-driven services, the use of technology in MSMEs remains narrow. As a result, it is a clear and deeply-felt involve speeding up the pace of technology adoption in the small business society and disseminating technology across the bottom of the pyramid and among India's MSMEs exclusively dramatically during the completion phase of the 12th Five Year Plan.

Conclusion

The MSME segment contributes enormously to the country's economic growth, accounting for 45% of manufacturing output, 40% exports and over 12% of GDP. Over the past four years, the SME portfolio of banks has grown at a compounded annual rate of 23% - faster than the credit growth of the banking sector. The potential for increasing funding to SMEs, therefore, remains significant. This paper provides a new insight of developing MSME's through the "Cost Alignment along with Business Strategy leads Sustainable Growth of MSME`s". The MSME sector is lacking as one of the main problems of the sector. And there is need to maximize the allocation of funds along with its expansion will leads the sector sustainable growth in the competitive market. MA

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Performance, Profitability and Cost Effectiveness of Bus Transport System in India: A case study on WBSTUs

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Introduction

The bus transport service dominates the public road transport system in India. The compound annual growth rate in bus transport has gone up from 5.3% in 1951 to 9.6 % in 2012 and total registered number of buses in India has gone up from 34 thousand in 1951 to 1677 thousand in 2012. Bus transport serves as a cheap and convenient mode of road transport. Under State Transport Undertakings (STUs.) there are 52 STUs in the country, owing 128735 buses in 2009-10 and 1676503 buses in 2011-12.

Buses are vital mode of transport for the common people in West Bengal. In West Bengal buses ply both in cities and villages. However, bus transport systems in many districts have not been able to keep pace with the rapid and substantial increase in travel demand. Moreover, bus transport operators in west Bengal face huge financial losses. The Government transport operators are usually dependent on Government subsidy which needs not be available all the time. When financial losses mount, first maintenance, then service reliability and finally operating capacity disappear.

In this present scenario, emerging financial crisis is considered to be the biggest challenge for bus transport operators in West Bengal. In this paper we intend to analyze the financial performance and cost effectiveness of STUs like Calcutta State Transport Corporation (CSTC), North Bengal State Transport Corporation (NBSTC) and South Bengal State Transport Corporation (SBSTC) in West Bengal. We have also given an outline of other important STUs in India such as Maharashtra State Road Transport Corporation (MSRTC) and Uttar Pradesh State Road Transport Corporation (UPSRTC) to draw a comparative and meaningful analysis.

Objectives of the Study

The objectives of the study are:

- To analyse the Financial Performance, Profitability and Cost Effectiveness of bus transport system in West Bengal.
- To compare and contrast the performance of West Bengal State Transport Undertakings with select STUs in India.
- To detect the areas of misutilization of resources and its suitable exploitation through proper recourse mapping

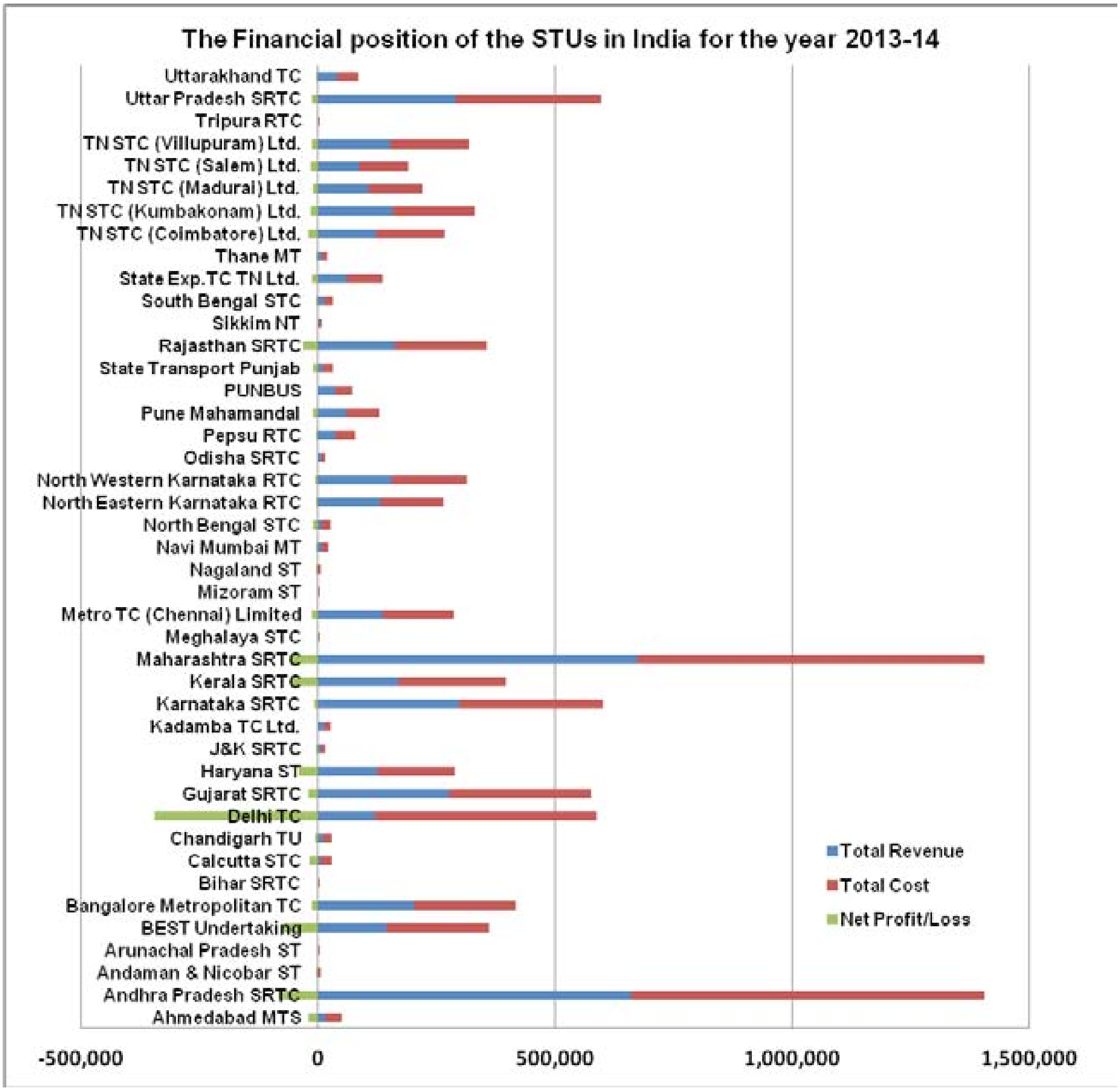
Methodology

The study is based on secondary data. This has been collected from various articles, reports and websites. The span of period of this study is five years from 2009-10 to 2013-14. We have analysed financial performance and resource management of STUs with the help of select parameters to examine financial performance, profitability and cost effectiveness and optimization of resource of the five STUs as mentioned above.

1. Financial Performance Management

The financial performance is a crucial factor that influence the finances of the organization. Under financial performance we have tried to evaluate the cost and its

Chart : Overall picture of financial position of STUs in India(2013-14)



Source: Ministry of Road Transport and Highways

Note: Rs. in lakhs

elements, revenue and profitability of the select STUs through ratio analysis and percentages.

The above chart reveals that almost all the STUs in India are facing net loss and this loss making trend continues in case of CSTC, NBSTC and SBSTC in West Bengal also.

The financial position of select STUs is given below:

Table 1.1 Cost Analysis during 2009-10 to 2013-14

Particulars	Year	CSTC	NBSTC	SBSTC	MSRTC	UPSRTC
Staff Costs (Rs. Lakhs)	2009-10	15196.56	9694.68	5279.23	156740.00	56300.74
	2010-11	17769.53	12451.79	6806.27	181567.00	68271.00
	2011-12	17201.33	10576.77	6964.48	202807.00	72154.00
	2012-13	15369.37	9562.08	7289.06	263343.00	82019.20
	2013-14	16894.16	9834.17	7012.99	280125.00	92652.78
Fuel & Lubricant Costs (Rs.Lakhs)	2009-10	4417.99	4246.02	4284.80	139502.00	60410.18
	2010-11	4424.78	4718.40	3772.26	161445.00	66216.00
	2011-12	4273.90	4616.60	3979.79	181381.00	73631.00
	2012-13	4582.29	5215.03	4423.68	205589.00	82135.74
	2013-14	4439.42	5615.37	5070.82	256529.00	102880.68
Cost of Tyres & Tubes (Rs.Lakhs)	2009-10	240.23	281.03	245.99	8082.00	4368.47
	2010-11	216.73	150.14	253.56	12048.00	4579.00
	2011-12	359.06	50.94	240.16	15646.00	5779.00
	2012-13	372.56	331.01	267.43	16981.00	7260.08
	2013-14	181.87	481.37	307.36	18994.00	6,936.21
Cost of Spares (Rs.Lakhs)	2009-10	333.22	246.01	509.85	10958.00	5793.86
	2010-11	271.38	194.82	645.23	29800.00	5458.00
	2011-12	305.59	160.37	542.70	31376.00	5513.00
	2012-13	311.71	291.31	704.10	13663.00	7250.50
	2013-14	321.54	437.46	393.33	13906.00	7044.69
Interest (Rs.Lakhs)	2009-10	1060.85	1281.00	1981.17	5324.00	2428.00
	2010-11	1029.32	1184.00	1883.10	1843.00	3185.00
	2011-12	N.A.	1302.00	1985.70	2450.00	4130.00
	2012-13	0.00	1367.10	2133.07	250.00	2833.85
	2013-14	0.00	1302.00	2193.27	134.00	4026.90
Depreciation (Rs.Lakhs)	2009-10	800.00	580.00	491.75	23915.00	13581.41
	2010-11	800.00	580.00	672.76	32918.00	12878.00
	2011-12	800.00	580.00	951.92	35192.00	13719.00
	2012-13	800.00	609.00	997.06	36457.00	12698.55
	2013-14	800.00	580.00	965.41	40793.00	14598.60

Particulars	Year	CSTC	NBSTC	SBSTC	MSRTC	UPSRTC
Taxes (Rs.Lakhs)	2009-10	0.00	0.00	52.20	56680.00	10426.00
	2010-11	0.00	0.00	76.47	75417.00	24185.17
	2011-12	0.00	0.00	327.71	84776.00	23402.00
	2012-13	0.00	0.00	394.93	90682.00	29366.49
	2013-14	0.00	2.17	410.34	99735.00	26523.00
Other Cost (Rs.Lakhs)	2009-10	410.82	705.03	730.11	19441.00	17590.80
	2010-11	631.00	1150.57	267.84	NA	22879.99
	2011-12	449.08	776.06	459.76	NA	29378.20
	2012-13	418.01	555.91	365.22	25497.00	37631.41
	2013-14	415.53	623.95	686.45	22105.00	50446.01
Total Cost (Rs.Lakhs)	2009-10	22459.67	17033.77	13575.10	420642.00	170899.00
	2010-11	25142.74	20429.72	14377.49	495038.00	207648.00
	2011-12	23388.96	18062.74	15452.22	553628.00	235855.00
	2012-13	21853.94	17931.44	16574.55	652462.00	261196.00
	2013-14	23052.52	18876.49	17039.97	732312.00	305109.00

Source: Ministry of Road Transport and Highways

In the above table we can see that the STUs of West Bengal are trying to reduce its personnel cost during the period of study expecting 2013-14 where CSTC and NBSTC have failed to trim down their personnel cost. Incase of MSRTC and UPSRTC personnel cost has increased continuously. On the other hand, the total cost of SBSTC, MSRTC and UPSRTC has increased constantly during the five years of study whereas, incase of CSTC and NBSTC we can observe a mixed trend.

Table 1.2 Revenue, Cost and Profit Analysis during 2009-10 to 2013-14

Particulars	Year	CSTC	NBSTC	SBSTC	MSRTC	UPSRTC
Total Revenue (Rs. Lakh)	**2009-10**	7533	6832	11813	434164	165702
	2010-11	6541	6525	13453	497967	202800
	2011-12	6163	6472	12178	560025	232398
	2012-13	7044	7512	12407	609579	252936
	2013-14	6198	7255	13493	673626	291466
Cost to Revenue Ratio(%)	**2009-10**	298.15	249.32	114.92	96.89	103.13
	2010-11	384.39	313.10	106.87	99.41	102.39
	2011-12	379.51	279.09	126.88	98.86	101.48
	2012-13	310.25	238.70	133.59	107.03	103.26
	2013-14	371.93	260.19	126.29	108.71	104.68

Particulars	Year	CSTC	NBSTC	SBSTC	MSRTC	UPSRTC
Net Profit / Loss (Rs. Lakh)	**2009-10**	-14,927	-10,202	-1,762	13,522	-5,197
	2010-11	-18,602	-13,905	-924	2,929	-4,848
	2011-12	-17,226	-11,590	-3274	6,397	-3,457
	2012-13	-14,810	-10,420	-4167	-42,883	-8,260
	2013-14	-16,855	-11,621	-3547	-58,695	-13,643
Profit/Loss per Bus/Day(Rs)	**2009-10**	-4185.86	-3485.12	-1065.65	232.19	-170.54
	2010-11	-5331.00	-4865.38	-620.47	49.50	-155.17
	2011-12	-5625.09	-4510.43	-2115.93	104.32	-108.29
	2012-13	-5208.64	-3964.99	-2393.38	-671.47	-254.47
	2013-14	-6431.49	-4627.67	-2291.94	-890.66	-389.36

Source: Ministry of Road Transport and Highways

We can perceive that though during 2013-14 each STUs are suffering from net loss,SBSTC, MSRTC and UPSRTC have managed to increase their total revenue as compared to 2012-2013. Here, we also can see that the cost to revenue ratio of CSTC and NBSTC is comparatively very high than the other STUs which indicates the huge gap between cost and revenue.

Elements of Costs:

Cost data can be classified in six major categories:
(i) Personnel Cost (ii) Material Cost (iii) Overhead Cost (iv) Depreciation Cost (v) Interest on Capital and (vi) Tax Personnel costs and material costs constitute the major burden of total costs. Personnel cost includes the cost of staff for administration, traffic, maintenance and repair and P.F. fund etc. and the material cost consists of fuel, lubricants, spare parts, tyres tube etc.

The percentage break-up of costs for Five Financial Years are given below:
Table 1.3 Analysis of Elements of costs during 2009-10 to 2013-14

Particulars	Year	CSTC	NBSTC	SBSTC	MSRTC	UPSRTC
Staff Costs as % of Total Cost	2009-10	67.66	56.91	38.89	37.26	32.94
	2010-11	70.67	60.95	47.34	36.68	32.88
	2011-12	73.54	58.56	45.07	36.63	30.59
	2012-13	70.33	53.33	43.98	40.36	31.40
	2013-14	73.29	52.10	41.16	38.25	30.37
Fuel & Lubricant Costs as % of Total Cost	2009-10	19.67	24.93	31.56	33.16	35.35
	2010-11	17.60	23.10	26.24	32.61	31.89
	2011-12	18.27	25.56	25.76	32.76	31.22
	2012-13	20.97	29.08	26.69	31.51	31.45
	2013-14	19.26	29.75	29.76	35.03	33.72

Particulars	Year	CSTC	NBSTC	SBSTC	MSRTC	UPSRTC
Cost of Tyres & Tubes as % of Total Cost	2009-10	1.07	1.65	1.81	1.92	2.56
	2010-11	0.86	0.73	1.76	2.43	2.21
	2011-12	1.54	0.28	1.55	2.83	2.45
	2012-13	1.70	1.85	1.61	2.60	2.78
	2013-14	0.79	2.55	1.80	2.59	2.27
Cost of Spares as % of Total Cost	2009-10	1.48	1.44	3.76	2.61	3.39
	2010-11	1.08	0.95	4.49	6.02	2.63
	2011-12	1.31	0.89	3.51	5.67	2.34
	2012-13	1.43	1.62	4.25	2.09	2.78
	2013-14	1.39	2.32	2.31	1.90	2.31
Interest as % of Total Cost	2009-10	4.72	7.52	14.59	1.27	1.42
	2010-11	4.09	5.80	13.10	0.37	1.53
	2011-12	0.00	7.21	12.85	0.44	1.75
	2012-13	0.00	7.62	12.87	0.04	1.08
	2013-14	0.00	6.90	12.87	0.02	1.32
Depreciation as % of Total Cost	2009-10	3.56	3.41	3.62	5.69	7.95
	2010-11	3.18	2.84	4.68	6.65	6.20
	2011-12	3.42	3.21	6.16	6.36	5.82
	2012-13	3.66	3.40	6.02	5.59	4.86
	2013-14	3.47	3.07	5.67	5.57	4.78
Taxes as % of Total Cost	2009-10	0.00	0	0.38	13.47	6.10
	2010-11	0.00	0	0.53	15.23	11.65
	2011-12	0.00	0	2.12	15.31	9.92
	2012-13	0.00	0	2.38	13.90	11.24
	2013-14	0.00	0.01	2.41	13.62	8.69
Other Cost as % of Total Cost	2009-10	1.83	4.14	5.38	4.62	10.29
	2010-11	2.51	5.63	1.86	NA	11.02
	2011-12	1.92	4.30	2.98	NA	12.46
	2012-13	1.91	3.10	2.20	3.91	14.41
	2013-14	1.80	3.31	4.03	3.02	16.53

Source: Ministry of Road Transport and Highways

Here, we can observe that staff and fuel cost have occupied the major portion of total cost of all the STUs, but incase of CSTC staff cost is excessively high.

The traffic revenue and government subsidy are the major source of income of STUs in India. On other hand Staff Cost and fuel cost are the major expenditures of this industry. Thus, it is imperative that these costs are needed to be kept under control.

2. Resource Management

In the high competition business, the bus transport operators should be responsible to minimize the cost so that they can run their business smoothly. In the bus transportation business, each bus operator has unque cost structure. If the operators can use the resource efficiently, the costs bound to decrease. On the other hand, if the operator cannot use the resource efficiently, the cost may be increased. A bus operator organization can be wealthy if it can utilize the available resources properly.

Here we can analysis resource management in bus transport system in five major categories:

Personal cost (ii) Fuel Efficiency (iii) Fleet Strength and its age profile (iv) Capacity Utilization and (v) Vehicle Productivity

2.1 Personnel Cost

Manpower is an important element of cost. Thus, it is imperative that this cost is kept under control and utilization is optimal to achieve high productivity.

Table 2.1 Analysis of total manpower, its cost and productivity during 2009-10 to 2013-14

Particulars	Year	CSTC	NBSTC	SBSTC	MSRTC	UPSRTC
Staff Strength (Number)	2009-10	6,719	4,273	2,416	101,138	33,109
	2010-11	6,102	3,959	2,388	103565	30128
	2011-12	5,813	3,690	2,316	104566	28928
	2012-13	5,485	3,410	2,244	100052	27,172
	2013-14	5,059	3,111	2,031	107885	26,595
Staff Cost (Rs. in lakhs)	2009-10	15,197	9,695	5,279	156,740	56301
	2010-11	17,770	12,452	6,806	181567	68271
	2011-12	17,201	10,577	6,964	202807	72154
	2012-13	15,369	9,562	7,289	263343	82,019
	2013-14	16,894	9,834	7,013	280125	92,653
Staff Cost per Revenue Earning Km (Rs.)	2009-10	38.09	21.8	14.01	8.48	5.36
	2010-11	50.98	30.96	18	9.57	6.64
	2011-12	58.33	27.52	19.16	10.22	6.64
	2012-13	59.03	23.65	20.34	13.21	7.37
	2013-14	78.32	27.17	19.82	13.69	7.90
Staff/Bus Ratio	2009-10	12.24	7.85	7.02	6.73	4.13
	2010-11	12.18	8.46	6.82	6.74	3.62
	2011-12	13.71	7.7	6.58	6.58	3.47
	2012-13	7.04	4.74	4.70	5.72	3.06
	2013-14	7.05	4.52	4.79	5.98	2.77

Particulars	Year	CSTC	NBSTC	SBSTC	MSRTC	UPSRTC
Staff Productivity (Kms/Staff/ Day)	2009-10	16.27	28.52	42.73	50.04	86.9
	2010-11	15.65	27.83	43.38	50.19	93.55
	2011-12	13.9	28.54	43.01	51.98	102.97
	2012-13	13.01	32.48	43.76	54.58	112.14
	2013-14	11.68	31.87	47.72	51.97	120.83

Source: Ministry of Road Transport and Highways

From the above table we can notice that incase of CSTC, the staff productivity is meager than the other STUs. Whereas, UPSRTC and SBSTC have managed to enhance their staff productivity remarkably.

2.2 Fuel Efficiency

Fuel is considered to be a major cost element. In this sector fuel efficiency can be utilized as a measure of productivity of bus companies. It is defined as bus-km per litre. This cost not only depends on external factors such as road condition, congestion, oil price but also on the internal factors e.g. driving habits and maintenance practice etc.

The Table below shows fuel efficiency/ Km/litre.

Table 2.2 Fuel Efficiency during 2009-10 to 2013-14

Name of (SRTUs)	Fuel Efficiency (Km/litre)				
	2009-10	**2010-11**	**2011-12**	**2012-13**	**2013-14**
CSTC	3.5	3.4	3.0	3.0	3.0
NBSTC	4.2	4.2	4.1	4.0	3.9
SBSTC	4.1	4.1	4.1	4.1	4.1
MSRTC	5.0	4.9	4.9	4.9	4.8
UPSRTC	5.3	5.3	5.2	5.2	5.2

Source: Ministry of Road Transport and Highways

It is clear that fuel efficiency has not deteriorated much for all the five STUs.

2.3 Fleet Strength and its Age Profile

The high incidence of over-aged buses led to low fleet utilization, excessive consumption of fuel, oil, stores and spare parts and the high incidence of idle buses in turn led to misutilization of assets. The Association of State Road Transport Undertaking (ASRTU) has prescribed the desirable age of a bus as eight years or five lakh kilometres, whichever was earlier.

Fleet utilization represents the ratio of buses on road to the buses held. So this ratio shows the assets utilization efficiency.

Table 2.3 Analysis of fleet utilization and average age of fleet during 2009-10 to 2013-14

Particulars	Year	CSTC	NBSTC	SBSTC	MSRTC	UPSRTC
Average Fleet Held (No.)	2009-10	977	802	453	15,955	8,349
	2010-11	956	783	507	16,212	8,560
	2011-12	839	704	484	16,801	8,746
	2012-13	779	720	477	17497	8,893
	2013-14	718	688	424	18055	9,600
Average Fleet Operated (No.)	2009-10	549	544	344	15,039	8,020
	2010-11	501	468	350	15,359	8,325
	2011-12	424	479	352	15,891	8,325
	2012-13	380	438	320	16215	8,634
	2013-14	309	455	335	16523	9,318
Fleet Utilization (%)	2009-10	56.19	67.83	75.94	94.26	96.06
	2010-11	52.41	59.77	69.03	94.74	97.25
	2011-12	50.54	68.04	72.73	94.58	95.19
	2012-13	48.8	60.8	67.1	92.7	97.1
	2013-14	43.0	66.1	79.0	91.5	97.1
Average Age of Fleet (Years)	2009-10	6.1	7.4	6.9	4.1	N.A
	2010-11	5.7	7.9	6.8	4.0	N.A
	2011-12	4.7	8.1	6.3	4.0	N.A
	2012-13	5.4	7.4	6.3	3.1	N.A
	2013-14	5.7	8.4	6.1	3.9	N.A
Over Aged Vehicles (%)	2009-10	24.7	34	16.9	0.6	N.A
	2010-11	20.7	37	19.5	10.4	N.A
	2011-12	13.6	41	19.8	5	N.A
	2012-13	17.0	64.0	8.5	6.7	N.A
	2013-14	21.7	40.0	8.4	0.0	N.A

Source: Ministry of Road Transport and Highways

The above tables show that the STUs of West Bengal were not able to achieve the norm of right age buses during the study period. Though the SBSTC has managed to reduce the percentage of over aged vehicles but still that percentage is comparatively high. Here, another big issue still persists i.e. the difference between average number of fleet held and average number of fleet operated is huge which means they have many idle buses.

It may be seen from the above table that the fleet utilization of NBSTC, SBSTC and CSTC remain quite low from the average fleet utilization (i.e. almost

89.5%) in India. The fleet utilization of CSTC has been reduced over the period depicting deterioration in operations. However, NBSTC and SBSTC have shown improvement in 2013-14. So, from the above it is clear that STUs of West Bengal did not able to achieve optimum utilization of their fleet strength, which in turn, impacted their operational performance adversely.

The factors contributing to poor fleet utilization were as follows:

- Shortage of crew (drivers/ conductors);
- High percentage of overaged buses which were not road worthy; and
- Breakdowns on account of inadequate servicing/ maintenance which are controllable in nature.

2.4 Capacity Utilization

Load Factor represents the percentage of passengers carried to seating capacity. It is a measure of the amount of utilization of the total available capacity of a transport vehicle. Passenger Lead is defined as the average length of journey performed by passengers.

Table 2.4 Analysis of Capacity Utilization during 2009-10 to 2013-14

Particulars	Year	CSTC	NBSTC	SBSTC	MSRTC	UPSRTC
Passenger Kilometres Offered (Lakhs)	2009-10	23,116	22,240	18,842	876,250	535,610
	2010-11	20,173	20,109	18,906	882,827	504,059
	2011-12	16,188	19,218	18,178	903,030	532,740
	2012-13	14,778	20,214	17,921	886,740	533,846
	2013-14	12,277	18,095	17,689	906,642	563,005
Passenger Kms Performed (Lakhs)	2009-10	19,128	14,760	15,317	533655	337434
	2010-11	12,108	13,951	14,916	543987	332679
	2011-12	11,996	13,427	14,875	556295	372918
	2012-13	12,175	15,614	16,040	536151	384369
	2013-14	10,120	14,560	16,734	528,386	365953
Occupancy Ratio (%)	2009-10	82.75	66.37	81.29	60.90	63.00
	2010-11	60.02	69.38	78.90	61.62	66.00
	2011-12	74.11	69.87	81.83	61.60	70.00
	2012-13	82.39	77.24	89.50	60.46	72.00
	2013-14	82.43	80.47	94.60	58.28	65.00
Passenger Carried (Lakhs)	2009-10	1,854	805	980	23,799	4,775
	2010-11	1,686	575	927	25,380	4,705
	2011-12	1,164	589	944	26,004	4,911
	2012-13	1,077	672	948	26,064	5,265
	2013-14	865	645	957	25,630	5,356

Particulars	Year	CSTC	NBSTC	SBSTC	MSRTC	UPSRTC
Passengers carried per Bus/Day (Number)	2009-10	925	406	781	434	163
	2010-11	922	337	726	453	155
	2011-12	752	337	735	448	162
	2012-13	379	256	545	408	162
	2013-14	330	257	619	389	153

Source: Ministry of Road Transport and Highways

The occupancy ratio of STUs of West Bengal has improved considerably but incase of MSRTC and UPSRTC this ratio has been decreased during 2013-14. Whereas incase of passenger carried per bus/days we have seen a mixed picture during the study period.

Vehicle Productivity:

Table 2.5 Vehicle Productivity

Name of (SRTU)	Vehicle Productivity (Kms/Bus/Day)	
	2013-14	**2012-13**
CSTC	82.31	91.57
NBSTC	144.12	153.84
SBSTC	228.6	205.86
MSRTC	310.56	312.08
UPSRTC	334.73	342.64

Source: Ministry of Road Transport and Highways

SBSTC has managed to increase the vehicle productivity rate considerably in comparison to all other STUs. This also indicates its good performance. Incase of NBSTC and CSTC vehicle productivity level is meager as compared to the average vehicle productivity in India.

Conclusion

Form the above study it is clear that during the last five financial years (2009-10 to 2013-14) the STUs of West Bengal are facing considerable amount of loss. The loss is incurred due to:

(i) Huge personnel cost viz salary of drivers and conductors are too high in comparison to that of the private bus operators that led to continuous loss of the organizations.
(ii) Hike in fuel price on a regular basis,
(iii) Low productivity of workers,
(iv) Low fleet utilization,
(v) Lack of efficient management,
(vi) Inefficient utilization of available resources etc.

In this study we have also identified that the annual expenditures are increasing steadily but the amount of revenue is not generated at the same pace. There are also a large number of workers with huge amount of salary, have very low productivity level. Passenger carried per Day/Bus is also not increasing reasonably due to high competition with private buses.

In the current scenario the above said STUs in W.B. are totally dependent on government subsidy; but it cannot be a proper solution towards attaining self sufficiency. To make themselves financially sound the STUs can adopt the following recommendations:

Recommendations:

1. Adopt PPP Model to enhance resources utilization which will again add to revenue earning capacity.

2. Appropriate utilization of Human resources and other assets like unused land and idle buses.

- The excess man power can be utilized to run commercial shop under the ownership of STUs in the bus depots.
- The organizations can also adopt voluntary retirement scheme to reduce the personnel cost.
- Unused land can be given on lease.
- Idle buses can be let out specifically for special promotional use.
- With the excess manpower and buses these organizations can emphasis on intra-state tour & travel program and the Government may encourage them in this direction.

3. Government can bring all the loss making STUs under one umbrella and can introduce proper performance appraisal system, upgraded training facilities to enhance productivity.

4. The management can adopt strong Internal Control and monitoring mechanism to enhance efficiencies.

5. The Government may create a separate regulatory body to regulate fares and services on uneconomical routes besides addressing the grievances of the commuters.

6. Approach to more advertisers so that more revenue can be earned through advertising. MA

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About Individual Choices and Well Being:

Nobel Chooses Angus Deaton

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It is by now common knowledge that Angus Deaton, the Dwight D. Eisenhower Professor of Economics and International Affairs at the Woodrow Wilson School of Public and International Affairs and the Economics Department at Princeton University received the Nobel Prize in Economics for the year 2015. Prof. Deaton is also a Research Associate of the National Bureau of Economic Research located in Cambridge, Massachusetts, a globally renowned research organization that involves the best minds engaged with research and policy making. Angus Deaton, incidentally, has a great connection with India as well. He along with Jean Dreze and many other development economists interested about India, and particularly about its poverty and inequality, have produced a staggering amount of research and policy propositions that have become important precursors to various national and sub-national public programmes and development-related activities adopted by the country. Deaton's continued interest about poverty questions in India has not only made him an important contributor to thought-provoking policy debates, but also someone who the policymakers and the practitioners of the subject look up to for directions about where to search for answers to complex puzzles in development and welfare economics. Indeed, Deaton's early contributions to welfare economics, in which he displays persistent effort in understanding the critical nuances of human well-being remains an important criterion for the grant of the most-coveted award in the subject. His institutional predecessor and a compatriot in the exploration of welfare economics with a lot of emphasis on the economic and social well-being in the most populous democracy, i.e., India, Amartya Sen also points out that Deaton's work stands out as a transition from the theoretical conjectures and axioms to applications that do touch upon the lives of millions of poor people. In his journey from a doctorate in economics at Cambridge University to seven year stint as a faculty member in Bristol University and then across the Atlantic to Princeton University in New Jersey spans 45 years of contribution in the subject that he would be known for over many more decades to come.

Once again, the award of the Nobel Prize in economics to someone interested in the general well-being of individuals comes at a time when in the aftermath of the deep financial crisis and global recession, people are generally not that buoyant about the economic prospects in the following years and that the social tension is substantially high. Deaton has a speciality in understanding the path of well-being adopted by individuals and the choices made by consumers by just looking at what and how they spend on several commodities in a week, a month or over a year. And, when is it the best time to observe silently how people react and behave in terms of allocating scarce resources including their labour and the investment patterns than during a financial crisis?

In a recent paper, if I may just choose to go backwards on the contributions that brings Prof. Deaton under the noble light (and I think that the demonstration of ability to make one's choices never makes Prof. Deaton unhappy, because it is still central to several of his extremely rich research outputs), the author comments that while the crisis brought harm to many, but it is a boon to researchers on self-reported

well-being, for whom it provided an unparalleled opportunity to examine how these events affected the standards of living, the emotional experiences, and life evaluations of those who lived through it.

Deaton further writes that the results of what one can potentially witness during a crisis was largely facilitated by a survey data from the Gallup Healthways Well-Being Index. According to this survey, approximately 1,000 randomly sampled adult Americans each day were asked about how their lives were going, whether they are satisfied with their standard of living, and whether they experienced a range of feelings on the previous day. Over the three-year period examined by the authors at the time of the publication of the said article, i.e., from 2 January 2008 to 29 December 2010, there were around a million observations on self-reported well-being, as well as on demographics, income, occupation, employment status, and numerous health measures. Really, how well have they been yesterday and how well are they today? Do we want to know? Does the state ever want to know? Of course it does not have to be about people living in the US or Canada or France who should alone be exposed to such questions. Does the Indian government ever care to inquire as to how have we have been between the last election when their to-be-elected representative on behalf of a red or blue or a green party knocked on your door and stood with a begging bowl, and now that the election has been won for three years? If the state is so insistent about knowing who you wrote your e-mail to and who you spoke to in the Middle-East, it should also try to figure out what you ate last night (unless of course your spouse made it so delicious that you do not want to make others envious by revealing it!). They would eventually come back at the beginning of the fifth year to ask how you have been, essentially as part of the preparation for the next election. No earlier than that! Well, no one expects democracies to be one hundred percent perfect, but some show of interest at least is not too much to ask for.

Deaton does not talk about these political and governance-related complications in his main approaches, but do these issues not stare at our face right from what he investigates? More importantly, it is hardly about information that is confidential and that which makes it even less onerous on the part of the state to inquire. Deaton initiated and investigated to the core, many such consumption related patterns that in turn offered tremendous inside information about what constitutes poverty and how does one plan to get out of it. Indeed, there is a distinct reason why referring to this poll conducted on American individuals means so much for what we can potentially discuss in this brief article, which can only hope to consider and not cover, the length and breadth of the research contributions by Prof. Deaton.

In the first place, one needs to clearly understand that cardinality of utility was actually banished from economics by Prof. John Hicks quite early into the launching of what became to be known as modern economics. What does that mean, really? Since Prof. Deaton has been to India and to Calcutta a number of times, reference to a short story by Bengal's one of the wittiest writers, Shibram Chakraborty would not be out of place. Mr. Chakraborty expressed his sincere displeasure in trying to answer how well he is today when simply asked so by a neighbour or somebody he happens to meet in the marketplace. If he has been well yesterday, and also well today, answering the same question is sheer drudgery for a smart brain. Or, one would still answer the question and be insincere in his/her answer because it carries no special interest on either side to investigate and/or reveal the true state unless there is a potential return from doing either. So, he (rather the character Harshabardhan in his short stories) devised a method not knowing necessarily what a cardinal measure of utility stands for. When asked about how well he is on a given day, he would put a number to it according to his own assessment. He would nonchalantly say, my wellness is 60 today and it was 63 on Wednesday. This would take the wellness inquirer so much by surprise that he ultimately would manage to erode away the inquisitive souls from asking the repetitive question however well-meaning the purpose had been.

However, following Hicks the ordinal measure of utility would no longer put a value to utility itself, but rank-order preferences of individuals in a continuous or a discontinuous manner. So, one would clearly weigh the basket of goods that presents itself to a potential consumer according to his/her budget set and choose the best possible combinations (if it is a normal good, meaning when your demand for the commodity goes up with your income). If the good is not normal, meaning an inferior commodity like polluted surrounding which you might have to face when your income is low but would be most happy to avoid when your income grows (it is no wonder that the millionaires in China are buying land in other countries planning to relocate out of the heavily polluted Chinese cities), the individuals choose the lowest possible combination, instead. These and several other dimensions of individual and mass preferences have become routines of our lives without us having to explicitly understand the processes in detail. To reiterate what Lalmohan Ganguly in Satyajit Ray's Feluda (the detective) stories would say, that, we are happy to walk around without having to remember how many small pieces of bones we have in our legs. The creator is certainly not this oblivious. The credit for understanding the economics of the routine reactions goes to Prof. Deaton's subsequent writings about how information about an individual's preferences leads to choice of pricing behaviour or creation of markets and mutual feedback effects on various types of consumers.

Going back to the US Gallup survey, the data allowed daily tracking not only of national averages, but of the outcomes of different groups. In addition to investigating reports of well- being over the crisis, Deaton also looked at a range of methodological issues. According to Deaton, one methodological issue in need of careful consideration is the long- standing question of whether variations in self-reported well-being (SWB) over time correspond to what might be expected from cross-section analysis. Deaton observes that with the Gallup poll, the three-year period had been too short to address the Easterlin paradox (which states that long-term growth appears not to generate the increase in SWB that would be predicted from the positive effects of income in the cross- section), but he could still examine whether the large fluctuations in income and unemployment generated fluctuations in SWB that match the findings from the cross-section. The author finds that the fraction of people satisfied with their standard of living rises with age, even though the level of income itself falls with age.

The analysis of the survey data further suggested that all groups showed some decline in their standard of living from spring 2008 until late in the year, and there was some recovery through 2009. However, it is in fact a very crucial finding that the severity of the harmful effects of economic crisis diminishes with age, and the crisis had a barely perceptible effect on those aged eighty and above. So, if the government knows this by help of a reliable statistical estimate of the nature under discussion, then at times of pressing crisis critical resources can be reallocated to more urgent concerns. Without the information, the government programs will run without the imminent requirement to readjust. Furthermore, Deaton also found out that the sixty to sixty-nine year old age group in the US was affected as severely as those under sixty, possibly because of their greater dependence on the market through defined-contribution pensions. The oldest group, whose pension income is unlikely to depend on the market, were the least affected by the crisis. When the state makes policies, when the Reserve Bank decides on interest rates, when the Employees Provident Fund decides on how to invest its accumulated resources in countries like India, are we certain that the decisions are adequately informed? Are we aware that finding yearly age distribution of work force participation in India is so difficult that people depend mainly on decennial censuses to understand activities in the Indian labour market? Do we agree that the central bank collects and maintains all the records on foreign remittances received at the state level in India, but neither analyzes its effects on the consumption and well-being of the recipients, nor makes it available to outside researchers? And still every morning every newspaper shall carry a statement from the top brass of the central bank on issues that are as dreary as they can be. India and numerous other countries, where the institutional qualities are as poor as their people are, should blindly follow Deaton's work if policymaking has to make any dent in the largely unwieldy world of political intervention in development.

Consider for example what Deaton has to say about the stunting of children in India. He and co-researchers clearly argue that children in India are visibly shorter compared to children of the same age in other countries. Why should that happen? Some researchers, including the vice-chairman of the Niti Aayog, Arvind Panagariya have said that it is genetic but it also seems that the supporting scientific evidence in this world of genetic mapping is absent. At least the recent debate in the Economic and Political Weekly bears testament to such unsupported claims. Deaton and others argue that apart from nutritional deficiencies, exposure to disease environment is extremely critical for causing stunting among children.

According to Deaton, healthcare is much less important for health status than the toll on children's growth that comes from constant struggling with disease. Deaton strongly asserts that food is obviously important, but so is disease because food and disease interact in key ways. All of this has been well understood for a long time, especially in the interpretation of the historical mortality decline and of the historical increase in heights. It is further suggested that the story of increasing longevity and of people growing taller over time cannot be told in terms of income and food alone.

Deaton has no ambiguity that the dynamics of healthcare, disease environment and height, weight, IQ etc, needs a better understanding of the conquest of disease in respective countries, which trajectory is by no means a linear one. It is argued in the same place that open defecation by individuals in India and exposure of children to maleficent viruses that open sewer carries is strongly responsible for the stunting of children in densely populated slums and countryside of India. The analysis uses adequate statistical support to display that genetics explaining short heights, like the last straw of a sinking analyst, cannot be ultimately clutched on to. There are better explanations that should have a direct impact on the policy world. Did it work? I do see it partially. In recent times, one finds a renowned woman film star from Bombay sensitizing through government sponsored televised bulletins to the villagers to build toilets at home because it poses health hazard to children and that it is a matter of respect for women folks. It is not a literal transmission of the point discussed here on to policy circles, but as long as the general understanding that poor sanitation has more to pose as problems than bad genetics, the building of toilets would be facilitated and the problem of stunting would also be taken care of undoubtedly.

Hopefully, people in India will not take recourse to cultural factors that make them proud to not use covered toilets. It is the same sort of culture, where people in India would never reveal the income level. Not that the government would pounce over them for taxes immediately, because most of the income remains unrecorded coming out of unregistered informal production, service and agricultural units, but it is considered rude to inquire about anybody's income in India. One can certainly ask about income in the US. Thus, unlike in many other countries if one has to survey and find out about indexed or comprehensive well-being in India, the only manageable way is to go through the expenditure line. The respondent would recall what they spent on food, clothing, education of children, healthcare, fuel, etc. over the last week or last month. From these responses, the state shall issue census or sample data on what are the consumption patterns in a country, what is deficient, what is surplus, etc. Based on these measures and weights assigned to individual tastes and preferences, the government shall assess the general well-being of the population. It may also help to understand if the individuals are happy or not. Deaton's legacy on these and similar aspects of well-being measures in India, Africa, along with his strong position on the relative inefficiency of foreign aid in bringing about growth and welfare in a recipient country shall remain very interesting reads for those who have any interest in knowing how the microeconomics of individual behaviour shapes the overall macroeconomic policies of a country. In general, the passage from economic analysis to framing of policies is laid with thorns, especially if it is a multi-layered poor democracy with serious ethno-religious-social factions defining the length and breadth of the country. It needs more time to see if the contributions of Angus Deaton walk this passage with substantial ease to the pleasure of those who believe that mass well-being is what we live and work for. MA

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Q&A

CMA Sudip Dutta

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***Q** What is your outlook regarding the performance of Infrastructure sector in India? What are the opportunities and challenges in this business today?*

The Indian Infrastructure is getting bigger and bigger as is the country's economy. Over the last decade or so there has been substantial liberalization and reforms carried out by successive Governments. The present Government has a strong focus on Infrastructure development which today offers substantial investment and development opportunities in almost all sectors such as road, highways, ports and airports railways, township and urban project, tourism etc. It is expected that the sector is going to rebound in the next 12 to 18 months. Already there are positive signs.

The Indian Power Sector for example has a huge investment potential of over US 250 billion in the next 4-5 years covering diverse sectors including power generation, distribution, transmission and equipment.

The Government of India has also earmarked Rs. 50,000 crores to develop 100 smart cities across the country. Similarly highway projects worth USD 93 billion have been announced under the National Highway Building Project. In order to boost the infrastructure sector the RBI has notified 100% FDI under the determined route in the construction sector. Also FDI rules in this sector have significantly liberalised.

In West Bengal, Kolkata Port Trust has signed an agreement with the West Bengal Government to setting up a new Port at Sagar Island costing around Rs. 11900/- crores. The State Government is in the process of developing six theme cities across the state.

While substantial progress has been achieved in the infrastructure sector some more work needs to be done. Rigorous project development process, adequate budgetary allocation, project sustainability, proper structuring of PPP transactions, fiscal incentives, governance and regulatory structure etc are some of the measures that needs to be further focused on. Land is definitely a key requisite for large infrastructure projects and delay in land acquisition has been one of reasons for delay in project. Speedy dispute resolution and arbitration process as well as continuity in policies insulated from politics are also critical for bringing large investments particularly in the global markets.

***Q** How is IL&FS incorporating the concept of cost effectiveness and energy efficiency in their projects?*

The IL&FS Project Teams have their own in-house design teams that help conceptualize and design cost effective and innovative project design while meeting the best of standards and specifications. Robust Financial Models and strong project monitoring and quality audit ensures optimum costs. The group also continuously sources technology for quality and cost optimization. All IL&FS projects seek to integrate environmental and social consideration into the project design. IL&FS Energy Group which is housed in IL&FS Environmental Infrastructure Services Limited specializes in Energy Efficiency and provides turnkey advisory services in this sector. The division possesses in house expertise and facilities for planning, reviewing and implementing energy efficiency projects.

IL&FS has devised innovative mechanisms and products to facilitate project financing. Since inception, IL&FS has been rated AAA by three independent agencies; ICRA, CARE and FITCH, across all tenors of debt confirming the group's ability to structure difficult projects successfully and enables IL&FS to raise funds competitively.

Unlike traditional models, the IL&FS project development cycle also uniquely encompasses wide-ranging consultations with the local community. It also ensures a comprehensive assessment of environmental and social issues. Such assessment creates the basis for a mitigation plan, which is integrated into the project life cycle

***Q** Project funding and its risk management is a complex & challenging task in the present economy, how do you manage it?'*

Risk Management needs to be an integral part of every company's business. The Risk Management Framework which needs to be developed carefully and well documented should not only ensures timely identification of risks, carry out analysis of the reasons for such risk, assessment of its materiality, assessment of its impact but also provide adequate risk mitigation processes. An efficient Risk Management Framework ensures that all risks however remote which could potentially threaten the existence of the Company are identified and risk mitigation steps identified for them

***Q** In infrastructure sector the need of public–private partnerships is imperative, what is your view in regard to the progress of PPP model in India?*

PPP in the infrastructure sector started to develop meaningfully on around 2000 -2001. IL&FS has been one of the few companies who had been taking up PPP projects even before this time. The Delhi Noida Direct flyway a world class infrastructure project developed by IL&FS on a PPP framework was one of the benchmark project set up way back in 2001.

The real boost to the PPP Projects came with the Golden Quadrilateral Program in the highway sector. India today is the world's largest market for PPP Project and there has been a host of successful PPP Projects in almost all sectors of the infrastructure

Having said that, PPP remains only a small percentage of the overall investment in the infrastructure sector and there remains substantial untapped potential to increase the investment. Power, Telecom, Railways, Health, Smart Urban Infrastructure are just some of the sectors which can be tapped significantly.

One of the key impediments to attracting private participation in infrastructure projects has been the absence of a focused and rigorous project development framework. This leads to issues and disputes during the implementation process which delays projects significantly and also has significant cost implications. To attract quality investors, a strong dispute resolution process and continuity in policy irrespective of political changes are important. The selection process also needs to be reviewed to ensure that only strong agencies having requisite qualification, expertise and resources are selected. Also the sector is suffering from non availability of long terms fund which calls for innovative approach.

Q As a member of this Institute, what do you feel the Institute should do to initiate associations and tie-ups for Industry-Institute interface?

I strongly believe that interface with the industry is critical for the Institute. This could be achieved in several ways. Our Institute needs also to contribute to nation building and we should collaborate both with the industry as well as with the Governments in developing policy suggestions in various areas of development. These interactions should be on a wide range of areas and not only confined to Cost or Management Accountants.

The power of involving the alumni in developing any institution cannot be understated. A process of identifying alumni and involving them in the development of the Institute e should be put in place.
Intensive programs under resourceful persons from the industry should be carried out for both students and faculties.

Q Cost and Management Accountants can play an important role in forecasting and management of risk in infrastructure projects. Please suggest in what ways CMAs may offer their expertise more effectively in this quest?

I am glad you mentioned this. There are many areas where CMAs can contribute effectively. This is only one of many. However this will require a bit of focused skill development.

Management of Risks in Infrastructure sector which suffers from a high level of uncertainty and is also subject to a large number of extraneous factors is complex and critical. The Risk Management Process involves identification of risks, assessment of the same, developing risk response and monitoring and control. There are several well established tools for risk management. One needs to have the capality to analyse and quantify risks at all stages of the project and develop prompt and effective response strategies. One would need to develop sound critical and analytical skills, strong communication skills, problem solving ability, ability to develop contingent plans etc in addition to the subject knowledge. The ability to spot a potential risk is critical. The Institute would be well advised to offer short terms courses based on case studies and real life simulation.

Q As a token of advice to our young CMA achievers, kindly mention at least 3 qualities that they must possess to excel in their career.

Today we are in a knowledge based economy where the value of an organization is based on the intellectual resources that it has rather than on its physical or financial assets. So every single person in an organization is important. To therefore succeed one one needs to continuously develop and sharpen ones knowledge base and skill sets. Do not stagnate. Once you stop learning, its all over. Also you need to push yourself continuously and raise the bar of performance.

To excel critical soft skills such as communication, leadership, strategic management, risk management and a never say die attitude are as important as the traditional skills of accounting and management. So do focus on developing these skill sets as well.

To excel, one needs to be passionate in what you are doing. This alone can sustain a person to achieve year after year. The infrastructure sector in which we work are full of challenges and my team members all work under some very difficult conditions. Yet the kick of a project actually materializing is what we work for and what keeps us going.

Lastly take ownership in whatever you are doing. Believe in yourself and the Institute. Have pride in the institute and contribute to its development.

Top Stories from www.taxmann.com

DIRECT TAXES

Case Laws

- **Compensation received by prospective employee on termination of employment contract isn't taxable** - An amount received by a prospective employee 'as compensation for denial of employment' was not in nature of profits in lieu of salary. It was a capital receipt that could not be taxed as income under any other head - *CIT* v. *Pritam Das Narang* [2015] 61 taxmann.com 322 (Delhi)
- **Roaming facility doesn't require human intervention; roaming charges paid by Telecom Cos aren't 'FTS'** - Human intervention is required only for installation, setting up, repairing, servicing, maintenance, capacity augmentation of the network. When one of the subscribers in the assessee's circle travels to the jurisdiction of another circle, the call gets connected automatically without any human intervention and it is for this, the roaming charges is paid by the assessee to the Visiting Operator for providing this service. Hence, payment of roaming charges cannot be construed as technical services, thus, it does not fall under the ambit of TDS provisions u/s 194J - *Vodafone East Ltd.* v. *Additional CIT* [2015] 61 taxmann.com 263 (Kolkata - Trib.)
- **Period of holding of shares received on conversion of debentures includes holding period of debentures** - Section 47(x) provides that conversion of convertible debenture into shares would not constitute transfer for purpose of computation of income under the head capital gains. Section 49(2A) provides that for computing capital gains on sale of shares (received on conversion of convertible debentures), cost of acquisition of shares shall be cost of convertible debentures. It means, cost of debenture shall be deemed to be cost of such shares received on conversion. Thus, it would be logical to reckon date of acquisition of convertible debentures as date of acquisition of shares received on conversion of convertible debenture - *Naveen Bhatia* v. *CIT* [2015] 62 taxmann.com 87 (Punjab & Haryana)

Statutes

- **Now Form 15G/15H can be e-filed; payee to specify number of Form15G/15H filed during the year** - CBDT has enabled e-filing of declaration in Form 15G or Form 15H, as the case may be. Hence, a payee who is claiming receipt of certain incomes without deduction of tax can e-file declaration to that effect to the payer. Further, now payer has to allot a Unique Identification Number (UIN) to each declaration received by him in Form No.15G and Form No.15H, respectively, during every quarter of the financial year and has to furnish the particulars of declaration along with the unique identification number in TDS return of said quarter - NOTIFICATION NO.76/2015 [F.NO.133/50/2015-TPL]
- **Production cost of abandoned Film isn't capital exp. as Rule 9A doesn't apply to such Films** - CBDT has clarified that Rule 9A does not apply to abandoned feature films, thus, the expenditure incurred on production of such abandoned feature films is not to be treated as a capital expenditure. The cost of production of an abandoned feature film, is to be treated as revenue expenditure and allowed, as per the provisions of section 37 - CIRCULAR NO.16/2015 [F.NO.279/MISC./140/2015-ITJ], DATED 6-10-2015

INDIRECT TAXES

Case Laws

- **Assessee need not reverse credit for 'exempted by-product'** - 'Spent Sulphuric Acid', arising as a by-product is manufacture of 'Acid Slurry', cannot be regarded as a final product; therefore, even if it is partly cleared under exemption, input credit cannot be denied under Cenvat rule 6 - *Commissioner of Central Excise, Pondicherry* v. *Advance Detergents Ltd.* [2015] 59 taxmann.com 319 (Madras)
- **Post-sale reduction in sale price won't lead to payment of less sales tax** - Where assessee had sold goods at a specified value and later on under an agreement value of goods was reduced by purchaser of goods and differential amount was recovered by him from subsequent bills of assessee, claim of assessee that sales tax was required to be paid on lower value of goods could not be accepted - *Universal Cylinders Ltd* v. *Commercial Taxes Officer* [2015] 60 taxmann.com 316 (Rajasthan)
- **Production capacity of machine can be ascertained on basis of actual parameters in absence of manufacturer's invoice** - Where manufacturer's invoice is not available to determine capacity, Commissioner's methodology in going into actual parameters/measurements of furnaces in order to ascertain their capacity, cannot be termed as faulty - *Raj Ratan Castings (P.) Ltd.* v. *Commissioner of Central Excise, Kanpur* [2015] 60 taxmann.com 343 (SC)
- **Delhi High Court allows input tax credit on DEPB scrips** - Assessee purchased scrips of Duty Entitlement Passbook Scheme from registered dealers after paying VAT and used it to pay import duty on goods. Since DEPB scrip has contributed to the price of imported commodity therefore it constituted 'use' of DEPB scrips in the 'sale' of said commodity. Hence assessee was entitled to input tax credit on purchase of such DEPB scrips - *Jagriti Plastics Ltd.* v. *Commissioner of Trade & Taxes* [2015] 62 taxmann.com 62 (Delhi)

Statutes

- **Abatement for Goods Transport Agency service is also applicable to ancillary activities connected thereto** - Goods Transport Agency (GTA) provides composite service which may include various ancillary services such as loading/unloading, packing/unpacking, transshipment, temporary storage etc., provided in the course of transportation of goods by road.

  It has been clarified that such ancillary services would form part of GTA service and abatement of 70%, presently applicable to GTA service, would be available on the value of ancillary services as well. It is subjected to the condition that ancillary services should be provided in the course of transportation of goods by road and the charges for such services should be included in the invoice issued by the GTA. It is also clarified that said abatement is also applicable where GTA undertakes to deliver the goods at destination within a stipulated time so long as the entire transportation of goods is by road and GTA issues a consignment note - CIRCULAR NO. 186/5/2015-ST, DATED 5-10-2015
- **Settlement Commission can't settle cases of gold smuggling: CBEC clarifies** - It is clarified that Settlement Commission has no jurisdiction to entertain the matters in relation to the goods specified under section 123 of the Customs Act, 1962 which include Gold. In case the Settlement Commission admits any such matter for settlement, the jurisdictional field formation should challenge the same in High Court by way of Writ, at the stage of admission - INSTRUCTION F.NO.275/46/2015-CX.8A, DATED 1-10-2015

Voluntary Compliance Scheme for Foreign Black Money: Success or Failure

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T.C.A.Sangeetha

The Government of India offered a window of opportunity to those with unaccounted for income and wealth kept abroad to come clean and pay normal taxes in India. The scheme closed on 30th September 2015. There were over 638 declarants who offered a sum of Rs.4,147 crores for tax. The scheme offered no amnesty; both tax and penalty were payable. The saving grace was that there will be no prosecution and time was granted upto December 2015 for payment for the declared taxes. Expectations ran high in Government circles that there will be huge inflows under the scheme. It did not succeed. It was a failure. Why did it fail?

According to Rahul Bajaj, there was fear that the foreign asset disclosure could be used against the declarants in future proceedings. People prefer to take a chance and can wait to fight out up to the level of the Supreme Court if they are caught. This is no doubt a sad commentary on our tax laws and the tax administration.

Past Experience

This is not the first time that the Government of India has come up with a voluntary compliance scheme. Demonetization of currency notes was attempted in 1946 and 1978. Out of a stock of Rs.144 crores in circulation in 1946, only a sum of Rs.9 crores was presented for conversion. The corresponding figures in 1978 were Rs165 crores and Rs20 crores. There were voluntary disclosure schemes in 1951 (Rs.70 crores and tax Rs.11 crores, 1965 Rs.52.18 crores and tax Rs.30.08 crores, Finance (No.2) scheme of 1965 Rs.145 crores and tax of Rs.19.45 crores, 1975 VDS scheme Rs.834 crores and tax of Rs.241 crores, 1981 Special Bearer Bond Scheme and the amnesty scheme of 1985 which mobilized Rs.700 crores. Dr.Manmohan Singh brought in the National Housing Bank Deposit Scheme, the Foreign Exchange Remittance scheme, India Development Bond Scheme and the Gold Bond Scheme. None of this succeeded. All these schemes operated on the premise that no questions will be asked about the source of funds declared. The schemes helped notorious black money holders to convert their ill-gotten income and wealth into white money to the horror of the honest taxpayers. The crowning piece was the VDS of 1997 introduced by Mr.P.Chidambaram as Finance Minister. It fetched Rs.10,000 crores of tax. It helped a large body of recalcitrant and immoral taxpayers to convert all sorts of ill-gotten gains into white money by paying a nominal tax 30% without penalty. The Supreme Court was informed about the immorality of the scheme. Its fury knew no bounds. It extracted an assurance from the Government of India that there will be no more amnesty schemes hereafter.

A wellknown commentator observed:

" The thief in W.H Auden's "for the time being" discerned supernal logic in a scheme of things whereby he, as a felon, liked committing crimes and God, the all-merciful, liked forgiving them. Thus the criminal was indeed doing God's work and furthering the ends of divine providence'.

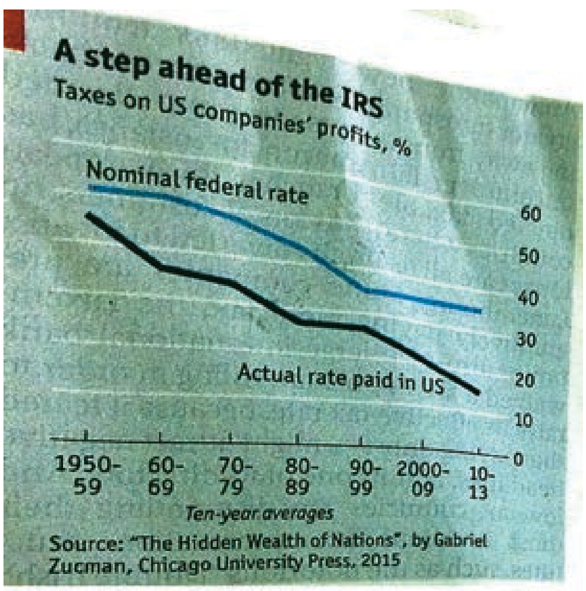
Amnesty Experience from Abroad

Amnesty Schemes Abroad had never been a flop Between 2009 and 2014, OECD countries recorded collections of Rs.2,715billion through voluntary disclosure programs. According to the Financial Times, Britain raised Rs.109 billion from 5819 disclosures upto March, 2015. America collected Rs.425 billion in taxes from about 45,000 disclosures and Germany Rs.95 billion in 2014 (source: Economic Times dt.7.10.2015). Canada offered amnesty waiving penalty and prosecution, so also Australia. America offered a series of short term program, ensuring that each program becomes less generous each time and this created a sense of urgency among taxpayers. In August 2015 OECD cautioned that while opportunities for making a voluntary disclosures are reducing, the risks of detection are rising.

Changing Times Need changing Rules

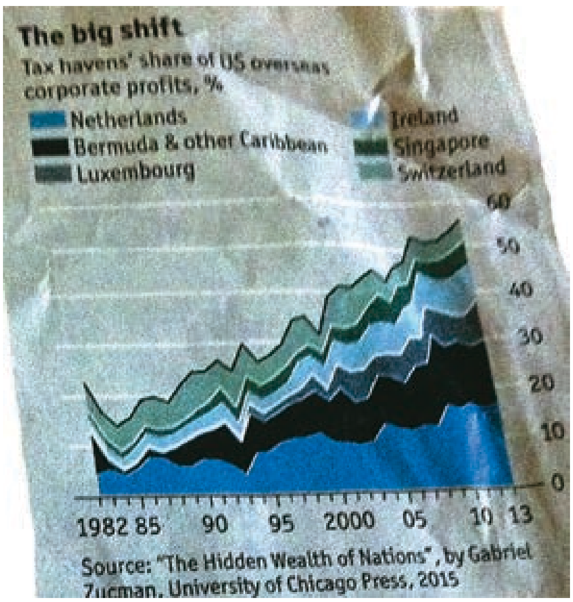
Tax administrations across the world are slowly learning to move with the times and they have started learning to deal with schemes designed to secure a 'stateless-income' structure. The American Senate highlighted how a big profitable unit of Apple was registered in Ireland, controlled from America and did not pay tax in either country. Our present tax laws, says the Economist of London, are dated and designed for the manufacturing age.

Today's business is increasingly digital, services based and driven by intangible assets including rights to exploit intellectual property from patents to Logo's. These are easier than physical asset to shuffle from subsidiaries in high tax countries to those in low tax countries. Tax planning is today is a core part of the business of transnational corporations. Tax loss is computed at 10% for global corporate income tax receipts by the OECD. American companies have revised ways of reducing the effective tax rates. See the chart below:



America's 500 largest firms hold more than $2 trillion in profit offshores. The American tax-law provides that foreign profits are taxable only when repatriated to USA. It is for this reason that the G-20 forum insisted that we should ensure that multinationals are taxed where economic activity takes place and where value is created. This outcry against tax evasion by multinationals led to the formulation of "Base Erosion and Profit Shifting" (BEPS) Rules. There is expectation that the new Rule would put an end to 'Double non taxation'. Companies will be required to do country by country reporting of where they really earn their Revenues, hold their assets and employ people, and where they book their profits.

This will give a clear picture of how much profit is being shuffled around for tax purposes. Netherlands, Ireland and Luxemburg are encouraging sweet heart deals enabling large MNC's to keep their profits in tax havens. Tax havens have been able to secure a big slice



of America's corporate profit., See the chart below: The problem arises because subsidiaries are created to shift profits to tax havens. Our transfer pricing laws are complex and often ineffective. There is no uniformity of approach among the Western countries in applying the transfer pricing laws. Each country is interested in protecting its own tax base.

Britain has come up with its new 'diverted profit-tax' as an anti-avoidance measure. Developing countries outside the OECD are not happy with the new Rules Governing BEPS. Netherlands houses more than 10,000 'letter box' companies and these are subsidiaries of foreign multinationals which help to cut their tax bills. Tax havens are undermining the global tax-base and helping big firms to avoid paying their fair share of taxes. Tax treaties are abused.

Treaty Abuse by MNCs

It is worth pondering why only 638 declarations were made under the latest open window scheme for voluntary tax compliance. MNCs have not come up with any declaration worth mentioning. India's treaty with Mauritius has often been adversely commented upon. The OECD has come up with a comprehensive coherent and coordinated reform of international tax Rules. Hereafter countries must incorporate anti-abuse provisions in their treaties. Treaty shopping is sought to be countered by the introduction of the limitation of benefit clause and the more general anti-abuse rule based on the 'principal purposes of transactions'. This will mean that only genuine investors can avail benefits of a tax pact.

Aggressive tax planning by multinationals can probably be eliminated or at least reduced next year when there will be a clear exchange of information among all countries. Compliance burden on MNCs will increase so that they can pay their fair share of taxes in each country where they do business.

Conclusion

The one time window compliance scheme may not have been a success. But those with moneys stashed abroad need not feel happy that the scheme failed. There is a global war on tax evasion. Countries are coming together to exchange tax information about secret funds.

The Hon'ble Mr.Arun Jetley has been voted the most brilliant Finance Minister among emerging economies. He will certainly come up with suitable measures to deal with the problems of growing black money inside and outside India. MA

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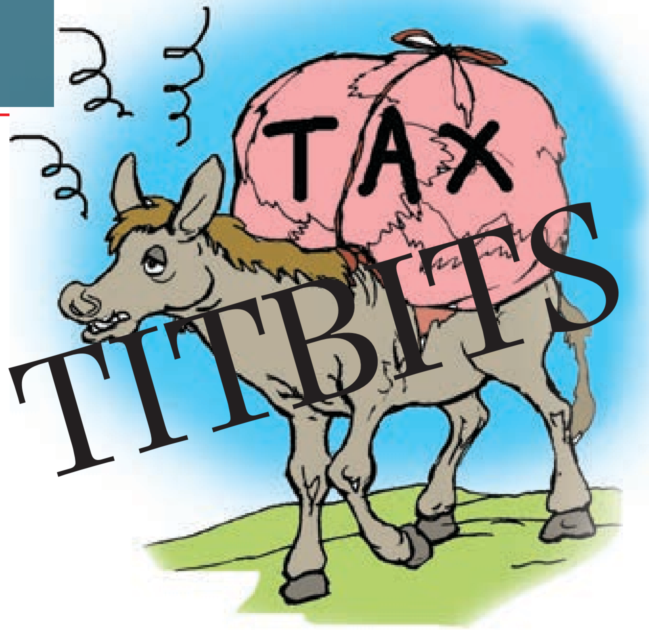

CMA S. Rajaratnam
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Chennai

Tax news – FATCA and BEPS

India is a party to the multilateral convention for automatic exchange of information on 3rd June, 2015 as between G20 countries. It has also signed a reciprocal Model 1 Inter-Governmental Agreement with U.S. on 9th July, 2015 in pursuance of US sponsored Foreign Account Tax Compliance Act (FATCA) making it mandatory for the persons liable to tax in US to disclose any direct or indirect interest in any offshore accounts or assets, the non-compliance of which would attract heavy penalties. More such agreements are under contemplation. There is some duplication because the comprehensive Double Taxation Avoidance Agreement already provide for exchange of information on the request of one country to the other.

There is also a hot subject in Base Erosion and Profit Shifting (BEPS) published in July 1993 by OECD for initiation of action to prevent shifting of profits across the international borders. With the failure of amnesty part of The Black Money (Undisclosed Foreign Income and Assets) and Imposition of Tax Act, 2015, there is bound to be greater activity to unearth black money abroad, but then the law under the Income-tax Act, 1961 as long as it recognises the artificial category of resident and not ordinarily resident, there is an escape route easily manageable by keeping physical presence in India within limits. Foreign Exchange Management Act, 1999 also is framed on parallel lines with Prevention of Money Laundering Act, 2002 running in a contrary direction. Reform in taxation is necessary, if FATCA or BEPS are to serve their purpose. Without such reform, the information from these sources are capable of being abused to the detriment of foreign direct investments both ways across the border.

Chartered Accountants in the news

The Mumbai Bench of the Tribunal in Vijay V. Meghani v. Dy. CIT [2014] 35 ITR (Trib) 320 (Mumbai)[SB] questioned the competence of a Chartered Accountant, who thought that there is no need to file an appeal on a matter which is already pending in appeal for earlier years in the view that rectification can be a remedy, if the decision in appeal is in favour of his client. The Tribunal was of the opinion that the advice was wrong as it placed the assessee at the mercy of the Assessing Officer for a number of years before finality could be reached in assessee's favour. The Tribunal had a dig at the training and updating programmes of the Institute of Chartered Accountants of India (ICAI). The delay in appeal in the circumstances of the case could have been condoned by the Tribunal without questioning the integrity or the competence of the Chartered Accountant, who believed in the fairness of the Income-tax Department and expected the settled law to be followed for later years on a rectification petition. It was so pointed out in the Notes and Comments on this case in ITR's Tribunal Tax Reports [2014] 35 ITR (Trib) (Journal) 57-58. It was added that the retort on this comment on the part of the Tribunal could well be "Physician, heal thyself".

As a further development, ICAI had taken up the matter by filing a miscellaneous petition making a plea, that the comments made by the Tribunal had led to unintended result affecting the reputation of ICAI. In Vijay V. Meghani v. Asst. CIT [2015] 61 taxmann.com 114 (Mumbai), the Tribunal dealt with the petition explaining, that the observation was made in the context and the intention was not to target any person or ICAI. The matter could have rested there. But the Tribunal had sought to justify the comments as being meant to be a wake-up call to the CA students pursuing the profession, while paying a left-handed compliment to training given to the article class by the profession adding a gratuitous advice that the model "may be supplemented by the coaching given by such institutes with practical training so as to avoid undesired results, which may affect the country as a whole". The better course for the Tribunal was to have expunged the offending passage instead of proferring further advice to the Institute or the profession in a more tempered language than the earlier one. The Tribunal does not have the necessary information nor is it competent to pass judgement on such matters.

Indiscriminate disallowance under section 14A

Where the assessee had invested in shares during the year, but there was no dividend declared on these shares during the relevant previous year, so as to be exempt under section 10(33) of the Act, should section 14A have application? This was the issue posed in CIT v. Lakhani Marketing Incl. [2015] 4 ITR-OL 246 (P&H). The view of the Tribunal, that in absence of any dividend income during the year, there was no case for disallowance of interest on borrowed funds under section 14A, was upheld by the P&H High Court purportedly following the decision in CIT v. Hero Cycles Ltd. [2010] 323 ITR 518 (P&H) and CIT v. Winsome Textile Industries Ltd. [2009] 319 ITR 204 (P&H) which itself followed in its turn another decision in CIT v. Abhishek Industries Ltd. [2006] 286 ITR 1 (P&H). But the decisions in these cases were in assessee's favour, only because the source of interest bearing advances were for business purposes. The Supreme Court in CIT v. Rajendra Prasad Moody [1978] 115 ITR 519 (SC) had held that, expenditure relating to a source with no income during the year from that source, was deductible, so that interest on borrowing for investment in shares is either deductible or to be disallowed irrespective of the fact, whether there was no dividend income during the year. On this reasoning, the rationale of this decision of the High Court under comment is vulnerable. But the same view was also taken in Cheminvest Ltd. v. CIT [2015] 61 taxmann.com 118 (Del) upholding the decision of the Special Bench of the Tribunal in Cheminvest Ltd. v. ITO [2009] 317 ITR (AT) 86 (Del)[SB] confining the scope of section 14A only to those cases, where there is exempt income and not where no income was earned from the exempt sources after distinguishing Rajendra Prasad Moody's case (supra).

The better reasoning, however, for the same conclusion, irrespective of the fact, whether any dividend was earned during the year or not, is that it is wrong to assume that dividend is exempt merely because of section 10(33). Dividend income is taxed in the hands of the company under section 115-O, so that section 10(33) only avoids double taxation. Such dividend income is taxed in the hands of the company, so that section 14A could have no application.

Revised account is acceptable

Where the assessee company had wrongly credited the entire sale proceeds of the assets in P&L Account instead of limiting the credit to profit or depreciation allowed, but had rectified the accounts by revision of accounts on holding another general meeting, such rectified accounts was found acceptable in computation of book profits for purposes of Minimum Alternate Tax under section 115JB of the Act in first appeal and endorsed by the Tribunal in Asst. CIT v. Armcess Engineers P. Ltd. [2015] 4 ITR (Trib)-OL 482 (Chennai). In the same case, it was held that the carry forward unabsorbed depreciation cannot be restricted to eight years under the then prevailing law for computation of statutory profits in working out the book profits under section 115JB. This law on both counts is based on the difference between statutory profits based on the provisions of the Act and book profits based on accepted accounting principles, accounting standards and company law.

Subsidies

There are conflicting decisions on the issue, whether State subsidy should be treated as a business receipt with revenue character or be outside the scope of taxation as a capital receipt. Where a subsidy was given to those industries, which showed an increase of 25% production over the existing capacity within a year, such subsidy, it was held, has to be considered as having revenue character in Joint CIT (Assessment) v. Colourman Dyechem P. Ltd. [2015] 377 ITR 411 (Guj) purportedly following the decision in Sahney Steel and Press Works Ltd. v. CIT [1997] 228 ITR 253 (SC). The decision of the Supreme Court in CIT v. Ponni Sugars and Chemicals Ltd. [2008] 306 ITR 392 (SC) was not brought to the notice of the High Court, where subsidy in near identical circumstances was found to be exempt in the light of the objective of relief to encourage industry with a finding that Sahney Steel and Press Works Ltd.'s case (supra) would have no application in such cases.

In another case, a State undertaking received Rs.10 crores allotted by the Government under the scheme for promoting export of horticultural produce. The funds were to be used solely for the purpose for which it was granted. It was otherwise to be refunded. The issue was, whether interest from the deposits made from such amount is liable to be taxed in computation of assessee's income. It was held to be not taxable as such interest was also refundable as an amount diverted at source, so that it does not form part of assessee's income as held in CIT v. Karnataka Urban Infrastructure Development and Finance Corporation [2006] 284 ITR 582 (Karn) followed in CIT v. Karnataka State Agricultural Produce Processing and Export Corporation Ltd. [2015] 377 ITR 496 (Karn). The other decisions to the same effect based on the principle of diversion by overriding title have also been referred in these cases.

In yet another case, where a subsidiary company received subsidy from a holding company, but against a specific obligation to undertake specified activities, the unutilised subsidy cannot be treated as income in the year of receipt. It was so held by the High Court in CIT v. Canon India P. Ltd. [2015] 377 ITR 514 (Del) affirming the decision of the Tribunal in [2013] 24 ITR (Trib) 694 (Del) following Sony Ericsson Mobile Communications India Pvt. Ltd. v. CIT [2015] 374 ITR 118 (Del). In this case, because of the relationship between the holding company and the subsidiary company, the issue became subject matter of transfer pricing rules as well. It was inferred by the Transfer Pricing Officer, that the specified activities related to Advertising, Marketing and Sales Promotion (AMP), attract transfer pricing provision for the amount agreed to be paid for it by way of subsidy. Since the unspent amount was refundable, it was mere reimbursement of expenses, which cannot be subject matter of transfer pricing regulations, so that the inference of the Tribunal holding that subsidies were not income in the facts of the case was upheld and the departmental appeal dismissed.

Provision v. reserve?

In computation of book profits, a *bona fide* provision is to be reckoned, but not a mere reserve. It is in this context, that the question of treating a special reserve required to be created under Reserve Bank of India Act, 1934 became the subject matter of dispute whether it could be reduced from the taxable book profits. Where this amount was added by the Assessing Officer along with debt redemption reserve, the additions were confirmed in first appeal and the Tribunal. The High Court in Srei Infrastructure Finance Ltd. v. Addl.CIT [2015] 4 ITR-OL 300 (Del) held that, what is required to be considered is the nature of reserves. In earlier years, debt redemption reserve was added by assessee company itself, so that there could be no doubt that it has to be treated as reserve not reducing the taxable book profits.

As far as special reserve is concerned, it is also not for any specific or known liability. It cannot, therefore, be a charge on profits. It can only be appropriation of profits. It is true that this view accords with the perception for purposes of statutory profits. For book profits, since such special reserve cannot be used for declaration of dividend and since it is statutorily required to be provided as a charge in profit and loss account under the Reserve Bank of India Act, 1934, the inference could have been different in the light of the objective of tax on book profits introduced to counteract companies not distributing dividend to avoid tax on dividend. This decision as regards Minimum Alternate Tax could have, therefore, been different.

A statutory authority created by the State – Whether it is Government?

A State Government has immunity from union tax under Article 289(1) of the Constitution. It was claimed that a statutory authority created by the State Government should be able to avail this constitutional provision, so as to be exempt from income-tax. The claim was negatived by the Tribunal in A.P. Pollution Control Board v. Dy. Director of Income-tax (Exemptions) [2015] 4 ITR (Trib)-OL 354 (Hyderabad) following the decision of the Apex Court in Adityapur Industrial Area Development Authority v. Union of India [2006] 283 ITR 97 (SC) *inter alia* pointing out, that revenues of the authority do not go to the State Government. In fact, the State Government itself would tax such statutory authorities. It was also pointed out that similar statutory authorities as in the case of Andhra Pradesh State Road Transport Corporation v. ITO [1964] 52 ITR 524 (SC) have been brought to tax and such liability has been upheld by the Supreme Court. MA

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Impact of BPR
in Indian General Insurance industry:
a comparative study

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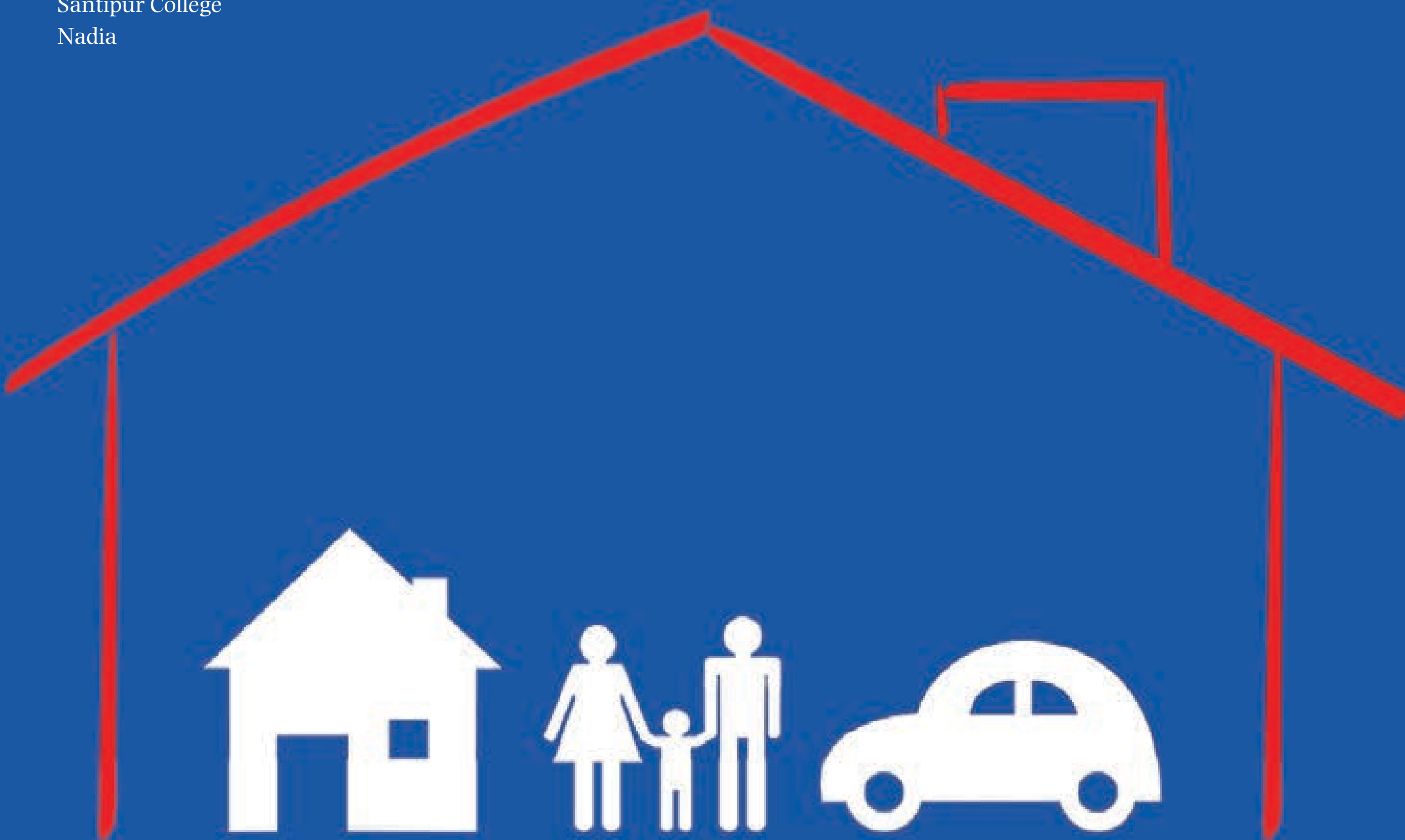

Introduction

General Insurers all over the world have been speedy responding to the effects of the global financial and economic crisis. Many turned to their focus to the core drivers of underwriting performance, pursuing more cost effective and efficient ways to acquire business and to manage expenses and claims. Though many insurers manage to raise their premium volume, a few are in competitive position to raise rates; few can expect any major contribution from investment income; few can expect any major decline in claims. Many general insurers, especially in developing markets face low market penetration, increasing competition, slackening product demand, tight credit controls, deregulation of the insurance sector, the collapse in the global economy and volatile investor confidence. As a result general insurers need to emphasize on strategic cost management to balance their efforts to drive revenue growth with attention to cost controls in order to ensure healthy profits and to achieve sustained performance in coming years,. Strategic cost management can only be possible with the improvement of efficiencies across the enterprise, from fixed cost management to human resources deployment and their accompanying monitoring mechanisms. Business Process Re-engineering (BPR) acts as an analytical tool of Strategic Cost Management and helps Indian insurers to address these issues and to enhance strategic cost optimization skills to develop a strong value proposition. The mission of the BPR in an insurance company irrespective of its mission and business objective is to reduce operating expenses, increase the number of policies captured and underwritten per day, increase the number of claims assessed per day and reduce fraudulent claims.

Initially, BPR has faced challenges in the insurance industry as insurers have been hesitant to implement BPR over critical core processes such as underwriting and claims as because, there has been limited clarity on the use of BPR in insurance and a perception of high cost. Therefore, BPR implementations require a coordinated and committed team of cross functional experts to integrate new systems with existing ones. Because of these challenges, many insurers restrict the scope of their BPR implementations. To mitigate the risk of a large scale BPR implementation effort, a 'controlled migration' methodology might be helpful. Controlled migration is a step-by-step process-managed approach to help insurers achieve a successful application landscape for the future. A traditional application landscape is rigid, complex, and has duplicate functionality. Through an incremental ROI-driven process, insurers can gain lower costs, increased quickness, and increased transparency in core systems.

Objectives of the Study

The objectives of the study are to review the conceptual issues of BPR as a tool of strategic cost management, main areas of BPR on general insurance industry to examine the impact of BPR on commission expenses and operating expenses and their ratios of the Indian general insurers (both public and private sectors) to evaluate the market share of sector-wise general insurers.

Research Methodology

The study is based on secondary data. Most of the facts and figures originate from extensive research of an array of publicly available data in the form of annual reports, books, reports etc. Secondary data have been collected from the relevant Annual Reports, and various news bulletins of the IRDA. The Annual Reports of Insurance Regulatory and Development Authority (IRDA) and other related literature available both as hard copy and on the web-journals/reports have also been consulted.

This study covers all the four public sector general insurance companies en gaged in general business (i.e. other than the two specialized insurance companies) and all the seventeen private sector general insurance companies in India. Therefore the study is based on population rather than on samples. The study covers a period of six years from 2006-07 to 2011-12. Further, the data have been analysed through percentage, ratio and presented through tables.

Conceptual issues on BPR

Different definitions of business process reengineering are available. Following are the definitions provided in notable publications in the world:

Michael Hammer (1990) defines BPR as a "radical re-design of business processes for dramatic improvement". According to Hammer, the key word in the definition is not necessary "radical" but rather "process".

Clelland Johnson defines BPR as "...the fundamental analysis and radical re-design of business process to achieve dramatic improvements in performance." It is not only the "..outsourcing of activities or revising organization charts", but it is also "developing creative and innovative ways of doing business, managing the organisation's human resources through these changes and implementing the appropriate information technology to support the new environment."

When defining BPR, Dr. Chris Bond (1994) also indicates the importance of aligning information systems appropriately when re-designing processes. In order to remove unnecessary communication, processing and duplication of data, information technology should be updated to support the newly designed processes.

According to Dr. Chris Bond successful companies reduce costs by reducing useless layers of work rather than blindly cutting down on the workforce. Management should begin to strip away everything that is not adding value by scrutinizing the workload and reducing to the essentials. As a result redundancies are removed, control is automated and timeliness, accuracy of source information is improved.

Fitzgerald (1994) refers to another very important factor that was indicated by John Kerr, partner with Arthur Andersen in Glasgow. The focus of changing the process should be delivering goods and services to the customer, as seen from that customer's point of view. It is a complete change in orientation from the traditional methods. This is the starting point for business process reengineering and probably the most important step. All employees, from senior management to the lowest job grade should change their focus to be customer oriented.

If we summarise the above definitions, we found six key elements of BPR-
- Radical Change
- Change in orientation (beliefs and behaviours)
- Re-design the business processes
- Change the organizational structure
- Technological improvements, and
- Improvement of customer service and reduction of costs, which imply the development of new performance measurement systems.

Although the names and steps being used differ slightly between the different methodologies, they share the same basic principles and elements. Simplified diagram of using a business process approach are as follows:

Exhibit 1: Steps regarding implementation of BPR

A. Visualize new processes 1.Secure management support 2.Identify reengineering opportunities 3.Identify enabling technologies 4.Align with corporate strategy	**D. Process redesign** 1.Develop alternative process scenarios 2.Develop new process design 3.Design HR architecture 4.Select IT platform 5.Develop overall blueprint and gather feedback
B. Initiating change 1.Set up reengineering team 2.Outline performance goals	**E. Reconstruction** 1.Develop/install IT sol ges
C. Process diagnosis 1.Describe existing processes 2.Uncover pathologies in existing processes	**F. Process monitoring** 1.Performance measurement, including time, quality, cost, IT performance 2.Link to continuous improvement 3.Loop-back to diagnosis

BPR used in Insurance Business

The main areas of BPR in Insurance field relates to:

A. Underwriting Solutions;
B. Business Intelligence and Data Analytics;
C. Claims Processing Solutions;
D. Re-insurance Solutions;
E. Insurance Work-flow Interface Solutions.

The focus of changing the process should be delivering goods and services to the customer, as seen from that customer's point of view. It is a complete change in orientation from the traditional methods. This is the starting point for business process reengineering and probably the most important step.

A) Underwriting Solutions

In tariff-free regime, the insurers have developed world-class solutions that encompass data capture, risk analysis and management and decision-support abilities. The BPR Process helps in the underwriting area of the insurers to:
1. Maintenance and Support of legacy systems and applications
2. Migration from proprietary systems to open platforms
3. New application development
4. Customization of standard software packages
5. Modernization of legacy applications through development of E-commerce and Web based applications

In India, various BPR Consultants are having their team of domain and technical experts who are focused on providing the best possible solution to the various organizers (customer) in their need.

B) Business Intelligence and Data Analytics

As Insurance industry handles huge volumes of data, solutions are required to organize and integrate data across the enterprise. Data analytics help the insurance customer to provide better service to their customers. The process of Business Process Engineering implemented through efficient consultants help the spread of knowledge and expertise to help insurance companies with their data warehousing needs. The desired objectives can be achieved through BPR in the following areas:
1. Data Modelling
2. Data Mining
3. Data Transformation
4. Data Scrubbing and Cleansing
5. Population of Data Warehouses
6. Migration of data across platforms
7.Develop Decision Support Applications
8. Development of Intelligent User Interface

The use of information technology (IT) is considered as a major contributing factor to obtain the achievable benefits of BPR fully.

C) Claims Processing Solutions

Claims processing is most critical function of an insurance business. BPR and its associated technology can play a significant role in improving efficiencies in claims processing. This, in turn, leads to improved financial performance. In the area of claims processing, following are the areas where the concept of Business Process Re-engineering applications is possible:

1. Custom Application Development
2. Migration of legacy applications
3. Modernization of legacy applications
4. Maintenance and Support of legacy applications
5. Porting and Re-hosting
6. Documenting existing applications

Business process re-engineering in the areas of claim settlement ensures that the company stays up to date with the latest happenings in the industry and thus provides the best possible services to their customers.

D) Re-insurance Solutions

Reinsurance processing is paper-intensive, and settlement of claims is prolonged and expensive. Business Process Re-engineering experts understand the complexities in reinsurance. The professional out-sourced experts have team of consultants with deep knowledge of reinsurance and experience in facultative and non-facultative reinsurance. The services in the field of re-insurance which are offered by BPR are as follows:
Custom Application Development
Migration of Legacy applications
Modernization of legacy applications
Maintenance and support of legacy applications
Web enabling of applications

Documenting existing applications

E) Insurance Work-flow Interface Solutions
The experts in this field have the essential knowledge and experience in providing workflow solutions to leaders in the insurance industry. They have addressed the entire life-cycle of processes while providing workflow solutions. The BPR Experts have developed following workflow systems with their extensive experience:

- Document Centre
- Image Requester
- Management Information systems based on File Nets Visual Workflow Solution
- Systems using Business Process Manager
- Document Management and Retrieval System

Business process reengineering is a management. approach aiming at improvements by means of elevating efficiency and effectiveness of the processes that exist within and across the organization

The BPR Experts are delivering the following important benefits to the insurance companies:

Exhibit 2: Benefits from BPR in general insurance industry

Benefit	Impact	BPR Helps Insurers...
Decreased operating expense	Bottom line	■ Achieve rule-driven decision-making and straight through processing ■ Support consistency and better performance metrics (business activity monitoring) ■ Enhance business user experiences leading to better productivity and job satisfaction ■ Improve compliance to regulations
Decreased IT expense	Bottom line	■ Build configurable underwriting systems to lower maintenance and support costs
Increased premium income	Top line	■ Enhance ability to issue policies, leading to enhanced customer and agent experiences

Impact of BPR on Financial Performance of the General Insurers

A six-year post-liberalisation period (i.e. from the period April 2006 to March 2012) has been chosen for analysing impact of BPR on financial performance of the Indian general insurance companies (both public and private sector). The analyses are based on the following parameters:

Gross Premium

Gross premium income includes all premiums received and receivable from any direct insurance or re-insurance business, after the deduction of any taxes or other duties levied on direct insurance premiums. Table 1 gives the view regarding performance of general insurance companies (both public and private sector) in terms of gross premium income.

Table 1

Sector-wise Gross Premium of General Insurance Companies (Rs. In Lakh)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Public Sector	1625890	1683185	1803075	2064345	2515185	3056074
Growth (%)		3.52	7.12	14.49	21.84	21.50
Market Share	65	60	59	60	59	58
Private Sector	864660	1099189	1232109	1397700	1742463	2231503
Growth (%)		27.12	12.09	13.44	24.67	28.07
Market Share	35	40	41	40	41	42
Industry Total	2490550	2782374	3035184	3462045	4257648	5287577
Growth (%)		11.72	9.09	14.06	22.98	24.19

The growth rate of gross premium income were positive for both the sectors but, the growth rate of the gross premium of private players was higher in each year of the study compared to the public players and also to the industry total. The market share of net premium of public players constantly decreased from 2006-07 to 2011-12 and the corresponding percentage that of private players increased. At last, in 2011-12 the market share of net premium of public players stood at 58% and that of private players was 42%. The gap between the amounts of gross premium of the two sectors has been narrowed down over the years due to high growth rate of the private sector in comparison to the public sector.

Commission

The commission expenses are paid by the insurance companies to procure business. On the other hand the insurance companies reinsure their risks in other insurance companies and thereby earn commission. The positive commission indicates the commission paid by a particular insurance company is higher than the commission received on reinsurance and opposite is the case of negative commission. Table 2 and 3 depict the commission expenses and commission expense ratio of Indian general insurers (both public and private sector).

Table 2

Sector-wise Commission Expenses of General Insurance Companies (Rs. In Lakh)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Public Sector	148974	151954	167086	182581	194334	225555
Growth (%)		2.00	9.96	9.27	6.44	16.07
Private Sector	58598	63739	68279	67690	81332	107980
Growth (%)		8.77	7.12	-0.86	20.15	32.76
Industry Total	207572	215693	235365	250271	275666	333535
Growth (%)		3.91	9.12	6.33	10.15	20.99

The public general insurers showed positive growth in commission in each year from 2006-07 to 2011-12 and the commission increased in each year except in 2009-10, when positive commission decreased. On the other hand, the private companies as a whole showed decrease in commission in 2008-09 and 2009-10 and in 2009-10 it showed negative commission. When we compare between two sectors, we saw private sector non life insurance companies spent less commission expenses than its counterpart to grab the market share.

Table 3
Sector-wise Commission Expenses Ratio of General Insurance Companies

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Public Sector	9.16	9.03	9.27	8.84	7.73	7.38
Private Sector	6.78	5.80	5.54	4.84	4.67	4.84
Industry Ratio	8.33	7.75	7.75	7.23	6.47	6.31

Moreover, when we consider the Commission expenses ratio, i.e., ratio between commission expenses and premium underwritten, private sector general insurers also showed lower figure than public sector general insurers in each year of the study i.e., from 2006-07 to 2011-12.

Operating Expenses

Operating expenses are those expenses which are associated with running the business. These expenses include sales and marketing, R & D and general administrative costs.
Table 4 and 5 represent the operating expenses and operating expense ratio of Indian general insurers (both public and private sector).

Table 4
Sector-wise Operating Expenses of General Insurance Companies (Rs. In Lakh)

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Public Sector	360674	365296	434721	526259	656300	668900
Growth (%)		1.28	19.01	21.06	24.71	1.92
Private Sector	170015	248230	301722	312961	393200	460900
Growth (%)		46.00	21.55	3.72	25.64	17.22
Industry Total	530689	613526	736443	839220	1049500	1129800
Growth (%)		15.61	20.03	13.96	25.06	7.65

Though both the sectors showed positive growth in the operating expenses, except 2009-10, growth rates in operating expenses of public sector general insurers showed lower than that of their counterpart in each year of the study.

Table 5
Sector-wise Operating Expenses Ratio of General Insurance Companies

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Public Sector	22.18	21.70	24.11	25.49	26.09	21.89
Private Sector	19.66	22.58	24.49	22.39	22.57	20.65
Industry Ratio	21.31	22.05	24.26	24.24	24.65	21.37

Furthermore when we consider the operating expenses ratio, , i.e., ratio between operating expenses and premium underwritten, private sector general insurers showed lower figure than public sector general insurers and also than industry as a whole during the six years of study except in the years 2007-08 and 2008-09.

Conclusion

From the above analysis, it may be concluded that four public sector companies, which are functioning in the industry for about four decades, got the advantage of higher gross premium income, over their private counterpart. But private general insurers showed more economical and efficient performance as they spent less commission expenses and operating expenses to grasp the market share. Private general insurers who had entered the industry only a decade ago have been continuously attained increasing trend of market share by using smart marketing i.e., direct sales by using the Internet and telephone, introduction of new and innovative products, speedy settlement of claims, customer relationship management etc.

Therefore, in the intensely competitive insurance market, differentiation through innovative technologies like BPR is an important and effective way of strategic cost management to maintain or increase market share and profitability. Insurers can achieve numerous qualitative and quantitative advantages across the value chain by implementing BPR. The 'Controlled Migration' approach helps insurers' lower risks and overcome the challenges of a BPR implementation for core processes so insurers can reap the benefits of a successful business process management. MA

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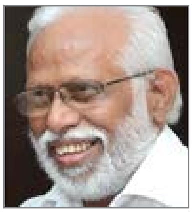

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Introduction

The Banks are essentially engaged in the business of financial intermediation which involves mobilization of deposits and granting of loans and advances to the needy. While mobilization of deposits and funds entails a cost in the form of interest paid on deposits and borrowings, the lending operations are the mainstay of income stream for the banks. The banks need to manage the size of deposits and borrowings on the side of liability management so as to commensurate with their requirement of funds to be deployed in the form of loans and advances. The management of liabilities and assets of the bank is an exercise of balancing the size, pricing and tenor of the deposits and advances after factoring adequate amount on account of preemptive investments viz., Cash Reserve Ratio and Statutory Liquidity Ratio. The banks which are able to evolve the resource mobilization and deployment models so as to ensure regular and adequate flow of income are considered efficient in their operations. The experience of Indian banks reveals that some portion of their loans and advances turn impaired and become difficult of recovery for variety of reasons including uncertainties and factors beyond the control of banks. It brings to focus the concept of risk at lending operations. Reserve Bank of India as a regulator of banks in the country, has been imparting guidance to the banks so as to ensure that the banks undertake their operations in such a manner that the risk of doing business is minimised.

Risk Management can therefore be described as dealing with uncertainties in a planned and systematic manner so as to reduce the losses in carrying out the business of banking. The concept of Risk Management in Indian banks is more than a decade old. Prior to that, the bankers were managing risk by obtaining securities both primary and collateral and also exercising common prudence. But with the advent of prudential accounting norms, the Reserve Bank of India (RBI) laid emphasis on effective risk management and has been periodically releasing improved guidelines to the banks so as to enable them to fairly manage their risks. The guidelines of RBI essentially involve the following steps in the area of Risk Management:

a) Identification of risk
b) Measurement of risk
c) Monitoring the risk
d) Controlling the risk

It is imperative for the banks to undertake a classification of various risks in their business profile. Once the risks are appropriately classified, it would be more methodical to identify measure, monitor and control the risks.

Risk Classification

The banks were initially focusing on managing credit risks and market risks, but the US financial crisis of 2008 shook the banking system globally and lead to a slip in the focus from share price and profitability to the risk entailed in their operational strategies. Accordingly the operational risk and reputational risks have assumed significant importance in managing the risk. The risks in the banking sector could be broadly classified into the following categories:

1. Credit Risk
2. Market Risk
3. Operational Risk
4. Reputational Risk
5. Regulatory Risk
6. Environmental Risk
7. Liquidity Risk
8. Country Risk
9. Interest Rate Risk
10. Currency Risk
11. Concentration Risk

It would be appropriate to briefly describe the above risks for a better understanding of the subject.

Credit Risk

arises out of direct lending operations of the banks on account of repayment defaults and insufficiency of funds on crystallization of liabilities in the event of inability of the borrower to meet the liabilities towards devolvement of Letters of Credit and invocation of Bank Guarantees.

Market Risk

arises out of unforeseen adverse developments in the economy including obsoleteness of the technology, change in fashion etc.

Operational Risk

arises out of human error, natural disaster, systemic failure, financial frauds committed internally and externally.

Reputational Risk

arises out of adverse media publicity on various counts including frauds, misappropriation, embezzlement etc.

Regulatory Risk

arises out of sudden change in regulatory requirements or violation of existing regulations.

Environmental Risk

arises out of changes in eco-system including customer's expectation, trade liberalization, entry of new players with more competitive strength.

Liquidity Risk

arises out of mismatch between the tenor of liabilities and corresponding loans; use of short term funds for long term purposes also causes liquidity risk.

Country Risk

arises out of a situation where the customer in the importing country has settled the payment but due to reasons like political instability or isolation, the amount has not been repatriated to the exporting country.

Interest Rate Risk

arises out of fluctuations in interest rate with different implications on liability and asset sides.

Currency Risk

arises out of a situation where the importer settles the payment in local currency, but the country is facing shortage of foreign exchange reserves and hence is not able to remit the settlement amount in foreign currency to the exporter.

Concentration Risk

arises out of a situation where substantial amount is lent to a single borrower including the group companies and associates or to a particular sector or industry. It is also called exposure risk.

Once the exercise of identification of risk is complete, the banks need to measure the risk. In simple terms, the risk can be measured as any uncovered/unsecured exposure of the bank on account of loans and advances including the non-fund based facilities. Such measurement of risk is considered as the bare minimum having potential to escalate further. Monitoring the risk is another important aspect which must keep the bankers always alert. Since the business of banking is dynamic, the risk management of their business cannot be static.

Risk Management Mechanism

There are multi pronged strategies adopted by banks in India as a part of risk management strategy. Such strategies include the following:

- Pricing the risk by loading extra interest
- Risk aggregation and segregation
- Capital allocation
- Reducing the duration gap
- Obtaining insurance cover
- Observing Regulatory/Board prescribed exposure ceilings linked to capital funds
- Periodical review and renewal of credit facilities
- Use of internal and external risk rating models
- Linking the pricing to the probability of loss
- Diversifying the credit portfolio to avoid concentration
- Loan Review Mechanism including analysis of risks of uncertainty and inherent credit risk
- Compliance with policy guidelines
- Conducting the business within the legal frame work in an ethical manner

Effective Risk Management System

RBI is the regulator of banks in India and has been charged with the supervisory functions over the banks. It has introduced the risk based supervision of banks and an assessment of quality of bank's procedure for measuring, monitoring and managing risks constitutes core of its supervisory monitoring of the banks. Banks have developed internal model for determining economic capital which is based on the principle of *"risk–return trade-off"* across diverse business activities and geographic locations. RBI expects accurate and authentic information under risk based supervision as the quality of such supervision would depend on the quality of the information supplied by the bank managements. The risks in post-globalisation and post de-regulated environment have substantially increased in as much as the commercial banks have transformed themselves to universal banks bringing in complex financial products under one roof. The banks in India more particularly the Public Sector Banks have diversified into several new areas without developing the required capabilities on HR and infrastructure front. It has enhanced the probability of risk even in new areas of product line and hence warrants more effective mechanism and infrastructure to manage the risk. Apart from pricing of the products there is also a need to conduct viability study of the product, its break even point, its productive life cycle etc. It is found that not many banks undertake such an exercise while diversifying into new product lines. Except a few large banks in India, the banks are following "flat-rate pricing model" which helps them to increase their market share but it lowers down the credit quality since the higher credit quality borrowers are able to obtain better pricing at those banks which had developed risk based pricing models.

Basel Norms

The banks are required to maintain 9% capital to their risk weighted assets value which is broadly computed by aggregating credit risk weighted assets, market risk weighted assets and operational risk weighted assets and arriving at its 9% value. RBI has been following Basel prescriptions from time to time. After the success of Basel-I framework, RBI directed the banks in India to move to Basel-II frame work which consisted of 3 mutually reinforcing pillars as follows:

Pillar 1 -

Minimum capital requirements which prescribed computation of capital requirement for operational risk in addition to market and credit risks.

Pillar 2 -

Supervisory review process which envisaged the establishment of suitable risk management systems in banks and their review by their supervisory authority.

Pillar 3 -

Market discipline which sought to achieve higher levels of transparency by prescribing more stringent disclosure requirements including minimum disclosure requirement for external reporting.

Basel-III framework

After US financial crisis triggered by sub-prime lending which shook the financial system globally and witnessed the collapse of global financial power houses, the Bank for International Settlements (BIS) felt an urgent need to evolve a more stringent frame work for enhanced regulatory capital. It leads to evolution of Basel-III norms for regulatory capital so as to make the banks more resilient during the periods of stress. The reform package also included international framework for liquidity risk measurement, standard and monitoring. It also aimed at improving the risk management and governance apart from strengthening banks' transparency and disclosure standards relating to regulatory capital. The main idea of the reform package in the form of Basel-III was to address the lessons of financial crisis and aimed at enhancing Banking Sectors ability to absorb shocks arising from financial and economic stress.

Basel-III norms have introduced capital conservation buffer in addition to the minimum common equity capital. The capital conservation buffer is considered as a macro prudential aspect introduced to enhance the loss absorbing capacity of the banks and is also intended to protect the banking sector from stress during the period of excessive credit growth. Basel-III maintains the requirement of minimum capital at 9% of risk weighted asset value but the provision of capital conservation buffer and counter cyclical buffer would take the minimum total capital plus buffer capital to 11.50 by 2019 in a phased manner. The components of tier 1 and tier 2 capital under Basel-III framework are given below:

Tier-I capital

(i) Common Equity Capital (CEC)	=	5.5%
(ii) Additional Tier-I Capital	=	1.5%
Total Tier-I Capital	**=**	**7.0%**

Tier-II Capital

(i) Minimum Regulatory Capital	=	9.0%
(ii) Total Capital Conservation Buffer	=	2.5%
Minimum Total Capital Ratio (CRAR)	**=**	**11.5%**

Computation of Capital under Basel-III framework

$$\text{Common Equity} = \frac{\text{Common Equity Capital (Tier-I)}}{\text{Credit RWA} + \text{Market RWA} + \text{Operational RWA}}$$

RWA = Risk Weighted Assets

$$\text{Tier-I Capital} = \frac{\text{Eligible Tier-I Capital}}{\text{Credit RWA} + \text{Market RWA} + \text{Operational RWA}}$$

$$\text{Total Capital Ratio} = \frac{\text{Eligible Total Capital}}{\text{Credit RWA} + \text{Market RWA} + \text{Operational RWA}}$$

There are three distinct approaches to compute capital requirement for credit risk, operational risk and market risk as follows:

Credit Risk

Credit Risk is the possibility of losses sourced by default due to inability or unwillingness of a borrower to meet commitments due to the bank. The types of approaches to compute capital requirement for credit risk are:

1. Standardised Approach
2. Internal Rating Based Approaches (IRB)
    a. Foundation IRB Approach
    b. Advanced IRB Approach

IRB Approach is based on measuring expected loss and unexpected loss.

Market Risk

Market Risk is the possiblility of losses caused by changes in the market variables such as interest rate, foreign exchange rate etc. The types of approaches to compute capital requirement for market risk are:

i) Standardised Duration Approach
ii) Standardised Maturity Approach
iii) Internal Model Approach

Operational Risk

Operational Risk is the possibility of losses caused by inadequate or failed internal processes, people, products and systemic or external events. The types of approaches to compute capital requirement for operational risk are:

i) Standardised Approach
ii) Basic Indicator Approach
iii) Advanced Approach

The objective of RBI is to establish consistency and harmony of the Risk Management practices adopted by banks in India with the international standards by prescribing Standardised Approach for Credit Risk, Basic Indicator Approach for Operational Risk and Standardised Duration Approach for Market Risk. The Capital Adequacy framework in the form of Basel-III is expected to be complied with at consolidated levels and also stand-alone levels.

Components of Common Equity Capital

The Common Equity Capital under Tier I includes paid up capital, share premium amount, statutory reserves, capital reserves, other disclosed free reserves, credit balance in Profit & Loss account and current year's profit on quarterly basis after factoring the amount provided for non-performing assets. Additional Tier-I capital would include perpetual non-cumulative preference shares, stock surplus (share premium), Debt Capital Instrument and any other instrument as notified by RBI from time to time after factoring the regulatory adjustments/deductions.

Tier-II Capital would include general provision and loss reserves, Debt Capital Instrument issued by the bank, preferential share capital, stock surplus on Tier-II instrument and re-valuation reserves discounted at 55 per cent.

Cost of Risk in banks

The banks in India lend for various purposes including commercial, productive, consumption and economic purposes with a view to earning interest income on the funds deployed for the purpose. These lending operations have the potential of becoming non-performing and non-recoverable. It brings the concept of pricing based on "risk-return trade-off" into play. The interest charged on loan products is normally high if the risk of default perceived is high and vice versa. The cost of risk in lending operations by the banks is considered to measure the proportion of bank's total loans that have been lost on account of unrecoverable/ non-performing assets. The Cost of Risk is therefore calculated as under:

$$\textit{Cost of Risk} = \frac{\textit{Loan loss provision charged to profit}}{\textit{Average interest generating loans}}$$

(Averageinterest generating loans are calculated by taking average of opening balance and closing balance of interest generating loans. The interest generating loans are calculated by adding customer loans, inter bank loans and other loans)

It can be seen from the above formula that higher the loan loss provision the higher will be the cost of risk on interest generating loans and vice versa. The cost of risk thus has a significant impact on profits of the bank. Minimising the cost of risk would lead to enhancing the profits.

The banks in India generally treat the capital charge against loans and loan loss provisioning as the cost of risk which drives the banks to negative value creation. But in literal sense there are four components of cost of risk in banks' lending operations.

1) Cost of funds:
It is determined by the bank on the basis of the period of maturity & the interest rate applicable for such maturity/term.

2) Cost of risk:
It represents the cost of loan loss provisioning.

3) Cost of capital:
It represents the holding cost of the capital charged to the loan account as prescribed by the Basel Regulatory Framework.

4) Cost of Administration & Overheads:
Costs incurred on the customer mobilization, credit appraisal and investigation, sanction, documentation, disbursement, monitoring & follow up, providing data, renewal, enhancement etc., are considered

as cost of loan administration. Infrastructure cost and various other expenditures incurred constitute overhead cost.

Measuring the Efficacy

We have discussed the techniques of measuring the risks in earlier parts of this paper. However, it is also considered appropriate to measure the overall efficacy of Risk Management framework in banks in India. The banks in India invariably lose money in two forms:

I) Loss in the form of frauds and
II) Loss in lending operations

The banks had incurred a loss of Rs.374 crores in the year 2002-03 and Rs.1134 crores in the year 2005-06 in the form of frauds. The amount of loss in fraudulent transactions witnessed a phenomenal increase to Rs.6600 crores during the year 2011-12. The latest figures of loss incurred by the banks in fraudulent transactions show a further increase to Rs.11022 crores from April 2014 to December 2014 (9 months). If the growing amount of loss in fraudulent transactions is any indicator of the efficacy of risk management tools in the banks in India, it appears to be quite gloomy. Under these circumstances, RBI and banks would do better to put their heads together and strengthen the risk management infrastructure so as to minimise if not completely prevent the fraudulent transactions. The areas to be focused on should include systems and procedure, technology upgradation, up-skilling HR, creating vigilant climate etc. Another fraud-prone area relates to the property mortgages where the fraudsters deposit fake title deeds, impersonate the property owners, over value the properties, create multiple documents for single property and deposit the same in different banks to borrow money and so on. The banks have been losing about 80-83% of the total fraud amounts only by way of mortgage related frauds. The magnitude of amounts lost in mortgage related frauds calls for more serious attention on the part of RBI and banks to prevent this menace. The system of central registry of mortgages needs to be strengthened so as to detect the multiple mortgage of the same property. The clearance from central registry should be made a pre-disbursement condition like obtention of legal opinion and valuation report on the property. The banks have been losing substantial amounts in the form of frauds by way of diversion of banks' funds for unintended purposes. It calls for stricter monitoring of transactions in the loan accounts in true sense. Despite technology advancement, the credit monitoring system in the banks has not been able to prevent the diversion of loans proceeds. The new system of creating hubs for the purpose of cheque truncation and payment settlement mechanism has led to debiting and passing the cheques at a centralised place. It is a clear dilution of credit monitoring system in the banks. The focus on speed of payment settlements has given us the laxity in credit monitoring as a by-product and that is considered as one of the important reasons for increasing number of frauds and loan losses.

The growing amounts of Non Performing Assets (NPAs) in banks have been causing great concern to RBI, Government and banks. The Gross NPAs of Scheduled Commercial Banks (SCBs) in India registered declining trend both in absolute and percentage terms up to 2007-08 and thereafter the NPAs have been consistently rising every year. In this back ground, it is difficult to say whether the decline in NPAs up to 2007-08 was due to effectiveness of risk management tools as introduction of more stringent risk management tools by RBI after US Financial Crisis has not been able to check the rise in NPAs. The percentage of stressed assets in the banks including the amount under Corporate Debt Restructuring (CDR) has gone beyond 13 per cent of total advances of the banking system in the country. It practically exposes not only the weakness of the banking system but also the ineffectiveness of risk management framework followed by the banks. It would not therefore be wrong to say that the frauds and NPAs are ***'risk management neutral'***. Both frauds and NPAs have the potential to carve out their own place in the banking system. In a way, it is largely reflective of national character of the people and also the corporate character of the industry. Industry bodies do not appear to be alarmed by rising corporate NPAs. **Morality is a casuality!**

Another disturbing trend noticed on the NPA front is that while NPAs of PSBs are high, the NPAs of Private Sector Banks – both Old & New Generation – are relatively low. It is intriguing to discern this gap because the government and RBI have been attributing the rise in NPAs to slow-down in the economy and other external factors. If that be so, the economic slowdown and other external factors should also impact the quality of assets of Private Sector Banks. It occurs to me that the large corporate advances given for infrastructure projects have turned impaired in PSBs for various reasons including delay in obtaining government clearances, time and cost over-run, liquidity constraints and more interestingly, the concept of corporate loans outside the consortium and Joint Lenders Forum (JLF) arrangement. It has facilitated siphoning off of the promoters' contribution thereby leaving the project devoid of promoters' stakes. Such situation will naturally bring down the level of involvement of the promoters in the management of the project. RBI, Government and banks would do well to put their heads together and go beyond the Basel prescriptions for effective management of different kinds of risks in the Indian banking system.

Whose risk is managed?

While analyzing the comprehensiveness of the available tools of risk management in the banks in India, we come across that the focus of such tools is on strengthening the balance sheets of the banks mainly by making adequate loan loss provisions and also strengthening the capital structure of the banks. Such a noble objective will guard against the likely failure of banks in the country as adequate capacity to absorb shocks is built. However, it is still intriguing to understand that by such mechanism whose risks are being managed. There are different stake-holders in the banking industry; some of them are illustratively mentioned below:

a) Share holders/Investors

b) Government of India

c) RBI

d) Depositors

e) Borrowers

f) Employees

g) Vendors

The existing risk management frame work seems to be focusing on managing the risk on behalf of borrowers as both loan loss provisioning and capital allocation leave little to be shared by other stake holders. Even among the borrowers, the honest seems to be cross-subsidising the dishonest. I am sure that such would not be the intent of risk management policy of RBI - the Regulator.

Reforms

The Government and IBA have been pitching in for various kinds of reforms in Labour Law and after the conclusion of Gyan Sangam in Pune, there are attempts to change the ownership and structure of the banks by introduction of Banks' Board Bureau, Banks' Investment Company, splitting the post of Chairman & Managing Director (CMD), bringing in Executive Chairman from outside the banking industry including the retired people, reluctance to adequately capitalise the PSBs, denying the legitimate rights of staff like pension updation on the lines of Government Pension Scheme, underpaying the employees and officers, overplaying the sword of vigilance activism and being insensitive to the declining job satisfaction and motivation levels of staff.

The reforms are needed more in the area of loan recovery management as DRTs and SARFAESI have lost their teeth. There is a need to make the loan defaults a criminal offence. A case of cheque bouncing on account of insufficiency of funds is considered a criminal offence under Section 138 to 141 of Negotiable Instrument Act. However, a loan default, wilful or otherwise, including due to insufficient funds or liquidity in the hands of borrower is not yet considered a criminal offence. There is urgent need to make loan defaults a criminal offence.

Conclusion

The Government would do well to bring out the legislations to make the loan default for whatever reasons a non-bailable criminal offense. The Government should also allow *'lifting of corporate veil'* to track the money trails at the corporate levels and also the individual share holders/ promoters so as to unearth the diversion of bank loans. Radical reforms in the loan recovery framework in the banks are the need of the hour so as to effectively manage the risks of losing money in frauds and loan defaults. RBI, as a Regulator, must coordinate with the Government of India to carry out reforms aiming at managing the risks of depositors and other stake holders who are made to suffer at the hands of loan defaulters. MA

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Specialisation in Banking
Payment Banks

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The Reserve Bank of India's latest initiative of introducing 'Payment Banks' finds resonance with ***Economist Adam Smith's Theory**** of employing Division of Labour to exponentially increase productivity. The new Business Model adopted will create a revolutionary trend in the Indian Banking Industry and will accelerate Government's Mission of improving Financial Literacy and achieving Total Financial Inclusion (TFI), both vital for a country's Economic Development.

*An important early (1776) description of processes was that of Economist ***Adam Smith*** in his famous example of a **PIN Factory**. Smith described the production of a PIN in the following way:

"One man draws out the wire, another straights it, a third cuts it, a fourth points it, a fifth grinds it at the top for receiving the head: to make the head requires two or three distinct operations: to put it on is a particular business, to whiten the pins is another ... and the important business of making a pin is, in this manner, divided into about eighteen distinct operations, which in some manufactories are all performed by distinct hands, though in others the same man will sometime perform two or three of them."

Smith also first recognized how the output could be increased through the use of labor division. Previously, in a society where production was dominated by handcrafted goods, one man would perform all the activities required during the production process, while Smith described how the work was divided into a set of simple tasks, which would be performed by specialized workers. The result of labor division in Smith's example resulted in productivity increasing by 24,000 percent (sic), i.e. that the same number of workers made 240 times as many pins as they had been producing before the introduction of labor division.

Lack of awareness of the structured Financial System and an unregulated or disorganised Rural Banking System, prevented most rural population from depositing their savings in banks. The introduction of Payment Banks in the rural, semi urban, and interior pockets will change this scenario, usage of and access to the system will help people understand it's functioning and help in Channelising the Savings of the people in these areas. It will also give government access to funds for development activities.

The Government of India and the Reserve Bank of India have implemented various Business Models to achieve TFI i.e., No-frills Accounts, Business Correspondents, Business Facilitators, Local Area Banks, Regional Rural Banks, and setting up of Rural Branches of Commercial Banks. However, their contribution has been negligible. Payment Banks are better poised to aid achieve TFI, their strength lies in the use of Technology and the Low Operational Cost it would entail in contrast with the Bricks–and-Mortar Banking Model.

Payment Banks will offer the following Advantages

Currency Circulation

Presently, Currency Circulation is Less in urban areas due to the use of Debit/Credit Cards and Internet/ Mobile Banking compared to rural and semi urban areas. With Payment Banks using Technology-mobile phones and bio-metric system (Aadhar Card enabled bank accounts)-the use of Currency Circulation in these areas too will decrease drastically. Payment of utility bills, tax payments, and small business transactions will change to Wire Transactions. This will help fight the problem of Forged Notes and reduce the Import of Paper for Printing Currency.

A Narrow Banking Model

Attracting deposits for lending is one of the core activities of the Commercial Banking system. However, mobilising deposits and investing them in safe mode-in treasury bills, government securities-is called Narrow Banking. Since Payment Banks are mandated to invest their mobilised funds in government securities, these maybe classified under the 'Narrow Banking Model'. This is the safest model as there is no Credit Risk involved, and the Spreads are high due to the mobilisation of low-cost deposits.

100% Safety

The Maximum Deposit to be mobilised by Payment Banks has been capped at Rs.1,00,000/-. The maximum deposits guarantee covered by DICGC is also Rs.1,00,000/- this means depositors' funds with payment banks are Completely Secure. This is one of the USPs that will attract Savings Bank Accounts to Payment Banks-most customers in the Rural Areas seek complete security for their hard earned savings funds. The activation of these Banks across the country will also lead to the decline of Chit Funds, and other unauthorized institutions that exploit Rural Population.

High Spread

The Operational Cost for these banks is less compared to Conventional Banking system. Further the use of latest Technology will increase the Spread of their business operations. In addition to Spreads, as these banks are authorised to sell other financial products such as Life Insurance, General Insurance and Mutual Funds like SIPs, etc. Presently Life and General Insurance penetration levels are low in India when compared to other countries. Payment Banks will increase the penetration level of these products. Moreover the fee-based income through Cross Selling will add to their Bottom-Line.

One Segment One Product

Payment banks are authorised to mobilise Savings Bank accounts upto Rs.1,00,000/- from salaried employees, petty vendors, agriculturists, landless laborers and small scales. This one product approach will be hugely beneficial as Marketing Skills required to sell this product is minimal. Further, this Niche Segment is not fully tapped by Commercial Banks. The differential service provided by the Payment Banks to the Customer will result in High Profitability.

Reach

In India, Mobile Usage is increasing and people-including rural population is well informed about its usage and functionalities. Mobile Service Providers have been allotted Licenses to Start Payment Banks. These providers using Latest Technology will reach the customers in the Nook and Corner of the Country easily incurring least Cost of Operations.

Low Cost of Operations

Brick and Mortar Banking is a Capital-intensive Business Model and Commercial Banks would find it difficult to Open Branches in the unbanked and far-flung areas as incremental cost would exceed incremental benefit. With the help of Business Correspondents or Franchise Banking System, Payment Banks will provide Low Cost services to the Customers located in the Remote Areas.

For Example, assume that a customer is buying a Top-up for his Mobile for Rs.20/- in a remote village in India. A petty shop (Buddy Shop) owner in a village is getting commission on selling the top-up without any paper work. Operational Process of credit to a Savings Bank Account is **similar to a top-up**. Similar process will be adopted by payment banks to deposit credits to a SB account and for payments Bio-metric System. In Conventional Banking System (at present RRBs located in villages and unbanked areas) Paper Work like Pay-in-slips, Withdrawal form, Cheques etc. for receiving cash and payment of deposit through bank branch channels is essential. Payment Banks will focus on Paperless Banking.

Asset Liabilities Management (ALM)

ALM mismatch will be minimal in Payment Banks as Deposits mobilised will be mostly invested in secure instruments like government securities. As these Banks do not have any Credit Lending activity, Liquidity Risk will not arise. The RBI's Monetary Policy will not affect Payment Banks due to these reasons. Due to Low Operational Cost and Spreads these banks can offer Higher Rate of Interest to Savings Bank deposit accounts when compared to Commercial Banks. As a result attrition or migration of SB Accounts from Commercial Banks to Payment Banks will occur. This poses a huge challenge for the former.

KYC

Out of the Eleven Payment Bank Licences issued by RBI, most of them have been allotted to Mobile Service Providers. When a customer wants to open an account with the payment banks of the mobile service providers, obtaining KYC becomes seamless as most of these Companies would have complied with the KYC Guidelines for providing the Mobile Phone, DTH or Landline Service. Hence, these providers can open an account to all their existing customers by default. Those who wish to use the account can begin operations without the hassle of documentation, photograph, address proof and identity proof.

The Last Mile Bridge

From time to time the Government of India, and State Governments offer various subsidies and benefits to the people, particularly the social security schemes. These benefits will directly be credited to the beneficiaries through Payment Banks.

Implementation of Basel III

Three main risks in the Banking Industry are Credit Risk, Market Risk, and Operational Risk-Banks have to provide Capital Adequacy Norms i.e., a minimum of 9% to cover these risks. As Payment Banks will not sanction any Credit or Loans to the Public, Credit Risk for these banks is zero. As for Market Risk, most of its investments will be either Treasury Bills or Government Securities and hence this risk is also minimal. And as the regulator will monitor their performance closely in the initial stages, Compliance Risk is also less. However, there is some Operational Risk related to the implementation, usage and adaptation of Technology. The Overall Risk Profile for Payment Banks is very less when compared to the Conventional Banking System in India. Hence, the CRAR or CAR for Payment Banks is less and they need not bother about the implementation of Basel III accord in full before 31st March, 2019.

Treasury Borrowings

In most of Commercial Banks, CASA Deposits Share in the Total Liabilities (Deposits) is in the range of 40% to 50%, where the Cost of CASA Deposits Ranges from 0% to 4%. Once Payment Banks start operations, CASA Deposits will shift from Commercial Banks and this will lead to an increase in the Commercial Banks Treasury Borrowing to Bridge ALM Mismatches. As a result Spreads will thin further. To overcome this problem, Commercial Banks need to provide Excellent Customer Service and develop Technology Oriented Products to retain existing customers in not only Metro and Urban areas but also in Semi-urban and Rural areas.

Also due to the limited Services offered by the Payment Banks, Innovation and Strategic Thinking in increasing the Market Share of Low Cost Deposits is possible and it will create further challenges to Commercial Banks in the coming days. *MA*

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Are Indian FMCG Companies adding Economic Value to its Owners?

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This case study investigates the Economic Value Added, as a Value-based Financial Management approach to measure and evaluate the performance of corporations. The study is conducted on the top 14 FMCG companies from India and attempts to answer whether during FY15 they have been successful in adding value to their shareholders' wealth o the basis of Stern-Stewart's approach to EVA. The study also proposes certain EVA-based ratios and demonstrates the computation and interpretation of the same using FMCG companies as sample. The analysis revealed that the FMCG firms by and large have generated excess value except companies like, UBL, Tata Global Beverages and Godrej Industries that have eroded the value. The study concludes with strong recommendation to use value based management framework around the concept of EVA to be used for performance measurements, target setting and also devising the operational plan - including strategic finance, marketing and other functional plans.

The style of value based management is permeating into corporate corridors and board-rooms in every strategic planning and performance evaluation meetings. VBM is widely accepted to be the way forward of managing businesses. Fortune Magazine has called the Stern-Stewart's EVA® as – "today's hottest financial idea and getting hotter" (Chandra, 2014). The rationale for demand for value based framework can easily be devoted to the changing perception regarding the purpose of existence of businesses. The business world has been effusively convinced to move away from the lame profit maximization objective to the shareholder wealth maximization objective as the sole purpose of its existence. It's being further reframed as intrinsic value maximization of the company's ownership stakes. Such an approach of management to focus on value, delivers greater accountability and result-oriented performances, which in turn ensures the corporate governance being taken care of. As the value maximization objectives are being accepted universally, the fundamental question arises, 'what is value?'

In the words of the world famous investor Warren Buffet– "Intrinsic value is an all-important concept that offers the only logical approach to evaluating the relative attractiveness of investments and businesses. Intrinsic value can be defined simply: It is the discounted value of the cash that can be taken out of a business during its remaining life." He also highlights the two problems with determining this value – "(1) We don't really know what future free cash flow will be, nor the willingness and ability of management to use it wisely; (2) We really don't know what the cost of capital is for a firm, particularly the cost of equity."(Buffet, 1996)The owner mindset in the shareholder community is no more interested in sheer profits that the firm is generating. Instead, it is demanding sustainability of the profit generating capacity of the firm and its management team. Thus, we descend that value is one parameter that the management team need to focus on – either creating value, adding value or nurturing those pockets of its business that enhance value.

Stern-Stewart's *EVA* Approach

Stern Stewart & Co., is a consulting firm that proposed the concept of *Economic Value Added* as the difference between the operating profit and the costs of financing of firm's activities (O'Byrne, Spring 1996). The proposal was presented as an answer to the market's constant demand of a concrete measure of operational performance and an approach to determine the valuation multiple. *EVA* is the excess return the firm has generated through its operations over and above the cost of raising capital. *EVA* is often seen to be a measure of total factor productivity. *EVA* is given by:

EVA=NOPAT-(WACC X CAPITAL)

where, NOPAT is the net operating profit after adjusting for taxes but before interest; WACC is the weighted average cost of capital; and CAPITAL refers to total long-term capital employed by the firm that includes shareholders' funds and long term debt. Caution needs to be exercised to adjust the accounting items considered for calculations for the distortions of GAAP. For instance, the R&D costs need to be capitalized for *EVA* computation purposes.

NOPAT can be computed as *EBIT(1-Tax Rate)*. This implies that financing decisions are separated from the investment decisions. This also implies that the value addition needs to be verified in after-tax terms. *WACC* is computed by sum totaling costs of different sources of capital with the proportion of each source in the capital structure of the company.

A comparatively higher *EVA* represents a better operational efficiency of the firm in terms of its revenue generating activities, capital allocation decisions and other strategic financing decisions. *EVA* has been adopted by a number of companies across the world, Coca-Cola, P&G and Godrej to name a few.(Chandra, 2014)

EVA AS ALPHA

Before we introduce*EVA*-based ratios, it may be useful to re-emphasize that *EVA* acts as *alpha* (the *excess value*) added to owners' wealth.The method of computing *EVA*, i.e., reducing WACC X CAPITAL, (which is shareholders' anticipation) from NOPAT, (which is the value generated by firm) is nothing but the process of determining the surplus profitability in absolute terms. Thus, while interpreting *EVA* of two companies, a company with higher *EVA* is said to have generated higher *'excess value'* to its owners(Damodaran, 2015). It also is dependent on the cost of capital of the firms, which in turn gets affected by the capital structure, the market conditions and the stage of life cycle they operate in.*EVA* is expected to represent the management efficiency in generating the *'alpha'* despite the internal and external environment they operate in.

EVA-BASED RATIOS

In general ratios are classified as those that measure the operational performance (like operating profit ratio), operational efficiency (like asset turnover), optimality of capital structure (like debt ratio) and liquidity measurement (like current ratio). Traditionally, one will take a look into all these different quadrants of ratios separately and draw a pooled conclusion with regards to the financial health of the company.

Under value-based management approach, one value, that's the *EVA*, is considered to be the key financial metric that single-handedly answers all the questions regarding the management performance. *EVA* considers NOPAT that signifies the operational performance and efficiency of the management; *EVA* considers WACC that signifies the management's efficiency in running the business with the right amount of leverage.

To compare firms of different size it may be helpful to standardize such *EVA* measure. Thus, *EVA*-based ratios as presented below are proposed.

$$\textbf{EVA Margin=} \left(\frac{\textbf{EVA}}{\textbf{NetSales}}\right)$$

EVA Margin indicates the capacity of the firm to generate excess return over and above the shareholders' expected return per rupee of sales. In other words, *EVA Margin* answers the question – "what is the *alpha* generated by the firm for every rupee of sales?"

$$\text{Total Assets EVA}=\left(\frac{\text{EVA}}{\text{Total Assets}}\right)$$

Total Assets EVA indicates the firm's efficiency in utilizing all its resources in the most optimum possible manner to surpass shareholders' expectations. In other words, *Total Assets EVA* answers the question – "what is the *alpha* generated by the firm from every rupee of its assets?"

$$\text{Equity EVA}=\left(\frac{\text{EVA}}{\text{Shareholders' Funds}}\right)$$

Equity EVA indicates the firm's efficiency in employing its true owners' investment in the firm in the most profitable ventures. In other words, *Equity EVA* answers the question – "what is the *alpha* generated by the firm for every rupee of owners' capital?"

$$\text{EVA per Share}=\left(\frac{\text{EVA}}{\text{Number of Ordinary Share}}\right)$$

EVA per Share indicates the firm's surplus return earning capacity per share, which in turn depends on the debt-equity structure of the company. It is possible to enhance *EVA per Share* by altering the capital structure, as the capital structure alteration will have its impact on both WACC and the denominator in the ratio formula. *EVA* per Share answers the questions – "what is the *alpha* generated by the firm for each shareholder.

$$\text{Price / EVA Ratio}=\left(\frac{\text{Current Market Price}}{\text{EVA per Share}}\right)$$

Price/EVA Ratio indicates the level of confidence that the market players have on the firm's capability in sustaining the current *EVA* generating capacity. In other words, *Price/EVA Ratio* answers – "what is the price that market is prepared to pay for a rupee of *EVA* that the firm generates?"

Objective and Design of this Study

This study is carried out to investigate the use of value-based approach to financial statement analysis. The study also aims to demonstrate application the EVA-based ratios.

The research is descriptive, cross-sectional and case-analytical in nature and samples are selected using convenience sampling.14 listed companies are selected in the order of their market capitalization (FMCG companies constituting CNX FMCG Index). FMCG companies are defined as those that deal with non-durable, mass-consumption products and available off-the-shelf. *EVA* and *EVA*-based ratios of each companies are computed. Observations are then recorded and financial performance under VBM approach are then commented upon.

Data And Analysis

- The period of study relates to performance during FY2015
- ***EBIT*** –obtained from respective companies' annual reports as on 31st March 2015
- ***t*** – as the tax expense varies from company to company depending on their adjustments of MAT credit and deferred tax treatments, tax-rate is taken as below:

$$t=\text{tax expense}\,/\,\text{profit before taxes}$$

- ***NOPAT***–is computed as *EBIT(1–t)*. It may be noted that*NOPAT* determines the firm's actual operating performance after accounting for taxes (investing side), but, treating finance costs to be non-operating expenses (financing side)
- ***WACC***–is computed by multiplying proportions of equity and debt with their respective costs. After-tax cost of debt (k_d) is computed by Cost of equity (k_e) is computed using Capital

$$k_d=\left(\text{finance costs}\,/\,\text{total long-term debt}\right)$$

Assets Pricing Model (CAPM) and is given by:

$$k_e=[r_f+\beta_e\,(r_m-r_f)\,]$$

where, r_f is the risk free rate, which is taken as on the 1st-April-2014, 5-Year GOI Bond Yield,i.e., 8.87%; β_e is the sensitivity of stock to the market, taken as a proxy using the 5-Year beta value of the CNX FMCG Index, i.e., 0.61; r_m is market return, taken as the 5-Year average annual return of CNX NIFTY Indexpreceding 1-April-2014,i.e., 23.81%. Therefore k_e would be 18.10%

- ***CAPITAL*** –total of ordinary share capital plus reserves and surplus plus long term debt. - The results are presented in Table-1 in next page.

Table 1: EVA and EVA-based Ratios of Selected 14 Indian FMCG Companies

	EVA (Rs. Crores)				EVA Based Ratios				
Company	**NOPAT**	**CAPITAL**	**WACC (%)**	**EVA**	**EVA Margin (%)**	**Total Assets EVA(%)**	**Equity EVA(%)**	**EVA per Share (Rs)**	**Price/ EVA Ratio (Times)**
Britannia	461.35	873	18.10	303.38	4.23%	12.3%	35.5%	49.84	43.31
Colgate-Palmolive	558.984	600.63	18.39	448.55	11.26%	30.0%	74.8%	32.98	61.07
Dabur	681.366	1902.34	18.41	331.14	6.10%	9.0%	17.4%	1.90	139.84
Emami	475.635	955.53	18.31	300.66	14.81%	23.9%	32.4%	22.42	44.66
GlaxoSmithkline	438.448	1822.13	18.34	104.22	2.42%	3.1%	5.7%	24.78	254.23
Godrej Consumer	996.612	5596.37	14.56	181.81	2.20%	6.5%	4.5%	5.34	194.88
Godrej Industries	286.162	4948.61	16.93	(551.78)	-5.98%	-4.1%	-14.6%	(29.47)	(11.73)
Hindustan Unilever	3384.42	3555.87	17.29	2,769.54	8.99%	21.3%	84.5%	12.81	68.21
ITC Ltd.	8957.57	27559.13	18.50	3,859.55	10.70%	8.7%	14.1%	4.85	67.15
Jubilant Foodworks	105.907	558.97	18.12	4.64	0.22%	0.4%	0.8%	0.71	2,083.38
Marico	559.297	1647.97	16.59	285.88	4.99%	9.6%	20.5%	4.43	87.02
Procter & Gamble	203.74	805.68	18.87	51.68	2.91%	3.4%	6.4%	15.92	453.78
Tata Global	365.055	7907.21	16.36	(928.40)	-32.19%	-25.1%	-13.7%	(15.01)	(9.91)
United Breweries	-390.51	2660.34	7.86	(599.52)	-157.17%	-15.1%	-466.0%	(89.72)	(11.15)

As one can see overall the FMCG industry has yielded a positive*EVA Margin*, meaning, each rupee of industry's sales has proportionally increased the overall value the firm added to its owners, except certain companies like UBL which have eroded the shareholders' value. Firms have been efficient in utilizing their total resources in generating excess return to shareholders as well as utilizing the owners' invested capital, both represented by *Total Assets EVA* and *Equity EVA* ratios. While there are firms like Colgate-Palmolive that have performance extremely well in terms of value addition, there are also corporations like Godrej, Tata and UBL that have generated negative value for investors. GlaxoSmithKline command the highest investor confidence as represented by *Price/ EVA Ratio*.

Conclusion

Thus, value-based management can be a meaningful alternative to the traditional performance analysis techniques. *EVA* provides an almost flawless metric for performance analysis, as it considers the *alpha* generated by the management to its owners. *EVA* deciphers the firm's ability to sustain the performance over a period. It focuses on firm's ability to generate value. As the shareholder wants to evaluate management on value terms, it makes more sense for the management to set its performance standards in value terms, set the performance measurements in value terms and also devise the operational plan - including strategic finance, marketing and other functional plans – to work in tandem to meet the targets in value terms. EVA-based ratios proposed in this article enhance the utility of *EVA*. MA

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CASE STUDY

5 Forces' Analysis of Indian Aviation

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1. Concept

Michael Porter's famous Five Forces of Competitive Position model provides a simple perspective for assessing and analysing the level of competition within an industry. The analysis guides an entity towards formulating an appropriate Business Strategy. As a result the entity is enabled to optimize its core competencies and position itself above the industry averages and become the industry leader.

The Five Forces Analysis draws upon industrial economics to derive the five forces that determine the competitive density and attractiveness or otherwise of a market. In an 'attractive industry', the combination of the Five Forces gear up the overall profitability, whereas in an "unattractive" industry the combination acts to drive down overall profitability. A very unattractive industry would be one approaching "pure competition", in which available profits for all firms are driven to normal level.

Porter developed his Five Forces analysis in reaction to the then-popular SWOT analysis. Porters felt that SWOT analysis was too simple and ad hoc, and so he evolved the Five Forces analysis as a better alternative. Porter's five forces analysis is based on the Structure–Conduct–Performance paradigm in Industrial Organisational Economics. The analysis has been applied to a diverse range of problems, from helping businesses become more profitable to helping governments stabilise industries. Frequently used to identify an industry's structure in order to determine corporate strategy, Porter's model can be applied to any segment of the economy to search for profitability and attractiveness.

Porter's five forces include stakeholders of two competitive dimensions, viz. three forces from 'horizontal' competition: the threat of new entrants, the threat of substitute products or services, and the threat of established rivals; and two forces from 'vertical' competition: the bargaining power of suppliers and the bargaining power of customers. "If the forces are intense, as they are in such industries as airlines, textiles, and hotels, almost no company earns attractive returns on investment," Porter wrote. "If the forces are benign, as they are in industries such as software, soft drinks, and toiletries, many companies are profitable."

Towards the outcome that would follow the analysis, Porter advocated three "generic strategies" of Cost Leadership, Product Differentiation and Market Focus that can be implemented in any industry, and in companies of any size. Porter said the new strategy should be executed at the corporate, business unit and departmental levels. Of these, Porter considered the business unit as the most significant.

2. Indian Aviation

The Indian Aviation Sector has witnessed tremendous growth in the recent past which is driven by sound demographic, macroeconomic & market dynamics. The three fold increase in consumerism, rising disposable income; booming aviation sector; proliferating middle class; increasing business travel; government reforms; entry of low cost carriers; increasing competition etc have positioned the Indian Aviation Sector in a high growth trajectory.

At present, India is one the fastest growing aviation markets and currently the ninth largest civil aviation market in the world with a passenger traffic stood at 163.06 Million during 2013. The country is projected to be the 3rd largest aviation market by 2020. It is one of the least penetrated air markets in the world with 0.04 trips per capita per annum as compared to 0.3 in China and more than 2 in the USA. Nearly two thirds of the seats flying on domestic routes are on LCCs, one of the highest proportions in the world.

Here is a venture to delve on 'Five Forces Analysis' of Indian Aviation Industry in the paragraphs that follow.

3. Threat of New Entrants

Aviation Industry needs substantial investments at the entry level as also at the operating level; and this warrants intensive capital outlay which constitutes the biggest barrier of entry for the new players. The amount of investment that goes into setting up a new airline company in this industry is simply phenomenal. Looking at the amount of investments which could go upto a few hundreds of crores of rupees as initial investment, the likelihood of more airlines entering this market gets very difficult.

The regulatory approvals and licensing is also an important deterrent for the new entrants into the aviation industry. Unlike the American Aviation Industry, airlines in India still continue to be controlled partly or fully by the government.

Superior technology forms the base line of aviation anywhere and everywhere in the world. Inventions and technological up-gradations keep hopping uninterrupted. Technological supremacy limits the number new players from venturing into the arena.

Advanced operating acumen for labour in skilled positions such as pilots, aircraft maintenance engineers, technicians and in-flight crew is the call of the aviation whereby a high learning curve is charted. Taking cognizance of the estimate that Indian aviation will need about 350,000 new employees to facilitate growth in the next decade, skill scarcity makes the entry into aviation industry even more difficult at times.

Intensive Capital Outlay, Regulatory Approvals, Superior Technology & High Learning Curve are, thus, the factors that deter the new entrants into aviation. The threat of new entrants into the aviation industry is, therefore, be deemed low.

4. Availability of Substitutes

It is an established fact today that air travel is the most popular mode of travel. And that is for multiple reasons. Apart from the reduction in travel time, air travel provides utmost comfort and high levels of convenience while travelling to longer destinations. In India, after so many years, flight travel is still considered as a symbol of status in the society. There is hence, a very dim possibility of substitutes being available to this industry.

However, with the introduction of Rajadhanis, Satabdis and Durantos; and by adopting dynamic pricing; Indian Railways is turning out to be one of the proximate substitute on the domestic front for the Indian Aviation. In general normal airfare ranges anything between AC II and AC I fares of the trains. In a situation where train travel implies overnight travel, the cost conscious commuter would look at the equation of "Airfare to be less than the Train Fare plus the Cost of getting ready for the Business at the destination". The preference would always be to catch the morning flight rather than spending for lodging after an overnight travel.

The ambitious policies of National Connectivity through Road Quadrangle and joining the Rivers of India are bound to improve the road transportation and water transportation, but the chances any competition with any of the airlines is very bleak.

At the end of it the fact, still, remains that the substitutes for aviation services, in India, are very limited.

5. Competitive Rivalry

The airline industry functions in an intense competitive market of cut throat fares. Put it across, competition in aviation sector is severe amongst the rivals. Customer luring is resorted to by the competitors through a raft of ancillary services and low prices which are, in turn, leading to lower and lower margins. Multiple airlines keep competing with each other with lucrative offers relating to the pricing of tickets, frequent flier programs, loyalty programs, etc. with a view to attract and retain the customers.

Competition is also severe amongst airlines for access to airport facilities, parking bays for aircraft and prime time departure slots, etc. which affect the Revenue as also the Cost Drivers. The situation is pulling down, drastically, the profitability of the industry.

Fleet expansions have taken place wherein Low Cost Carriers (LCCs) have added aircrafts mainly on long-term operating leases; and Full Scale Carriers (FSCs) have purchased aircrafts, debt financed, most often backed by guarantees from the US EXIM Bank or Europe's ECA with a view to leverage upon the anticipated robust growth and to support international operations. Such of these aggressive steps have significantly impacted the capital structure and weakened the credit profile of most domestic airlines. At the same time, the existing players of the industry are prone to high exit barriers, mainly due to its specialized equipment with little or no alternative uses.

As a consequence, multiple players with lucrative offers, LCCs and high exit barriers deem the competition in aviation sector as a sort of "cut throat" exercise.

6. Bargaining Power of Suppliers

Aviation equipment is highly sophisticated which includes high-tech high-end state-of-the-art infrastructure aircrafts and engines. There are, just, two major companies, i.e. Boeing and Airbus, who supply aircrafts to the Indian aviation industry. Strength of the sophisticated technology supplanted by the established brand name has strengthened bargaining power of the equipment suppliers of the aviation industry over the airline operators. In addition to this, the possibility of vertical integration also does not exist in the industry since the aircraft suppliers would never venture into starting their own airlines.

Fuel expenditure constitutes a significant portion of Aviation Expenses. Historically, the price of Aviation Turbine Fuel (ATF), which is based primarily on the international price of crude oil, has been subject to wide price fluctuations. The price of crude oil is influenced by geopolitical issues, government regulation and various supply and demand factors, including periods of market surplus and shortage. The irony, in the Indian context, however, is the ATF prices in India are regulated by Government. In India ATF is currently available at airports from only three Government-controlled companies.

Another important element of cost, the air port charges, is also government driven. The airport charges levied by the Indian airports are amongst the highest in the Asian and the Gulf countries. Further, India at present does not have any secondary airports for LCCs and the Indian LCCs have to shell out comparatively higher airport charges than its international peers. Congestion at airports is another factor that plagues the costs of the aviation industry in India. The congestion increases the turnaround time of the aircraft, reduces the average aircraft utilization, and also adds up to the avoidable fuel wastage while the aircraft has to hangs around in the sky.

Airline Industry in India is, thus, dominated by sophisticated technology wielded by few suppliers, regulated ATF prices and monopolistic airports whereby the suppliers are bestowed with an inherited power punch.

7. Bargaining Power of Customers

Aviation customers are highly price sensitive and can easily keep changing their choice. Large number of consumers, dynamic pricing, and no change over costs are the special features of aviation market. With increased choice of airlines and smart fare wars, the bargaining power of customers is increasing day by day.

Aside from the structural issues, industry observers have cited Air India's artificially low fares as the main factor behind the struggles of Indian carriers. It is reported that the average Indian ticket price of $95 is about $11 shy of a break-even figure. A weak rupee isn't helping and has caused further cost increases in dollar-denominated expenses.

Another important feature is that of almost zero product differentiation amongst the service providers. The services do not vary much regardless of which of the airlines is selling them. All of the basic services of aviation are treated and traded as a commodity. This translates into customers seeking low prices from the companies that offer reliable services.

Aviation industry is, thus, characterized by price sensitive customers, smart fare wars and zero product differentiation with a strong and rising bargaining power of the customers.

8. Assimilation

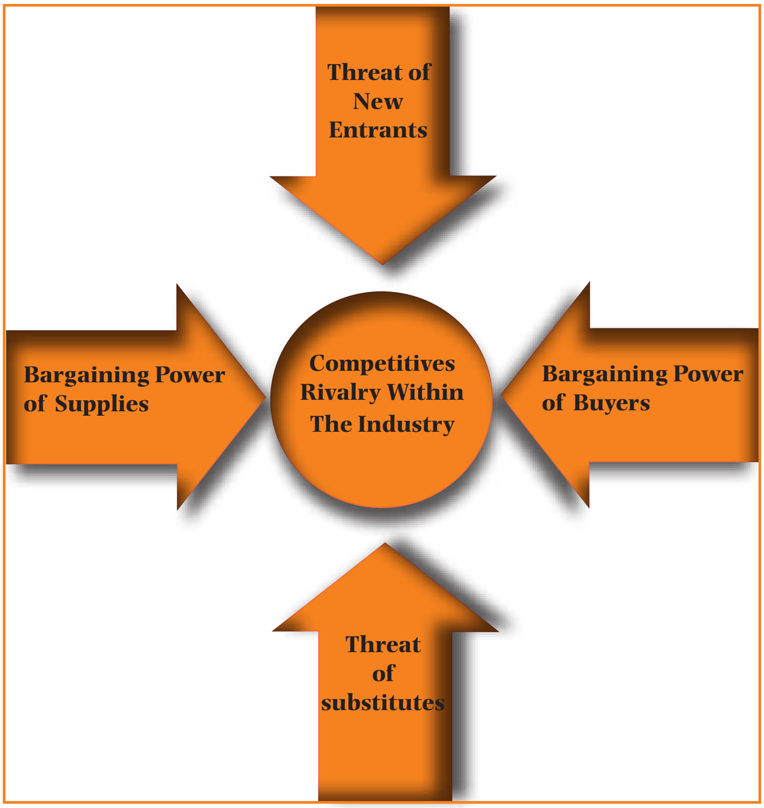
The strategic environment of Indian Aviation Industry is, thus, characterized by low threats of new entrants; limited substitutes; high competition; strong bargaining power of suppliers; and rising bargaining power of customers. Indian Aviation Industry is one of those sectors which have been growing by leaps and bounds, but the individual airlines are not doing well. Put it the other-way, the industry is clouded by the Price-Cost-Squeeze. The competitive posture for the Industry continues to be that of "Survival of the Fittest".

9. Generic Way Out

Zero Product Differentiation, Dynamic Pricing, and Price Sensitive Customers being the specific features of the aviation, the only generic-way-out, open to the industry, appears to be the Strategy of Cost Leadership. It is worth recalling that the concept of cost leadership, too, was developed by Michael Porter as a sequel to the Five Forces' Analysis.
Cost Leadership refers to the minimization of the

costs and passing on the savings to the customers. As a result, Cost Leadership enables establishing the competitive advantage within the industry. Cost Leadership involves the entity garnering the market share by appealing to cost-conscious or price-sensitive customers. This may be achieved by having the lowest prices in the target market segment, or at least the lowest price to value ratio. To succeed at offering the lowest price while still achieving profitability and a high return on investment, the entity must be able to operate at a lower cost than its rivals.

Cost Leadership is perceived to be driven by the key factors of asset utilization, operational efficiency and value chain control. Some of the relevant factors that may be identified in relation to aviation in this connection are Passenger Load Factor, Cargo Load Factor, Fuel Margin per Kilo Litre, Revenue per Passenger Kilo Metre, and so on.



Measures such as Passenger Load Factor and Cargo Load Factor enable Cost Reduction by means of optimising the Asset Utilisation. Monitoring the Fuel Margin per Kilo Litre of ATF facilitates Minimisation of Costs through Maximisation of Operational Productivity. Augmentation of Revenue per Passenger Kilo Metre shores up the revenues by Creating Value to the Customers.

Value Creation through the medium of Cost Leadership, thus, appears to be Sixth Force that should be adopted by the Indian Aviation to steer out of the turbulent weather. A Cost Strategist on hand is, thus, the differential advantage that the winner wields!

Resources

1. Indian Aviation Industry , Through turbulent times, FDI relaxation alone not a game changer, March 2012, ICRA Rating Feature
2. www.makeinindia.com
3. Evolving Cost Competency, CMA Dr. Sreehari Chava, July 2015
4. Porter's generic strategies, www.wikipedia.org, 18.10.2015

Michael Porter, one of most influential management gurus of this century, is widely regarded as the Father of Corporate Strategy and Management. A testimony of the fact lies on the shelf of every successful CEO of the world – his books which are a magnum opus in the field of competitive and company strategy. Serving as university professor at Harvard Business School, Porter's strategies have found universal acceptance. He has also served as the strategic adviser to many successful and leading U.S. companies and other international companies. Over the years, he has authored over 18 books and written various articles on business competition, competitive strategy and advantage. Some of his writings include, 'How Competitive Forces Shape Strategy', 'Competitive Strategy', 'Redefining Health Care: Creating Value-Based Competition On Results', and 'Strategy and the Internet'. MA

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Customs

✦ CBEC increases the basic customs duty on ghee, butter and butter oil from the present rate of 30% to 40% for a period upto and inclusive of the 31st day of March, 2016 vide Notification No. 49/2015-Cus,dt. 05-10-2015.

✦ CBEC further amended notification No. 27/2011-Customs dated 01.03.2011 so as to reduce the export duty on export of Iron Ore by MMTC Limited (only NMDC origin) to Japan and South Korea under the Long Term Agreement (LTA), from 30% to 10%, upto and inclusive of 31.03.2018 vide Notification No. 50/2015-Cus,dt. 16-10-2015.

✦ CBEC increases the basic customs duty on wheat [CTH 1001 19 00 and 1001 99 10] from the present rate of 10% to 25% for a period up to and inclusive of 31.03.2016 vide Notification No. 51/2015-Cus,dt. 19-10-2015.

✦ CBEC amends notification No. 12/2012-Customs dated 17.03.2012 so as to:

- extend zero import duty regime for all pulses except gram [CTH 0713 20 00] and lentil [CTH 0713 40 00] without an end date;
- extend zero import duty regime for gram [CTH 0713 20 00] and lentils [CTH 0713 40 00] only up to 31.12.2015.

Source: Notification No. 48/2015-Cus, dt. 30-09-2015

✦ Tariff Notification in respect of fixation of T V of Edible oil, Brass, Poppy seed, Areca nut, gold and Sliver vide Notification No. 100/2015-Cus (NT), dt. 15-10-2015.

Read more at: http://www.cbec.gov.in/htdocs-cbec/customs/cs-act/notifications/notfns-2015/cs-nt2015/csnt100-2015

✦ **CBEC levied definitive anti-dumping duty on:**

- imports of Plain medium Density Fibre Board of thickness 6 mm and above, originating in or exported from the People's Republic of China, Malaysia, Thailand and Sri Lanka for a period of five years vide *Notification No. 48/2015-Cus (ADD), dt. 21-10-2015*.

- imports of Front Axle Beam and Steering Knuckles for medium and heavy commercial vehicles, originating in or exported from the People's Republic of China for a period of five years vide *Notification No. 49/2015-Cus (ADD), dt. 21-10-2015*.

- imports of Hexamine, originating in or exported from the People's Republic of China and UAE for a period of five years vide *Notification No. 50/2015-Cus (ADD), dt. 21-10-2015*.

- imports of All Fully Drawn or Fully Oriented Yarn/ Spin Draw Yarn/Flat Yarn of Polyester (non-textured and non POY), originating in or exported from the People's Republic of China and Thailand for a period of five years vide *Notification No. 51/2015-Cus (ADD), dt. 21-10-2015*.

✦ **Use of digital signature for submission of documents**

Board Circular No. 10/2015 - Customs dated 31.03.2015 lays guidelines for use of digital signature certificates for submission through remote EDI filing of customs process documents viz. Bill of Entry, Shipping Bill , Import General Manifest (IGM), Export General Manifest (EGM) by importers, exporters, Customs brokers, airlines and their agents, with effect from 01.04.2015. In terms of Board Circular No 10/2015 - Customs, dated 31.03.2015, importers registered under Accredited Client Programme (ACP) are mandatorily required to file Bills of Entry with digital signature with effect from 01.05.2015.Wherever the customs process documents are digitally signed, the Customs will not insist on the user to physically sign the said documents.

In order to increase coverage of digitally signed documents and subsequent phasing out of physical / manual submission of documents, Board has decided that all importers, exporters using services of Customs Brokers for formalities under Customs Act, 1962, shipping lines and air lines shall file customs documents under digital signature certificates mandatorily with effect from 01.01.2016. The importers/ exporters desirous of filing Bill of Entry or Shipping Bill individually may however have the option of filing declarations/ documents without using digital signature. Further, wherever the customs process documents are digitally signed, the Customs will not insist on the user to physically sign the said documents.

Source: Circular No. 26/ 2015- Customs, dated 23.10.2015

✦ Revised Guidelines for Arrest and Bail in relation to offences punishable under Customs Act, 1962 vide *Circular 28/2015 dt 23-10-2015*.

Read more at: http://www.cbec.gov.in/resources//htdocs-cbec/customs/cs-circulars/cs-circulars-2015/circ28-2015cs.pdf

✦ Guidelines for launching of prosecution in relation to offences punishable under Customs Act,1962 vide *Circular 27/2015 dt 23-10-2015.*

Read more at: http://www.cbec.gov.in/resources//htdocs-cbec/customs/cs-circulars/cs-circulars-2015/circ27-2015cs.pdf

Central Excise

✦ CBEC amends notification No. 12/2012- Central Excise dated 17.03.2012 so as to exempt central excise duty on RBD Palm Stearin, Methanol and Sodium Methoxide used in the manufacture of specified bio-diesel subject to actual user condition vide *Notification No. 42/2015-CE, dt. 19-10-2015*.

✦ CBEC further amended CENVAT Credit Rules, 2004 so as to allow input credit of duty paid on molasses generated from cane crushed in the sugar season 2015-16 i.e. 1st October, 2015 onwards, used for producing ethanol for supply to the public sector oil marketing companies, namely, Indian Oil Corporation Ltd., Hindustan Petroleum Corporation Ltd. or Bharat Petroleum Corporation Ltd., for the purposes of blending with petrol, in terms of the provisions of S. No. 40A of the Table in notification No.12/2012-Central Excise, dated the 17th March, 2012, by including such supplies of exempted ethanol under rule 6(6) of the CENVAT Credit Rules, 2004

Source: Notification No. 21/2015-CENT dt. 07-10-2015

✦ Withdrawal of Order under 37B of Central Excise Act, 1944 on classification of Coconut Oil packed in small containers vide *Circular 1007/14/2015-CX dated: 12-10-2015*.

✦ **Revised monetary limits for arrest in Central Excise and Service Tax**

CBEC has decided to revise the limits for arrests in Central Excise and Service tax. Henceforth, arrest of a person in relation to offences specified under clause (a) to (d) of sub-section (1) of Section 9 of the Central Excise Act, 1944 or under clause (i) or (ii) of sub-section (1) of section 89 of the Finance Act, 1994, may be made in cases where the evasion of Central Excise duty or Service Tax or the misuse of Cenvat Credit is equal to or more than rupees one crore vide vide Circular Circular No. 1010/17/2015-CX dated: 23rd October, 2015. Central Excise circular no. 974/08/2013-CX and Service Tax circular no. 171/6 /2013-ST both dated 17-09-2013 stand amended accordingly.

Read more at: http://www.cbec.gov.in/htdocs-cbec/excise/cx-circulars/cx-circulars-2015/circ1010-2015cx

Service Tax

Service tax levy on services provided by a Goods Transport Agency

The All India Transport Welfare Association (AITWA) has represented regarding the difficulties being faced by the Goods Transport Agencies (GTAs) in respect of service tax levy on the services of goods transport. Doubts has been raised by the All India Motor Transport Congress (AIMTC) regarding treatment given to various services provided by GTAs in the course of transportation of goods by road. The issue has been examined. Since July 1, 2012, service tax has shifted to a negative list regime, by which all the services except those covered in negative list as mentioned in section 66D of the Finance Act, 1994 or those exempted by notification are chargeable to service tax.

Goods Transport Agency (GTA) has been defined to mean any person who provides service to a person in relation to transport of goods by road and issues consignment note, by whatever name called. The service provided is a composite service which may include various ancillary services such as loading/unloading, packing/unpacking, transshipment, temporary storage etc., which are provided in the course of transportation of goods by road. These ancillary services may be provided by GTA himself or may be sub-contracted by the GTA. In either case, for the service provided, GTA issues a consignment note and the invoice issued by the GTA for providing the said service includes the value of ancillary services provided in the course of transportation of goods by road. These services are not provided as independent activities but are the means for successful provision of the principal service, namely, the transportation of goods by road.

A single composite service need not be broken into its components and considered as constituting separate services, if it is provided as such in the ordinary course of business. Thus, a composite service, even if it consists of more than one service, should be treated as a single service based on the main or principal service. While taking a view, both the form and substance of the transaction are to be taken into account. The guiding principle is to identify the essential features of the transaction. The interpretation of specified descriptions of services in such cases shall be based on the principle of interpretation enumerated in section 66 F of the Finance Act, 1994. Thus, if ancillary services are provided in the course of transportation of goods by road and the charges for such services are included in the invoice issued by the GTA, and not by any other person, such services would form part of GTA service and, therefore, the abatement of 70%, presently applicable to GTA service, would be available on it.

It is also clarified that transportation of goods by road by a GTA, in cases where GTA undertakes to reach/deliver the goods at destination within a stipulated time, should be considered as services of goods transport agency in relation to transportation of goods for the purpose of notification No. 26/2012-ST dated 20.06.2012, serial number 7, so long as (a) the entire transportation of goods is by road; and (b) the GTA issues a consignment note, by whatever name called.

Source: Circular No.186/5/2015-ST dated 5th October, 2015

✦ CBEC included activities relating to advancement of yoga, in the definition of charitable activities, for the purposes of exemption from Service Tax vide *Notification No. 20/2015-ST dt. 21-10-2015.*

✦ Based on *Notification No. 20/2015-Service Tax dated 21.10.2015*, CBEC further amended notification No. 25/2012-Service Tax dated 20.06.2012 so as to exempt specified services provided by Business Facilitator/Business Correspondent with respect to a Basic Saving Bank Deposit Account covered by Pradhan Mantri Jan Dhan Yojana [PMJDY] in the banking company's rural area branches.

SEBI

✦ Investments by FPIs in Government securities

RBI in its Fourth Bi-monthly Policy Statement for the year 2015-16, dated September 29, 2015 has announced a Medium Term Framework for FPI limits in Government securities in consultation with the Government of India. It has been decided that the limits for FPI investment in debt securities shall henceforth be announced/fixed in rupee terms. Further, it has been decided to enhance the limit for investment by FPIs in Government Securities as follows:

a. Limit for FPIs in Central Government securities would be increased to INR 129,900 cr and INR 135,400 cr on October 12, 2015 and January 01, 2016 respectively from the existing limit of INR 124,432 cr.
b. Limit for Long Term FPIs (Sovereign Wealth Funds (SWFs), Multilateral Agencies, Endowment Funds, Insurance Funds, Pension Funds and Foreign Central Banks) in Central Government securities would be increased to INR 36,600 cr and INR 44,100 cr on October 12, 2015 and January 01, 2016 respectively from the existing limit of INR 29,137 cr.
c. There will be a separate additional limit for investment by all FPIs in State Development Loans (SDL). Debt limits of INR 3,500 cr each would be released on October 12, 2015 and January 01, 2016 respectively under this category.

Source: Circular CIR/IMD/FPIC/8/2015 dt October 06, 2015

✦ Guidelines on overseas investments and other issues/clarifications for AIFs/VCFs vide Circular CIR/IMD/DF/7/2015 dated: October 1, 2015

SEBI (Alternative Investment Funds) Regulations, 2012 ("AIF Regulations") were notified on May 21, 2012 repealing and replacing the erstwhile SEBI (Venture Capital Funds) Regulations, 1996. As on August

31, 2015, there are 165 Alternative Investments Funds (AIFs) registered with SEBI. In this regard, it is specified as under:

A. Overseas Investment by Venture Capital Funds (VCFs) registered under SEBI (Venture Capital Funds) Regulations, 1996 (now repealed)

a. VCFs registered under erstwhile SEBI (Venture Capital Funds) Regulations, 1996 are permitted to invest in Offshore Venture Capital Undertakings which have an Indian connection upto 10% of the investible funds of a VCF in terms of the SEBI circular no. SEBI/VCF/Cir no.1/98645/2007 dated August 09, 2007.
b. SEBI has received several representations from the industry that there has been, in recent times, an increased interest of Indian entrepreneurs outside India. Many Indian entrepreneurs have been setting up their headquarters outside India with back end operations and/ or research and developments being undertaken in India. Therefore, there is a need to allow higher overseas investment by VCFs beyond the existing 10% limit.
c. The representations also state that such investments would provide opportunities to the funds to generate better returns globally, getting exposure to the international markets practices, etc.
d. As such investments are required to have an Indian connection, it is anticipated that such investments will generate indirect benefits to India through bringing in resources, technology up gradation, skill enhancement, new employment, spill-overs, etc.

B. Overseas Investment by Alternative Investment Funds:

a. Under Regulation 15(1)(a) of AIF Regulations, "Alternative Investment Fund may invest in securities of companies incorporated outside India subject to such conditions or guidelines that may be stipulated or issued by the Reserve Bank of India and the Board from time to time."
b. In this regard, Reserve Bank of India (RBI) vide its A.P.(DIR Series) Circular No.48 dated December 09, 2014 has permitted an Alternative Investment Fund (AIF), registered with SEBI, to invest overseas in terms of the provisions issued under the A.P. (DIR Series) Circulars No. 49 and 50 dated April 30, 2007 and May 04, 2007 respectively.

c. In accordance with the aforesaid RBI circular, it is stated as under:

i. AIFs may invest in equity and equity linked instruments only of off-shore venture capital undertakings, subject to overall limit of USD 500 million (combined limit for AIFs and Venture Capital Funds registered under the SEBI (Venture Capital Funds) Regulations, 1996).
ii. AIFs desirous of making investments in offshore venture capital undertakings shall submit their proposal for investment (in the attached format at Annexure) to SEBI for prior approval. It is clarified that no separate permission from RBI is necessary in this regard.
iii. For the purpose of such investment, it is clarified that "Offshore Venture Capital Undertakings" means a foreign company whose shares are not listed on any of the recognized stock exchange in India or abroad.
iv. Investments would be made only in those companies which have an Indian connection (e.g. company which has a front office overseas, while back office operations are in India).
v. Such investments shall not exceed 25% of the investible funds of the scheme of the AIF.
vi. The allocation of investment limits would be done on 'first come- first serve' basis, depending on the availability in the overall limit of USD 500 million.
vii. In case an AIF who is allocated certain investment limit, wishes to apply for allocation of further investment limit, the fresh application shall be dealt with on the basis of the date of its receipt and no preference shall be granted to it in fresh allocation of investment limit.
viii. The AIF shall have a time limit of 6 months from the date of approval from SEBI for making allocated investments in offshore venture capital undertakings. In case the applicant does not utilize the limits allocated within the stipulated period, SEBI may allocate such unutilized limit to other applicants.
ix. These investments would be subject to Notification No. FEMA120/RB-2004 dated July 7, 2004 [Foreign Exchange Management (Transfer or Issue of Any Foreign Security) Regulations, 2004] including amendments thereof and related directions issued by RBI from time to time.
x. AIFs shall not invest in Joint venture/Wholly

Owned Subsidiary while making overseas investments.

xi. AIFs shall adhere to FEMA Regulations and other guidelines specified by RBI from time to time with respect to any structure which involves Foreign Direct Investment (FDI) under Overseas Direct Investment (ODI) route.

xii. AIFs shall comply with all requirements under RBI guidelines on opening of branches/subsidiaries/ Joint Venture /undertaking investment abroad by NBFCs, where more than 50% of the funds of the AIF has been contributed by a single NBFC.

Read more at: http://www.sebi.gov.in/cms/sebi_data/attachdocs/1443691973267.pdf

✧ Comprehensive Risk Management Framework for National Commodity Derivatives Exchanges

Pursuant to Section 131 of the Finance Act, 2015 and Central Government notification F.No. 1/9/SM/2015 dated August 28, 2015, all recognized associations under the Forward Contracts (Regulation) Act, 1952 are deemed to be recognized stock exchanges under the Securities Contracts (Regulation) Act, 1956 with effect from September 28, 2015. This circular applies to National Commodity Derivatives Exchanges as defined in the Securities Contracts (Regulation) (Stock Exchanges and Clearing Corporations) (Amendment) Regulations, 2015. This circular is issued with an objective of aligning and streamlining the risk management framework across national commodity derivatives exchanges (hereinafter referred to as exchanges). The comprehensive risk management framework has been finalized after a due consultative process with the exchanges. The provisions of this circular shall be implemented by national commodity derivatives exchanges latest by January 1, 2016 unless specified otherwise in any specific clause of this circular. The norms specified by Forward Markets Commission shall continue to be in force to the extent not modified or repealed by this circular.

Source: Circular No. CIR/CDMRD/DRMP/01/2015 dated: October 01, 2015

Read more at: http://www.sebi.gov.in/cms/sebi_data/attachdocs/1443700933819.pdf

Banking

✧ Investments in Market Infrastructure Companies by State Central Cooperative Banks

RBI has been decided to permit investment in shares of Market Infrastructure Companies (MICs) as under:

- Investments made by StCBs/CCBs in MICs will be reckoned as Non-SLR investments;
- StCBs/CCBs are allowed to exceed the limit for investments in Non-SLR securities, if it becomes necessary to do so for acquiring membership of MICs;
- The MICs eligible for such investments by StCBs/CCBs are Clearing Corporation of India Ltd. (CCIL), National Payments Corporation of India (NPCI) and Society for World Wide Inter-Bank Financial Tele-Communication (SWIFT). The list of eligible MICs will be updated from time to time by the Reserve Bank of India.

Source: Notification No. RBI/2015-16/209 [DCBR.CO.RCBD.BC.No. 5/19.51.026/2015-16] dated: October 21, 2015

✧ Financial Inclusion Fund (FIF) - Revised Guidelines

Financial Inclusion Fund (FIF) and Financial Inclusion Technology Fund (FITF) was constituted in the year 2007-08 for a period of five years with a corpus of Rs. 500 crore each to be contributed by Government of India (GOI), RBI and NABARD in the ratio of 40:40:20. The guidelines for these two funds were framed by GOI. In April 2012, RBI decided to fund FIF by transferring the interest differential in excess of 0.5% on RIDF and STCRC deposits on account of shortfall in priority sector lending. Keeping in view the various developments over the years, GOI has merged the FIF and FITF to form a single Financial Inclusion Fund. The Reserve Bank of India has finalized the new scope of activities and guidelines for utilization of the new FIF in consultation with GOI. The new FIF will be administered by the reconstituted Advisory Board constituted by GOI and will be maintained by NABARD vide Notification No. RBI/2015-16/206[DCBR.RCBD.BPD.No.4/19.51.010/2015-16] dated: October 15, 2015.

Please refer: https://www.rbi.org.in/Scripts/NotificationUser.aspx?Id=10074&Mode=0 for detail Financial

Inclusion Fund – Guidelines

✦ Memorandum of Procedure for channeling transactions through Asian Clearing Union (ACU)

RBI decided to permit the use of the Nostro accounts of the commercial banks of the ACU member countries, i.e., the ACU Dollar and ACU Euro accounts, for settling the payments of both exports and imports of goods and services among the ACU countries.

Consequently, payments for all eligible:

- export transactions may be made by debit to the ACU Dollar / ACU Euro account in India of a bank of the member country in which the other party to the transaction is resident or by credit to the ACU Dollar / ACU Euro account of the authorized dealer maintained with the correspondent bank in the other member country;
- import transactions may be made by credit to the ACU Dollar / ACU Euro account in India of a bank of the member country in which the other party to the transaction is resident or by debit to the ACU Dollar / ACU Euro account of an authorized dealer with the correspondent bank in the other member country;

It is further reiterated that all eligible export/import transactions with other ACU member countries (except in the case of certain countries where specific exemptions have been provided by the Reserve Bank of India) shall invariably be settled through the ACU mechanism.

Source: Notification No. RBI/2015-16/203 [A. P. (DIR Series) Circular No. 21] dated: October 08, 2015

✦ Risk Management & Inter-Bank Dealings: Booking of Forward Contracts - Liberalization

As per Fourth Bi-monthly Monetary Policy Statement (para. no. 39) on September 29, 2015, with a view to further liberalizing the existing hedging facilities, RBI has decided to allow all resident individuals, firms and companies, who have actual or anticipated foreign exchange exposures, to book foreign exchange forward and FCY-INR options contracts up to USD 1,000,000 (USD one million) without any requirement of documentation on the basis of a simple declaration. While the contracts booked under this facility would normally be on a deliverable basis, cancellation and rebooking of contracts are permitted. Based on the track record of the entity, the concerned AD Cat-I bank may, however, call for underlying documents, if considered necessary, at the time of rebooking of cancelled contracts vide *Notification No. RBI/2015-16/201 [A. P. (DIR Series) Circular No. 20] dated: October 8, 2015*

Source: https://www.rbi.org.in/Scripts/NotificationUser.aspx?Id=10064&Mode=0

✦ Advance against Pledge of Gold ornaments/ jewellery

As per para 3 of the circulars UBD.CO.BPD.PCB.Cir. No.60/13.05.001/2013-14 dated May 09, 2014 and RPCD.RRB.RCB.B.C.No.8/03.05.33/2014-15 dated July 01, 2014 wherein it was stipulated that in order to standardize the valuation and make it more transparent to the borrower, gold jewellery accepted as security/ collateral will have to be valued at the average of closing price of 22 carat gold for the preceding 30 days as quoted by Indian Bullion and Jewellers Association Limited [Formerly known as Bombay Bullion Association Limited (BBA)]. Now RBI has decided that the cooperative banks may also use the historical spot gold price data of the preceding 30 days publicly disseminated by a Commodity Exchange regulated by the Securities and Exchange Board of India.

Source: Notification No. RBI/2015-16/207 [DCBR. BPD. (PCB/RCB). Cir. No. 3/13.05.001/2015-16] dated: October 15, 2015

(For further details on these issues, please visit the Institute's website: www.icmai.in for the complete CMA e-Bulletin, November 2015, Vol 3, No 11 in the "Research and Publications" section.)

Role of CMAs in Cost Management Strategy for Economic Sustainability

Tourism Industry:

Tourism industry in India is emerging and it has vast prospect regarding employment generation and earning large amount of foreign exchange besides giving an impetus to the country's overall economic and social sustainability. Eco-tourism needs to be encouraged for preserving and supporting the diversity of the India's natural and cultural environments. Development of this sector with the Public-Private Partnership (PPP) Model may have an affirmative impact on the overall economic advancement, which entails an investor-friendly environment with commercial feasibility of the projects. To overcome the infrastructural bottlenecks the CMAs can instigate suitable strategies to systematize the infrastructure more effectively, balance the public-private interest, benchmarking governance methodologies, technology, check allocation and apportionment of funds, carry out Risk Mapping and proper designing of the projects.

MSME Sector:

In the competitive and globalised market, cost control becomes an important element of strategy as unit margins shrink and new products and applications are harder to find. Cost & Management Accountants can help the SME sector in managing costs effectively and thereby establish a competitive edge to become world-class players. In this context, they can apply Lean Manufacturing technique for cost reduction of MSMEs. It also has lot of social benefits in terms of training of labour, creation of knowledge, increased labour productivity, lower input costs to other industries and introduction of new production equipment in manufacturing.

Telecom Industry:

The telecommunication industry is considered as the backbone of industrial and economic development. The industry has been serving through delivery of voice and data services at rapidly increasing speeds, and thus, has been upgrading human communication. This sector requires huge investments for its expansion as it is capital-intensive and FDI plays a vital role in meeting the fund requirements for expansion of the telecom sector. The inflow of FDI has provided remarkable momentum to the sector in the past few years. In this context, CMAs can project the cash flows appropriately after considering the uncertainties and risk associated with the project. He can assist in improving customer service and developing new products and services for emerging markets by carrying out Productivity Audit. CMAs play a vital role on cost assessments and framing pricing mechanism. A practicing Cost Accountant is authorized to appear Telecom Disputes Settlement Appellate Tribunal to resolve the disputes of the service providers. He may even render advisory services to the companies in telecom industry regarding policy decision, cost reduction, maintaining the quality, initiating innovative schemes and carry out audit for Metering and Billing Accuracy through his professional expertise in costing and accounting.

Healthcare Sector:

The healthcare services continue to experience very significant budgetary challenges like cost curtailment and at the same time improving services for patients. Incessant quality improvement through effective governance structures, clinical effectiveness, outcome measurements and evaluation can be done by the CMAs. They can assess expenses incurred on medical procedure by applying apt costing techniques subject to infrastructure, resources utilized, services provided and international linkages. CMAs can implement sound Performance Appraisal system, for better financial accountability and transparency, decision making purpose and eliminating corruption both in public and private healthcare systems. CMAs should develop comprehensive strategic model, as the case may be, in an effective manner. It seems that lot of audit issues can appear where CMAs can take note of that.

Education Sector:

The Indian education industry is poised for growth. However, in recent years, with increase in government aid to educational institutions particularly in the form of concessions and incentives, increased fees charged from the students and increased donations stimulated necessity of sound accountability of the financial resources used by the educational institution. In this regard, the CMAs can lend a hand to recognize the costs and revenue earned through various sources – tuition fees and other charges, income from consultancy or from intellectual property owned by the institution (for higher educational institutions) etc. to identify if surpluses are being generated and recommend apt techniques in which the surpluses can be effectively utilized or invested resulting a sound accounting and financial reporting framework for sustainable Education Sector.

Insurance Sector:

In various types of general insurance policies such as fire, marine, Loss due to catastrophes, loss of profits, fidelity guarantee, malicious damage, etc., the CMAs can act as the surveyor and assess the quantum of loss strictly as per conditions laid down in the policy. The surveyor's report forms the basis for payment of compensation by insurance companies where he is appointed as surveyor. The CMAs can assess and certify Transit Loss arising due to leakage, pilferage or improper packing, Marine loss occurring due to leakage or pilferage, Loss of Stock due to fire and Damage of equipment by militant trade unions or political parties. The CMAs can be appointed as consultant in the panel of consultants to assist the management in decision-making purpose and risk-mapping purposes.

Transport Sector:

Transportation sustainability is basically being measured on the basis of profitability, cost-effectiveness and efficiency. CMAs can bring cost-effectiveness by improving resource management, manpower productivity, eliminating ineffective cost centres, etc. They can assist management to frame a fair, transparent and standardized process for the procurement of PPP services. Commuters in metropolitan cities are faced with acute road congestion, energy wastage, rising air pollution due to carbon emission, a high rate of accident risk and unjustified fares. In this context, the CMAs should facilitate the competent authority in tariff fixation mechanism, so that people can enjoy smooth service and transport service providers can earn sustainable amount of profit in a cost effective manner.

Discussion Meet on Risk Management in BFSI

The Committee on Banking & Insurance and the Committee on Research, Journal and IT of the Institute, in association with Financial Express as media partner, organized a seminar on October 1, 2015 at ICAI Auditorium, Kolkata. Here a thorough evaluation had been initiated on the issue of "Risk Management in BFSI". Shri Sukamal Chandra Basu, Former CMD, Bank of Maharashtra, being the chief guest in his inaugural address deliberated that the risk elements in banking is enormous. Here the Institute could become the pioneer by settling up the discrepancies like mismatch of assets and liabilities and could advice the bankers accordingly. According to him Banking is not only a financial intermediary but also a developmental agency. The welcome address was extended by CMA Avijit Goswami, Chairman, Research, Journal & IT Committee of the Institute. With great reference to risk management he believes that there is an immense day to day opportunity for Risk management. He was supported with same zeal by CMA Amit Anand Apte, Chairman, Banking & Insurance Committee of the Institute, who stated that RBI feels CMAs are competent enough to cover from stock audit to internal audit. Shri Mithun Dasgupta , Financial Express, Editorial Desk delivered a special address to this programme saying that coverage of risk management is as important as coverage of round tables, power, or energy sections. Now, adding some light to the former speaker, CMA Manas Kumar Thakur, Vice President of the Institute asserted that CMAs are passionate about proper evaluation, judging, scrutinizing cost elements, mapping costs , assuming costs and analysis of costs. Hence to him , cost of risk is very crucial. Dr. Debaprosanna Nandy, Director, Research and Journal of the Institute presented the vote of thanks. The programme got kicked off in a swift manner after the panel discussion session telescoped with a great beginning with Prof Suman Mukherjea, Renowned Economist & Dean, Bharatya Vidya Bhavan, Institute of Management Sciences who took over as moderator. In the Panel Discussion session, Dr. J.D Sharma, Director, Indian Overseas Bank detailed on the risk management procedures to be adopted by banks. Risk Management is a measure that is used for identifying, analyzing and then responding to a particular risk. Banks must identify its risk, monitor and regulate it. He too laid emphasis on the Basel Norms, the set of reform measures designed to improve the regulation, supervision and risk management within the banking sector. He also stated that the CMAs have a huge role to play by assisting the banking industry by analyzing and doing research on break even points and risk elements. Shri AK Verma, GM, Canara Bank, Kolkata Circle asserted that a separate risk management wing has been set up by their bank with the objective of mitigating the risk. He expressed his deep concern on the excessive accountability which is to be taken care of. Shri S.K Sharma, DGM, UCO Bank, Kolkata HO, asserted that a robust structure of risk management is required in every banks. Shri Sharma thinks that Banking is business of risk. There has to be a constructive management. Shri K.B Vijay Srinivas, GM, National Insurance Company Ltd, discussed on the precautionary measures that are taken by his concern and said that risks are getting codified and risk management mechanism is getting improved. Certain areas like Regulatory risk, Cyber risk, Data security risk, Long term liabilities risk should be addressed with great attitude. Shri Biplab Chakraborty , Retd GM, RBI, Kolkata said Endogenous Risk is important. Greatest outcome is depending upon economic growth in financial sectors and he opined that there is no clear mention of risk appetite statement which needs to be noticed. This statement becomes advantageous for all stakeholders to understand and directly linked to the financial institution's strategy. He claimed that measurement of risk is very important. Effective cost management is very important and for that CMAs will definitely play a huge role. Shri Sujoy Dutta Choudhury, D.G.M, Financial Express ended up the session delivering few words on the subject. The session was summed up by the moderator and attracted a networking of discussions.

Corporate Cost Management Week

12th to 18th October 2015

The Institute celebrated the 'Corporate Cost Management Week' during 12th to 18th October 2015 on the theme 'Business Excellence through Cost Management'.

The real beginning of the Cost Management in the country, however, started in 1965 when the Companies Act, 1956 was amended to incorporate the provisions relating to the maintenance of Cost Accounting Records and Cost Audit w.e.f. 15th October, 1965.

The objective of 'Corporate Cost Management Week' was to spread the message that Cost Management is essential to achieve business excellence. It provided platform to discuss best cost management practices across various sectors in the economy and created awareness about cost culture, cost consciousness and cost disciplines in firms.

The experts deliberated on the following technical sessions :

I. Business Excellence through Cost Management
The thrust of most businesses has been to focus on improving their manufacturing/ operating competencies targeting quality, profitability and overall business excellence. Business excellence needs to be viewed from multiple dimensions which is all about right alignment of people, process and technology in providing customer delight. Factoring sustainability into business strategies makes a business case. A cost and Management Accountant navigates in formulating a corporate strategy and its effective implementation to achieve the excellence.

II. Achieving operation objectives through Risk Management
The growing complexities in business environment and business models have made organizations exposed to various risks. A successful business understands the vital difference between reacting to emerged risks and managing risks proactively. Risk management is an integral part of good governance. Today corporates are geared towards the achievement of its objectives in a transparent, efficient and ethical manner. The management need to communicate its philosophy and values to grass root level in the organization to set the right tone at all levels.

III. Cost Management in Service Industry - In a highly competitive market, service providers are continually looking for ways to manage their costs and increase productivity. Although cost accounting was originally developed for the manufacturing industry, it has proven useful in the service industry as well. The new competitive environment has increased the demand not only for more cost information but also for more accurate information.

IV. Cost Management in MSMEs - The MSME sector is one of the key sectors of the economy which provides maximum employment and contributor to the economic growth. The cost management at MSMEs is through good quality systems, good manufacturing practices and continuous improvement initiatives as all of them aim at increasing productivity, efficiency and cost effectiveness.

Our Regional Councils and Chapters actively organised programme in their respective cities. This initiative was very much appreciated by members. We are happy to note that at about fifteen Hundred members attended the sessions during the week.

Overwhelming participation of members in practice and in industry at Chennai, Kolkata, Kottayam, Pune, Bhubaneshwar, Trivandrum, Bangalore, Mumbai, Jodhpur, Visakhapatnam, Bareilly, Cochin, Asansol, Mettur-Salem, Nagpur, Pimpri-Chinchwad-Akurdi, Howrah, Hyderabad, Agra-Mathura, Ajmer-Bhilwara, Palakkad, Navi Mumbai, Madurai, Delhi, Indore-Dewas, Baroda, Lucknow and Bhopal.

CORPORATE COST MANAGEMENT WEEK 2015

National Seminar on 'Fostering Sustainability through Skill & Entrepreneurship Development'

The Directorate of Research and Journal of the Institute in association with NSDA, Commerce Alumni Association of Calcutta University and EDI Gujarat organized a National Seminar on 'Fostering Sustainability through Skill & Entrepreneurship Development' at ICAI Auditorium, Kolkata on October 10, 2015. The seminar endeavours to create a platform among the participants to acquire knowledge base on the concerned theme and motivates to become an agent to this nation building project of skill and entrepreneurship development undertaken by the Institute. Padmabhushan Shri S. Ramadorai, Chairman, NSDA & NSDC being the chief guest emphasized on skill development in India and asserted that it will be possible if we could accommodate the young bird and boost them up to become entrepreneurs. There are unprecedented opportunities in India which needs to be cultivated and the government is proactive enough to make considerable youths in India well trained to achieve its mission and make India the biggest human capital force by 2020. He anxiously narrated that India lags far behind in imparting skill training as compared to other countries and there is a great need of financial literacy across the country. He also

Director, Research and Journal of the Institute was the presenter of the entire sessions. Research Bulletin, Vol 41, No. III got released during the seminar. In the technical session, Shri Kalyan Kar, Co-Founder & Managing Director, Inthink Knowledge Ventures, stressed on the urgency in the change in mindset and said that the blue collar worker needs to be respected in order to make India one of the skillfully developed nation. Dr. Saibal Kar, Associate Professor of Economics, Centre for Studies in Social Sciences, Calcutta opined that large proportion of youths in India are not involved in skill formation. He asserted that in India there is a huge requirement of on the job and off the job training. Shri Suvaraj Bhattacharya, an young entrepreneur, stressed on the bureaucratic hassles and political interferences that the small scale manufacturers are facing and said that there is a huge contribution of policy makers and politicians in this aspect. Prof Ashok Banerjee, President-elect, Calcutta Management Association beautifully narrated the quotes of Swami Vivekananda and said that we all should have a focus and a vision to achieve the mission. He firmly believes that the villages are the basis for Indian growth and each and every entrepreneurs has to be innovative, has to involve the customers and should go for inclusive growth to attain skill development. Shri Suparna Pathak, Business Editor , Anandabazar Patrika was the moderator of the technical session and at the end there was a questionnaire session very well resolved by the dignitaries present in the dais.

said that in India the industries are not yet aligned to the skilled workforce. He contented that the MoU signed by the Institute with NSDA & EDI would enable offering various collaborative activities to promote and encourage skill and entrepreneurship in India. Prof Rajib Dasgupta, Head, Department of Commerce, University of Calcutta, asserted that increasing number of graduates from IITs and IIMs are opting out of placements and setting up venture capital enterprises, which could show the way into the future. CMA Kaushik Banerjee, Secretary (Acting) of the Institute delivered his welcome speech and Prof Swagata Sen, Pro Vice Chancellor, Academic Affairs, University of Calcutta, CMA Biswarup Basu, Council Member of the Institute, CMA Avijit Goswami, Council Member & Chairman, Research, Journal & IT Committee of the Institute, CMA Manas Kumar Thakur, Vice President of the Institute, Prof. Dhruba Ranjan Dandapat, General Secretary, Commerce Alumni Association, University of Calcutta were among other eminent dignitaries who also gave their valuable views and shared in brief in the inaugural session. CMA Dr. Debaprosanna Nandy,

Eastern India Regional Council

Guwahati Chapter of Cost Accountants

The Chapter organized an industry oriented training program for CMA final students in association with Assam Electricity Grid Corporation Ltd, Guwahati. CMA S K Saha, CGM (F&A), AEGC Ltd deliberated speech on Government Securities Market and discussed in detail about Central Government Securities and State Development Loans by State Government. CMA Mukesh Sharma, Accounts Officer, AEGC Ltd has made deliberation on Mutual Fund and discussed about different category of Mutual Fund in detail. Shri Navneet Jain, Vice President, Tip sons Financial Services Ltd was the special guest during the program and deliberated on dealing with Government Securities and State Development Loans in secondary market.

Hazaribag Chapter of Cost Accountants

The chapter organized career counseling on September 12, 2015 attended by CMA Pranab Kumar Chakraborty, Secretary, EIRC, CMA Bibekananda Mukhopadhyay, Vice Chairman, EIRC, and CMA Chiranjib Das, Joint Director of studies dept of the Institute. They elaborated the course details and Prof (Dr.) Mantu Kumar Singh, Head of department of MBA, Vinoda Bhave University also discussed with the students about the course. A workshop on 'GST-A New Regime of Indirect Taxes' had been organized by the chapter on September 13, 2015 attended by advocates, tax professionals, CMA A.D Wadhwa, past Chairman, EIRC, CMA Pranab Kumar Chakraborty, Secretary of EIRC, CMA Bibekananda Mukhopadhyay, Vice Chairman, EIRC etc enriching the audience with various aspects of GST, its applicability and impact on indirect taxes.

South Odisha Chapter of Cost Accountants

On September 27, 2015 the chapter organized a

seminar on ‘Goods & Service Tax’. Shri V.V. Rama Narasingha Rao, President, Ganjam Chamber of Commerce being the chief guest, discussed the

practical anomalies in GST and about uniform rates of GST. CMA Niranjan Mishra, central council member of the Institute as the guest of honour, reiterated about the students. CMA Niranjam Swain, General Manager, Finance, OPGC Bhubaneswar, the resource person and the chief speaker elaborated about applicability of GST, the IGST and GST rates, proposed rate structures. CMA Ch. Venkata Ramana, Member, EIRC of the Institute as the guest of honour elaborately discussed about the merits and demerits of GST and its implementations.

Bhubaneswar Chapter of Cost Accountants

The Chapter organized an evening talk on September 19, 2015 on the theme ‘Goods & Service Tax (GST)’ for its members. CMA Ashok B. Nawal, Council Member & Chairman-Taxation Committee of the Institute, the chief speaker, CMA Niranjan Swain, General Manager (Finance), OPGC Ltd and Past Chairman, EIRC of the Institute was the co-speaker on the occasion. Both speakers deliberated in detail about the proposed goods and service tax. On September 20, 2015, the chapter conducted the regional council and

chapter coordination meeting. CMA Niranjan Mishra, Chairman, RC and Chapter Coordination Committee of the Institute presided over the meeting. CMA Manas Kumar Thakur, Vice President of the Institute made short analysis of the facts, strength and weakness of the chapters and Regional councils & assured to provide all support. CMA S.P. Padhi, Chairman, EIRC welcomed all the representatives of different chapters and Eastern India Regional Council. The Chapter conducted successfully 15-days pre placement orientation programmes for June 2015 term qualified CMAs at its own premises from September 21 till October 5, 2015. CMA Niranjan Mishra, Council Member & Chairman, RCs and Chapter coordination Committee of the Institute inaugurated the 15 days orientation programme in the presence of CMA Shiba Prasad Padhi, Chairman, EIRC of the Institute, CMA Bibhuti Bhusan Nayak, Chairman of the Chapter and

other members of the Managing Committee of the chapter. The chapter organized a Practitioners meet on October 10, 2015 at its own premises to discuss various issues relating to enhancement of the scope and opportunities of practicing CMAs under the draft New Odisha Industrial Policy-2015. The chapter celebrated Corporate Cost Management week and to mark the celebration, a seminar on ‘Business Excellence through

Cost Management' had been organized on October 16, 2015. In the seminar, CMA Kshirod Chandra Nanda, DGM (Finance), WESCO Ltd. addressed on 'Cost Management in Electricity Distribution Business', CMA Srikanta Kumar Sahoo, DGM(Finance), GRIDCO Ltd. addressed on 'Cost Management in Trading and Transmission', CMA Niranjan Swain, G.M (Finance), OPGC Ltd. addressed on 'Cost Management in Thermal Power', CMA Santosh Kumar Sahu, Director (Finance), OHPC Ltd. addressed on 'Cost Management-Generations, Hydro Power & Green Energy'. CMA Debaraj Biswal, Ex-CEO, Bhubaneswar Stock Exchange Ltd. and Central Electricity Supply Utility of Odisha was the chairman of the technical session and delivered concluding address.

Rajpur Chapter of Cost Accountants

The chapter organized a seminar on 'GST – A Rising in the Horizon' on September 20, 2015 where CMA Biswarup Basu, Council Member, Shri S. Chakraborty, Jt. Commissioner, Service Tax, CMA Mrityunjoy Acharjee, Asst. VP (Taxation & Finance) Balmer Lawrie Ltd, CMA A. K. Bhattacharya, Chairman of the chapter graced the dais. CMA Acharjee presented the subject very widely mainly on the aftermath of the implementation of GST. Shri Khaled Aziz Anwar, Sr. Jt. Commissioner, Commercial Tax, Govt. of West Bengal stressed on the VAT portion of the GST and asserted how it is getting merged into the proposed tax. CMA S.N. Das, Vice Chairman of the chapter proposed the vote of thanks.

Durgapur Chapter of Cost Accountants

On October 4, 2015 the chapter organized a half day seminar on 'Proposed Goods and Service Tax in India'. CMA Ashok Nawal, Council Member was the speaker of the event.

Northern India Regional Council

Udaipur Chapter of Cost Accountants

The chapter organized Annual Member's Meet and Felicitation programme to achievers on September 6, 2015. CMA Y.L. Jain, Secretary of the chapter explained the activities of the chapter and encouraged public and the students to take admission in CMA course. CMA Dinesh Dargar Chairman of the chapter gave the vote of thanks.

Chandigarh-Panchkula Chapter of Cost Accountants

The Chapter, Professional Development Committee and Taxation Committee jointly organized a Mega GST

Conclave at Chandigarh. CMA Rakesh Singh, Chairman, UP Development Council & Head, ASSOCHAM Cost Cell and past president of the Institute was the Chief Guest and he said that the introduction of GST in India would be the biggest indirect tax reform. It would probably change the tax administration and the manner of conducting business. CA Bimal Jain,

Chairman, Indirect Tax Committee of PHD Chamber of Commerce asserted GST is the destination based tax and will be levied and collected on supply of goods & services. CMA Ashok Nawal, Chairman, Taxation Committee of the Institute deliberated that GST shall have three components, one levied by the Centre (Central GST), other levied by the States (State GST) and third component will be IGST which will be for Inter-State transfer combining CGST & SGST. CMA Vijender Sharma, Chairman, Professional Development Committee of the Institute said there is a need of awareness session to know what will be in the GST. CMA Balwinder Singh, Chairman, Cost Accounting Standards Board of the Institute said that our current structure of indirect taxes is driven by a multiplicity of taxes, some levied by the centre and others by the states. CMA Preet Mohinder Singh, chairman of the chapter discussed that the GSTs would re-distribute the burden of taxation equitably between manufacturing and services bringing about a qualitative change in the tax system.

Jaipur Chapter of Cost Accountants

The Chapter organized 15 Days pre-placement training program for students inaugurated by CMA A.K. Shah, Managing Director, Fingrowth Co-operative Bank Ltd. on September 20, 2015. Chief Guest was CMA

L. Gurumurthy, Sr. Director (Training & Placement) who shared various informations & replied to various queries & doubts from the students regarding campus placement and the program was coordinated by CMA P.D. Agrawal, Director, Coaching. The Chapter conducted Career Awareness Program on October 8, 2015 at Parishkar International College at Mansarovar, Jaipur. Principal of the college, Dr. Prerna and Asst. Professor, CMA Govind Sharma provided full support and also addressed the students and persuaded them to join the CMA Course for their successful career.

Lucknow Chapter of Cost Accountants

The Chapter celebrated Teacher's Day in the presence of CMA Anjana Chadha, Chairperson of the chapter, CMA Pawan Kumar Tiwari, Vice Chairman, CMA Dharmendra Singh Saluja, Secretary, CMA Amit Yadav, Treasurer and CMA Neha Sharma, Jt. secretary. A seminar had been organized by the chapter on 'Risk Based Internal Audit and updates on G.S.T' for the members at CMA Bhawan on September 26, 2015. The seminar was inaugurated by Chief Guest Shri R.L Yadav, Retd. Asst. Commissioner, VAT and guest of honour, Shri B.S Goel, past chairman of the chapter. CMA R.S Yadav, Deputy Finance Manager,

Bhel, Jagdishpur was the special guest along with CMA Sunil Singh, secretary, NIRC who graced the occasion. CMA Dr. Pawan Jaiswal explained about the updates on G.S.T in details. CMA Dharmendra Singh Saluja, secretary of the chapter gave the vote of thanks.

Southern India Regional Council

Visakhapatnam Chapter of Cost Accountants

The Chapter organized a professional development programme on 'GST and Ind-AS' on September 20, 2015 at its premises. Sri Jatin Arora and CMA Ganesh Balakrishnan of Deloitte Haskins and Sells LLP were the speakers who explained in detail about the proposed GST and also explained the implications of GST on consumer and on the Government Exchequer. The chapter organized the Corporate Cost Management Week, 2015, a Professional Development Programme on 'Cost Management in Port Services' on October 17, 2015 at its premises. Speaker, CMA D. Ramana Murthy explained the Port Operation Procedures, the role of Tariff Authority for Major Ports in fixation of prices and also explained different costing methods followed in port in different periods.

Hyderabad Chapter of Cost Accountants

On September 11, joint programmes on Youth convention of Management & Leadership at Ramakrishna Math were organized where Swami Bodhamayanandaji, Sri V Srinivas, CEO, Illumine Knowledge Resources, Mumbai and Sri Sai Prasad Vishwanathan, Technology Risk Consultant at Deloitte were the speakers. On September 14, 2015 a career counseling programme had been held at Priyanka Degree College for Women, Mehdipatnam by CMA Dr. R. Chandra Sekhar, Member & Chairman, Students' services subcommittee. On September 19, 2015, the chapter, Indian Accounting Association, Hyderabad Chapter & Badruka College of Commerce & Arts organized a seminar on 'Integrated Financial Reporting' at Badruka College, Kachiguda where CMA Sanjay Kallapur gave a brief introduction about Integrated Reporting and Prof. Dr. Usha Kiran threw light on the importance of 'IR' and the way forward. On September 20, 2015, a programme on Professional Metamorphosis had been organized at CMA Bhavan, Himayatnagar. Speaker Sri Raajh Shekhar, Soft Skills, Personal effectiveness Trainer, Author & Life coach explained the minutest parts of personal effectiveness,

attending interviews, having different perceptions etc. On September 29, the chapter arranged an Industrial visit tour to all students and on September 30, 2015 a career counseling programme was organized at St. Joseph Degree College, King Koti by CMA Vijay Kiran Agastya, chairman & CMA KVN Lavanya, secretary of the chapter. On October 3, 2015, 'Look at CMA', a programme for equipping the final students and freshers with practical knowledge and experience had been launched by CMA K. Ch. A.V.S.N. Murthy, Past Chairman, SIRC.

Western India Regional Council

Bhopal Chapter of Cost Accountants

The Chapter organized a seminar on National Company Law tribunal (NCLT) and Equity Investments on September 13, 2015. CS Hitesh D Butch was the key note speaker in technical session on NCLT and explained various provisions relating to NCLT. Shri AK Asnani, Investment Consultant too discussed the current scenario and future prospects in equity investments. CMA Yogesh Chourasia, secretary of the chapter proposed the vote of thanks.

Pimpri Chinchwad Akurdi Chapter of Cost Accountants

The Chapter organized a full day seminar on 'XBRL Taxonomy and GST' on September 5, 2015 where CMA

Kunal Banerjee, former President of the Institute conducted the first technical session on XBRL taxonomy and the second technical session had been conducted by guest speaker, CMA B. M. Sharma, former President of the Institute on the theme 'GST'.

Surat South Gujarat Chapter of Cost Accountants

The Chapter organized an educational tour on September 19, 2015 for final year students with the guidance of office bearers and members of the chapter. CMA Santosh Rai, Head of Costing Department along with the officers of production department guided and explained in detail the actual manufacturing process costing method. On the same day, an Industrial Orientation Training programme for final & CSST for the intermediate students had been conducted by the chapter. CMA Surendra Behani, GM finance, CMA Manubhai K. Desai, chairman of the chapter guided the students about cost accounting records and cost audit record rules 2014. A study tour at Hydro Power Station, Ukai was organized where Shri Ashish Desai, Engineer in charge, CMA Nanty Shah, CMA Bharat Savani and CMA Brijesh Mali guided the students.

Nasik Ojhar Chapter of Cost Accountants

The Chapter in association with Nashik Chapter of WIRC of ICSI organized a half day seminar on 'SME – Managing Transition, Growth and Governance' on September 9, 2015. CMA A. Sekar, faculty of the seminar explained about SME-IPO, Institution Trading Platform (ITP), Compliance Management Systems etc. On the same day, a felicitation programme had been organized for successful students of June 2015 Examination. The programme was coordinated by CMA Pradnya Chandorkar, vice chairperson, CMA Suraj Lahoti, secretary, and CMA Prashant Yeole, treasurer of the chapter.

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

EXAMINATION TIME TABLE & PROGRAMME – DECEMBER 2015

FOUNDATION COURSE EXAMINATION
(Multiple Choice Questions – Online Mode)

Day & Date	Foundation Course Examination	
	Syllabus-2012	
	Paper – 1 & 2 (100 Marks) Time : 10 A.M. to 12.00 Noon	Paper – 3 & 4 (100 Marks) Time : 2 P.M. to 4.00 P.M.
Saturday, 19th December, 2015.	**Paper 1** : Fundamentals of Economics and Management (50 Marks) **Paper 2** : Fundamentals of Accounting (50 Marks)	**Paper 3** : Fundamentals of Laws & Ethics (50 Marks) **Paper 4** : Fundamentals of Business Mathematics and Statistics (50 Marks)

Examination Fees

Foundation Course Examination	**Inland Centres**	**₹ 1200/-**
	Overseas Centres	**US $ 60**

1. **The Foundation Examination under syllabus-2012 will be conducted in M. C. Q. Mode through Online only**.

2. Total Questions: 100 (Multiple Choice Questions) in each session, Maximum Marks: 100 (Each Question will carry 1 Mark) in each session. There will be no negative marking for wrong answers.

3. **Foundation Examination will be conducted under 2012 syllabus only.**

4. **Application Forms for Foundation Examination has to be filled up through online only and fees will be accepted through online mode only (including Payfee Module of IDBI Bank). No Offline form and DD payment will be accepted for domestic candidate.**

5. **STUDENTS OPTING FOR OVERSEAS CENTRES HAVE TO APPLY OFFLINE AND SEND DD ALONGWITH THE FORM**.

6. **(a) Students can login to the website www.icmai.in and apply online through payment gateway by using Credit/Debit card.**

   (b) Students can also pay their requisite fee through payfee module of IDBI Bank.

7. **Last date for applying for Foundation Examination of December 2015 term is 3rd November, 2015.**

8. **Examination Centres**: Agartala, Ahmedabad, Akurdi, Allahabad, Asansol, Aurangabad, Bangalore, Baroda, Berhampur(Ganjam), Bhilai, Bhilwara, Bhopal, Bewar City(Rajasthan), Bhubaneswar, Bilaspur, Bokaro, Calicut, Chandigarh, Chennai, Coimbatore, Dehradun, Delhi, Dhanbad, Durgapur, Ernakulam, Erode, Faridabad, Gandhidham, Ghaziabad, Guwahati, Hardwar, Hazaribagh, Howrah, Hyderabad, Indore, Jaipur, Jabbalpur, Jalandhar, Jammu, Jamshedpur, Jodhpur, Kalyan, Kannur, Kanpur, Kolhapur, Kolkata, Kota, Kottayam, Lucknow, Ludhiana, Madurai, Mangalore, Mumbai, Mysore, Nagpur, Nasik, Nellore, Noida, Panaji (Goa), Patiala, Patna, Pondicherry, Port Blair, Pune, Rajahmundry, Ranchi, Rourkela, Salem, Sambalpur, Shillong, Siliguri, Solapur, Srinagar, Surat, Thrissur, Tiruchirapalli, Tirunelveli, Trivandrum, Udaipur, Valsad, Vashi, Vellore, Vijayawada, Vindhyanagar, Waltair and Overseas Centres at Bahrain, Dubai and Muscat. **(If no examination centre is available at a particular location, examinees will be accommodated at the nearest Centre available)**

9. **A candidate who is completing all conditions for appearing the examination as per Regulation will only be allowed to appear for examination.**

10. **Probable date of publication of result : 9th January, 2016.**

A. Das
Director (Examination)

*** For any examination related query, please contact exam.helpdesk@icmai.in**

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

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EXAMINATION TIME TABLE & PROGRAMME – DECEMBER 2015

	PROGRAMME FOR SYLLABUS 2012	
Day, Date & Time	**Intermediate** 9.30 A.M. to 12.30 P.M.	**Final** 2.00 P.M. to 5.00 P.M.
Thursday, 10th December, 2015	Financial Accounting	Corporate Laws and Compliance
Friday, 11th December, 2015	Laws, Ethics and Governance	Advanced Financial Management
Saturday, 12th December, 2015	Direct Taxation	Business Strategy & Strategic Cost Management
Sunday, 13th December, 2015	Cost Accounting & Financial Management	Tax Management & Practice
Monday, 14th December, 2015	Operation Management and Information Systems	Strategic Performance Management
Tuesday, 15th December, 2015	Cost & Management Accountancy	Corporate Financial Reporting
Wednesday, 16th December, 2015	Indirect Taxation	Cost & Management Audit
Thursday, 17th December, 2015	Company Accounts and Audit	Financial Analysis & Business Valuation

EXAMINATION FEES

Group (s)		Final Examination	Intermediate Examination
One Group	(Inland Centres) (Overseas Centres)	₹1400/- US $ 100	₹1200/- US $ 90
Two Groups	(Inland Centres) (Overseas Centres)	₹2800/- US $ 100	₹2400/- US $ 90

1. **Application Forms for Intermediate and Final Examination has to be filled up through online only and fees will be accepted through online mode only (including Payfee Module of IDBI Bank). No Offline form and DD payment will be accepted for domestic candidate.**
2. **STUDENTS OPTING FOR OVERSEAS CENTRES HAVE TO APPLY OFFLINE AND SEND DD ALONGWITH THE FORM.**
3. (a) Students can login to the website www.icmai.in and apply online through payment gateway by using Credit/Debit card.
   (b) Students can also pay their requisite fee through payfee module of IDBI Bank.
4. Last date for applying for December 2015 Examination is 25th October, 2015.
5. Finance Act 2014, involving Assessment Year 2015-2016 will be applicable for P7 - Direct Taxation, P11- Indirect Taxation and P16 - Tax Management & Practice for the purpose of December 2015 term of Examination. Refer clarification issued for December 2015, BoS(Academics)/9/08-02/2015-16 dated 25/8/2015.
6. The provisions of the Companies Act 2013 and The Companies (Cost Records & Audit) Rules 2014 – are applicable in December 2015 Examinations. Supplementary reading materials for both Intermediate & Final is uploaded in the website of the Institute. Refer clarification issued for December 2015, BoS(Academics)/9/08-02/2015-16 dated 25/8/2015.
7. If a student obtains at least 60 per cent marks in any paper, the benefit of carry forward/exemption is allowed for the immediately successive three terms of Examination only.
8. Examination Centres: Adipur-Kachchh(Gujarat), Agartala, Ahmedabad, Akurdi, Allahabad, Asansol, Aurangabad, Bangalore, Baroda, Berhampur(Ganjam), Bhilai, Bhilwara, Bhopal, Bewar City(Rajasthan), Bhubaneswar, Bilaspur, Bokaro, Calicut, Chandigarh, Chennai, Coimbatore, Cuttack, Dehradun, Delhi, Dhanbad, Durgapur, Ernakulam,Erode, Faridabad, Ghaziabad, Guwahati, Hardwar,Hazaribagh, Howrah, Hyderabad, Indore, Jaipur, Jabbalpur, Jalandhar, Jammu, Jamshedpur, Jodhpur, Kalyan, Kannur, Kanpur, Kolhapur, Kolkata, Kota, Kottayam, Lucknow, Ludhiana, Madurai, Mangalore, Mumbai, Mysore, Nagpur, Naihati, Nasik, Nellore, Neyveli, Noida, Panaji (Goa), Patiala, Patna, Pondicherry,Port Blair, Pune, Rajahmundry, Ranchi, Rourkela, Salem, Sambalpur, Shillong, Siliguri, Solapur, Srinagar, Surat, Thrissur, Tiruchirapalli,Tirunelveli, Trivandrum, Udaipur, Vapi, Vashi, Vellore, Vijayawada, Vindhyanagar, Waltair and Overseas Centres at Bahrain, Dubai and Muscat.
9. A candidate who is fulfilling all conditions specified for appearing in examination will only be allowed to appear for examination.
10. Probable date of publication of result : Inter & Final – 21st February 2016.

A. Das
Director (Examination)

* For any examination related query, please contact exam.helpdesk@icmai.in

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

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MANAGEMENT ACCOUNTANCY

EXAMINATION TIME TABLE & PROGRAMME – DECEMBER 2015

Thursday 10th December, 2015 09.30 A.M to 12.30 P.M	Thursday 10th December, 2015 02.00 P.M to 05.00 P.M	Friday 11th December, 2015 09.30 A.M to 12.30 P.M	Friday 11th December, 2015 02.00 P.M to 05.00 P.M	Saturday 12th December, 2015 09.30 A.M to 12.30 P.M
Management Accountancy	Advanced Management Techniques	Industrial Relations & Personnel Management	Marketing Organisation & Methods	Economic Planning & Development

EXAMINATION FEE

Per Group	Rs 2500/-

1. (a) Application Form for Management Accountancy Examination is available from Directorate of Advanced Studies, The Institute of Cost Accountants of India, Hyderabad Centre of Excellence, Plot No. 35, Financial District, Nanakramguda Village, Serilingampally Mandal, Gachibowli, Ranga Reddy District, Hyderabad on payment of Rs 50/- per form.

   (b) Students can also download the Examination Form from ICAI Website at www.icmai.in.

2. Last date for receipt of Examination Application Form without late fees is 10th October, 2015 and with late fees of Rs 300/- is 20th October,2015.

3. Examination fees to be paid through Demand Draft of requisite amount drawn in favour of "The Institute of Cost Accountants of India" and payable at Kolkata.

4. Students may submit their Examination Application Form along with the requisite amount at the Directorate of Advanced Studies, The Institute of Cost Accountants of India, Hyderabad Centre of Excellence, Plot No. 35, Financial District, Nanakramguda Village, Serilingampally Mandal, Gachibowli, Ranga Reddy District, Hyderabad. Any query in this regard may be addressed to Directorate of Advanced Studies, Plot No. 35, Financial District, Nanakramguda Village, Serilingampally Mandal, Gachibowli, Ranga Reddy District, Hyderabad.

5. Examination Centres: Adipur-Kachchh(Gujarat), Agartala, Ahmedabad, Akurdi, Allahabad, Asansol, Aurangabad, Bangalore, Baroda, Berhampur(Ganjam), Bhilai, Bhilwara, Bhopal, Bewar City(Rajasthan), Bhubaneswar, Bilaspur, Bokaro,Calicut, Chandigarh, Chennai, Coimbatore, Cuttack, Dehradun, Delhi, Dhanbad, Durgapur, Ernakulam,Erode, Faridabad, Ghaziabad, Guwahati, Hardwar,Hazaribagh, Howrah, Hyderabad, Indore, Jaipur, Jabbalpur, Jalandhar, Jammu,Jamshedpur, Jodhpur, Kalyan, Kannur, Kanpur, Kolhapur, Kolkata, Kota, Kottayam, Lucknow, Ludhiana, Madurai, Mangalore, Mumbai, Mysore, Nagpur, Naihati, Nasik, Nellore, Neyveli, Noida, Panaji (Goa), Patiala, Patna, Pondicherry,PortBlair, Pune, Rajahmundry, Ranchi, Rourkela, Salem, Sambalpur, Shillong, Siliguri, Solapur, Srinagar, Surat, Thrissur, Tiruchirapalli,Tirunelveli, Trivandrum, Udaipur, Vapi, Vashi, Vellore, Vijayawada, Vindhyanagar, Waltair and Overseas Centres at Bahrain, Dubai and Muscat.

6. A candidate who is fulfilling all the conditions only will be allowed to appear for the examination.

CMA Rajendra Bose

Jt.Director (Advanced Studies)

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

(Statutory body under an Act of Parliament)

Southern India Regional Council

REGIONAL CMA SUMMIT - 2015

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