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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.

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MISSION STATEMENT

“ICWAI 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

“ICWAI would be the preferred source of resources and professionals for the financial leadership of enterprises globally.”

DISCLAIMER

The views expressed by the authors are personal and do not necessarily represent the views and should not attributed to ICWAI.

NOTIFICATION

Re : Upward revision of examination fees

The Council in its 259th meeting held on 21st December, 2009 has approved the enhancement in the examination fees from the term **December, 2010** as follows :

	New Fees (Rs.)
Foundation	800
Intermediate (Per Group)	850
Intermediate (Both Groups)	1600
Final (Per Group)	950
Final (Both Groups)	1800

S. M. Galande
Chief Executive Officer

Editorial

India is the 2nd most attractive destination for Foreign Direct Investment (FDI) in the world, up from 9th last year.

While the world still grapples with lurking fears of a double dip deflation, here's another testimony of "India Shining". The UN Conference on Trade and Development study (World Investment Report, 2010-12) ranks India as the 2nd most attractive destination for Foreign Direct Investment (FDI) in the world, up from 9th last year. By this, India has managed to upstage the US as the second most favoured location for FDI, after China.

Net FDI into India is in the \$20 billion-plus range from \$5 billion earlier. Over recent years, trends in both inward and outward FDI to/by India have risen significantly. Inward FDI which was in the \$5 billion range till FY05 has risen to over \$30 billion since FY08. Like-wise, outward investments by Indian companies which were in the \$2 billion range in FY05 have risen to the \$15 billion range. This has resulted in net FDI now being over \$20 billion as against \$3-4 billion earlier. India received \$35 billion in FDI in 2009.

While the increase in FDI inflows is stating the obvious- a reflection of the growing bullish sentiments of the global investor about the economy's resilient and strong fundamentals; it is the fact of higher outward FDI (not to be confused with withdrawal of investments made by FIIs in India) that begets our attention. For, higher outbound FDI indicates the coming of age of the Indian entrepreneur and investor on the global map.

The 1990s days of India are long past when the country emerging from an external balance and liquidity crisis desperately needed funds to carry its nascent growth march forward. Consequently, this period saw loosening of norms to make the country more inviting for capital. Since FDI has always been preferred to its more volatile counterpart- the portfolio variety, owing to its long term and stable nature, even the South East Asian crisis could not dampen the enthusiasm for FDI. FDI was seen as an essential recipe for growth for it brought in funds and the latest technical know-how and comparisons were (and still are) forever being drawn of how China pipped us in this race. We were viewed as a nation that was destined to remain in the shadows of the developed nations.

However a lot has changed in the recent years. We are increasingly being seen a mover on the international scene; theories abound on how our educated and young workforce, our high savings rate and innate sense of entrepreneurship that can survive despite the systemic deficiencies ("jugaad") will propel us to the top by 2050. This can be attributed to the superlative success achieved by India in the field of information technology and the fact that we could emerge unscathed from the sub-prime crisis which has injected a never before kind of confidence in our businessmen. Major acquisitions by our corporate conglomerates in areas as diverse as telecom, automobiles, energy and natural resources are all manifestations of how the Indian entrepreneur is a major force to reckon with in the world. India is a breeding ground for breakthroughs in R&D (think "Nano", think pharma). Our IT giants are today setting up off-shoring units in different overseas locations- providing jobs, capital and cutting edge technology to the host nations; economic policies in the developed nations today get shaped taking into account the dynamics of Indian business.

However as discussed in this column in the last issue, much needs to be done on all fronts if such high expectations are to be met. We at ICWAI are an integral part of this way ahead. Towards this end, we launch from this issue onwards special issues on different domains where India enjoys a comparative advantage. A beginning is made with a widely debated topic- climate change. India is in a very difficult position in that it has to balance the livelihood concerns of its poor and at the same time be a responsible global citizen by combating environmental degradation. On one hand, we have taken a lead in holding of carbon credit certificates; on the other hand major projects guaranteeing jobs to thousands are getting held up on environmental grounds. The October edition takes a peek at all these issues on "Green Gains".

From the ICWAI family we wish all our readers a very happy festival season ahead. □



B. M. Sharma, President

“A river cuts a rock, not because of its power, but because of its consistency. Remember, never leave your hope and keep moving towards your goal.”

– Anonymous

My Dear Professional Colleagues,

I have received many letters and feedback on my September communiqué regarding the Companies Bill, 2009, CWA (Amendment) Act, Direct Tax Code Bill 2010, Goods and Services Tax etc. which are important to our members. I have requested to reproduce the September 2010 Communiqué in news bulletins of Regional Councils for wider coverage and for information of students and Members. Many members have expressed anguish and displeasure at the adverse recommendation of the Standing Committee on Finance emanating solely out of the opposition of ICAI. Let me reiterate my confidence that the Institute will get its due share.

Many of the legislations mentioned above are getting introduced to the Parliament in the forthcoming sessions. It is important that the Honourable Members of Parliament should be aware of the competencies and skill sets possessed by our profession. I have sent an appeal to all the Chapters and Regional Councils requesting them to contact the local MPs from their constituencies, and apprise them of the key issues concerning our profession. I am extremely happy that the Chapters and Regional Councils have responded in an overwhelming manner, and have been successful in getting good support. It is very important that our profession, which is closely linked to optimum resource utilization and efficiency improvement, which results in price reduction for the common man, should start building a closer rapport with the political system, which also works for the same cause. I firmly believe that apart from the actions taken at Kolkata or Delhi, the grass root approach will broaden the reach of what we are capable of doing.

I wish to assure members that with the help of our Regional Councils and Chapters, we will continue to take steps to get the long overdue matters solved for the profession.

I visited the Hazaribag Extension Center with Shri S.C. Mohanty, CCM. During my visit I also met Mr. Yaswant Sinha, Chairman, Parliamentary Standing Committee on Finance and Ex Finance Minister to the Government of India.

Cost Accounting Standards Board (CASB)

I had the privilege to attend the meeting of reconstituted Cost Accounting Standards Board (CASB) on 16th September, 2010 at New Delhi. I congratulate the Chairman and the members of the Board for finalising 12 Cost Accounting Standards. I am sure that the progress will continue in the coming year and the Board will come out with more standards and guidance notes in the near future. I also assure full support of the Council to the activities of the CASB.

Training & Placement Directorate

I am glad to inform that initiatives of Training & Placement Directorate generated good response from the Corporate World. Large numbers of companies have come forward for Campus Placements arranged by Training & Placement Directorate at Delhi, Kolkata, Chennai and Hyderabad. The companies which have participated in the Campus Placements in September 2010 are GAIL (India) Ltd., Coal India Ltd., MMTC Ltd., Engineers India Ltd., NMDC Ltd, National Housing Bank, Food Corporation of India (FCI) Ltd., Lanco Infratech Ltd. and AkzoNobel India Ltd. A number of freshly qualified

cost accountants have been selected by these companies. Further, WIRC and SIRC are also arranging Campus Placements for the recently passed students on 9th October at Mumbai and 10th October 2010 at Chennai respectively and participation in these campus placements are from a number of companies both in the private sector and public sector. Due to Commonwealth Game at New Delhi during October 3 to 14, 2010, the Campus Placement activities at Delhi shall restart from 18th October 2010 with M/s Hindustan Zinc Ltd. Training & Placement Directorate has been actively pursuing with the corporate houses who in turn have been absorbing fresh qualified cost accountants at a fast pace.

CEP Directorate

I am happy to inform that the Institute has launched Certificate Course on IFRS. This course has interactive class room sessions with case-studies followed by a unique feature of submission of online assignments. ICWAI has been in the forefront in organising workshops, seminars and short term programmes on highly relevant topics for the profession. The launch of this course is a step in that direction.

MoU with Institute of Professional Accountants, Russia

I had the honour of signing a historic MoU on behalf of the Institute with Institute of Professional Accountants and Auditors, Russia (IPAR). Pursuant to this MoU, both parties have agreed to develop joint R&D projects and promote the results of the researches in work practices for the benefit of accounting community of both countries. Both the parties will also work towards the mutual recognition of membership and also cooperate in international forums such as IFAC.

This historic MoU was signed in the presence of Shri R Bandyopadhyay, IAS, Secretary to the Government of India, Ministry of Corporate Affairs, who was leading an official delegation of Accounting professionals to Russia from India. I along with Shri A N Raman, Chairman of ICWAI Committee on WTO and International Affairs as well as Vice President SAFA represented the Institute in the delegation. Shri R.

Bandyopadhyay, Secretary to Government of India concurred on the need for sharing experiences of both accounting bodies in the context of both Russia and India being important constituents of the BRIC and the G 20 nations.

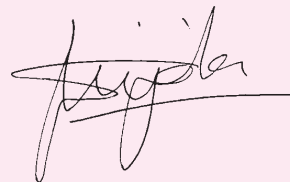
Investor Awareness Programmes

ICWAI has been organising Investor Awareness Programmes since last year. This unique initiative of Ministry of Corporate Affairs, Government of India taken up by ICWAI during 2009-10 is gaining momentum. Shri M Gopalakrishnan, Vice President of the ICWAI who is now in-charge of these programmes in the Institute is taking new initiatives to increase the financial literacy of the average investors in the country. We have roped in our ROCCs, imparting training on CAT course to organise these programmes. With these measures, I am confident that ICWAI shall meet the target set by Ministry of Corporate Affairs.

It was shocking to know the demise of former President Shri S. Ramanathan, who was the President of the Institute for the year 1987-88. ICWAI Offices in various parts of the country paid homage to him and were closed afterwards as a mark of respect to the departed soul. I join my fellow members in praying to God for bestowing strength to his family to bear this great loss.

I wish all the students, members and their family good health, joy and happiness for the festival season beginning with Navaratri, Durga Puja, Vijaydashmi and Lakshmi Puja.

Yours sincerely,



(B.M. Sharma)

President

Date : 4th October, 2010

Ethanol : Time to Consider as Vehicle Fuel

Prof. Amardeep D. Jadhav*

In a significant move to deal with a massive oversupply of sugar that could also give a major boost to environment-friendly fuel, a group of ministers (GoM), headed by External Affairs minister Pranab Mukherjee, has recommended that India adopt a mandatory blending of 10% ethanol with petrol to run motor vehicles. While blending – at 5% – is currently optional for individual states, the GoM has recommended that 10% blending of ethanol be made mandatory by October 2008, with only exceptions being Jammu and Kashmir, the north-eastern states, Andaman and Nicobar Islands, and Lakshadweep. The recommendation now goes to the Cabinet Committee on Economic Affairs (CCEA) for approval.

No matter how it is produced – from biomass or petrochemical and carbochemical processes –, ethanol is a fuel that releases significant amounts of heat as it is burned. Nevertheless, ethanol is quite different from conventional fuels derived from petroleum. The main difference is in the high oxygen content, which represents 35% of the mass of ethanol. Ethanol's characteristics enable cleaner combustion and better engine performance, which contribute to reduce pollutant emissions – even when it is mixed with gasoline. In these cases, it behaves as a true additive for regular fuels, improving their properties. Notwithstanding the extensive experience with ethanol fuel in some countries, particularly Brazil, it is surprising how, in some countries where ethanol is not routinely used, prejudices and misleading information about the actual use conditions and the advantages associated with this fuel and additive persist.

This paper seeks to present technical, economic, and environmental issues that are important for ethanol as a fuel in internal combustion engines, either in gasoline blends (anhydrous ethanol, that is, without water) or pure (hydrated ethanol). It discusses the main physical and chemical characteristics that define the specifications for ethanol and reviews its suitability and compatibility with the elastomers and metals most used in engines, highlighting the view of the auto industry on its use. Air emissions associated with the use of ethanol, as compared to gasoline, are analyzed.

Also of interest to those considering using ethanol as a fuel, the paper addresses generic legal terms for the use of ethanol for vehicular purposes, economic issues such as fuel pricing in markets where ethanol competes, and taxation mechanisms and logistics for fuel market incorporating ethanol.

Technical and environmental aspects of ethanol

Ethanol, or ethyl alcohol, represented by the molecular formula C_2H_6O , may be used as fuel in spark-ignition internal combustion engines (Otto cycle) in two ways, namely : 1) in gasoline and anhydrous ethanol blends; or 2) as pure ethanol, usually hydrated. Table 2 summarizes the main characteristics of ethanol and a typical gasoline. It is worth emphasizing that these properties do not refer to a strict specification covering several other properties and parameters related to safety, performance, contamination and chemical hazards.

In the Brazilian case, specifications to be observed by producers and the entire distribution chain are set forth by the National Petroleum Agency (ANP) Administrative Rule 309/2001 for gasoline with anhydrous ethanol, and by ANP Resolution 36/2005 for anhydrous and hydrated ethanol. In the Brazilian legislation they are referred to as anhydrous ethyl alcohol fuel (AEAF) and hydrated ethyl alcohol fuel (HEAF), respectively. According to that legislation anhydrous ethanol must contain less than 0.6% of water by mass, while for hydrated ethanol the content must be between 6.2% and 7.4%. These values correspond to a

maximum content of 0.48% for anhydrous ethanol and a range of 4.02 % to 4.87% for hydrated ethanol when expressed on a volume proportion basis, at 20° C.

Table 1 : Gasoline and bio-ethanol properties

Par Lower calorific value	kJ/kg	43,500	28,225
	kJ/litre	32,180	22,350
Density	kg/litre	0.72 – 0.78	0.792
RON (Research Octane Number)	–	90-100	102-130
MON (Motor Octane Number)	–	80-92	89-96
Vaporization latent heat	kJ/kg	330-400	842-930
Stoichiometric relation	air/fuel	14.5	9.0
Steam pressure	kPa	40 – 65	15 – 17
Ignition temperature	oC	220	420
Solubility in water	% in volume	~0	100

Source : API (1998) and Goldemberg and Macedo (1994)

In Brazil, for several decades now, the only types of fuel for internal combustion engines that can be found at all service stations are: regular, and premium gasoline, with minimum average octane ratings of

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87 and 91 (according to RON and MON methods, respectively) and both with an anhydrous ethanol content of 20% to 25%; these federal standards apply to all domestic and imported vehicles with gasoline engines, including luxury cars; hydrated ethanol, with an average octane rating higher than 110, for vehicles with engines suitable for this fuel or with flex-fuel engines, capable of using blends of gasoline with 20% to 25% hydrated ethanol content. Pure hydrated ethanol must be used in engines manufactured or adapted specifically for this purpose, in particular those with higher compression ratios, which seek to use ethanol's higher octane rating (relative to gasoline) and achieve efficiencies on the order of 10%. In other words, ethanol's higher octane rating allows engines to obtain more useful energy vis-a-vis gasoline.

Other modifications must be made in the fuel feed system and ignition, in order to compensate for differences in the air-fuel relationship, among other properties. Furthermore, modification of some materials that come in contact with the fuel are required, such as anticorrosive treatment of the metal surfaces of fuel tanks, fuel filters and pumps, substitution of fuel lines, and use of materials which are more compatible with ethanol. After decades of experience in improving engines designed for ethanol, automotive technology has evolved to the point where vehicles using pure hydrated ethanol achieve similar performance parameters, drivability, cold start conditions and durability as gasoline engines, especially in countries with mild winters.

Incorporating extensive use of electronics in advanced systems that control fuel-air mixing and ignition, cars introduced in Brazil since 2003 use flexible or so-called "flex-fuel" engines which are capable of using — without any interference from the driver — gasoline (with 20% to 25% ethanol), pure hydrated ethanol, or mixtures of these two fuels in any proportion, while meeting standards of efficiency and drivability, and complying with the legal limits for exhaust emissions [Joseph Jr. (2007)]. Since 2005 vehicles equipped with flex-fuel engines have represented the majority of the new car sales in Brazil and cold-start systems have been improving in terms of performance and functionality. Currently there are over 60 different engine models produced by ten U.S., European and Japanese manufacturers operating in Brazil. It should be emphasized that the Brazilian approach to flex-fuel vehicles gives the driver complete discretion to choose the fuel to be used, from 100% hydrated ethanol to gasoline-ethanol blends containing 20% to 25% ethanol.

In the United States, Canada and Sweden, vehicles with flexible engines are also sold, but under a different context: they use gasoline-ethanol blends ranging from

pure gasoline (without ethanol) to a blend of 85% anhydrous ethanol and 15% gasoline, a product known as E85, with limited, but growing availability.

However, the simplest and fastest way of expanding the use of ethanol as a fuel is by using gasoline-ethanol blends in vehicles already on the road, without the need for modifying engines. This is an attractive option both for developed and developing countries. Developing countries because, in many cases, they can produce ethanol but currently depend on increasingly expensive fuel imports for their fuel supply. And developed countries because they currently have a limited capacity to produce cost-efficient ethanol with good energy and environmental balances, but can diversify their liquid fuel options by adding ethanol imported from regions with favourable conditions for bio-fuel production. Then, it is important to consider the consequences of adopting gasoline-ethanol blends on engine performance, drivability and durability of vehicles, as well as the associated environmental impacts.

Since the 1980s, the anhydrous ethanol content of all gasoline sold at service stations in Brazil has exceeded 20%. That same decade the United States also began using a gasoline-ethanol blend, known as E10, with ethanol content capped at 10%. The cap was favoured by the auto industry because it did not require changes in materials or components, nor engine recalibrations.

In recent years several countries, including India (exceptions being Jammu and Kashmir, the north-eastern states, Andaman and Nicobar Islands, and Lakshadweep), China, Thailand, Australia and Colombia adopted E10 as a starting point for the introduction of ethanol in their markets. In such concentrations, ethanol acts as an octane booster and reduces pollution, replacing tetraethyl lead and other oxygenating additives facing imminent environmental restrictions (eg, MTBE), or whose use has already been banned in several countries. The experience of several countries with E10 allows us to affirm that this blend can be introduced to supply the existing vehicular fleet without requiring major changes.

Table 2 presents the modifications to vehicle engines required for different ethanol contents in gasoline [Joseph Jr. (2005)]. In the case of flex-fuel engines, the American approach of using blends of up to 85% ethanol in gasoline is simpler than the Brazilian one, since it does not require an auxiliary cold-start system. It does, however, mean that such engines cannot use pure ethanol. In a near future, with the development of more advanced injection systems, there should be no need for auxiliary systems, and, thus, it may be possible for Brazilian engines to be simplified.

Table 2 : Required modifications for vehicles using gasoline with different bioethanol contents

% of bioethanol in gasoline	Changes to a Pure Gasoline Vehicles											
	Carburettor	Fuel injection	Fuel pump	Fuel filter	Ignition system	Fuel tank	Catalytic converter	Basic Engine	Engine oil	Intake header	Exhaust system	Cold-start system
≤ 5%	Any Vehicle											
≤ 10%	Vehicles produced from 1990 on											
≤ 25%	Brazilian gasoline vehicle											
≤ 85%	Flexible Vehicle used in the USA and in Canada											
≤ 85%	Flexible Vehicle used in Brazil											

No changes are necessary Changes are probably necessary

Source: Adapted from Joseph Jr. (2005)

When ethanol is blended with gasoline, a new fuel is formed; some of its characteristics are distinct from the values determined by the direct measurement of the properties of each component, because of the non-linear behaviour of certain properties. While ethanol is a simple chemical substance, regular gasoline is itself a blend with over 200 different kinds of petroleum oil hydrocarbon derivatives. In the next sections we comment on the main properties of the gasoline-ethanol blends and their environmental behaviour.

Octane rating

Octane rating is a measure of a fuel's resistance to self-ignition and detonation. There are two main ratings, the Motor (MON) and Research (RON) methods, which permit to infer how engines fed with a particular fuel will behave in high load or steady

of the first countries in the world to completely eliminate tetraethyl lead, and only occasionally resorted to the use of MTBE in a few regions during the 1990s. These additives are still used in some countries, but are associated with environmental problems and are being phased out. As shown in Table 3, the addition of ethanol affects the RON octane rating more than the MON octane rating. It is also possible to see the importance of the base gasoline's composition and, consequently, its original octane rating on how the addition of ethanol impacts the octane rating. A general and clearly important rule is that the lower the octane rating of the base gasoline, the more significant the boost due to ethanol.

Volatility

For a fuel to burn properly, it must be well mixed with air. Therefore, the vaporization capacity of a

Table 3 : Effect of bio-ethanol in the octane rating of base gasoline

Composition of base gasoline			Increased octane rating with							
			5% de Bio-ethanol		10% de Bio-ethanol		15% de Bio-ethanol		20% de Bio-ethanol	
Aromatics	Olefins	Saturated	MON	RON	MON	RON	MON	RON	MON	RON
50	15	35	0.1	0.7	0.3	1.4	0.5	2.2	0.6	2.9
25	25	50	0.4	1.0	0.9	2.1	1.3	3.1	1.8	4.1
15	12	73	1.8	2.3	3.5	4.4	5.1	6.6	6.6	8.6
11	7	82	2.4	2.8	4.6	5.5	6.8	8.1	8.8	10.6

Source: Carvalho (2003)

load condition, respectively. Ethanol is an excellent anti-detonating additive, and significantly improves the octane rating of the base gasoline. Brazil, the only country that adds ethanol to all its gasoline, was one

liquid fuel is an important property, which directly affects several performance parameters of the vehicle, including cold or hot start conditions, acceleration, fuel economy and dilution of lubricant oil. Thus, fuels

derived from petroleum must have a balanced composition of light and heavy fractions, so as to produce a distillation curve in which the product starts to vaporize at relatively lower temperatures and ends at temperatures much higher than the ambient temperature. The addition of ethanol tends to shift the distillation curve, especially its first half, affecting the so-called T50 temperature – 50% of the mass evaporated – although the initial and final distillation temperatures are not significantly affected. In this regard, the addition of ethanol has limited impact on engine behaviour.

However, the addition of ethanol significantly affects steam pressure, an important property associated with volatility. Steam pressure determines the level of evaporative emissions and the possibility of steam forming in fuel lines, a problem which is minimized today with the use of fuel pumps inside the tank of most modern vehicles. It is interesting to note that, although the steam pressure of pure gasoline is higher than that of pure ethanol, as shown in Table 2, the addition of ethanol to gasoline raises the steam pressure of the blend. The increase typically presents a maximum of around 5% of the volume of ethanol in the gasoline, falling gradually as the ethanol content grows. For example, for a given composition of gasoline in which 5% ethanol is added, the steam pressure increased to 7 kPa, whereas, with 10% ethanol, this pressure goes to 6.5 kPa [Furey (1985)]. This effect can be easily compensated by adjusting the composition of the base gasoline, so as to ensure that the blend meets specifications. In Brazil and in other countries which have introduced ethanol as a gasoline additive, steam pressure has been specified at levels comparable to those of pure gasoline. In other words, the effect of ethanol on steam pressure can be readily controlled.

Performance

Given that gasoline-ethanol blends can be adjusted to meet the normal specifications of a pure gasoline, there are usually no performance and drivability problems, provided that the quality standards for fuels are maintained.

Nevertheless, when compared to pure gasoline, a 10% ethanol blend needs 16.5% more heat to totally vaporize, which can be challenging in very low temperature conditions [TSB (1998)]. On the other hand, the higher vaporization heat required by gasoline-ethanol blends is one of the main reasons that the efficiency of an engine which uses such fuel improves 1% to 2% in comparison with the performance of pure gasoline. Therefore, even if a gasoline with 10% of ethanol contains 3.3% less power per unit volume,

the final effect on fuel consumption is smaller and depends on particular driving conditions [Orbital (2002)].

The relevant point is that in blends of up to 10% the effect of ethanol on fuel consumption is smaller than the variation in consumption from one driver to the next. Thus, in practical terms, one litre of these low ethanol content blends produces practically the same effects as a litre of pure gasoline [Salih & Andrews (1992) and Brusstar & Bakenhus (2005)]. For higher ethanol contents, such as a 25% blend, which corresponds to a 10% lower energy content per volume, one sees, on average, an increase in consumption of only 3% to 5% over pure gasoline. These results, confirmed in many field tests, suggest that ethanol, although displaying lower calorific power, allows an improvement in engine efficiency, thanks to lower intake temperature and a greater volume of combustion products.

This effect is even more pronounced using pure hydrated ethanol, as long as the engine is properly adapted, by increasing its compression rate. Although it generates 40% less calorific power compared to gasoline, the final effect on contemporary engines is a 25% to 30% increase in fuel consumption relative to gasoline. Over the intermediate term, the adoption of more advanced concepts in engine engineering, such as direct fuel injection, higher compression rates and intelligent turbo systems, may bring significant improvement in fuel economy in hydrated ethanol engines even outperforming the measures seen with pure gasoline [Szwarc (2008)].

Phase Separation

The possibility of water phases separating from a gasoline-ethanol blend is frequently cited as an obstacle to greater acceptance of ethanol fuel. The concern is that somehow water is introduced with ethanol or condenses in the fuel tank of a vehicle, separating at the bottom and interfering with the normal operation of the engine. Strictly speaking, the more ethanol is added to gasoline, the less this problem tends to occur. While pure gasoline basically does not absorb water, anhydrous ethanol does have an affinity for water. As shown in the ternary diagram in Figure 4, gasoline-ethanol blends have a capacity to dissolve water that is directly proportional to the ethanol content. The higher the ethanol content, the wider the range that defines the region where total solubility occurs, as observed in the upper part of the diagram. Under very low temperatures this effect is weaker but, generally speaking, ethanol acts as a co-solvent between gasoline and water, reducing the risk of separation of the water phase in gasoline.

Auto Industry and Users' Views

Lastly, it is worth mentioning the Worldwide Fuel Chart (WWFC) — a set of specifications for vehicular fuels prepared by trade associations of auto manufacturers in the United States (Alliance of Automobile Manufacturers — Alliance), Europe (Association des Constructeurs Européens d'Automobiles — ACEA), India (Association of Indian Automobile Manufacturers - AIAM) and Japan (Japan Automobile Manufacturers Association, JAMA) and by the Engines Manufacturers Association (EMA), as well as their proposal to fuel producers [Autoalliance (2006)]. According to such proposal, the presence of up to 10% of ethanol is welcomed as an oxygenator for gasoline, with the explicit recommendation that the product fulfills quality specifications.

Now-a-days, virtually all car manufacturers — whether ethanol is present in the gasoline to be used or not — try to produce models capable of using the new fuels. To this end, car owner manuals emphasize the benefits of ethanol in gasoline: “Toyota permits the use of oxygenated gasoline with up to 10% ethanol. This fuel enables excellent performance, reduces emissions and improves air quality” [Toyota (2007)].

Although the WWFC limits its recommendation to E10, some international initiatives in favour of blends with 20% of anhydrous ethanol (E20) are being discussed. For example, Thailand and the US state of Minnesota have proposed adopting a 20% ethanol blend. As a response to these trends, there are models already being sold in Thailand, such as the Ford Escape and the Ford Focus, compatible with E20. Ford acknowledges that the experience accumulated in the Brazilian market allowed the quick introduction of these models in the Thai market.

Economic and Institutional Aspects of Fuel Ethanol

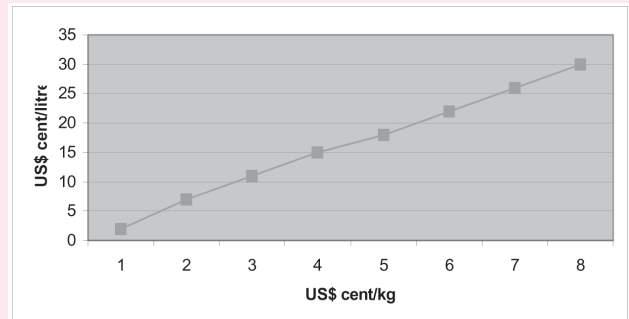
After reviewing technical aspects which make the case for ethanol as a fuel, it is important to explain how — in market terms — bio-fuel prices are calculated, especially bio-ethanol prices. In recent years and in most countries fuel markets have evolved into free markets, where prices are determined by local economic forces or mirror more competitive markets — so called parity pricing. Within this scenario, bio-ethanol consumer prices are determined by the producer's costs, which, in turn, are determined by production and logistics chains, including tax and sale margins. This analysis is crucial for determining if bio-ethanol is viable and how it would impact the market. As we will see in the next chapter, bio-ethanol can be produced from a wide range of raw materials, each with its corresponding production and market

opportunity cost, both used in determining bio-ethanol prices. Therefore, the minimum price producers will want to charge for their bio-ethanol which should meet two conditions : a) cover production costs, which obviously include raw material and plant operational costs, as well as capital costs corresponding to production investments; and b) be equal to, or higher than the price that could be obtained if the raw materials were used in the best manufacturing alternative.

Sugar and molasses are among the alternative products that sugarcane can be used for, the latter a by-product of the sugarcane industry that has value as an industrial input or as animal feed. According to the chemical equations for transforming sucrose into bio-ethanol, 1 kg of sugar can, theoretically, produce 0.684 litres of anhydrous ethanol. Considering typical fermentation and distillation yields of 90% and 98%, respectively, we obtain the correlation indicated in the equation and depicted in Graph 1, a indifference curve which enables us to estimate an indifference price for anhydrous ethanol price (PIEa) for a given market price of sugar (PA.):

$$PIEa (\$/litre) = 1,67 * PA. (\$/kg)$$

Graph 1 : Indifference price curve for anhydrous ethanol price according to the price of sugar price



Source: Elaborated by Luiz Augusto Horta Nogueira

Equation considers only the value of sucrose and excludes the costs related to other investments and operation of the production plant. Nevertheless, the indifference price is an important value for the producer: it only makes sense to produce bio-ethanol if it can be sold at prices higher than the price of sugar. This reasoning, however, does not always hold; for example, when the sugar market is saturated. In such a scenario, producing more sugar would not be as profitable as producing bio-ethanol because sugar prices would tend to decline due to an excess supply. The use of molasses — a sugar by-product — for bio-ethanol production can be subjected to a similar analysis, which should favour bio-ethanol since the price of molasses is always lower than the price of

sugar. The availability of molasses is directly related to sugar production and because, of lower ethanol yields, may be inadequate for large scale bio-ethanol production. While one ton of raw sugarcane juice produces 80 litres of bio-ethanol, one ton of molasses by-product produces 12 litres of ethanol, in addition to the sugar. Therefore, in most sugar producing Latin American countries, molasses could be an important source of bio-ethanol and a way for them to begin to meet domestic fuel needs. For example, Central American countries could produce – without cultivating one additional hectare of sugarcane – 22% of the bio-ethanol needed to introduce 10% ethanol to the gasoline currently imported by these countries, just by using molasses [Horta Nogueira (2004)].

Obviously, any viability assessment of bio-ethanol production should consider other factors, such as commitments and market strategies, in addition to fluctuations in the price of sugar and other commodities. Another unavoidable issue is the relative rigidity of international sugar markets, in which sizable volumes of the product are traded within quotas and prices that do not reflect supply and demand pressures. Several developing countries expect that these distortions will be gradually reduced

and that greater efficiency and realism will be introduced to the sugar market.

A recent World Bank study modeled how sugar prices would respond if price controls were abandoned, using several market scenarios, and estimated that average sugar prices would increase by only 2.5%. The most important benefits would accrue to countries in Latin America and sub-Saharan Africa [World Bank (2007b)].

Two important factors that directly influence international sugar prices are: a) preferential contracts with the United States – i.e., quotas set forth by the US Department of Agriculture – with prices determined by No. 14 Contracts of the New York Board of Trade (NYBOT), and with Europe under the terms of the Africa, Caribbean and Pacific (ACP) and Special Protocol Sugar (SPS) agreements, which set quotas to sugar-producing countries; and b) free or excess contracts, that may follow the prices of No. 5 Contracts of the London Stock Exchange or No. 11 Contracts of the NYBOT.

Although these contracts determine international reference prices – based on electronic operations in such commodity exchanges – preferential contracts reflect higher prices in smaller markets. □

ANNOUNCEMENT

The Management Accountant – November, 2010 will be a special issue on **'COST AND MANAGEMENT ACCOUNTANTS IN PHARMACEUTICAL SECTOR'** Articles, views and opinions on the topic are solicited from readers to make it a special issue to read and preserve. Those interested may send in their write-ups by e-mail to research @icwai.org, followed by hard copy to the Research & Journal Department, 12 Sudder Street, Kolkata-700016 to reach by 15th October, 2010.

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Carbon Trading : Global Market vs. Indian Market

A. P. Pati*

Greenhouse gases are major pollutants of environment and its reduction has become a strategic issue world over. Among the various approaches to their reduction, the commercial strategy of issuing of CERs and their trading – as finalised in the Kyoto Protocol – has added another dimension to the financial market mechanisms. Since 2000, as a financial product, the emission trading has started in a big way. By 2008, \$119 billion worth of trading had taken place in voluntary and regulatory markets. However, the size of the latter is much bigger. Among the trading platforms EU ETS has emerged as the largest trading platform for carbon credit trading. In India, CERs are generated through the CDM mechanisms and its world position stands only next to China. Considering the low level of pollutions India has a vast potential of generating CERs and reaping benefits out of its trading. Though trading has recently started through MCX; the poor awareness among the industries, lack of development of efficient trading mechanisms and its related infrastructures, and dearth of proper consultancy service are some of the hurdles in the development of the carbon market in India.

Carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O) and other gases – as a group called “greenhouse” gases (GHG) – are environment pollutants, and have the potential to bring severe ramification to the entire globe. Barring a few pollutants they act globally, thus their impact on the environment is generally similar wherever in the globe they are released. As the World Bank (2005) puts it : ‘greenhouse gases mix uniformly in the atmosphere, which makes it possible to reduce carbon emissions at any point on Earth and have the same effect’. So the location of the originator of the emissions does not really matter from an environmental standpoint. Carbon is a generic term used for the entire GHGs and its reduction is one of the most important global issues confronting administrators, environmentalists, and national governments for quite some time.

There are many ways and efforts underway to reduce carbon emissions and promote activities which help to store and remove carbon. This has made carbon a valuable economic commodity. Several approaches to the reduction can be intervened by respective governments like introducing new regulations, imposing direct and indirect taxes, special budgetary provisions for clean technology implementation at micro unit level etc. Either of these approaches varies with respect to their cost and effectiveness. Since it is a global issue the cost to countries to address this menace will differ. That’s because the Marginal Abatement Cost (MAC) – the cost of eliminating an additional unit of pollution – differs by country. It might cost country X Rs 100 to eliminate a ton of CO₂, but it would probably cost country Y differently. International emissions-trading/carbon trading markets were created precisely to exploit differing

MAC. To find a common unit for this commodity all GHGs are converted to CO₂ equivalents (CO₂eq). The CO₂eqs are traded on carbon markets. The markets work in a similar way to financial markets. The currency used on these markets is carbon credits.

Kyoto Protocol and its mechanism

Formally the first World Climate Conference 1979 recognized climate change as a serious problem. A number of intergovernmental conferences focusing on climate change were held in the late 1980s and early 1990s. Intergovernmental Panel on Climate Change (IPCC) released its First Assessment Report in 1990. Finally, the Earth Summit in 1992 shaped the commercial approach to address the climate change problem which culminated with a target based CO₂ reduction strategy in Kyoto in 2005.

The overall goal of an emissions trading plan is to reduce emissions. If we trace the history of emissions trading, the proposals initiated by the Technocracy movement of the 1930s in USA would probably come first. Technocracy proposed a system of Energy Accounting, or emissions trading, to promote balanced and harmonious development throughout the world. The present trading system of CO₂ has its roots in the United Nations Framework Convention on Climate Change (UNFCCC), signed by 154 states (plus the EC) at the Earth Summit in Rio de Janeiro in 1992, and came into force on 21 March 1994. Both developed and developing countries accepted a number of general commitments. The main target of this pact was to reduce emissions of GHG. The Kyoto Protocol (KP), an amendment to the UNFCCC, came

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into force on 16 February 2005. The 6 gases covered by the Kyoto Protocol are: CO₂; CH₄; N₂O; Hydrofluorocarbons (HFCs); Perfluorocarbons (PFCs); Sulphur hexafluoride (SF₆). Prerequisite for KP was that Annex 1 nations, i.e. developed nations, and economies in transition representing 55% GHG emissions ratify it.

As of April 2009, 184 countries had signed up with 37 industrialized countries having agreed to a target of reducing emissions by an average of 5.4% below 1990 levels over the period 2008-2012. Where Annex 1 nations are required to adhere to an annual limit on the total amount of greenhouse gas emissions and must reduce their emissions, developing nations that are signatories to the Kyoto Protocol ("Non-Annex 1" nations) do not have a cap on their emissions, but must produce an annual emissions inventory. So, KP recognized differentiated responsibilities of industrialized and developing nations i.e. a) industrialized nations to own responsibility of past GHG emission levels responsible for today's global warming; and b) developing nations to achieve a decoupling of GDP growth and emissions by promoting "sustainable development."

In essence, signatories employ "flexible mechanisms" to reduce GHG emissions in a cost-effective manner, purchasing emission reduction units from other parties that have reduced their emissions.

Under this flexible mechanism this emissions reductions can be achieved in three ways :

- i. Joint Implementation projects (JI), defined by Article 6 of the Kyoto Protocol, which produces Emissions Reduction Units (ERUs). One ERU represents the successful emissions reduction equivalent to one tonne of carbon dioxide equivalent (tCO₂e). Under JI, countries can purchase surplus reductions from Annex 1" nation that has reduced its emissions below the required maximum level.
- ii. Clean Development Mechanism (CDM), defined by Article 12, which produces Certified Emission Reductions (CERs). One CER represents the successful emissions reduction equivalent to one tonne of carbon dioxide equivalent (tCO₂e). Under the CDM, countries can purchase reduced emissions from Non-Annex 1" nations.

The main objectives of the CDM are twofold: (i) to help developed countries meet their emission reduction commitments through projects in developing countries; and (ii) to enable developing countries to achieve sustainable development from low carbon or

high-energy efficient technologies. The mechanism enables projects in developing countries to access additional sources of financing if they can demonstrate that the project is generating emission reductions additional to those in the baseline or 'business-as-usual' scenario. As the CDM is a performance-based incentive, project developers need access to upfront resources for implementation. By its nature, the CDM is easy to combine with other sources of financing, as it adds to the revenue stream of the project.

- iii. International Emissions Trading (IET), defined by Article 17. Emission trading is an allowance-based transaction system that enables developed countries and countries with economies in transition to purchase carbon credits from other developed countries and economies in transition to fulfil their emissions reduction commitments.

Carbon Trading : Genesis and development

The costs involved in acquiring carbon credits are the production cost, for which, ultimately she consumers pay. These credits are maintained in the form of Electronic Certificates, like Demat Share Certificates, which facilitate its trading. Two types of trading take place in carbon market – Cap and trade (or emissions trading); and offset trading (or trading in project-based carbon credits). Although it is not possible to pinpoint a single founder of carbon trading, many of the theories from which it derives can be traced back to the work of economists Ronald Coase, George Stigler and, later, J. H. Dales – who provided a theoretical framework on the basis of which a market-based means to tackle pollution could be developed (Stigler, 1987). The most significant experience, however, was the Sulphur dioxide (SO₂) trading scheme set up as part of US Clean Air Act Amendments in 1990. The OECD (1992) investigated the US SO₂ emissions trading experience and considered the scope for international emissions trading. UNCTAD, meanwhile, engaged in an extensive work programme to promote a global CO₂ trading system.

The offset market, however, germinated prior to cap-and-trade market. In the 1970s and 1980s, various US authorities and regulated corporations eager to build a pollution offset market tried to commensurate reducing pollution from industrial installations with buying up and scrapping old cars or by making material process substitutions elsewhere (Liroff, 1986 and Drurry et al, 1999). Costa Rica pioneered the development of Payments for Environmental Services (PSA) in the 1990s, establishing a national plan to

compensate landowners to preserve forests and reforest 'degraded' lands, including tree plantations (Sanchez-Azofeifa 2007). The Costa Rica experience brought the offset into UNFCCC provisions.

Since USA backed out of KP, EU became more active in emission trading and, since January 1 2005, European Union Greenhouse Gas Emission Trading System (EU ETS) emerged as the largest trading system for CO₂ in the world. The ETS currently covers more than 10,000 installations with a net heat excess of 20 MW in the energy and industrial sectors which are collectively responsible for close to half of the EU's emissions of CO₂ and 40% of its total greenhouse gas emissions (Wikipedia.com).

Over the last few years several instruments, mechanisms and markets have emerged for carbon trading. Two types of carbon market exist—the voluntary; and the regulatory compliance markets. Voluntary markets support activities to reduce emissions not mandated by policymakers, including certifications to support carbon neutrality. In this market the trade of carbon credits is on a voluntary basis. The compliance market is used by companies and governments that, by law, have to account for their GHG emissions. It is regulated by mandatory national, regional or international carbon reduced regimes. The existing project based compliance markets are dominated by CDM projects, with a fast increasing number of Joint Implementation projects. As of March 2010, there are currently more than 2,000 registered CDM projects in 58 countries, and about another 2,300 projects in the project validation/registration pipeline. Based on estimates in submitted project design documents, the CDM could generate more than 2.9 billion certified emission reductions by end 2012. Different markets vary in their regulatory requirements as well as the price of credits.

Types of Market

(a) Voluntary Market

As the name implies, the voluntary carbon markets include all carbon offset trades that are not required by regulation. The voluntary carbon markets themselves have two distinct components: the Chicago Climate Exchange (CCX)—which is a voluntary but legally binding cap-and-trade system—and the broader, non-binding "Over-the-Counter" (OTC) offset market (Hamilton, 2009).

The CCX's unit of trade is the Carbon Financial Instrument (CFI), which represents 100 tCO₂e. CFIs may be either allowance-based credits, issued to emitting members in accordance with their emission baselines and the exchange's reduction goals, or offset

credits generated from qualifying emissions-reduction projects. Offset-based credits can only be used to offset 4.5% of a member's total emission reduction requirement, so the vast majority of credits traded on the CCX are allowance-based. The CCX is owned by the Climate Exchange Plc group of companies, which also includes the European Climate Exchange (ECX), the Montreal Climate Exchange, and the Tianjin Climate Exchange. In 2008, the CCX launched the Chicago Climate Futures Exchange (CCFE) to trade futures contracts and derivatives based on different climate emissions vehicles, including regulatory instruments and offset credits.

Outside of the CCX, one finds a wide range of voluntary transactions that make up a voluntary market not driven by any sort of emissions cap. Because this market is not part of a cap-and-trade system where emissions allowances can be traded, almost all carbon credits purchased in this voluntary market originate from emissions reduction projects and are thus offsets. Additionally, because this mass of transactions does not occur on a formal exchange, it is called "Over-the-Counter" (OTC) market. Credits sourced specifically for the OTC market are often generically referred to as Verified (or Voluntary) Emission Reductions (VERs), or simply as carbon offsets. However, OTC buyers may also voluntarily purchase credits from compliance markets such as the CDM or Regional Green House Gas Initiatives (RGGI).

(b) Regulated Market

The regulated markets are developed and regulated by national governments. The prominent trading platform among them is EU ETS. The tradable units for this come from different CO₂ reduction mechanisms like the CDM, JI, AAU, RGGI, SGER etc. The inter-national trading mechanism has resulted in the EUETS, which involves all EU member states and is currently the world's largest multinational GHG-emissions trading scheme. Credits traded under the system are called European Union Allowances (EUAs).

CDM is a flexible mechanism that creates a "Market Based Instrument", which 'commoditizes' environmental performance over business-as-usual. When a project activity in Annex 1 does better than "Business as Usual" scenario the emission reduction over that level is translated into CER. The business-as-usual case is defined as Baseline Scenario approved by a regulator viz. CDM Executive Board (EB). CERs accrue each year after the project performance is "verified" through a preapproved methodology. CER is a financial instrument which can be sold to parties with a commitment. These credits can be traded and sold in the carbon market.

Today, the CDM is by far the more dominant Kyoto mechanism. A large degree of the CDM's success is down to host country governments putting in place the required institutions and regulations in a timely and efficient manner. The linking directive aided this already positive environment by opening up the EU ETS to the CDM market. This helped to buoy up investor confidence, as it provides a more liquid and easily quantifiable market than would be provided by simply selling in bulk to national governments.

Global Market Size

The size of the two markets differs considerably. In 2008, on the voluntary market, US \$704 million of credits were traded whereas, in regulatory markets, the size was an astounding amount of US\$119 billion (Hamilton et al, 2009) with an overall annual growth of 84 percent over previous year (Table 1). The voluntary markets remain only a small fraction (about 2.9% vol.-wise, 0.6% value-wise) of the regulated markets.

Markets	Volume (MtCO ₂ e) 2008	Annual Growth %	Value (\$mill) 2008	Annual Growth %
Voluntary OTC	54.00	25.29	396.70	50.89
CCX	69.20	202.18	306.70	323.62
Other Exchanges	0.20	–	1.30	–
Total Voluntary Markets	123.40	86.97	704.80	110.20
EU ETS	2982.00	44.69	94971.70	89.58
Primary CDM	400.30	-27.35	6118.20	-17.61
Secondary CDM	622.40	159.33	15584.50	185.74
Joint Implementation	20.00	-51.22	294.00	-41.08
Kyoto (AAU)*	16.00	–	177.10	–
New South Wales	30.60	22.40	151.90	-32.19
RGGI	71.50	–	253.50	–
Alberta's SGER**	3.30	120.00	31.30	128.47
Total Regulatory Markets	4146.10	42.01	117582.20	84.56
Total Global Markets	4269.50	43.01	118287.00	84.69

* Assigned Amount Units, ** Specified Gas Emitters Regulations

Source: Fortifying the Foundation: State of the Voluntary Carbon Markets 2009, A Report by Ecosystem Marketplace and New Carbon Finance, May 2009

While it is clear that voluntary carbon markets alone will not achieve the scale needed to address climate change, the voluntary markets are not insignificant in size. For example, the voluntary OTC market alone is larger than the New South Wales, JI, and RGGI markets combined. Moreover, the voluntary markets' total growth rate of 87% was actually more than twice the regulated markets' growth rate of 42%. In the regulatory market segments, EU ETS alone traded 55 percent of the

carbon with a value of around US\$ 95 billion, constituting around 80 percent of the total global market of 2008. The growth rate of 90 percent for EU ETS signifies the popularity of carbon trading in recent years. Among the Kyoto mechanisms CDM is the most popular. In 2008 it commands almost 25 percent of the total volume traded and 20 percent of total value traded. The growth rate of secondary CDM market is very fast and gaining popularity among the developing nations. Apart from these two constituents others have minor shares in the global carbon market.

Table 2: Carbon Market at a Glance, Volumes & Values in 2007-08

Year s	2007		2008	
	Volume (MtCO ₂ e)	Value (MUS\$)	Volume (MtCO ₂ e)	Value (MUS\$)
Market	Project-based Transactions			
Primary CDM	552	7433	389	6519
JI	41	499	20	294
Voluntary market	43	263	54	397
<i>Sub Total</i>	636	8195	463	7210
	Secondary CDM			
<i>Sub Total</i>	240	5451	1072	26277
	Allowance Markets			
EU ETS	2060	49065	3093	91910
New South Wales	25	224	31	183
Chicago Climate Exchange	23	72	69	309
RGGI	na	na	65	246
AAUs	na	na	18	211
Sub Total	2108	49361	3276	92859
Total	2984	63007	4811	126346

Source: State and Trends of the Carbon Market 2009, World Bank, May 2009

Table 2 shows another classification of the global carbon market on the basis of project based transactions and allowance markets. CDM is the major player in the former (92 percent) whereas EU ETS is the major player (91 percent) in the allowance markets. The project-based market has decelerated in 2008 by almost 40 percent in volume and 12 percent in value, whereas, for allowance market, the figures have shown a positive growth rate of 50 percent and 87 percent, respectively. The supply of CDM and JI in 2008 and early 2009 continued to be constrained by regulatory delays in registration and issuance and the financial crisis made project financing extremely difficult to obtain (World Bank, 2009).

Indian Scenario

In comparison to the developed nations the carbon emission level in India is much less. This provides enough opportunities for its industries to produce carbon units and harness benefits out of its trading.

In August 1992 India signed the KP. The main objective behind the agreement is to allowing CDM projects to take off with the help of developed countries which will benefit the Indian industries earning CERs as well as achieving the KP mandate of carbon reduction. Presently, India is generating the highest number of CERs in the world—only next to China. The energy sector industries which need an overhauling because of outdated technology are the major contributor of CERs. Coal-fired power generation is India's biggest polluter, and the biggest opportunity for emissions reductions.

Most CDM projects in India involve biogas, biomass, energy efficiency, fuel switch, hydroelectric power, waste gas, and wind energy. Most of the Indian CDM projects are in renewable energy sector. Apart from energy producing sector, transport sector, urban sector, agriculture, industrial process—particularly the iron and steel industries—have the vast scope for producing CERs and reaping financial benefits from its trading. As on March 2010 India has emerged as the second-largest seller of carbon credits globally with 489 registered CDM projects till date (24% of total projects registered under CDM globally (www.iges.or) with a total issued CERs of 76.89 million ton of CO₂eq. Of the 294 Indian projects which have attracted European buyers, 107 are biomass projects.

Trading in Indian markets

Like any other commodities the CERs can be traded through Multi Commodity Exchange (MCX) and the National Commodity and Derivatives Exchange (NCDEX). All the types of companies can participate in this trading. Since January 2008, futures trading in carbon credits have already started in MCX, which has become the first in Asia to do so. The trading unit of carbon credits is fixed at 200 tonne. However, in this regard, the awareness level of Indian industries is very low. This is one of the important stumbling blocks in the development of carbon market. Further the required infrastructure for the trading is yet to be developed. As a prerequisite of any market a regulator with a broadbased well defined regulatory framework need to be instituted. Though GOI has already set up a CDM National Authority, its scope of operation and functions are yet to be defined in the context of carbon trading. The establishment of a CER registry and a domestic trading platform has not been formalized. Though India had send the first GHG inventory to UNFCCC this need to be updated. Further, the rating of CDM projects is also necessary for a good market. Landell-Mills and Porras (2002) emphasize that the creation of a well-functioning market-based institution for an ecosystem service requires a well-defined trading

commodity for the service in question; the existence of both demand and supply flows for the service; and an enabling legislative and institutional framework which outlines the rules for commodity trading and for the contractual relationship between supply and demand. All together, it is found that the Indian carbon trading platform and its facilitating infrastructure are in a nascent stage of development.

India has a huge potential of gaining from carbon trading. Just like the stock market, a vibrant and transparent platform is required to discover the best price for the buyers and sellers. At present, most of the credits are transferred through the OTC channel, very often at a low price, which is a loss to the CERs, producers. To harness the best price from the trading MCX has recently tied-up with CCX. Further, a need is also there to enhance the awareness level of various participants in the eco-system product trading. Public and private initiatives are urgently much required for encouraging industries and societies to understand the different facets of environment pollution, its reduction strategies and the carbon financing in particular. In this context the carbon consultancy service has a greater part to play and is going to add a new dimension to the financial services arena. □

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Environment Accounting — Step towards saving the Earth

CMA Vikram Kapoor*

The article brings forth the fact that the declining state of our environment has become a global epidemic and environment accounting can be used as one of the tools for making the corporations around the world understand their responsibility and thereby help to sustain the environment.

The article lays emphasis on the need for regulatory environment disclosures, preventive strategies that can be adopted by the companies, role of accounting professionals and the practices adopted presently in Japan and Europe.

The article, most importantly, attempts informing the readers to start thinking in this direction and to initiate new ideas that can help in evolving effective methods of environment accounting – and thereby taking steps towards saving our earth and our existence.

Environment Accounting – A Glimpse

According to the United States Environment Protection Agency (US ERA) :

“Environmental accounting is to bring environmental costs to the attention of corporate stakeholders who may be able and motivated to identify ways of reducing or avoiding those costs while at the same time improving environmental quality.”

While the goal of a company or firm is sustainability, the goal of the human species is to sustain themselves as well. Sustainability is a state of being that can be maintained indefinitely. Sustainable development meets the needs of the present without compromising the ability of future generations.

Companies prefer not to break even, but sustain themselves with a higher margin of safety. Similarly, we'd like to see humankind sustain them for many many years to come. Unfortunately, we are not leading ourselves towards that path. The declining state of our environment has become a global epidemic, centered on consumer-focused countries like the United States of America. It is essential that we – as educated and responsible citizens – take action now in order to save the sacred place which we thrive upon.

Many people ask “How can I make a difference?” Although there are many simple solutions (consume recycled products, reduce energy use, etc.), environmentalism can even fit into our everyday lives – into the profession of accounting.

Environmental accounting has been under discussion since the 1960s, but has expanded greatly in the last three decades. Now that the environmentalist is in the public eye, it is more pertinent to the profession of accounting than ever.

The term environmental accounting is frequently used within the accounting and environmental

management literatures. Environmental accounting is a broader term that relates to the provision of environmental-performance-related information to stakeholders – both within and outside an organization.

Environment accounting in today's scenario

Environment issues today are becoming increasingly complex and difficult. The public is more aware of industries' environmental performance. At the same time, governments are not becoming increasingly active in attempting to prevent events that harm the environment and to rectifying and indemnifying for events that have already happened. Accounting for cost of past, present and future environmental activities is becoming increasingly important.

Environment accounting is a tool which is based on the recognition that the Earth's environment is vulnerable. It is a comparatively new notion in accounting. The necessity of introducing it appeared in context of development of globalization processes, spreading of transnational corporation activities, and changes in environment understanding in conditions of growing consumerism and earth pollution.

In most cases, environment accounting is “corporate-focused”, but it should be also appreciated at a national level or regional level.

The most important function of environment accounting is to bring environmental costs to the attention of corporate stockholders who may be able and motivated to identify ways of reducing or avoiding those costs while, at the same time, improving environmental quality. So, sometimes, environmental accounting is viewed as a part of management. The general use of environmental management accounting information is for internal

* AICWA

organizational calculations and decision making procedures for internal decision making include both physical procedures for material and energy consumption, flow and final disposal, and monetarised procedure for costs, savings and revenues related to activities with a political environmental impact.

Environmental accounting provided a broad range of information about financial and non-financial aspects of an organization's environment performance. It also can generate information about how to use resources with environment related impacts that affect financial position of organization.

Environment accounting and eco-efficiency

Today, almost all big companies and corporations use environment accounting for promoting environmental management to increase eco-efficiency. Eco-efficiency is an environmental management indicator, calculated with accounting methods. It is a ratio of sales to the amount of environmental impact of business activities. The calculation of this ratio and analysis of its trends permits to make conclusions about the influence of company's activities on environment, and tendency of this influence. Other indicators specific for environment accounting are: pollution prevention costs, environment remediation costs, global environmental conservation costs.

With the growing prevalence of environmental (and social) performance indicators being used as basis for assessing an organization and its environmental management (for example, in management remuneration plans) there is a need to have a mix of both financial and non-financial indicators to assess an organizational environmental performance. For example, some managers might be rewarded in terms of saving in waste cost (a financial measure), whereas other managers might be rewarded in terms of reduction in spilling rates (a non-financial measure). So, today, environment accounting is between the social and financial aspects.

In this situation, when enterprises have to be competitive, satisfy client's needs and, at the same time to be social-responsible and think about the Earth's future, environmental accounting can become a salvation, a method to activate with greater profits for companies and less damages for nature.

As usual, companies use the following scheme to establish decisions for environmental management, using environmental accounting methods:

1. step : Evaluate the eco-balance of transactions
2. step : Identify major factors of environmental impacts

3. step : Draw up plans to reduce environmental impacts
4. step : Identify cost items, quantify these items by cost-effectiveness
5. step : Select measures to be taken
6. step : Conduct cost-effectiveness and evaluate their contribution to achievement of sustainable environmental management.

As we see, the aim of environmental accounting and environmental management is not simply internal, to decrease costs—but helps to keep the environmental equilibrium.

Future of the Earth in the hands of Corporation

Today the future of the earth is in the hands of corporations rather than governments! Corporations are powerful and global spread. Nevertheless, only a small number of companies in each industry are effectively integrating social and environmental factors into business decisions. At the same time, the harmful influence of corporations is obvious.

We are sure that in conditions of globalization, when the main actors are corporations with their huge consumption of raw materials and other components of production process, the role of environment accounting will grow in proportion of growth of number of corporations and their importance in the world economy. The business becomes more human or, at least, seems to become so, and environmental accounting will be used more often, because the purpose of business is profit, but protection of the earth — is a purpose of everybody.

Need for Environment Accounting and Regulatory Environment Disclosure

Now we are facing many global environmental issues such as global warming (greenhouse effect), ozone depletion, acid rain, deforestation and pollution (land, air, water and noise). In minimizing these effects the international communities have developed many global environmental agenda aroused due to global environmental concerns such as The Montreal Ozone Protocol addresses issues related to CFCs (1987); The Rio Earth Summit (1992); The Brundtland Report—Sustainable Development (1987) and The Kyoto Convention—Greenhouse Effect (1997) and, most recently, conference in Copenhagen in 2009.

But the issue is whether these agendas do help the world to sustain the environment with volunteer legislation, and improving corporate image? Different regions and countries may adopt different standards for EMS such as ISO9000, QS 9000, SA 8000, BS7750 (Pun, et al, 2002) but the prominent system adopted by the international communities in relation

to environmental management is ISO14000 series. The benefits of EMS are served as self-regulatory compliance to legal and regulatory requirements, to reduce costs from customer audits, better market impression, to increase efficiency of resources and the ability to adopt changing circumstances.

As environmental management in business has evolved over time, interest has grown in developing a better understanding of environmental-related financial costs and benefits as input to conventional management accounting. The main stimulus is growing evidence that focus on environmental related factors can enhance the profitability and financial position of a business. Environmental accounting is used to assess full environmental costs associated with activities and/or products.

Companies claim that their activities have no significant impact toward environment, and, therefore, there is no need for any disclosures. Further, many companies believed that environmental issues are not relevant to their organization and some claimed that environmental impacts are unknown. Lack of perceived benefit: A large number of companies do not believe that investment in environmental initiative offered them either opportunity for cost saving or improved support from shareholders.

One of the most prominent factors that are able to drive companies for environmental disclosure is the government. The government enforcement for and regulatory environmental reporting is very important. The government is ranked above the influence of business associations and it must enforce the fact that environment is more forceful than the resource or shareholders and investors' pressure. Strong instruction and enforcement is needed to overcome resistance and perceptions that environmental reporting is an unnecessary cost burden.

Environmental auditing is a generic term, which encompasses a wide range of management activities, including environmental compliance audit, environmental risk assessments, and environmental review (Rezaee and Elam, 2000). In ISO 14001, environmental audit is defined as "the systematic, documented verification process of objectively obtaining and evaluating audit evidence to determine the reliability of an assertion with regards to environmental aspects of activities, events and conditions as to how they measure established criteria, and the communicating such result to the client" (cited in Taylor et al, 2001). In order to carry out effective environmental audit, the management of organizations must provide adequate resources and financial support. Further, the organization also must

ensure the auditors are well-qualified to conduct the EMS audit by providing adequate training related to environmental audit. According to Taylor et al (2001), the best EMS auditor is the auditor with an accounting background.

The total estimated damage caused to the natural environment in one day – according to the Germany Federal Environmental Agency (Letmathe and Doost, 2000) – is given by :

- The destruction of 55,000 hectares of tropical forest;
- The reduction of arable land by 20,000 hectares;
- The extinction of 100 to 200 species;
- Emission of 60 million tons of carbon dioxide into the atmosphere.

Preventive Strategies that could be adopted by Companies

Environmental issues affect different areas of an organization's operation such as manufacturing, raw material procurement, energy usage, marketing, product development, disposal and waste management. Some of the prevention strategies proposed that could be adopted by organizations is by using prevention strategies as :

- Design products which generate less waste or emission during their life cycle. This can be carried out through conducting lifecycle analysis.
- Technologies that use less power and produce less waste which subsequently will decrease the expensive "end-of-the-pipe" clean-up operations
- Substitute materials that can reduce waste or indirect effect
- Modify operating processes to reduce wastes
- Develop continual waste and energy minimizing programs
- Develop methods to reuse or recycle waste rather than sent for disposal (recovery).
- **US Conservation** – minimize depletion of natural resources by establishing effective control measures or prevention measures
- Use the recycled material.

Environmental Accounting & Role of Accounting Professionals

Environmental accounting is a wonderful opportunity for individuals to pair their interest in the environment with a skill set in accounting. The demand for these specific professionals, however, is tied to environmental regulations originated.

While it is the environmental accountants'

responsibility to adhere to government guidelines, we should not overlook their role in improving environmental conditions. It is pertinent that environmental accountants work with public relation as well as marketing professionals, in order to promote the most eco-friendly products. The marketability of some commercial products depends on its level of environmental friendliness. Using recyclable materials will not only cut costs, but also impress consumers.

In upcoming years, environmental accountants will play a key role in business strategies. Environmental accountants have the power to satisfy management with financial figures, as well the community with social responsibility. These specific professionals will hold the key role in following environmental regulations. With hope, environmental accountants can do their part in moving towards sustainability.

In work published in Science Today, researchers from UQ's Ecology Centre and collaborators have found that only by 'honest' reporting of both the positive and negative outcomes of conservation policy can we hope to properly manage our dwindling environmental resources.

Lead author of the study, Dr Eve McDonald-Madden, said that without rigorous and transparent accounting it is impossible to manage the environment.

"Given the increasing public awareness of conservation issues and the need for ongoing investment in environmental management, it is worrying that little attention has been given to deriving rigorous metrics for reporting on conservation investments," Dr McDonald-Madden said.

"Reporting both gains and losses is a basic requirement of 'honest' conservation accounting. The current global standard of reporting gains but not losses is unjustified and potentially misleading."

Professor Hugh Possingham, Director of a federally funded Commonwealth Environmental Research Facility on environmental decision-making and co-author of the study, said that the field of biodiversity conservation is hampered by weak performance measurement :

"In the corporate world such weak reporting would be considered bad practice," Professor Possingham said.

"When metrics are used that account for both loss and reservation, they tell a markedly different story" –he said

Dr McDonald-Madden said honest metrics of conservation achievements are essential to inform

conservation shareholders – we the public, about the performance of their investments.

"In failing to mention the losses and opportunity costs of conservation investments, agencies reporting on conservation achievements are disclosing revenue rather than net profit, and are being economical with the truth" –Dr McDonald-Madden said.

Environment Accounting in Japan

"Environmental accounting" is now attracting the attention of Japanese industry. In the past, environmental audit, eco-labeling, EPE, LCA and other techniques have been developed to support environmental management by enterprises. Eco-materials and eco-design focusing on environmental harmony of raw materials, materials and products have been developed and are used.

The year 1999 is regarded as the first year of environmental accounting in Japan. The Guidelines on Measurement and Reporting of Environmental Cost announced by the Environment Agency in March 1999 [Environment Agency, 1999] were taken up prominently by the mass media and attracted the attention of many companies. In September 1999, a decision on the inauguration of the Environmental Accounting Committee within the Ministry of International Trade and Industry was taken. In the private sector, the Japan Management Association formed its Environmental Accounting Research Group in July 1999, which was joined by about a dozen leading companies including Toyota Motor and Fuji Heavy Industries. The research group has developed environmental accounting methods and techniques mainly intended for internal management uses.

At present, environmental accounting disclosed to stakeholders in environmental reports are varied in form. As described in more details below, environmental accounting can be classified into the following types: (1) environmental cost disclosure type, (2) Environmental cost vs benefit type, (3) Environmental cost vs; performance type, and (4) Others.

Environment Accounting in Europe

For the last 10 years, a strong effort is being done by the European Commission to encourage the European countries to compile Environmental Accounts providing both methodological and financial support to pilot projects. The environmental accounts framework is now mature and robust enough for comprehensive implementation and analysis of environmental data.

With respect to the three priority areas, the

activities in the European countries are quite comprehensive :

24 countries have developed air emission accounts, while 2 more are contemplating to do so in the near future.

A total of 23 countries are involved in compiling economy-wide material flow accounts or are planning to do so (6).

21 countries are collecting data on environmental expenditure and 2 more will follow in the near future.

In a bit more than half of the countries the Environmental Accounts have been used for research purposes and/or for monitoring environmental performance (i.e. indicators).

Environmental Accounting was used for analysis and assessment of environmental policies (e.g. regulations, taxes, international agreements) in 7 European countries, and for raising public awareness of environmental problems in 8 countries.

While many countries have been involved in pilot studies, only some countries are presently compiling the accounts on a regular basis.

For the three priority areas, 15 countries are compiling accounts for air emissions, 10 for economy-

wide material flow accounts, and another 10 countries are active in compiling environmental expenditure statistics.

Conclusion

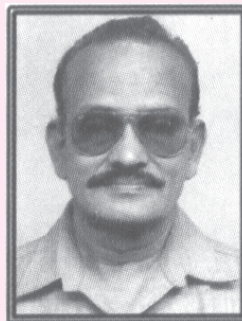
Environment Accounting is still a new subject. There is no clearcut procedure to follow. However many organizations – such as International Standards of Accounting and Reporting (ISAR), the European Accounting Advisory, and accounting and standard setting bodies in Canada, the United Kingdom, united States and Japan – are trying to identify and establish best practices that may be considered by national setters in the development of standards, rules and regulations.

It is high time that the governments in countries across the world start recognizing the responsibilities of the corporations – both large and small – in saving the earth and following the accounting practices for reporting of environment accounting. □

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CONDOLENCE



It is with profound grief that we inform the death of Shri S. Ramanathan, President of ICWAI during 1987-88. Shri Ramanathan devoted his life to the development of the Profession and the Institute. We pray for peace of the departed soul and pray that his family has strength to bear the loss.

Management Report to BI tool - A paradigm shift

CMA Debdatta Banerjee*

The unification of Management Reporting with attributes of Business Intelligence is to support management sustainability process which in turn connects corporate strategy with the interests of key stakeholders. In this article we have revisited some of the traditional techniques of management reporting and made an attempt to integrate the two apparently disparate functions trying to establish management reporting as a useful BI tool.

To differentiate themselves from competitors, organisations must move beyond operational excellence to become smart, agile, and aligned. These are the characteristics of a company that has achieved management excellence.

All analysts across industries provide numerous internal reports, both regular and specific to the management, but a few actually get noticed and others are lost in the plethora of data on the managers' desk. That is because most management reports merely provide data without the ability to present information which align to company objectives. Effective management reports should be like shoes – designs and colour vary according to the purpose, one size will not fit everyone, nor is the same style appropriate for all occasions.

On the other hand, Business Intelligence (BI) is a technique used for collecting, analysing and translating raw business data into information to support a broad range of strategic, financial and operational management processes. Prime objectives of any BI tool includes; (a) understanding of an entity's internal and external strengths and weaknesses (b) understanding of the relationship among different functions for effective decision making; (c) identifying new business opportunities and investment avenues (d) resource optimisation.

In this article the author has critically revisited some of the traditional methods of management reporting and made an ambitious attempt to integrate the two apparently disparate processes trying to establish management reports as a useful BI tool.

Some practical steps of integration are discussed :

1. Connect to Target Audience with Information

The term 'target audience' is commonly used in marketing parlance to describe a particular group of people, identified as the intended recipient of an advertisement or campaign. It means that the target audience for a toothpowder advertisement would be very different from the target audience of a high end

car. The design of the advertisement and choice of the communication medium varies from one target audience to another.

Similarly, the success of an effective management report depends upon whether or not it could cater to management requirements without burdening the reader with unnecessary details. For example a Travel Expenses Report sent to a Financial Controller might contain regional sub-account wise details, comparison with previous trends and information about top travel spends. Here we are trying to give the FC a hold on his numbers, helping him to control travel costs and having tabulated information ready, he can choose to approve/reject further travel spends.

But, the same report would be irrelevant if furnished to the CFO. The CFO would be interested to know a comparison with Budget and which country, division or product line is having overrun so as to revise the allocation. A report to the CFO should contain a summary sheet and links to the back-up data. He might choose to navigate through some of the information and skip the others.

The first step for an internal report to match the managers' expectations from a BI tool is to identify which tier of management (viz. Middle, Senior or Board) would be using the report and what would be the priorities thus.

However, there is an important difference between transactional processes and management processes. Transactional processes such as the (O2C) order-to-cash, (P2P) procure-to-pay and (H2R) hire-to-retain processes are standardised, integrated and automated using (ERP) enterprise resource planning, (CRM) customer relationship management and other enterprise systems. By contrast, management processes deal with uncertainties and a range of possible outputs; they require more flexibility. For example, the decision to invest a marketing budget

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in advertising must be based on estimates of the impact on revenue. The marketing campaign will likely contribute to overall brand recognition and image, which can increase the value of the company and its products.

As members of the Institute we should also explore innovative and symbiotic relationship of our profession with business intelligence professionals so as adopt best practices from each other.

Facilitate Decision making by presenting Business-Critical data :

Decision Making is a process of selecting a logical choice from the different options available. When trying to make a decision, a manager must evaluate the pros and cons of each option, and consider all feasible alternatives. For effective decision making, a person must be able to forecast the outcome of each option and, based on all these factors, determine which option is the best for that particular situation. Therefore it is important to segregate between normal facts and data which are critical for decision making. Leading organisations are able to identify the best opportunities by combining internal analysis of their portfolio strength with the dynamics of certain markets to identify differentiators and, ultimately, create a competitive advantage.

Before preparing the report, the analysts need to understand the probable usages that his/her report would have with the management. No report is just for information, it should facilitate proactive decision-making. There may also be certain cases where the analyst is asked to report on the detail of a few items. Here the reporting should be focused on the in-depth analysis of those limited items and present what the management wants to achieve out of that report.

Elaborating our above example, the various decisions that could be taken around travel spends are –

- a) Monitor travel costs country wise, and, in case of quarterly target framework, alarm the country in the second month of the quarter whether it would be staying within the budget.
- b) Track the regular travelers. There are various opportunities to minimise costs by advance air /hotel booking, avoiding travel during peak seasons etc. These can be discussed with regular travelers around considerations of propriety.
- c) Facilitate forecasting through trend analysis.

At the end of the report, a specific suggestive section can be incorporated to highlight key pointers for decision-making. For internal reports to acquire

characteristics of a BI tool, each data section should be accompanied by a commentary on findings.

Based on the company's strategic goals, management performs a number of financial and operational planning cycles in parallel. It evaluates constraints, optimizes planning models and structures and assigns targets across the organisation. The resulting plans are distributed to all decision-makers and later collected, consolidated and then analysed for gaps or deviations. Finally, the organisation allocates resources and commits to the budgets and its goals. These actions result in internal alignment.

Provide a simple and consistent user experience

There is no single structure suitable for all reports. The structure of a report depends upon the analyst and the users. To be effective, the format must be designed to fit the exact needs of a particular company, its departments and its executive management. The type of industry, corporate size, reporting practices, requests from executive management, the type of analysis and outcome of the findings – all these considerations affect the structuring of an appropriate and effective format.

The suggestive simplistic structure of a reporting pack could be :

- a) Executive Summary.
- b) Financial Highlights.
- c) Summarised P&L Accounts.
- d) Analysis/Trends.
- e) Back-up Data.

It is always wise to use a mix of financials and quantitative data, so as to include a wider audience group. For e.g. for a manufacturing unit, a P&L based management report would contain financial highlights, consumption and sales data (quantitative) and Key Performance Indicators. However, array of the mix would depend again upon the target audience.

Also, modern day reporting increasingly uses graphs, charts and other pictorial forms over tabular presentation of numbers. Tools like Excel, PowerPoint and Adobe etc are available with advanced reporting capabilities.

Whatever may be the format or frequency of a report, it is of paramount importance to add analytical value to each page of the report. This is essential to maintain the readers' interest in the report. A good approach is to have a brief discussion with audience and impress upon them the key highlights of the report, and then distribute the detailed report.

4. Repurpose and Re-engineer contents for Value Creation

Putting value creation first gives companies both the financial advantages over their competitors in driving growth: capital and revenue. Understanding where and how value can be created within the company and in the market is the best and most objective way to identify which of the activities and assets are unique to provide a platform for sustainable and profitable growth.

Exception reporting is a process of monitoring predefined conditions that occur as a result of an organisation's transactions and events. After the conditions are defined, exception reporting operates within the defined framework. Exception reporting is used sparingly, probably because it is not well understood, but it is a BI function that provides tremendous benefit to the professionals who take advantage of what it can offer.

Exceptions are usually twofold in nature;

- a) Amounts that distort trend. E.g. In a software firm one large customer deal renewed in advance could distort the bookings-revenue correlation.
- b) Nature of income/expenses, though not material in amount, requiring management attention. E.g. penalty paid to tax authorities due to non-compliance. This needs special attention because a financial violation of bigger magnitude could be brewing.

Data presented should be comprehensive so that a good understanding of the company's activities is facilitated. Financial information should aid in the evaluation of the amounts, timing and uncertainties of cash flows. Also, management reporting should furnish information about the company's economic resources, claims against those resources and periodic changes in those resources and claims.

Organisations must also prepare contingency plans for potential deviations such as higher than expected demand. If production capacity cannot scale with an increase in demand, the outcome (not enough production) could have negative repercussions for the company. For example, one of the leading car manufacturers recently released a new SUV model. Within a few months, the entire planned production capacity for the first year was sold. Undoubtedly, this was a profitable business decision in the short term. But if demand exceeded all previously planned scenarios and there were no reasonable alternatives to increasing the number of units produced, buyers might choose to buy from a competitor.

Exceptions should be addressed at the earliest before they become practice. For long reports, a separate section for exception reporting can be used.

5. Build Management practices on a high quality integrated platform

Like shoes, management reports can sometimes wear out and need repair. The internal reporting department should examine its report formats periodically to see that the format reflects changes that have occurred within the organisation. In order to remain effective and fit, report formats must adapt to changes in product lines, organisational structure and management goals.

Accuracy cannot be compromised under any circumstances. The quality of the data that is used by a business is a measure of how well its organisational data practices satisfy business, technical and regulatory standards. To avoid the consequences of poor data quality, many companies implement source system controls to ensure that their data satisfies quality standards at its point of origin. When properly implemented, source quality controls can effectively prevent the proliferation of invalid data.

Usage of built-in control checks to ensure data accuracy would be effective. For a spreadsheet-based report, the common control checks used are :

- a) Within the spreadsheet, check whether the grid totals (horizontally and vertically) are same.
- b) When data is spooled from multiple sources, which of the database total of key items match with the report total.
- c) Information is meaningful and consistent with previous reports.

Usage of customised quality checklists for each report would also be effective. Basic auditing tools are available in MS Excel; also most ERPs are designed with strong internal check mechanism.

Also, a small note on accuracy that the author would like to share from his industry experience. Often people tend to lose sight of the prime difference between management and financial reporting; financial reports are mostly for legal compliance to external authorities while management reports are internal and for decision making. Materiality and relevance should be on top priority for management reporting, without spending too much time attempting to reconcile trivial differences.

Another major challenge is maintaining data consistency across the company. One could argue that if data is extracted from the same system (for e.g. an

ERP system) used company wide, how can the data be different. For e.g. the revenue data provided by Marketing and Finance departments often in reality differ due to different underlying assumptions used by these two functions. It would be prudent to involve the cross-functional business leadership from an early stage of report designing to avoid any embarrassments later. If that is not practically feasible, regular dialogues should be held among departments to enhance the usage and effectiveness of the reports. The report contents have to be revisited regularly to build efficiencies and remove redundancies, if any.

Although management processes might look different within every organisation, most are likely based on the same principles. The strategy to success for an organisation is to determine which of its management processes can be improved and which can already be considered best practices.

Conclusion

The unification of Management Reporting with

attributes of Business Intelligence is to support management sustainability process which, in turn, connects corporate strategy with the interests of key stakeholders: employees, customers, suppliers, regulators, society, and investors. Its purpose is to ensure that a company acquires all the necessary contributions from its stakeholders to drive business performance while, at the same time, meeting stakeholder expectations.

When designing your management report, make certain the “shoe fits” your company before asking executive management to wear it. If the contents fit comfortably, it will not “pinch” the user. Evidently there are numerous similarities among Management Reporting techniques and the Business Intelligence process. Careful re-engineering of some of the traditional internal reporting methods would allow organisations to achieve a state of management excellence – being smart, agile and aligned – which provides competitive advantage and leverages their operational investments. □



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Extensible Business Reporting Language (XBRL)

CMA Shashikant Choubey*

Financial Data and information is not only limited to the accounting activities, but is useful to other group and authority within or outside the organization for whomsoever it matters. Extensible Business Reporting Language (XBRL) is a method and technique to use the financial data and information from data source in such a way that a meaningful information could be obtained for taking decision. Under XBRL, a highly advanced software technique is applied in order to make the information more meaningful, error free and within shortest possible time. Present article explains in detail about the working mechanism, creation, use and benefits and key issues of XBRL as of now.

There were the days when financial reports and financial data were known as a Block of output, used by accountants and investors. But, these data and financial information are now widely used in a business as well as non business organization by all related people for whom it matters. These data are interpreted in different ways with or without mix of non financial data too, to take an appropriate and meaningful decision. The introduction of XBRL (Extensible Business Reporting Language) is based on above backgrounds. Here financial data is being extracted from the data source in such a fashion as to be useful to the data user leading a meaning decision in right time. This is an information tool not only limited to management and business analysis as it applies to MIS, but the information as required by the user may be available to business/non business and inside/ outside of the organization – as the case may be.

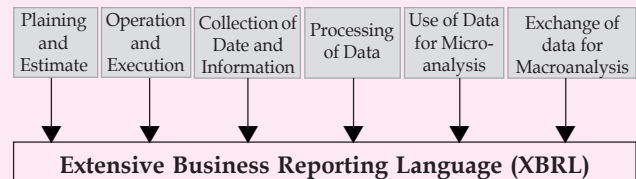
In an automated processing of business environment, information is being extracted through computer software. The software helps us to treat XBRL data in more accurate way, faster, analytical, transfer, compare, mix the non financial data, and storage facility as per the user's need. XBRL makes the data and information more reliable in minimum possible time.

XBRL International, a non-profit organization of more than five hundred business/non business organizations, engaged in developing XBRL, explains: 'is a language for the electronic communication of business and financial data which is revolutionizing business reporting around the world. It provides major benefits in the preparation, analysis and communication of business information. It offers cost savings, greater efficiency and improved accuracy and reliability to all those involved in supplying or using financial data. Thus, XBRL is not only limited to intra business/organization but through it, the information can be shared to all third parties for whom it matters.

For example, an Annual Financial Statement (Balance Sheet, Profit & Loss Account and Cash Flow Statement) prepared under Indian GAAP and under Schedule VI of the Companies Act, can be used by the Income Tax Department for analyzing tax liability of the organization. Further the Tax authority is able to compare the data amount the industry and region or as the case may be.

XBRL working mechanism

XBRL works in between the activities, which is reproduce under following diagram :



XBRL is a bridge between the activities in the whole business environment and pass through each and every activity up to level of macroanalysis.

Through XBRL, not only final output is being made but also facilitates to know-how items and data are co-related to each other and up to what level. Calculation, path and methodology of drawing such information. Group identification and reason thereto. Other options where the user may find fit to do so.

The software technique is applied in such a way as to get the information in the manner and in the time user required to do so.

Creation of XBRL

An organization is able to create XBRL through their financial data by different ways – Use of support software, which facilitates exporting the data to XBRL platform by one to one mapping of financial accounting /centre code to XBRL code.

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Statements are also possible to be mapped into XBRL by using software tools designed for this purpose.

Software can transform data in particular formats into XBRL. For example, for filling of quarterly/annual results and filling of income tax return, source financial data can be used for transferring and uploading the data in the prescribed format. To create XBRL, we require a mindset apart from plethora of infrastructure, technical support and investments involve into that.

A minimum requirement may be :

Transparency of all the data level among the users.

Standardized and uniform process for data generating activities.

Uniform financial reporting structure. Like, Indian GAAP, and Companies Act to be followed for XBRL, limited to the country. For international level of XBRL, IFRS/USGAAP to be followed.

Extensive use of modern electronic and software technique, which is capable to handle and process the data useful to the users in minimum possible time.

Data reliability and free from virus/error to facilitate the required information in minimum possible time which is more reliable, understandable and helps to take decision to the users.

Uses and benefits

It is said "Information is Power". Reliable and timely information is always vital for the users to lead to a correct decision. Transparency and information sharing are the sole value of XBRL, which would even help us to save from disaster like 'Satyam'. Obviously a number of benefits could be counted to the different groups or agencies. Few of them are explained below.

Organization itself

- Time and cost saving while preparing data in one platform and generate multiple out-puts.
- Improves data reliability and accuracy.
- Earn credit of transparency and reliability among the investors, trading partners and other community.
- Consolidate results across SBUs and subsidiaries in no time.
- Focus on analysis, forecasting and decision making.
- Facilitate on time and accurate decisions.
- Profuse use of electronic via media in order to make communications fast.
- Simplicity in process and get fast response from the third party.

Strategic Business Units

- Quick results with maximum reliability facilitate quick decision and avoid business opportunity loss.
- Easy to inter business segment and inter unit comparison

Businessmen and Accountants

- Time spent on value added job of analysis and review rather than making data output. Through this, accountant could play a role of business partner in decision making process.
- Reduce effort and costs in accumulating and analyzing data.
- Simple and easy to understand as well as convince about the information.
- Storage facility of archive and easy to retrieve when and where required

Government agencies and Regulatory Authorities

- Avoids lengthy process of filling, assessment and search of data and information.
- Analyze and compare data much faster, and reliably.
- Vigil activities and make judgment faster with confidence.
- Adopt simplicity in explaining and convincing the data and information. Strengthen the transparency and vigor of information among the mass.

Investors and Investment Analysts

- Today, general investors lacking transparency, XBRL facilitates the same and builds confidence, reliability and consistency in company financial data.
- Opportunity to compare performance of each businesshouse and take decision for investment.

Bankers

- Obtain data quickly and reliably via automated reporting.
- Reduce costs in processing data.
- Compare and analyze financial information much more reliably, fully and effectively using automated processes.
- Track financial performance more quickly and efficiently.
- Reach decisions more confidently and provide a quicker response to clients.

Policymakers

- Benefits while making policy issues, like tax structure, planned and non-planned expenditure and other economic value additions efficiently.

Software Suppliers

- Standardization of data and information across the Business, Organization, Industry, and Country.
- Develop new software to support the preparation, publication and collection of data in XBRL.

Key issue in XBRL

Though anatomy of XBRL is understandable and appreciated from every corner, the major issue remains stranded, *'how far we open to transparency'*¹. The mindset behind data sharing and exchanging information are the key issues. Creative accounting and misinterpretation of data and information in the corporate world makes success of XBRL very bleak. We have experienced in past – like MTN deals with Bharti and Reliance took inconsiderably long time for their due diligence. Regulatory were handicapped to make the processes fast.

Data confidentiality and misuse of information by unwanted groups also hurdles. It is also said that forces behind business success and business confidentiality can't be maintained under XBRL environment.

Variation in organizational setup, Business culture and standard, accounting standard and tax structure across the region and country too are responsible for keeping XBRL under low profile.

Flow of XBRL may not be easily swollen by SMEs because of their limited resources and lack of will power to maintain transparency.

Being a highly technical software structure and application, XBRL needs qualitative technical skills and infrastructure at moderate rate.

Uninterrupted electronic media and internet/intranet supply plays a vital role in implementation and running. In developing and undeveloped countries – where basic infrastructure and technical skill are very limited and dearer – application of XBRL will take its own time to go with.

It is also misunderstood as an advance version of Business MIS. But XBRL is much more than MIS where information and data are not only used by internal agencies but also by the external agencies independently in the manner the user wants to do so.

Initiative and Path Forward

Initiative by XBRL International for development and implementation is widely appreciated. Recognitions and cooperation from different accounting and other international bodies like IASB get more strengthened. IASB has taken all length and breath to make XBRL a great success by way of training and orientation and amendment in IFRS suits to implement XBRL. Sole purpose of IFRS is to bring uniformity and accuracy in business accounting across the world. XBRL plays a vital role to bring transparency and exchange of information to the agencies and group to use such information for decision making. Thus mission of IFRS remain incomplete without implementation of XBRL. □

Reference

- www.xbrl.org, www.iasb.org

NOTIFICATION

The Examination Committee of the Council of ICWAI at its 272th meeting decided to open new examination centers at –

(a) Solapur (Center Code 128) (b) Vapi (Center Code 129) (c) Vashi (Center Code 130) and Akurdi-Pune (Center code 131) with effect from December 2010 term of examination.

While selling the existing Examination Application forms the Chapters and Regions are requested to inform the students accordingly.

C. Bose
Sr. Director-Examinations.

Investment Decisions: Business Practices of Indian Corporate World

Dr. Nikhil Zaveri*

Dr. Kamini Shah**

Capital budgeting decisions have significant impact on the bottomline of any business enterprise as they have a decisive influence on its existence and growth. The fixed assets are real earning assets of a company. Any lapse in capital expenditure decisions may create stake for the survival of a business enterprise. It is one of the top management's most crucial tasks to see that a company puts in due attention to the question of how a company shall use its long term funds. This research paper is an attempt to evaluate the use of capital budgeting methods in the corporate sector in India. The study reveals that though PBP is still a very popular technique of capital budgeting, firms are now using multiple criteria in selecting capital budgeting projects.

Capital budgeting is a vital managerial tool for investment decision-making. The capital budgeting decisions assume great importance due to its decisive impact on the survival and growth of the firm. If the firms make few such wrong decisions repeatedly it may become a suicidal step for even the most efficient firms. These are indeed irreversible decisions. This necessitates the need for correct and well thought out investment framework. What have been the capital budgeting practices followed by business firms in the corporate sector of India, constitutes the subject matter of this research paper.

Background

There are number of researchers in accountancy and finance who have studied the types and frequency with which various techniques of capital budgeting such as PBP, ARR, NPV, IRR and PI—are used by firms in India as well as abroad. The most noteworthy among such studies are Gitman Lawrence G. and John R. Forrester Jr. (1977) study of capital budgeting techniques used by major U.S. Firms, Jog and Srivastava (1991), Bierman Harold (1993), Graham and Harvey's (2001) study on capital budgeting, cost of capital, and capital structure, Prasanna Chandra (1975), L. S. Porwal's (1976) study on capital budgeting techniques and profitability, and Pandey IM's (1989) study on capital budgeting practices of Indian companies.

The findings of such studies suggest how corporate firms across the world operate so far as investment decisions are concerned. They indicate that increasingly sophisticated capital budgeting procedures have been put in practice. However, a generalization that more sophisticated practices take place across all industries is subject to investigation and challenge.

However, it seems that there is no research conducted recently to study the methods used currently by industries in India except the study conducted by Gupta, Batra and Sharma in February 2007 for Punjab-based companies. So we selected randomly some companies operating in India using purposive convenience sampling which represent different industries showing methods of capital budgeting used by them. Tables 1.1 and 1.2 represent snapshot of literature review of Indian studies and foreign studies.

Research Plan

The core research objective is to analyze the practices of the capital budgeting for evaluation of investment proposals in the corporate sector in India.

The study relies on the primary survey conducted. A structured non-disguised questionnaire was used to collect the data from various companies operating in India. Some of the questions in this survey were replicated from the past surveys of Kester and Tsui, Capital budgeting practices of listed firms in Singapore; Arnold and Hatzopoulos, The theory-practice gap in capital budgeting: Evidence from the United Kingdom; Gupta, Batra and Sharma, "Capital Budgeting Practices in Punjab-based Companies, to know the current status of corporate capital budgeting practices of firms operating in all over India. The researchers sent the questionnaire to 200 companies covering representation of 9 industries, such as Cement, Chemical, Consumer,

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Engineering, IT, Oil, Pharma-ceutical, Sugar, Textile. The responses obtained from 40 companies, a response rate of 20%. Out of that, 30 responses were usable for the final analysis.

Capital Budgeting Practices

1. Project Size

Average Size (Rs. lakhs)	Percent
Less than 100	3.7
101-500	18.5
501-1000	25.9
1001-5000	22.2
Above 5000	29.6
Total	100.0

Table 1.1

52% of the companies under these sectors fell into the category of more than Rs. 1000 lakhs as the Annual Capital Budget outlay; while 48% were between Rs. 100 lakhs to Rs. 1000 lakhs.

The researcher also wanted to know the project size that requires a formal quantitative analysis in the firms operating in India. It was found that all project size required a formal quantitative analysis but the median size of the project requiring formal quantitative analysis is Rs. 22 lakhs.

2. Time Frame

The study explored the time frame for planning capital expenditures of the organization, i.e., how many years in advance usually the capital budgets are prepared for achieving firm’s objectives.

The survey indicates that nearly half of the companies (48.1%) have been planning capital budget 1 year ahead while almost one-fourth of the firms are planning 3 years in advance. But, surprisingly, only one of the responding companies has reported to be planning in advance for more than 4 years. However, the findings of the Porwal (1976) indicate that more than two-thirds of sample companies were found to be planning five years in advance while nearly one-third of sample companies planning only one year in advance. Even the findings of Jain P. K., Jain S. K. and Tarde S. M. (1995) revealed that 45.3% firms have been planning capital budget five years ahead. This new trend, perhaps, indicates the impact of competitive environment which compels the firms to be at the pale for development. Secondly, it indicates that the dynamic environment vis-à-vis advance longer duration of exercises may not be worthwhile for firms. Hence 48% of them plan just one year ahead.

3. Evaluation techniques

One of the objectives of this study is to determine

which of the quantitative evaluation techniques are currently used by firms operating in India. Therefore, the researcher wanted to know whether the firms are using theoretically sound investment appraisal techniques. There are mainly two types of techniques used in evaluating projects, viz., Discounted cash flow/Time-adjusted techniques like NPV, IRR and PI which takes into account the time value of money and Non-discounted cash flow/Traditional techniques like PBP, ARR which ignores time value of money.

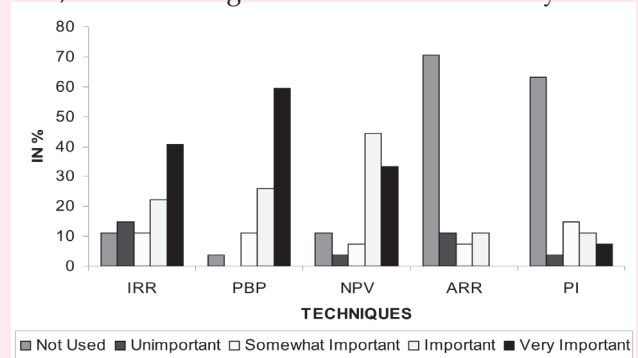


Fig. 1.1

The responding firms ranked PBP (59.3%), IRR (40.7%) and NPV (33.3%) as the most important techniques, respectively. Among these techniques, PBP is getting highest rating even though it ignores time value of money and it also ignores cash flow beyond pay back period. It seems—as it is easy to calculate and understand—PBP is still a very popular technique. However, IRR is ranked second, and NPV is ranked third as the most important, but 44.4% consider it as an important technique in this survey. Surprisingly, no respondent considered ARR as the most important technique; in fact 70.4% respondents are not using this technique at all.

4. Type of Decisions

The respondents were also asked to indicate the capital budgeting techniques used by them for evaluating various investment decisions. The results are summarized in Table 1.2# :

Investment Decision	ARR	IRR	NPV	PBP	Others
1 New Project		74.1	55.6	66.7	7.4
2 Expansion of existing operation	3.7	37.0	48.1	66.7	
3 Merger/Acquisition	7.4	25.9	37.0	25.9	3.7
4 Replacement of Assets		18.5	25.9	51.9	
5 Leasing of Assets		14.8	3.70	22.2	3.7
6 Modernization	3.7	22.2	3.70	44.4	3.7
7 Process or Product improvement		22.2	25.9	37	7.4
8 Any other (please specify) such as canteen, housing colony , staff welfare scheme.			3.7	3.7	

As there are multiple responses the total per cent may exceed 100%.

Table 1.2

One can observe that IRR (74.1%), PBP (66.7%) and NPV (55.6%), respectively, are the most preferred techniques for evaluating new capital budgeting projects. While, for expansion, replacement of assets, modernization and process or product improvement, PBP is preferred over other techniques. The respondents prefer even NPV (37%) for modernization as well as mergers and acquisitions.

5. Frequency of Usage

The respondents of the present study were asked to mention frequency of the use of different capital budgeting methods. It indicates that PBP (74.1%) and NPV (59.3%) are always used by the firms for evaluating their projects capital expenditures followed by IRR (55.5%).

6. Use of Multiple Techniques

Evaluation Technique	Not Used	1	2	3	4	5
Internal Rate of Return (IRR)	11.1	44.4	22.2	22.2		
Payback Period (PBP)		66.7	22.2	07.4	03.7	
Net Present Value (NPV)	11.1	22.2	40.7	25.9		
Accounting Rate of Return (ARR)	66.7		03.7	03.7	14.8	11.1
Profitability Index (PI)	59.3		14.8	03.7	11.1	11.1
Other [pl. specify]						

Table 1.3

Table 1.3 shows that IRR and PBP has been given first rank by maximum 44.4% and 66.7% of respondents, respectively, followed by NPV(22.2%). These results are consistent with the results of Gupta, Batra and Sharma (2007) study of Capital Budgeting Practices in Punjab-based, Companies who found out that, out of 32 companies, 30 companies responded in favour of using more than one capital budgeting method.

7. Adjustments for Inflation

While estimating the cash flows, it is very important to know the inflation adjustment methods used for investment appraisal by the firms. The Table 1.4# summarizes the results for identifying the popular methods of inflation adjustments for their investment appraisal :

	Percent
Specify cash flow in constant prices and apply a real rate of return	29.63
All cash flows expressed in inflated price terms and discounted at the market rate of return	40.74
Considered at risk analysis or sensitivity analysis	40.74
No adjustment	14.81

As there are multiple responses the total per cent may exceed 100 %

Table 1.4

As observed in Table 1.4, the equal numbers of firms (40.74%) prefer to adjust for inflation by expressing all cash flows in inflated price terms and discounted at the market rate of return, or considering sensitivity analysis. Very few companies (14.81 %) are not making any adjustment for inflation in their capital budgeting decisions.

7. Minimum Acceptable Rate of Return

Almost all the respondents of this survey are using DCF techniques for evaluating their capital budgeting projects; so there was a question focused on the method used to determine the minimum acceptable rate of return or the rate of discount to evaluate the proposed capital expenditure project.

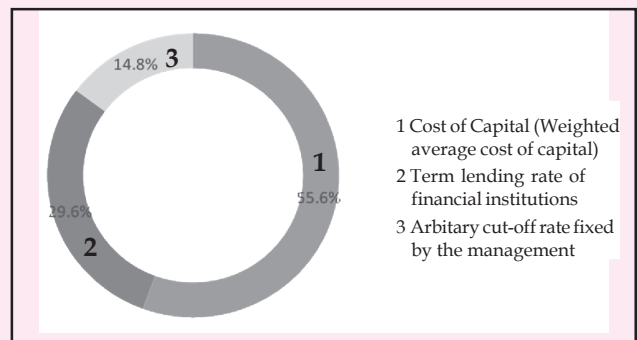


Fig. 1.2

The results, summarized in the above Fig. 1.2 indicate that more than half of the respondents are using WACC as the discount rate. However, very few firms (14.8%) are using arbitrary cut-off rate fixed by the management. The results of this study are consistent with the results of the study by Jog and Srivastava (1995) who found out that WACC was used by 47% of the Canadian firms for calculating cost of capital – which corresponds to the theory that considers WACC as the sound method for determining cost of capital.

One of the very important components for determining WACC for any firm is to estimate the cost of equity and cost of retained earnings. This question was asked to finance officers of the surveyed firms who were using WACC as the discount rate for evaluating their capital budgeting projects.

	Percent
Capital Asset Pricing Model [CAPM, based upon the firm’s estimated beta]	33.03
Dividend yield plus growth rate [Discounted Cash Flow method]	33.03
Cost of debt plus risk premium	26.07
Other [Specify]	06.67
Total	100

Table 1.5

The results, shown in Table 1.5, show that equal numbers of firms were using CAPM model and Dividend yield plus growth rate method for estimating cost of equity. Almost one-fourth of the firms are also using cost of debt plus risk premium method.

The responding firms were asked to mention whether they use different discount rates for different sizes of investment or for different types of projects. It was observed that three-fifth of the firms are not using different discount rates while two-fifth of the firms are using different discount rates.

8. Weights of Debt-Equity

The finance theory claims that the market value weights are more reliable than book value weights of debt-equity. The researcher wanted to know how finance executives define weights for determining WACC of their companies which were using WACC as the discount rate.

	Percent
A long term target of debt -equity ratio	33.33
The present market values of debt-equity	46.67
Balance sheet ratios of debt-equity	20.00
Total	100

Table 1.6

As indicated in Table 1.6, almost half of the firms are using the present market values of debt-equity followed by one-third of the firms using a long term target debt-equity ratio while only one-fifth of the firms are using balance sheet ratios of debt-equity.

9. Risk Differentiation

As one knows, investment decisions are always full of risks and uncertainties due to possibility of variation in results of the proposed project’s uncertainties about the future demand, sales, production, technology etc. The study explored whether firms categorize projects into different risk classes such as low risk, moderate risk and high risk.

	Percent
Fluctuations in expected return	70.370
Non-recoverable	14.810
Changes in economic, social and political factors	55.560
Fear of obsolescence	33.330
Other [pl. specify]	03.704

As there are multiple responses the total per cent may exceed 100 %.

Table 1.7

It reveals that the significant number of firms 70.4% does categorize their projects into different risk classes. Even the respondents were asked to reveal the type of risk involved in such investments. As in-

dicated in Table 1.7#, the maximum numbers of firms (70.37%) consider fluctuations in expected return as a major risk factor followed by (55.56%) changes in economic, social and political factors. Only one-third of the companies (33.33%) consider fear of obsolescence as risk factor. One company mentioned in others category fear of new entrants as the risk factor.

9. Risk & Uncertainty

Another objective of this research was to analyze how ‘Risk’ and ‘Uncertainty’ in the future estimates in investment projects are being taken care of. The study revealed that Sensitivity analysis is considered as the most important technique while Scenario analysis is considered as the second important technique for assessing risk. The other more sophisticated techniques—like Decision tree, Monte Carlo simulation, Certainty equivalent, Probability analysis, Beta analysis—got very low ratings that means these techniques are rarely used in practice by firms in India. Wong, Farragher and Leung (1987) had similar findings that is sensitivity analysis and scenario analysis were the most frequent techniques used by their respondents in Singapore, Malaysia, and Hong Kong.

10. Switch in Technique

There was a question in the survey whether there has been a major switch in techniques used over the last 5 years. It was found that there is reluctance to change the techniques used by the firms over last 5 years for evaluating capital budgeting projects. Almost all—except one firm—from the usable responses says that there is no major switch in techniques. Though there are so many advanced and value based techniques like EVA, Monte Carlo simulation, Beta analysis, Real Options, cash flow return on investment available, the finance executives are still comfortable with those techniques which they are already using. This may be due to the fact that these techniques are already tried on existing projects and those projects might have given good returns; and also, it requires less time and computer operations than the new techniques. This can be cross-verified from questions in this survey pertaining to the various evaluation techniques of this survey where majority of the firms are not using advanced techniques.

11. Capital Rationing

In spite of the use of theoretically sound techniques of capital budgeting to incorporate risk, many profitable capital budgeting proposals have to be rejected for one or other reasons. Some firms place a limit on the size of their annual capital budgets. The respondents were asked a dichotomous question to identify

whether Indian firms engage in capital rationing. The results are summarized in Table 1.8 which reveals that the majority of the firms (59.3%) place a limit to their annual capital budget. But Kester and Tsui (2001) conducted a survey on capital budgeting practices of listed firms in Singapore and found out that the majority of the respondents (64.8%) say that their firms do not practice capital rationing :

12. Non-economic Projects :

	Percent
Health and Safety	88.89
Legislation	85.19
R & D/Strategically necessary	59.26
Social/Environmental	74.07
Repair/Maintenance	55.56
Others	44.44

As there are multiple responses the total per cent may exceed 100 %.

Table 1.9

Most of the respondents say that health and safety, legislation and social or environmental factors are mainly responsible for accepting such projects. Though more than one half of the survey participants also believe that R&D and repair/maintenance are sometimes responsible for the acceptance of non-economic projects but in that case we must accept that these projects will have economic effects also.

13. Selection of Method

There are a number of factors deciding capital budgeting methods in a company. As shown in the Table below experience and competency is considered as the most important factor influencing the decision of selecting capital budgeting method. The importance of the project is also considered as an important factor by almost half of the companies. The finance theory has also got some weightage in selecting methods which may be due to academic background of the finance decision-makers. One note worthy point here is no firms prefer informal rule of thumb for investment appraisal.

	Percent
Finance Theory	44.44
Experience and Competency	62.96
Informal Rule of Thumb	00.00
Importance of the Project	48.15
Easy to Understand	29.63
Familiarity of Top Management	22.22

As there are multiple responses the total per cent may exceed 100 %.

Table 1.10

14. Feedback Mechanism

The capital budgeting decisions—once taken and executed—it cannot be reversed because it will not fetch more than secondhand value. The study focused on the conduct of the post audits of major capital expenditures because such post audit is basically a feedback device which help in avoiding mistakes of current project in the future projects.

	Percent
Always	40.7
Often	37.0
Sometimes	18.5
Never	03.7
Total	100.0

Table 1.11

The results reveal that two-fifth of firms always while more than one-third of the firms often conduct post audits of their major capital expenditures.

There are a number of variables affected by capital budgeting decisions. Impact of capital budgeting decisions on sales, profitability, investment in fixed assets etc. would be an interesting focus for further research. As these decisions are very crucial for the survival of the firm, it is important to know the impact of such decisions, if taken correctly, on the monetary/ non-monetary incentives of the officials in charge. One of the unexplored areas is effect of various phases of business cycle on the investment decision of the firm. For example, it is required to evaluate effect of recession on the capital expenditures of the firm. It is also required to investigate whether non-profit organizations are using any capital budgeting procedures.

Conclusion

The results of the present study is reassuring that pay back period as a capital budgeting method is widely used even today but now it is not the only method used for investment appraisal. The firms use multiple criteria in selecting capital budgeting projects. The firms prefer to use now DCF techniques like IRR and NPV. All the respondent in this survey are using PBP as well as IRR or NPV while evaluating investment projects. The firms surveyed find risk to be an important consideration in their capital budgeting decisions. The sensitivity analysis and scenario analysis are the most widely used techniques for project risk analysis. Most of the firms are using WACC as the discount rate for using DCF techniques and they prefer to use present market values of debt-equity for assigning weights. □

Concept Note on Opportunities of Cost Professionals in Urban Local Bodies

CMA Nirmal Kumar Chakrabarti*

Basically in this Article I want to indicate some new avenues that may be explored by our professionals in the field of Urban local Bodies. The areas are basically emphasising on cost control and cost reduction in the different areas of expenditure made by the ULB for providing services to their citizens. Further, some services provided by the ULB require cost recovery from the citizens to sustain that project and also for revenue mobilization. For successful implementation of any project proper cost estimation also required.

Here, I also indicate some known concepts of Audit like energy and environment but it is not yet implemented in this type of organizations.

Accounting and cost management process and techniques in Urban Local Bodies (ULBs) have undergone a sea-change during the last five years. The move to switch over from single entry to double entry system of accounting brought forth by the 74th Constitutional amendment has not only increased financial discipline but has also augmented the opportunity of cost control in various financial areas in ULBs.

The milestone constitutional amendment necessitated deployment of professionals as Accounts and Finance Co-coordinators (AFCs) in 127 ULBs throughout West Bengal. The article collates the observations of the AFCs in respect of change in accounting and cost management process during the churning process of 5 years. It seeks to highlight the merits of current or proposed accounts and cost management system against the erstwhile structure.

Pre-existing Accounting System

Prior to the 74th Constitutional amendment, Cash based Single Entry accounting system was prevalent in ULBs. It suffered from multiple drawbacks :

1. The Single entry system resulted in inappropriate presentation of the financial position of the ULBs.
2. Fund management was non professional as the system did not support adequate matching of expenses against revenue.
3. Difficulty in cost estimation making it difficult to accurately budget for capital expenditures resulting in significant variance. Viability of projects in financial terms was difficult to establish.
4. Significant weakness in internal control as the system did not support checks and control at adequate points.
5. Manual and time consuming process leading to higher risk of inaccuracy of information.

The bottlenecks and constraints of the age-old system resulted in the move towards development of a new structure that supports financial propriety.

Existing Framework & Opportunities

The appointment of AFCs and the shift to Double Entry System has not only resulted in a strong financial discipline but has also enabled the ULBs to exploit further opportunities :

A.1. Advanced Cost Recovery Management

The current structure enables the matching of resultant cost elements with respective revenue source. For example, operation and maintenance of Bituminous Road may be recovered by way of collection of users' charges. Similarly, cost of capital investments like Road, Sewerage System etc made out of Municipal Fund can be recovered by creation of Depreciated Reserve and charging against the Income & Expenditure Account on a yearly basis. Hence, the development of cost recovery mechanism can be very much explored.

2. Scientific Resource mobilizing system

If there is no proper Resource Mobilizing System, implementation of cost recovery system will be nothing but a myth. Resources may be mobilized through various cost control techniques and would commence from its respective generation through selection of proper cost objectives followed by analysis and selection of best alternative.

3. Modern Capital Budgeting System

Capital Budgeting helps in determining the discount cash flows in future through which cost of project may be recovered. The implementation of

* Presently attached with the Accounting Reform Project of "Kolkata Urban Services for Poor" aided by Department for International Development—UK as 'Accounts and Finance Coordinator' deputed at Rajarhat Gopalpur Municipality

Capital budgeting technique will help in ascertaining the viability of the capital projects under Five year Draft Development Plan of the ULBs. The ULBs prioritize the implementation of these key projects considering social factors as well as pattern of revenue generation in the near future.

4. Better Fund Management Techniques

Segregation and identification of cost elements under the Double Entry System of accounting helps in establishing cost centers and analyses thereof. Segmental analysis of revenue and expenses is also made possible. For example, repair and maintenance expenditure incurred during a particular period can be recovered out of a specified Municipal Fund without disturbing the investible surplus resulting in minimization of loss of interest.

5. Analysis of Variances

Various analysis will help in analyzing the impact of adverse material, labour and overhead variances on the budgeted profitability. The analysis is required considering the fact that the ULB has to follow the PWD scheduled rates to estimate the capital cost of inflation and other factors.

6. Compliance of Relevant Standards

The ULBs are currently in a position to comply with various globally accepted cost and financial standards prescribed by professional bodies in India – thereby developing uniform practices.

7. Real Time Cost Estimation

The ULBs generally make estimates for different works (like construction of Infrastructural assets and other Assets) following PWD prescribed Schedules available to them. The modification of rates prescribed in various components are not made at regular intervals. Sometime the rates of component may be very old and sometimes the rates are modified at the time of vetting by MED. So there is no regular system of estimation of cost of the project (Assets) considering the real time concept of cost estimation and considering the present situation and the purpose of the project. So there is a gap between the estimation and the actual cost of execution. It tends to Cost overrun and adverse variance of cost. The bill of any works prepared on the basis of the Schedule so the correct costing of any asset is done is remote, the financial position is also distorted for this type of costing, i.e. Assets/Liabilities may be overstated/ understated. Activity based costing and PERT/CPM techniques should be implemented to reduce the unnecessary activity of the project and resulting cost reduction and control also time over run of the project. Professionally equipped AFCs, deployed in different

ULBs, have been endeavoring to inculcate the aforesaid factors in the current accounting system to make way for the successful implementation of an advance cost management system at all ULBs in West Bengal.

B. Scope of Environment Audit in ULBs

At present Environment Pollution and Global Warming is a very emergent topic. The Government of India worried how to protect the nation and environment from the fatal effect of the Global warming. So the Government framed different Rules to control the environment. Some of the most relevant Rules which are applicable to ULB as a Local Authority are

1. Bio Medical Waste (Management & Handling) Rules, 1998
2. The Municipal Solid Waste (Management & handling) Rules, 2000

Most of all, the Municipality's jurisdiction have one or more Hospital/Private Nursing Home/Health Centre/Poly clinic. Some bio-Medical waste generate within its jurisdiction from these units. The ULB should have the duty and also responsible to collect these wastes and proper be way of disposal at their dump sites.

The Solid waste generated within the territorial area of the ULB should be responsible by implementing the provisions of the rule and for any infrastructure development for collection, storage, segregation, transportation processing and proper disposal. The ULB is responsible to furnish Annual report in Form-II (prescribed in this rule) to the Secretary in charge of the Department of Urban Development of State in case ULBs are in Metropolitan Cities, or DM or Deputy Commissioner concerned in case of all other towns and cities, with a copy to State Board or the committee on or before 30th June every year.

The Scope of Audit regarding the above can be explored by our professionals. Some areas of coverage for Audit :

- i) Compliance of rules framed by the Central Government;
- ii) Quantum of Disposal generated;
- iii) Transportation Cost of Solid waste;
- iv) Cost aspect regarding the process of disposal i.e earth filling, recycling, vermicomposing etc;
- v) Compliance regarding the timely submission of report to proper authorities.

C. Energy Audit in ULBs

ULB, as a service provider organization, provides

different services to the citizens covered in their jurisdiction. Most common and important services provided among other services are Public Lighting of different areas covered by its jurisdiction and providing water supply facilities to the citizens of ULB.

So electricity consumption for this purpose plays a major role in the total expenditure of the ULB. So energy cost control is an emergent issue at the present day situation of ULB.

Energy Audit can be explored by our Cost Professional

Calculating your municipality’s energy footprint is a fundamental and necessary first step in identifying opportunities to reduce energy use and energy costs. Without this baseline data, we will not have the information necessary to make cost effective decisions now and in the future about what energy saving strategies to implement. This process is also an important first step for reducing municipal greenhouse gas emissions

Benefits of Energy Audits

- Reduce greenhouse gas emissions, and air pollution.
- Significantly lower electrical, natural gas, steam, water and sewer costs.
- Address indoor air quality, lighting quality and building occupant satisfaction.

How to Conduct an Energy Audit

1. Create an Energy Audit Team made up of the municipal business administrator, facilities, and environmental and maintenance staff.
2. Collect, Organize, and Analyze Two Years’ Energy Data (Usage, demand, and rate schedules) for electricity, heating fuel, and water/sewer accounts.
3. Assess Efficiency of Building Systems (electrical and mechanical) and identify issues to address during the site visit.
4. Conduct Onsite Inspection.
5. Analyze Findings and Issue an Action Report.

Success Story of Energy Audit in India

The energy cost in water pumping is the single largest component in municipal expenditure. We have successfully brought the energy efficiency as a part of project planning for existing and augmentation projects.

Nagpur Municipal Corporation has changed its master plan for better energy efficiency and Thane Municipal Corporation has modified the design for augmentation for better energy efficiency.

Nagpur Municipal Corporation has implemented energy saving/conservation program with Rs. 25 crore investment which is the largest comprehensive energy conservation program taken-up by any Municipal Corporation in Maharashtra with potential savings of Rs. 6.75 crore/year.

Thane Municipal Corporation, as per energy audit report (2006-07) and energy saving action plan suggested –has bypassed BPT at Sonale which has resulted into energy saving due to reduction in pumping head by 8 meter in 2007-08.

Sr. No.	Water & Energy Audit Projects in various Municipal Corporations/Councils	
1	Nagpur Municipal Corporation, Nagpur	Carried out Energy Audit and Energy Conservation Study for Water Works Department of Nagpur Municipal Corporation
2	Municipal Corporation of Greater Mumbai, Mumbai	Carried out Energy Audit for Municipal Corporation of Greater Mumbai installations at Pise Panjrapur, Yewai Complex, Bhandup Complex and City Pumping Station
3	Thane Municipal Corporation	Carried out Energy Audit and Energy Conservation Study for Water Supply Department of Thane Municipal Corporation
4	Shahad-Temghar Water Authority, Thane	Carried out Water & Energy Audit of 285 Mld Scheme
5	Mira-Bhayander Municipal Corporation, Bhayander	Carried out Comprehensive Water Audit, Leak Detection & Reduction, Energy Audit and Energy Conservation for Entire Water Supply Distribution Scheme for Mira-Bhayander Municipal Corporation, Bhayander, Dist. Thane
6	Wardha Nagar Parishad, Wardha	Carried out comprehensive Water Audit, Leak Detection & Leak Reduction, Energy Audit & Energy Conservation for Entire Water Supply Distribution for Wardha Nagar Parishad, Wardha
7	Pusad Municipal Council, Pusad	Carrying out Water Audit, Leak Detection and Leak Reduction & Energy Audit Study for Water Supply Distribution System of Pusad Municipal Council
8	Jalna Nagar Parishad, Jalna	Carrying out Water Audit, Leak Detection, Leak Reduction & Energy Audit Study for Water Supply Distribution System of Jalna Nagar Parishad, Jalna

Sources :

- The New Jersey Sustainable State Institute (NJSSI) www.njssi.org
- Municipal Land Use Center at the College of New Jersey www.tcnj.edu/~mluc/
- www.gudcltd.c
- Funds available for municipal energy audits

Credit Rating : An important tool for investor's decision making

Nabina Saha*

Credit rating is a process of evaluation of creditworthiness of an individual/money or capital market instrument. Credit rating always helps in corporate investment flows and it has also other advantages as it increases ROI and plays an important role in risk management. Credit ratings also has some disadvantages. It involves a series of steps which are quite tough and complex in nature. The use of rating is obvious for investors, issuers, investment banks, broker dealers and governments. Now many credit rating agencies provide "credit rating advisory services" and according to which it may advise an issuer how to structure its bond offerings. The system of credit rating was started at first in the USA but now it has spread throughout the world. In India the application of credit rating is not very old. In India there are four credit rating agencies as CRISIL, ICRA, CARE and joint venture between Duff and Phelps. It has been laid down in SEBI guideline that before debt issue credit rating must be obtained from any credit rating agency. Overall, it can be said that it is "guidePost" for lay investors.

Credit rating is a process of assessment of credit risk attached with a financial instrument and debt. Rating is not a general evaluation of credit risk associated with the issuer company; it is specifically related with an instrument. The rating always gives information about the possibility of timely payment of principal and interest but does not indicate whether the instrument is over priced or not. So, higher rating does not make any recommendation on investment decision, which may depend upon different factors—the investor's risk taking capacity, desired rate of return, and so on. Rating is a continuous process. So, with the introduction of new information, previous rating may be revised. The information which are used by the rating agencies are not necessarily based on the audit; so every credit rating agency needs to state that the rating does not constitute any recommendation to buy, hold or sell any security. For the purpose of rating, credit rating agencies need information about the issuer. So, the appointing company agrees to supply all information as per the necessity of the rating company.

Advantages

The advantages of credit rating for investors and issuers are obvious. For the purpose of credit rating too much attention are spend on credit risk research which diminishes the return on investment; and credit rating saves the research cost also. Rating represents the informed opinion of a neutral third party, and also the certainty about the financial strength of the issuer. Credit rating is a guidance in making an investment decision. Credit

rating represents constant monitoring and surveillance on the debt instrument which may lead to effective risk management strategies. By adopting an universally accepted measure of credit risk, the issuer of any country can gain access to global capital markets. As the issuer's credit risk is publicly announced, the issuer can obtain financing at an appropriate interest rate. A first time and unknown issuer can get recognition by the credit rating to establish his market credibility. Credit rating increases the goodwill of the issuer and so a heavy flow of investment—including foreign investment—occurs. Credit rating motivates the issuer for better performance.

Disadvantages

In spite of different advantages, credit rating also has some disadvantages. For lack of accountability in the process and the close nexus between the agency and the issuer, sometimes there may exist a chance of biased ratings and misrepresentation. Rating only represents the past and present performance of the issuer but the future events may alter the nature of rating. The rating is always based on the information provided by the issuer. So, a chance of concealment of information on the part of the issuer may exist. For the purpose of rating, calculations are usually done on relative terms. So, exact result may not be obtained. Rating is not a recommendation to buy, sell or hold securities as they do not inform on the adequacy of market price, suitability of

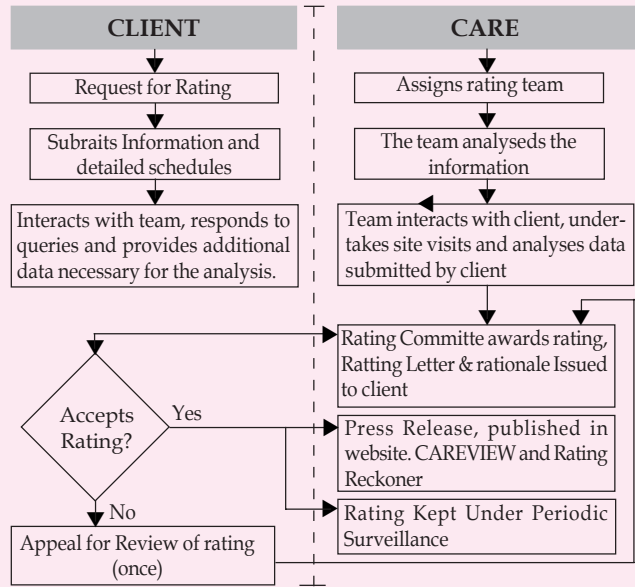
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any security for an investor or the taxability of the payments. The information obtained from issuers for rating is not checked for accuracy or truth. So, the rating may change on account of unavailability of adequate information.

The process of credit rating

The process of credit rating is quite tough. It involves series of steps. The steps are quite complex in nature. In India, the rating process has been adopted from international rating agencies. Indian credit rating starts by a formal request from the issuer (such as MF issuer, bond issuer and IPO issuer etc.) which includes the terms of the rating assignment. Next, a rating team is formed which comprises of different experts required to evaluate the business of the issuer. To facilitate the rating, lists of required information are provided to the issuer and this required information are derived from the experience of the issuers business. The rating agency may also utilize the secondary source of information which may include the utilisation of its own research division; and the rating agency also has a panel of industry experts which may provide sufficient guidance to the rating team about a specific issue. To make rating, estimating of future earnings of the issuer is very important and for this purpose an interaction with the issuer’s management—specially relating to plans, outlook and funding policies—are made. For the purpose of rating plant visiting is also very essential which facilitates understanding of the production process, quality of the technical personnel, cost of production etc. After completing the analysis the findings are discussed at international committee of credit rating agency comprising senior analysts of that agency and, on this stage, an opinion about the rating is also formed. Finally, the rating team makes a presentation in brief about the management and business of the issuer and also the recommendation of internal committee is considered and, at last, a rating is assigned. The assigned rating is communicated to the top management of the issuer company for acceptance –and if the rating is not accepted by the issuer, he has a right to make appeal for review of the rating. The review can be done only if the issuer provides fresh inputs to the rating agency about the issues that were considered for assigning the rating and, if the inputs are proper or convincing, the committee can change its initial decision.

Exhibit 1



Rating Process of CARE

Uses of rating :

Credit rating is a system which is used by investors, issuers, investment banks, broker-dealers and governments. It increases the scope of investments to investors and provides an independent way of measurement of relative credit risk. It also opens the way of capital markets to some borrowers as small governments, start up companies, hospitals and universities who might otherwise be shut down altogether.

Issuers use credit ratings as an independent verification of their creditworthiness. By studying the bond market association it has noted that many institutional investors now prefer that a debt issuance have at least three ratings. Same issuer may have different credit rating for different bonds. Many large credit rating agencies (CRAs) provide “credit rating advisory services” which may advise an issuer how to structure its bond offerings and special purpose entities (SPEs) so as to achieve a given credit rating for a certain debt tranche. But this system may have different problems and so some credit rating agencies refer to rate debt offerings for which advisory services are sought.

Regulators use ratings and permit rating for some regulatory purpose. For example, under the Basel II agreement of the Basel Committee on Banking Supervision, banking regulator permits banks to use credit ratings from certain approved CRAs (called ‘ECAI’, or External Credit Assessment

Institutions) when calculating their net capital reserve requirements. The US Stock Exchange Commission (SEC) permits certain bond issuers to use a shortened prospectus if the issuer has already issued some bonds and has a credit rating above a certain level. On September 29, 2006, the then US president George W. Bush signed into law the "Credit Rating Reform Act of 2006" which requires the SEC to clarify how NRSRO recognition is granted, eliminated the "No Action Letter" approach, makes NRSRO recognition a commission decision and required that the NRSRO to be registered with and be regulated by the SEC. S&P strongly protested the act on the grounds of unconstitutional violation of freedom of speech. Having various kinds of regulatory relief and encouragement, some governments have started their domestic rating agency business.

Sometime credit rating agencies may play an important role in structured financial transactions. Credit ratings often determine the rate of interest and price attached with a particular tranche of loan, based on the quality of loans and assets within that grouping. The rating made by any rating agency is only a "point in time" analysis; it never gives any guarantee of certain rating to any particular tranche. In case of structured finance transactions the rating of rating agency is an opinion—whether the given security will fail to be serviced over a given period of time.

International experiences

The process of credit rating was firstly started in USA. When the capital market of USA started their development process the Railroad Company—the principal user of the market at that time—needed funds from the public to finance their land and railway stocks. The Railroad Company was the first company on which financial information and statistics were published by Varnum Poor from 1954. Now there exist at least five firms which are providing their service regarding credit rating and, among all of them, Standard and Poor (S&P), Mody's Investor Services and Fitch's rating are more important. S&P rates bonds at its own and continuously reevaluates it at a nominal fee and publishes the result in newspapers. S&P assign to corporate and municipal debt with AAA, AA, A, BBB, BB, B, CCC, CC, C and D rating. A +ve or -ve sign implies to show the relative position within the major rating categories.

The credit rating in Japan has started late. But, the system of credit rating has got a high recognition from the investors, issuers and the financial intermediaries. In Japan, the system of credit rating started with the establishment of Japan Bond Research Institution (JBRI) in 1975. JBRI, supported by four other rating agencies, came into seen in the 80s. JBRI was assigned with the principal task of assigning rating for Samurai Bonds, issued by the non-residents. In domestic Bonds, the JBRI rated the convertible bonds, corporate bonds with warrants, and straight bonds. In addition to bond rating, JBRI and other rating agencies are required to do economic and capital market research to provide information to those who want to get them. The rating procedure adopted by the Japanese rating agencies are mainly based on the rating procedures adopted by U.S. rating agencies, i.e. Mody and S & P.

Through out the world the agencies that assign credit ratings for corporations include :

- A.M Best (U.S)
- Bay Corp Advantage (Australia)
- Dominion Bond Rating Service (Canada)
- Dun & Bradstreet
- China Credit Information Service (China)
- Fitch Ratings (U.S)
- Japan Credit Rating Agency (Japan)
- Moody's Investors Services (U.S)
- Standard & Poor's (U.S)
- Rating Agency Malaysia (Malaysia)
- Egan-Jones Rating Company (U.S)
- Brickwork Rating (India)

Credit rating in India

The formal credit rating in India is fairly of recent origin. It is given in SEBI guideline that, before debt issue, credit rating must be obtained from any credit rating agency. Also, RBI guideline requires that an intended issue of commercial paper must have the best credit rating obtained within a month.

The issuer company agrees to provide all information to the appointing credit rating agency according to their necessity. To prevent any misuse of any sensitive information the SEBI (Credit Rating Agency) Regulations 1999, provide that the credit rating agency must keep all such information confi-dentially and must not disclose them to any other person, except where such disclosure is required or permitted by any law for the time being in force.

In India, there exists four credit rating agencies. The name of these credit rating agencies are CRISIL (Credit Rating and Information Services of India Ltd.), ICRA (Investment Information and Credit Rating Agencies), CARE (Credit and Research Ltd.), and Joint venture between Duff and Phelps, USA, and Alliance Capital Ltd, Kolkata.

The main functions of Indian credit rating agencies are to grade the different sectors and companies in terms of performance and offer solutions for upgradations. Very recently they have started services to the mutual fund sector through the introduction of fund utilization services. The major industries recently graded by the credit rating agencies are agriculture, health care industry, infrastructure and maritime industry.

The SEBI (Credit Rating Agencies) Regulation, 1999, has given different guidelines towards the registration and functioning of credit rating agencies in India. The registration procedure means application for the establishment of a new credit rating agency which fulfills the eligibility criteria. They need to prepare internal procedures in accordance with circulars. They are offered by the act guidelines regarding the credit rating procedure. The credit rating agencies must have compliance offers and they are required to show their accounting records.

CRISIL, the first credit rating agency in India, was established in 1987 and was promoted by UTI and ICICI. It commenced its activities from January 1988 and its first rating was released in March 1988. Initially it was set up to rate the firms and entered into the field of assessment service for the banks. CRISIL's majority shareholder is Standard & Poor's, a subsidiary of the McGraw-Hill companies. It is the most important provider of independent credit ratings, risk evaluation, investment research, and data. ICRA is the rating agency which was established after CRISIL and it was promoted by

IFCI. It started its operation in September 1991. The international credit rating agency Moody's Investors service is ICRA's largest shareholder. ICRA has a range of services as rating services, grading services, information services, research and publications. CARE, the third rating agency in India, was incepted in April 1993. CARE has already completed over 5,307 rating assignments having aggregate value of about Rs 14,801 billion (as at December 2008). The three major shareholders of CARE are IDBI Bank, Canara Bank, and State Bank of India. In addition to debt ratings, CARE has experience in providing some specialized grading/rating services as Corporate Governance ratings, IPO grading, Issuer Rating, Mutual Fund credit quality rating etc.

Conclusions

Rating is an opinion of the rating agencies on a specific issue. It is an "guidepost" to lay investors. Credit rating encourages investors to inflow their savings into capital market activities. It is not a suggestion for investors to invest in a particular issue. Still, with the help of rating, investors can enter into the capital market with confidence. CRAs may sometimes face some conflicts to make the rating and, to solve the problem, in December 2004, the International Organisation of Securities Commission (IOSCO) published a code of conduct for CRAs which is designed to address the types of conflicts of interest that CRAs face. All major CRAs have agreed to sign this code of conduct and it has been approved by regular ranging from the European Commission to the U.S Securities Exchange Commission. In India the total rating process is strictly adhered to the SEBI (Credit Rating Agencies) Regulation, 1999, and amendments thereto. Credit rating agencies are now gaining such confidence of public regarding to their rating that it will help to channelling the household savings into corporate investment. □

CORRIGENDUM

Please refer to page 712 in September issue of the Management Accountant under the article "Commodity Derivatives Market of India – An Overview".

The formula of hedge ratio should read as $H = \rho (\sigma_{\Delta CP} / \sigma_{\Delta FP})$ and not as $H = \rho (\sigma_{-ACP} / \sigma_{-AFP})$

The error is genuinely regretted.

Economic Value Addition: The Conceptual Framework

Shivani Gupta*

The metrics of financial performance are important in the corporate and investors' decision-making to the extent they influence the stock prices. Traditionally, accounting based measures of financial performance like EPS, ROI, ROE etc. have been found to influence the stock prices but, of late, due to vulnerability of these measures to accounting distortions, these measures are finding fewer acceptances among the investors. The Economic Value Added (EVA) framework developed by the Stern Stewart & Company is gradually replacing the traditional measures of financial performance due to its robustness and its immunity from "creative accounting".

EVA gained importance in the second half of 1990s and has emerged as one of the most prominent value based management techniques. Fortune magazine has called it "today's hottest financial idea and getting hotter" and management guru Peter Drucker referred to it as a measure of total factor productivity. Companies across a broad spectrum of industries and a wide range of countries have joined the EVA bandwagon and have started reporting their EVA numbers.

In this paper attempt has been made to discuss various aspects relating to EVA like its meaning, calculation, principles, implementation, objectives and its advantages and disadvantages.

The paper is original work of ours and we hope it will contribute to further research on the topic.

Stock price maximization is the most widely accepted objective of listed firms worldwide. The entire corporate decision-making framework revolves around this comprehensive framework. The metrics of financial performance are important in the corporate and investors' decision-making to the extent they influence the stock prices. Traditionally, accounting based measures of financial performance like EPS, ROI, ROE etc. have been found to influence the stock prices but, of late, due to vulnerability of these measures to accounting distortions, these measures are finding fewer acceptances among the investors. The Economic Value Added (EVA) framework developed by the Stern Stewart & Company is gradually replacing the traditional measures of financial performance due to its robustness and its immunity from "creative accounting".

The value of companies' shares will only increase if management can earn a rate of return on new investments which is greater than the rate investors expect to earn by investing in alternative, equally risky, companies. Since the concept of "maximizing shareholder wealth" was developed in the 1970s, more and more aware managers are focusing on strategies which maximize economic returns for shareholders, as measured by dividends plus the increase in the company's share price. One way of viewing the "shareholder value" approach is to value the business using EVA as a valuation methodology.

EVA, that gained importance in the second half of 1990s has emerged as one of the most prominent value based management techniques. Fortune maga-

zine has called it "today's hottest financial idea and getting hotter" and management guru Peter Drucker referred to it as a measure of total factor productivity. Companies across a broad spectrum of industries and a wide range of countries have joined the EVA bandwagon and have started reporting their EVA numbers.

Meaning of EVA

EVA is a registered trademark by its developer, Stern Stewart & Co. Economic Value Added or EVA is an estimate of true economic profit after making corrective adjustments to GAAP accounting, including deducting the opportunity cost of equity capital. By taking all capital costs into account, including the cost of equity, EVA shows the financial amount of wealth a business has created or destroyed in a reporting period. In other words, EVA is profit in the way that shareholders define it. If the shareholders expect, say, a 10% return on their investment, they earn money only to the extent that their share of the NOPAT exceeds 10% of equity capital. The idea behind EVA is that a shareholder must earn a return that compensates the risks taken by him. In other words, equity capital has to earn at least the same return as similar risky investments in equity markets. If that is not the case, then there is no real profit made and, actually, the company operates at a loss from the viewpoint of shareholders. On the

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other hand, if EVA is zero, this should be treated as sufficient achievement because shareholders have earned a return that compensates the risk.

The EVA Theory

EVA can be calculated as :

$$EVA = NOPAT - WACC \times CAPITAL EMPLOYED$$

where

NOPAT refers to net operating profits after taxes. NOPAT is equal to earnings before interest and tax (EBIT) minus adjusted taxes (AT).

EBIT refers to the earnings before interest and tax.

Following accounting items are not to be considered :

A. Income

1. Interest income on loans given by the company
2. Dividend income on financial investments made by the company
3. Profit on sale of assets
4. Profit on sale of investments.

B. Expenses

1. Loss on sale of fixed assets
2. Loss on sale of investments
3. Expenses by subsidiaries.

Others Issues

1. **Brand expenses:** The expenses incurred in brand development should be amortized over a period of years in case the brand is launched and the same survives over the period. The expenses incurred on a brand not subsequently launched should be written off in the same year rather than amortizing the same over a period of years.
2. **Capitalization of R&D expenses :** Similarly, only those R&D expenses which contribute to the revenue in future periods should be deferred. Else, they be written off in these years when they are incurred.
3. **Currency translation:** The reversible currency translation effects should be ignored. The irreversible, periodic and gradual translation effects should be considered to the extent they result in losses. Gains should be ignored to be on conservative side.
4. **Sinking fund depreciation:** The depreciation should be charged in line with the utilized life of assets. However, cases with steady capital investment policy would not require this adjustment.

The objective behind all these adjustments is to reflect the operational efficiency of the company under purview.

AT refers to the adjusted taxes. It is calculated as:

$$AT = \text{Cash Taxes Paid} + \text{Tax Advantage on Interest}$$

WACC refers to weighted average cost of capital. It comprises of two components :

1. Cost of debt: Company's post tax marginal rate of borrowing.
Cost of Debt = Borrowing rate \times (1-marginal tax rate)
2. Cost of equity: Required rate of return on company's share.
Cost of Equity = Risk free rate + Risk premium \times Beta (Capital Asset Pricing Model)
WACC = D/V \times Cost of Debt + E/V \times Cost of Equity

where

- a. D = Average debt
- b. E = Average equity (market capitalization)
- c. V = D + E (Total value of firm)
- d. The risk free rate is equivalent to the government's long-term bond yield
- e. Beta measures the volatility of share price relative to the market
- f. Market risk premium is the extra return investors expect from equity market over and above risk free rate.

Capital Employed : Capital employed is taken to be total assets subtracted with non-interest bearing liability in the beginning of the period. This definition does not consider the capital infused into the business at different times during the year and, hence, has a favorable impact on the resulting values. However, use of average capital employed shall correct this bias.

Following points should be remembered :

- a. Exclude the profits from the ending balance sheet.
- b. Exclude capital work-in-progress since it does not give any returns till commissioned.
- c. Funds locked in investments should be excluded.
- d. Add customer advance where it is considerable.
- e. Average assets can be calculated on average of individual months.

There is a school of thought which is against including capital work-in-progress since it does not contribute to earnings in that year. The counter-view is that capital work in progress is a cost that a company needs to pay today for growth tomorrow. Generally, the values are not considerable, still, calculating from both views is beneficial. It is important to note that it is not wise to do all adjustments suggested above because of the marginal effects of some of them.

Methodology of EVA Approach

Economic Value Added Analysis consists of three primary analyses. A manager should :

- i. Determine the net after-tax operating profit generated by a business.
- ii. Estimate the return required by investors. This calculation requires two inputs. First, identify the dollars invested in the firm. Then determine the cost of equity, or the return shareholders could have expected in dividends and appreciation from investing in stocks about as risky as the company's.
- iii. Determine the Economic Value-Added by subtracting the expected return to shareholders from the profits created by the firm. (Firms with positive Economic Value-Added generate value above and beyond the level expected or required by shareholders.)

Principles of EVA

EVA was developed to help managers to incorporate two basic principles of finance into their decision making :

1. The primary financial objective of any company should be to maximize the wealth of its shareholders.
2. The value of a company depends on the extent to which investors expect that future profits will differ from the cost of capital. By definition, a sustained increase in EVA will result in an increase in the market value of a company. This approach has proved valid and effective for many types of organization. This is because the level of EVA isn't what really matters. Current performance already is reflected in share prices. It is the continuous improvement in EVA that brings continuous increases in shareholder wealth.

Objectives of EVA

Economic Value Added is one among various frameworks within value based management framework. EVA is based on the common accounting based items like interest bearing debt, equity capital, net operating profit etc. The idea behind EVA is that a shareholder must earn a return that compensates the risks taken by him.

The main objectives of EVA are :

1. The foremost objective of the EVA is the true performance measurement of an organization after taking into consideration the stakeholders' perspective.
2. The main objective of EVA is to determine which business units best utilize their assets to generate returns and maximize shareholder value; it can be used to assess a company, a business unit, a single plant, office, or even an assembly line.
3. EVA aims at determining a company's true profit,

- once taxes and the cost of supporting capital have been taken into account. It helps to identify whether a business or project is earning more or less than the capital originally invested in it.
4. EVA aims to ascertain the financial health of the organization and its capacity to generate shareholder 'value', respectively.
5. EVA aims at the financial assessment of an organization which is important for the company's long range success and planning.
6. EVA is a financial tool, which signifies the gain, or loss that remains after assessing a charge for the cost for all types of capital employed in an organization. EVA helps in ascertaining the 'value' of the organization in a given time period.
7. The other objective of EVA is to help the managers in setting organizational goals on the basis of financial assessment and keeping into consideration the main motive of shareholders' wealth maximization.
8. EVA gives the true economic profit and helps the managers in determining the bonuses, corporation valuation and analyzing equities. It aims at acting as a motivator of the managers and presenter of the true and fair picture of the organization to the investors and the shareholders.

Need of EVA

Today's business environment is rife with challenges that have a major impact on performance of companies. Prominent among these are a creation of level playing field due to ease of availability of capital, easy flow of information and mobile talent, and turbulence caused by life cycle inflections, factor costs, global competition, deregulation, foreign exchange and interest rate volatility.

The challenges cited above have opened the eyes of managers to the importance of value creation and its difference with other parameters like earnings. The stock markets are not naive and have been punishing the value destroyers. Hence, it is not surprising to see even the largest conglomerates with long successful track record disintegrating recently in search of value. Flexibility and responsiveness, new aspects of value enhancement have now taken the centre stage and value based management framework seems to be the key to success in future.

There is a long history in economics of preferring "economic" over "accounting" profits. The difference is that the former subtracts opportunity costs, in particular, a "fair" rate of return on investment where accounting profits do not. EVA is the Net Operating Profit after Taxes (NOPAT) minus the money cost

of capital. Money cost of capital means the dollar value of that cost rather than a rate of return. It adds back to the accounting profits the amortization of goodwill or capitalization of brand advertising. There are other similar adjustments of intangibles which EVA considers important. Shareholders of the company receive positive value added when the return from the capital employed in the business operations is greater than the cost of that capital. The EVA concept believes that for every performance measure there is a corresponding wealth measure.

EVA is needed as a performance measurement tool because of the following reasons:

1. Economic Value-Added Analysis accounts for the cost of capital used to invest in a business; it provides a clear understanding of value creation or degradation over time within the company. This information also can be linked to management compensation plans. It helps in assessing the performance of the business.

2. EVA helps in testing the hypotheses behind business plans, by understanding the fundamental drivers of value in the business. This provides a common framework to discuss the soundness of each plan.

3. EVA helps in determining priorities to meet the business's full potential. This analysis illustrates which options have the greatest impact on value creation, relative to the investments and risks associated with each option. With these options clearly understood and priorities set, management has a foundation for developing a practical plan to implement change.

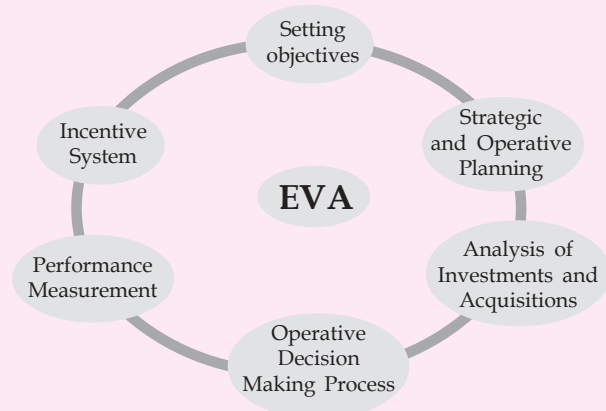
4. EVA helps companies enhance their ability to acquire capital, either by demonstrating that they provide superior returns to investors or by identifying where they need to make improvements.

Significance of EVA

Unlike conventional profitability measures, EVA helps the management and other employees to understand the cost of equity capital. At least in big companies, which do not have a strong owner, shareholders have often been perceived as free source of funds. These flaws are taken care of by the concept of economic value added. The key feature of this concept is that for the first time any measure takes care of the opportunity cost of capital invested in business. The significance of EVA can be summarized by stating that EVA is an integrated approach to all decisive parts of Financial Management System. (Exhibit 2.1)

Exhibit 2.1

EVA as an Integrated Approach to all Decisive Parts of Financial Management System



Following points further explains the importance of EVA:

1. **Better Decision-Making:** EVA clarifies the concept of maximizing the absolute returns over and above cost of capital in creating shareholders' wealth. Hence better investment decisions can be taken with above aim rather than maximizing percentage of ROI. Understanding of EVA enables monitoring of investment decisions closely not only at the level of corporate but at line staff as well.

2. **Fosters New Era of Corporate Control:** EVA centers can be created within an organization and these centers would have capital, revenue and expenditure issue attached to them. It helps identify value drivers and destroyers. Responsibility of positive EVA can be delegated at these centers.

3. **Long-Term Thinking :** Perhaps the biggest benefit of this approach is to get employees and managers to think and act like shareholders. EVA encourages long-term perspective among the managers and employees of organization. It emphasizes that in order to justify investments in the long run they have to produce at least a return that covers the cost of capital. In other case, the shareholders would be better off investing elsewhere. This approach includes that the organization tries to operate without the luxury of excess capital and it is understood that the ultimate aim of the firm is to create shareholder value by enlarging the product of positive spread multiplied with capital employed. The approach creates a new focus on minimizing the capital tied to operations. Firms have so far done a lot in cutting costs but cutting excess capital has been paid less attention.

4. **Capital Allocation Tool :** EVA is a capital allocation tool inside a company as it sets minimum level of acceptable performance with regard to the rate of return in the long run. This minimum rate of

return is based on average (risk adjusted) return on equity markets. The average return is a benchmark that should be reached. If a company cannot achieve the average return, then the shareholders would be better off if they allocated the capital to another industry or another company.

5. Bonus System : EVA has provided a platform on which a flexible bonus payment system can be based. Employees will be paid bonus only when they earn at least equal to the cost of capital employed. This links the bonus with the end result and forces employees to act like shareholders. Proponents of bonus systems based on EVA have suggested that bonuses for corporate managers should always be tied to the long-term capital because short-term EVA can sometimes be manipulated upwards to the cost of long run EVA. The long run can be incorporated into EVA-based bonuses, that is, by banking the bonuses. This would mean that when EVA is good, the managers earn a certain percentage of it, but the bonus should not be paid out of them entirely. If the periodic EVA is negative, then the bonus put in the bank is negative and it decreases the balance already earned. This exposes the managers partly to the risk the shareholders are used to bear. At the same time, it gives incentives to good performers and encourages the bad performers to improve their performance.

6. Flexibility in EVA : Today's business environment is marked by presence of a lot of change drivers like globalization, an intense competition, etc. and the uncertainty surrounding them has created chaos and confusion in organizations. Consequently, flexibility has assumed key role in every facet of organization management and finance function, known for its rigidity, is not too far from application of this paradigm.

EVA can lend a helping hand in this connection in two ways: one that it is inherently flexible, and, secondly, it helps generate flexibility within the organization:

a. The EVA concept allows adjustment of various accounting parameters to suit the desired end purpose. There can be various purposes for which EVA exercise might be carried out such as award of bonus to employees, relative performance of various divisions, assessment of business as a whole, etc. For the purpose of award of bonus to employees, the focus is on the operational income and capital employed to generate such income. Various accounting adjustments are made accordingly. However, for the purpose of assessment of business as a whole, the strategic investment and its returns also come into picture. While comparing various divisions, the capital employed and expenses incurred on corporate centre take a back seat. Thus, EVA concept provides flexibility in hands of finance manager in measuring performance.

b. Not only is the EVA concept inherently flexible, but it also induces flexibility in the organization. The application of concept forces the organization to release/free the excess capital employed. This deployment of excess capital provides the much-required flexibility to the finance manager to improve performance. Since application of concept questions every decision harder, it forces the managers to keep exploring options and encourages keeping the system flexible. This effect is more pronounced in companies which are in distress, and where restructuring is being carried out.

Implementation of EVA

Implementing EVA should be more than just adding one line in the monthly profit report. EVA affects the way capital is viewed and, therefore, it might create some kind of change in the management's attitude. Of course this depends on how shareholder-value-focused the management is and how the company has been in the past. While implementing EVA represents some kind of change in the organization, it should be implemented with care in order to achieve understanding and commitment.

It is vital that group level managers thoroughly understand the characteristics of the concept, how these characteristics affect control and, above all, where the Strategic Business Units (SBUs) stand currently from the viewpoint of these characteristics. Before implementing EVA to any SBU, the group management ought to assess whether the business units are currently cash flow generators in mature businesses or companies in rapidly growing businesses. This assessment should absolutely include careful estimation of relative age and structure of assets in order to know whether the current accounting rate of return is over or under-estimating the true rate of return. Only then can the concept be properly tailored to the unique situation of each individual business unit. Group level managers should also know how to support strategic goals of SBU with EVA and how to create value with EVA in individual SBU.

At the level of SBU, gaining understanding and commitment are also the most important issues. First task is to get the support of all the managers, not only of the Managing Director, but also of directors of production and marketing etc. This is achieved with intense and thorough training. For managerial level, attaining thorough commitment can be facilitated very much by introducing good incentive plan based on EVA.

Gaining commitment of middle level managers and other employees below the top management of business unit is also important. Training and some kind of EVA based compensation plans should also be considered

with these target groups. Keeping EVA simple is also viewed as an important feature in successful implementation. In principle, EVA is simple concept and it should be offered to business units as such.

Problems in Implementation of EVA

The main problems in the implementation of EVA faced by the executives in the corporate world are:

a. The executives worry that EVA and the capital charge it imposes on all the assets discourages the managers from investing, because the increased capital charges depress EVA, at least in short run, and reduce their bonuses. It can lead the managers to underinvest, both in physical assets and in the assets of less tangible nature, such as Research and Development and brand equity. This is because of the capital charges imposed by EVA and from the belief that managers will try to increase their EVA and EVA linked bonuses by milking assets and limiting investment in anything not expected to offer an immediate payoff.

b. The second concern relates to the measurement of EVA at divisional and sub-divisional levels. For the value creating proposition of the multidivisional company to work, the company must achieve synergy, perhaps in the form of shared services and assets or perhaps in the form of vertical integration strategies that enable the company to capture more control over its value chain. The problem for implementation of EVA is that such interactions require overhead allocations and transfer prices. And as anyone who had experience with either will testify, there is arbitrary aspect to just about any allocation or transfer price. Unfortunately, the calculation of EVA at divisional level in synergistic, multidivisional firms is not possible without them.

Uses of EVA

The common uses of EVA are :

1. Assess the performance of the business. Since Economic Value-Added Analysis accounts for the cost of capital used to invest in a business, it provides a clear understanding of value creation or degradation over time within the company. This information also can be linked to management compensation plans.

2. Test the hypotheses behind business plans, by understanding the fundamental drivers of value in the business. This provides a common framework to discuss the soundness of each plan.

3. Determine priorities to meet the business's full potential. This analysis illustrates which options have the greatest impact on value creation, relative to the investments and risks associated with each option. With these options clearly understood and priorities set, management has a foundation for developing a practical plan to implement change.

4. Help companies enhance their ability to acquire capital, either by demonstrating that they provide superior returns to investors or by identifying where they need to make improvements.

Advantages of EVA

EVA is more than just performance measurement system and it is also marketed as a motivational, compensation-based management system that facilitates economic activity and accountability at all levels in the firm. Stern Stewart reports that companies that have adopted EVA have outperformed their competitors when compared on the basis of comparable market capitalization.

Several advantages claimed for EVA are:

1. EVA eliminates economic distortions of GAAP to focus decisions on real economic results.

2. EVA provides for better assessment of decisions that affect balance sheet and income statement or tradeoffs between each through the use of the capital charge against NOPAT.

3. EVA decouples bonus plans from budgetary targets.

4. EVA covers all aspects of the business cycle.

5. EVA aligns and speeds decision making, and enhances communication and teamwork.

Academic researchers have argued for the following additional benefits:

i. Goal congruence of managerial and shareholder goals achieved by tying compensation of managers and other employees to EVA measures. (Dierks & Patel, 1997)

ii. Better goal congruence than ROI. (Brewer, Chandra, & Hock, 1999)

iii. Annual performance measured tied to executive compensation.

iv. Provision of correct incentives for capital allocations. (Booth, 1997)

v. Long-term performance that is not compromised in favor of short-term result. (Booth, 1997)

vi. Provision of significant information value beyond traditional accounting measures of EPS, ROA and ROE. (Chen & Dodd, 1997)

Limitations of EVA

It would be wrong to say that EVA is not beset with any drawbacks. Though it provides a new tool in the hands of management, it has its own limitations :

a. EVA does not take into cognizance current market value of assets and book value is taken into account in calculations. This is, of course, misleading and presents a distorted picture; but estimating the current market value of assets is very difficult and often impractical.

b. EVA has established superiority over other

measures of performance but that does not mean that EVA alone can clearly tell how the plans are going and strategic goals being met. The companies that have invested heavily today and expect positive cash flow only in distant future are extreme examples that have negative EVA in near future. Their performance can be better judged by market share, sales growth etc.

c. The concept of EVA requires knowledge of accounts internal to organization to a great extent and their availability to the external world is a big constraint. This constraint becomes even more pronounced in countries like India where even the annual reports published by companies have scanty disclosures. Moreover, it has to be borne in mind that EVA gives one year snapshot of company's operational performance.

Implications of EVA in Corporate Control

Unlike conventional profitability measures, EVA helps the management and also other employees to understand the cost of equity capital. At least in big public companies, which do not have a strong owner, shareholders have often been conceived as a free source of funds. Similarly, business unit managers often seem to think that they have the right to invest all the retained earnings that their business unit has accumulated although the group would have better investment opportunities elsewhere. EVA might change the attitude in this sense because it emphasizes the requirement to earn sufficient return on all capital employed.

Including capital costs in the income statement helps everybody in the organization to see the true costs of capital. Rate of return does not work that way because nobody can explicitly see the costs caused by, e.g. inventories, receivables, etc. The approaches showing the consequences of invested capital under the line as profit with ROI or over the line as cost with EVA are totally different. That is why organizations tend to increase their capital turnover after introducing EVA, although they have formerly used ROI that ought to take into account the capital as well. When calculating EVA, the cost of equity and debt can be subtracted in the income statement earlier than after the net operating profit. If all the revenues and costs are grouped by functions or by processes, then it is, of course, practical to allocate the capital costs to these functions or processes. The capital costs can also be allocated directly to products. Part of the capital costs is variable in nature, e.g., inventories, trade receivables, and, thus, they fluctuate according to the sales volume. If the true capital costs were not included fully in product costs, then those cost calculations (for price determination) are misleading. The error is bigger the more capital intensive the production is.

At best EVA can be a new approach to view business. Perhaps the biggest benefit of this approach is to get the employees and managers to think and act like shareholders. It emphasizes that, in order to justify investments in the long run, they have to produce at least a return that covers the cost of capital. In other case the shareholders would be better off investing elsewhere. This approach includes that the organization tries to operate without lazy or excess capital and it is understood that the ultimate aim of the firm is to create shareholder value by enlarging the product of positive spread between return and cost of capital multiplied with the capital employed. The approach creates a new focus on minimizing the capital tied to operations. Firms have so far done a lot in cutting costs but cutting excess capital has been paid less attention. The power of EVA-approach is something that most academic studies about EVA and share price correlation fail to trace.

How to improve EVA

There are countless individual operational things that create shareholder value and increase EVA. Often EVA does not directly help in finding ways to improve operational efficiency except when improving capital turnover. Nor does EVA help directly in finding strategic advantages that enable a company to earn abnormal returns and thus create shareholder value. It is, however, often helpful to understand the basic ways in which EVA and thus the wealth of shareholders can be improved. Increasing EVA falls always into one of the following three categories :

1. Rate of return increases with the existing capital base. It means that more operating profits are generated without tying any more capital in the business.
2. Additional capital is invested in business earning more than the cost of capital. (Making NPV positive investments.
3. Capital is withdrawn or liquidated from businesses that fail to earn return greater than the cost of capital.

The first method includes all the countless ways to improve operating efficiency or increase revenues. Increasing rate of return with current operations and new investments are often linked; in order to improve the efficiency of ongoing operations, companies often do investments which enhance the return on current capital base.

The fact that the wealth of shareholders increase with investments returning more than the cost of capital is probably known in organizations if they also use some kind of weighted average cost of capital (WACC) and Net present value (NPV) methodology

in investment calculations. This rule is actually completely same as accepting only NPV-positive investments.

The third category, withdrawing capital, is probably not so widely understood and applied as the previous ones. It is, however, also very important to realize that shareholder value can also be increased if capital is withdrawn from businesses earning less than the cost of capital. Even if an operation has positive net income, it might pay to withdraw capital from that activity. It is also kind of withdrawal when access inventories and receivables—and thus the capital costs caused by them—are reduced without corresponding decreases in revenues.

These categories and ways to improve EVA might appear to be quite simple. They are certainly not new ways to improve the position of shareholders. Decreasing cost of capital is not included in this list of methods. That is because it can not normally be done without changing line of business and, in that way, changing business risk. Changing financial leverage affects WACC only slightly via increased tax shield.

Conclusion

At best EVA helps create a mindset throughout the organization that encourages managers and employees to think and behave like owners. As companies introduce new tools for managing their businesses, it is imperative that each manager also develop a working knowledge of these tools. At operational level, this new approach often leads to increased shareholder value through increased capital turnover. EVA has been helpful because it forces companies to pay attention to capital employed and especially to excess working capital. The advent of this concept has provided flexibility to the management in measuring the performance of their business operations. It has to be kept in mind that EVA is not a wealth creator; it only measures value.

EVA can provide a valuable measure of wealth creation and can be used to help align managerial decision making with firm preferences; however, it is only one piece of the performance measurement puzzle and it must be used in conjunction with a balanced set of measures that provide a complete picture of performance. □



Cost Accounting Standards Board of ICWAI

Request For Comments

The Central Council of the Institute has approved the release of **Exposure Draft of Revised Cost Accounting Standard 3 on Overheads (Revised CAS 3)** as recommended by the Cost Accounting Standards Board (CASB), the standard-setting body of the Institute on July 21, 2010. The proposed revised standard may be modified in light of comments received before being issued as a standard in final form.

The members are requested to give their **specific views** on paragraph 4.12 of the ED CAS, particularly on the exclusion of following points from the definition of Overheads :

- *Donation and gifts including political donations;*
- *Contribution for Corporate Social Responsibility (CSR) activities;*
- *Bad Debts;*

Please submit your comments on the proposed ED, preferably by email, latest by **November 8, 2010**.

Comments should be addressed to

The Secretary

Cost Accounting Standards Board
The Institute of Cost and Works Accountants of India
ICWAI Bhawan, 3rd Floor
3, Lodi Road, Institutional Area
New Delhi 110 003

Emailed responses should be sent to : **casb@icwai.org**

Copies of this exposure draft may be downloaded from the ICWAI website at **<http://www.icwai.org>**



Exposure Draft on CAS 3(R 1) Cost Accounting Standard on “Overheads”

The following is the revised COST ACCOUNTING STANDARD 3 (CAS 3) issued by the Council of The Institute of Cost and Works Accountants of India on “Overheads”. In this Standard, the standard portions have been set in **bold italic** type. This standard shall be read in the context of the background material, which has been set in normal type.

1. Introduction

1.1 This standard deals with the principles and methods of determining the Overheads.

1.2 This standard deals with the principles and methods of classification, measurement and assignment of Overheads, for determination of the cost of product or service, and for the presentation and disclosure in cost statements.

2. Objective

The objective of this standard is to bring uniformity and consistency in the principles and methods of determining the Overheads with reasonable accuracy.

3. Scope

This standard shall be applied to cost statements, which require classification, measurement, assignment, presentation and disclosure of Overheads including those requiring attestation.

4. Definitions

The following terms are being used in this standard with the meaning specified :

4.1 Abnormal Cost : An unusual or atypical cost whose occurrence is usually irregular and unexpected and/or due to some abnormal situation of the production or operation.¹

4.2 Absorption of Overheads : Absorption of overheads is charging of overheads from cost centers to products or services by means of absorption rates for each cost center.

4.3 Administrative Overheads : Cost of all activities relating to general management and administration of an organisation.

Administrative overheads shall exclude production overheads, marketing overheads and finance cost. Production overheads include administration cost relating to production, factory, works or manufacturing.²

4.4 Cost Centre : It is an organisational unit, in rela-

tion to which costs are accumulated and used for the purpose of cost control.

A cost centre includes a process, function, activity, location, item of equipment, group of persons or any other unit in relation to which costs are accumulated.

4.5 Cost Object : This includes a product, service, cost centre, activity, sub-activity, project, contract, customer or distribution channel or any other unit in relation to which costs are ascertained.³

4.6 Distribution Overheads : Distribution overheads, also known as Distribution Costs, are the costs incurred in handling a product from the time it is ready for dispatch until it reaches the ultimate consumer.⁴

For example :

- Secondary packing
- Transportation cost
- Warehousing cost
- Cost of delivering the products to customers, etc.
- Clearing and forwarding charges
- Cost of mending or replacing packing materials at distribution point.

4.7 Imputed Cost : Hypothetical or notional cost, not involving cash outlay, computed for any purpose.⁵

4.8 Indirect Employee Cost : The employee cost, which cannot be directly attributed to a particular cost object.⁶

4.9 Indirect Expenses : Expenses which cannot be directly attributed to a particular cost object.⁷

¹Adapted from CAS 1 Para 6.5.19

²From CAS 11 paragraph 4.3

³Adapted from CIMA Terminology

⁴From CAS 9 paragraph 4.7

⁵Adapted from CAS 1 paragraph 6.5.13

⁶Adapted from CAS 1 paragraph 6.2.10

⁷Adapted from CAS 1 paragraph 6.2.12

4.10 Indirect Material Cost : Materials, the cost of which cannot be directly attributed to a particular cost object.⁸

4.11 Normal Capacity : Normal Capacity is the production achieved or achievable on an average over a number of periods or seasons under normal circumstances taking into account the loss of capacity resulting from planned maintenance.⁹

4.12 Overheads : Overheads comprise indirect materials, indirect employee costs and indirect expenses which are not directly identifiable or allocable to a cost object in an economically feasible manner.

Overheads are normally classified on the basis of functions to which the overheads are related. For example :

- Production Overheads
- Administrative Overheads
- Marketing Overheads.

The following items, among others, shall not form part of overheads :

- Direct Taxes levied by the Central Government, State Government, or Local Authorities, that are in the nature of tax on profits such as Income Tax, Minimum Alternate Tax, and other direct taxes such as Wealth Tax
- Loss or gain on sale of assets
- Finance cost
- Foreign Exchange gains or losses
- Gain or Loss on inventory valuation
- Bad Debts
- Donations and gifts including political donations.

4.13 Production Overheads : Indirect cost involved in the production process or in rendering service.¹⁰

The terms Production Overheads, Factory Overheads, Works Overheads, and Manufacturing Overheads denote the same meaning and are used interchangeably. Production overheads shall include administration cost relating to production, factory, works, or manufacturing.

4.14 Marketing Overheads : Marketing Overheads comprise selling overheads and distribution overheads.¹¹

4.15 Selling Overheads : Selling Overheads, also known as Selling Costs, are the expenses related to sale of products and include all Indirect Expenses in sales management for the organization.¹²

4.16 Standard Cost : A predetermined cost of resource inputs for the cost object computed with

reference to set of technical specifications and efficient operating conditions.

Standard costs are used as scale of reference to compare the actual cost with the standard cost with a view to determine the variances, if any, and analyse the causes of variances, and take proper measure to control them. Standard costs are also used for estimation.¹³

5. Principles of Measurement

5.1 Overheads representing procurement of resources shall be determined at invoice or agreed price including duties and taxes, and other expenditure directly attributable thereto – net of discounts (other than cash discounts), taxes and duties refundable or to be credited.

5.2 Overheads other than those referred to in paragraph 5.2 shall be determined on the basis of amount incurred in connection therewith.

For example, machinery spare fabricated internally or a repair job carried out internally will include costs incurred on material, employees and expenses.

5.3 Any abnormal cost where it is material and quantifiable shall not form part of the overheads.

5.4 Finance costs directly incurred in connection with self-generated or procured resources shall not form part of overheads.

5.5 Overheads shall not include imputed cost.

5.6 Price variances related to overheads, where standard costs are in use, shall be treated as part of overheads. The portion of usage variances attributable to normal reasons shall be treated as part of overheads. Usage variances attributable to abnormal reasons shall be excluded from overheads.

5.7 Any Subsidy/Grant/Incentive or amount of similar nature received/receivable with respect to overheads shall be reduced for ascertainment of the cost of the cost object to which such amounts are related.

5.8 Fines, penalties, damages and similar levies paid to statutory authorities or other third parties shall not form part of the overheads.

5.9 Credits/Recoveries relating to the overheads, material and quantifiable, shall be deducted from the total overhead to arrive at the net overheads.

⁸Adapted from CAS 1 paragraph 6.2.8

⁹Adapted from CAS 2 paragraph 4.4

¹⁰From CAS 9 paragraph 4.13

¹¹From CAS 9 paragraph 4.10

¹²From CAS 9 paragraph 4.14

¹³From CAS 7 paragraph 4.15

5.10 Any change in the cost accounting principles applied for the measurement of the overheads shall be made only if it is required by law, or for compliance with the requirements of a cost accounting standard, or a change would result in a more appropriate preparation or presentation of cost statements of an entity.

6. Assignment

6.1 While assigning overheads, traceability to a cost object in an economically feasible manner shall be the guiding principle. The cost which can be traced directly to a cost object shall be directly assigned.

6.2 Assignment of overheads to the cost objects shall be based on either of the following two principles :

- i) Cause and Effect – Cause is the process or operation or activity and effect is the incurrence of cost.
- ii) Benefits received – Overheads are to be apportioned to the various cost objects in proportion to the benefits received by them.

In case of facilities created on a standby or ready to serve basis, the cost shall be assigned on the basis of expected benefits instead of actual.

6.3. Primary and Secondary Assignment of Overheads : In a production environment, there are production cost centers and service cost centres which provide services to the production cost centres and other service cost centres. The first step to be followed is to assign the production overheads to the production and service cost centres on an appropriate basis. The second step is to assign the cost of service cost centres to production cost centres on an appropriate basis. The first step is termed as primary assignment and the second step is termed as secondary assignment of overheads.

6.3.1 Primary Assignment of Overheads : The basis for primary assignment of overheads is to be selected following the two principles as given in paragraph 6.2.

6.3.2 Secondary Assignment of Overheads : Secondary assignment of overheads may be done by following either Reciprocal basis or Non-Reciprocal Basis. While reciprocal basis considers the exchange of service among the service departments, non-reciprocal basis considers only one directional service flow from a service cost centre to other service cost centres and production cost centres.

6.4 The overheads assigned to the production cost centres shall be charged to products/services through an overhead absorption rate for each cost centre.

Common bases for assignment of Production Overheads to Cost Objects are :

Bases of denominator	Applicability
Unit of Production	When single product is produced or various products are similar in specifications
Material Cost	Where the overheads are mostly related to material
Direct Employee Cost	When conversion process is labour intensive and wage rates are substantially uniform
Direct Employee Hour	When conversion process is labour intensive
Machine Hour or Vessel Occupancy or Reaction Hour or Crushing Hour etc.	When production mainly depends on performance of the machine, vessel or other facility

A preferred approach for assignment of overheads to cost objects is to use multiple drivers instead of a single driver such as machine hour, where feasible.

6.5 Alternate approach to Assignment of Overheads :

A preferred approach to assignment of overheads is the assigning of cost of resources to activities and assigning the cost of activities to Cost Objects through use of cost drivers, wherever feasible.

7. Presentation

7.1 Overheads shall be presented as separate cost heads under various broad functions like production, general administration and marketing in the cost statement.

7.2 Element-wise and behavior-wise details of the overheads shall be presented, if material.

8. Disclosures

8.1 The Cost Statements shall disclose :

- 1. The basis of distribution of overheads to the cost objects.
- 2. Overheads incurred in foreign exchange.
- 3. Overheads relating to resources received from or supplied to related parties.¹⁴
- 4. Any Subsidy/Grant/Incentive or any amount of similar nature received/receivable reduced from overheads.
- 5. Credits/Recoveries relating to the overheads.
- 6. Any abnormal portion of the overheads.
- 7. Penalties and damages excluded from the overheads.

8.2 Disclosures shall be made only where material, significant and quantifiable.

8.3 Disclosures shall be made in the body of the Cost Statement or as a footnote, or as a separate schedule.

8.4 Any change in the cost accounting principles and methods applied for the measurement and assignment of the overheads during the period covered by the cost statement which has a material effect on the overheads shall be disclosed. Where the effect of such change is not ascertainable wholly or partly the fact shall be indicated.

¹⁴Related party as per the applicable legal requirements relating to the cost statement as on the date of the statement

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BCOM, FICWA
Dy. General Manager (Fin.
& Cost), Indo Count Indus-
tries Ltd., 301, Arcadia,
Nariman Point,
Mumbai 400 021
- M/24786
Shri R. Sridar
BCOM, MBA, FICWA
9/5 "Saranga Nivas",
16th Street, Jai Nagar,
Arumbakkam,
Chennai 600 106
- M/24821
Shri Surjit Singh
BCOM, FICWA
Surjit Singh & Co., # 119,
Govind Vihar, Baltana,
Zirakpur, SAS Nagar,
Mohali 140 603
- M/24969
Shri Ajay Kumar Popli
BCOM, FICWA
H.No. 68, Hanuman Mandir
Marg, Vidya Nagar,
Meham Road,
Bhiwani 127 021
- M/25014
Ms. Manisha Avadhut
Ketkar, BCOM, FICWA
Unit No. 35/36, Row HS
No. 18, "Sankul", Near
Deenanath Hospital,
Erandwane, Pune 411 004
- M/25079
Shri Akshaya Kumar Sahoo
BCOM(HONS), LLB,
FICWA
M/s Siemens Ltd., SRE
Division, Plot No. 6A, Sec-
tor-18, Maruti Industrial
Area, Huda,
Gurgaon 122 015
- Admission to Associateship
Date of Admission :
9th July 2010**
- M/29246
Shri Sekhar Sengupta
BCOM(HONS), AICWA
24/1, Prince Dilwarjah Lane,
PO.: Garden Reach,
Kolkata 700 024
- M/29247
Shri Dharmendra Kumar
BCOM, FCA, AICWA
C 1111, Sector A,
Mahanagar,
Lucknow 226 006
- M/29248
Shri G.R.V. Phani Kumar
MCOM, AICWA
H No. 34, 8th Inner Cross,
Shanti Layout Bus Stop,
Ram Murthy Nagar
Bangalore
- M/29249
Shri Partha Narayan Dash
MCOM, AICWA
At/PO. Aikund Nuagan,
Via Pritipur, Dist. Jajpur
Jajpur 755 013
- M/29250
Shri Deepak Kumar Gupta
BCOM, AICWA
C/o. Ashok Gupta, C 302,
GayatriSatsang, B/H. Vishnu-
Shivam Mall, Thakur Village,
Kandivali East, Mumbai
- M/29251
Shri Vaibhav Bansal
BCOM, AICWA
L 18, Vijay Chowk, Laxmi
Nagar, Delhi 110092
- M/29252
Shri Prashant Agarwal
MCOM, AICWA
B 1/37, Sector Q, Aliganj,
Lucknow 226024
- M/29253
Shri Hiren Chandrakant
Goradia, BCOM, AICWA
A/703, Paras The Golden
Touch Co-op. Hsg. Soc. Ltd.,
Opp : R N A Royale Park,
M. G. Road, Kandivali
(West), Mumbai 400067
- M/29254
Shri Bimalendu Jena
BSC(HONS), AICWA
Plot No : A/L 1, V.S.S.
Nagar, Bhubaneswar,
Dist. Khurda,
Bhubaneswar 751 007
- M/29255
Ms Veena Kandpal
MCOM, AICWA
Q.No. 36 B, DDA LIG Flats,
Madhuban Enclave,
Madipur, Rohtak Road,
New Delhi 110 063
- M/29256
Shri Rajesh Vallabhadas
BA, MCOM, MBA, AICWA
New No. 10, Old No. 11,
1st Floor, Kesava Street, Park
Town, Chennai 600 003
- M/29257
Shri Ritesh Kumar
BCOM(HONS), AICWA
B3, 1st Floor, Chandrarang
Classic, Keshav Nagar,
Chinchwadgaon,
Pune 411 033
- M/29258
Shri Vinod Kumar
MCOM, AICWA
C/o. Tarsem Chand, First
Floor, H. No. 227, 16 Acre,
Barnala, Dist. Barnala,
Barnala 148 101
- M/29259
Shri Pakala Mohan Rao
MCOM, AICWA
H. No. 6-175/2, Srinagar
Colony, Kothagudem,
Dist. Khammam,
Kothagudem 507 101
- M/29260
Shri Ankit Garg
BCOM, AICWA
C 2677, Rajaji Puram,
Lucknow 226 017
- M/29261
Ms Lipsa Mohanty
BSC, AICWA
C/o. Upendranath Mohanty,
Orikanta, Nemalo,
Cuttack 754 293
- M/29262
Shri Raghavendra Kumar
Balanagu, BCOM, AICWA
Flat No. A2, Rangasayi
Apartments, No. 33, Warren
Road, Mylapore,
Chennai 600 004
- M/29263
Shri Amit Rawat, AICWA
Sector D, 453, Mandir Marg,
New Delhi 110 001
- M/29264
Shri Kiran Muralidhar Patil
BE, LLB, AICWA
A 1504, Safal Twins, Deonar,
Mumbai 400088
- M/29265
Shri Durga Prasad Sarda
BCOM(HONS), AICWA
Wasantika Apartments, Flat
No. S 2, Sitaramdas Mandir
Road, Raj Nagar,
Nagpur 440013
- M/29266
Shri Sabheak Singh
MCOM, AICWA
55/301, Evershine Millen-
nium Paradise,
Thakur Village, Phase V,
Kandivali (E),
Mumbai 400101
- M/29267
Shri Shravan Ramchandra
Satpute, MCOM, AICWA
New Siya Co-op. Hsg.
Society, 5th Floor, Flat
No. 503, Veer Savarkar Road,
Pak Baug, Kalyan 421 304
- M/29268
Ms Lakshmi Kanthi
Nidamarthy,
BCOM, AICWA
G2, Balaji Residency, Road
5P, Krishnanagar Colony,
Moula Ali, Hyderabad.
- M/29269
Ms M. Sasi
BCOM, AICWA
New No. 18, Old No. 6,
80th Street, Ashok Nagar,
Opp : PTC Main Entrance,
Chennai 600 083

- M/29270
Shri Shankar Vijay
MCOM, AICWA
C 3, Type III, BSNL Staff
Quarter MIDC, Wardha,
Wardah 442 006
- M/29271
Shri Jay Vijay Choksi
BCOM, CIMA, AICWA
802, Vijay Tower, Adajan
Patiya, Rander Road,
Surat 395 009
- M/29272
Shri Dipak J. Rajpara
BCOM, AICWA
802, Vijay Tower, Adajan
Patiya, Rander Road,
Surat 395 009
- M/29273
Shri Chenna Bathny Ram
Manoj, MBA(FIN), AICWA
2-17-127/34, Annapurna
Nagar, Uppal,
Hyderabad 500 039
- M/29274
Shri Jarajapu Raja Sekhar
Babu, BCOM, MBA, AICWA
Flat No. F, 2nd Floor, Varun
Block, Pavan Residency,
Simhachalam Road,
R.R.V. Puram,
Visakhapatnam 530 029
- M/29275
Shri K. Siva Rama Krishna
MCOM, AICWA
H. No. 45-257/10, Shirdi-
nagar Colony, Street No. 4,
Upperguda, Moulali,
Hyderabad 500 040
- M/29276
Ms G. Aruna Kamakshi
MCOM, AICWA
No. 22, Sankarlal Jain Street,
Nehru Nagar, Chromepet,
Chennai 600 044
- M/29277
Shri Sivaprasad Kopalle
MCOM, AICWA
Flat No. 202, Vinayaka
Ramchander Residency,
Street No. 4, Vidyanagar,
Hyderabad 500 044
- M/29278
Shri Dasika V.R. Mallikarjun
BCOM, AICWA
12 - 32/1, Income Tax
Colony, S.R.K. Puram,
Saroornagar Post,
Hyderabad 500 035
- M/29279
Shri Ranjit Nair
BCOM(HONS), ACA, AICWA
203, Serven Heights,
20/1, Laxmi Layout,
1st Cross, Munekolala,
Bangalore 560 037
- M/29280
Shri Vohra Burhanuddin
Abbasbhai, MCOM, AICWA
103 AL Kareem Complex,
Near Ayurvedic College,
Rehmani Park, Ayurvedic
Road, Vadodara 390 019
- M/29281
Ms Sindhu S.
MCOM, AICWA
64/819, Komaroth House,
Near Ayyappankavu Temple,
Chittoor Road,
Cochin 682 018
- M/29282
Shri Ameya B Naware
BCOM, AICWA
Mayuresh Apartments, Sai
Section, Defence Colony,
Opp : Gautam Hospital
Ambarnath (E),
Thane 421 501
- M/29283
Shri Tapas Adhikari
BCOM(HONS), AICWA
49 B Pratapaditya Road,
Kolkata 700 026
- M/29284
Ms Taruna Aneja
BCOM (HONS), AICWA
C 243, (Opp : B Block
Market) Rajajipuram,
Lucknow 226 017
- M/29285
Ms Barsha Agarwal
AICWA
78, Mohanty Nivas, CTC
Road, Sabarsahi Lane,
Bhubaneswar 751 006
- M/29286
Shri Ramesh Balasubrama-
nian, BCOM, AICWA
451, 7th Cross, MICO
Layout, BTM II Stage,
Bangalore
- M/29287
Ms Swati Bhatt
BCOM(HONS), AICWA
Flat No. D2 - S4, Tejovalay
Society, 118/2C, Near Cipla
Foundation, Warje,
Pune 411 052
- M/29288
Shri R. Govindarajan
BCOM, AICWA
102, Sripathi Nilaya, Vallaba
Nagar, Vasanthpura Road,
Konanakunte Cross,
Bangalore
- M/29289
Shri Babu Rao Gangadhara-
bhatla, MCOM, AICWA
K2 - 23, Cross Road No. 5,
Telco Colony,
Jamshedpur 831 004
- M/29290
Ms Sumana Ghosh
BCOM(HONS), AICWA
13, Prince Anwar Shah Lane,
Kolkata 700033
- M/29291
Shri Nirmal Kumar Jena
BSC, AICWA
65, Masjid Moth, 3rd Floor,
Near South Extn, Part II,
New Delhi 110 049
- M/29292
Shri Jickson Jacob A,
BCOM, AICWA
AL Futtaim Technologies,
P. O. Box 5866, Dubai,
UAE., Dubai
- M/29293
Shri J. Kumar
MCOM, MBA(FIN), AICWA
No. 6, Third Main Road,
Annanagar, Pammal,
Chennai 600 075
- M/29294
Shri Jitendra Kumar
BSC, LLB, AICWA
55/27/37, Purbo-Sinhi
Road, (FakirGhosh)5th Lane,
Kolkata 700 030
- M/29295
Shri K. Senthil Kumar
MCOM, MPHIL, AICWA
C3/28, Mohan Nagar, Salem
Steel Plant Township,
Salem 636 030
- M/29296
Shri Krishnamurthy S.
Kotha, BCOM, AICWA
C/o.M.ChandraSekhar, Flat
No.G4, Bhargava Residency,
Sai Narayana Reddy Colony,
Nizampet Village,
Hyderabad 500 082
- M/29297
Shri Ankit Tusharbhai
Mankodi, MCOM, AICWA
G7, White Gate Colony, Atul
Colony, Atul, Dist. Valsad,
Valsad 396 020
- M/29298
Ms M. Indumathi
BCOM, AICWA
No. 24, Velacherry Road,
Little Mount, Saidapet,
Chennai 600 015
- M/29299
Shri Ranjan Kumar Maity
MCOM, AICWA
17/21, Dakshindari Road,
2nd Floor, Dakshindari
P.S. Lake Town,
Kolkata 700 048
- M/29300
Shri Sukhamoy Mukhopa-
dhyay, MCOM, BED,
AICWA
Radharani Bhaban, Vill +
P.O. Moutosh, 7 Ana, Via.
Santaldih, Dist. Purulia,
Santaldih 723145
- M/29301
Ms Guntupalli Nagalakshmi
BSC, AICWA
H. No. BC 213, Babu Camp,
Kothagudem, Dist. Kham-
mam, Kothagudem 507 101

- M/29302
Shri Partha Sarathi Pujapanda, BSC, AICWA
C/o Sridhar Pujapanda,
At Ramayani Devi Sahi,
Old Town, Dist. Khurda,
Bhubaneswar 751 002
- M/29303
Shri Raja S. P.
BCOM, AICWA
Attoor Puthen Veedu,
Manakkara Sastham Cotta –
P.O. Kollam, Kollam 690521
- M/29304
Shri Prakash Ramachandran
BCOM, AICWA
Post Box No. 18359, Jebel Ali
Free Zone, UAE, Dubai
- M/29305
Shri Muruli S, BSC, AICWA
No. 1803, 40th A Cross,
9th Block, Jayanagar,
Bangalore 560 069
- M/29306
Shri Sharma Anand Ramprasad,
BCOM, AICWA
D302/303, Walchand Plaza,
Geeta Nagar, Bhayander
(West), Dist. Thane
Thane 401 101
- M/29307
Shri Kurra Srinivasa Rao
MCOM, AICWA
Plot No. 89, H. No. 5-5-33/
32/3, Behind Metro Vignana-
napuri Colony, Kukatpally,
Hyderabad 500 072
- M/29308
Shri Ananda Sahu
BCOM, AICWA
A 241, PTS, NTPC - TSTPS,
PO- Deepsikha, Dist. Angul,
Angul 759 147
- M/29309
Shri Dalpreet Singh
MCOM, AICWA
9/15 A, Moti Nagar,
New Delhi,
New Delhi 110 015
- M/29310
Shri Manoj Kumar Sinha
BCOM(HONS), AICWA
3/411, Viram Khand, Gomti
Nagar, Lucknow 226 010
- M/29311
Shri Sudhir Kumar Sonker
MCOM, LLB, AICWA
14/156, Vikas Nagar,
Lucknow 226022
- M/29312
Shri Jasbir Singh
MCOM, AICWA
New Jodhamal Bagh, Behind
Aman Palace, Bajri Com-
pany, Pathankot Dist.
Gurdaspur,
Gurdaspur 145 001
- M/29313
Ms Yogita Uday Ghodke
MCOM, AICWA
759/105, Mayur Corner,
Flat No. 12, Prabhat Road,
Lane 4, Deccan Gymkhana,
Opp : PYC Court
Pune 411 004
- M/29314
Shri Venkata Narasimha
Murthy V, BCOM, AICWA
58-14-99/4/6, H I G 30, Flat
No. 203, Sri Ganesh Nivas,
Marripalem Vuda Layout,
Visakhapatnam 530 009
- M/29315
Shri Baskar V.
BCOM, AICWA
No. 67, Ground Floor, Jyothi
Nagar, 1st Cross, HAL Post,
Bangalore 560 017
- M/29316
Shri Sandeep Ramesh
Bhonde, MCOM, AICWA
40/32 Erandawane Bhonde
Colony, Gopal Kripa,
Pune 411 004
- M/29317
Shri Anil Jose Alby Joseph
BCOM, AICWA
Kuzhivilakom House,
Family Unit No. 26, Valia
Veli, Thiruvananthapuram,
Trivandrum 695 021
- M/29318
Shri T Raj Kumar Jain
BCOM, AICWA
Sri Arihant, 32, Vanigar
Street, Thirupporur
Thirupporur 603 110
- M/29319
Shri S Ramanand Karthi-
keyan, BCOM, AICWA
3 (Old # 2), Kasturi Estate
1st Street, Alwarpet,
Chennai 600 018
- M/29320
Shri Ashish Ramesh
Chandra Khatri, BCOM,
AICWA
M/s. Enercon (India) Ltd.,
Plot No. 33, Unit II, Daman-
Patalia Road, Bhimpore,
Daman 396 210
- M/29321
Ms Gomathy Loganathan,
MCOM, AICWA
No. 166, Geetha Nilaya, 5th
Main Road, Konenagahara,
H A L, Bangalore 560 017
- M/29322
Ms Rar Lalitha Lakshmi
BSC, MA, AICWA
1, Ground Floor, Aparna
Paradise, Phase IV, Partha-
sarathy Street, S S Colony,
Madurai.
- M/29323
Shri Abhishek Mundhra
MCOM, AICWA
32/4 Sahitya Parishad Street,
Shanti Niket Apartment,
Goa Bagan, Block D,
Flat 114, Kolkata 700 006
- M/29324
Shri Omprakash Nayak
BCOM, AICWA
887, Kandrapokhari, Lewis
Road, Samantarapur, Old
Town, Bhubaneswar 751 002
- M/29325
Shri M S Ramesh
BCOM, AICWA
P. O. Box 105828, Abu Dhabi
United Arab Emirates,
Abu Dhabi
- M/29326
Shri R Radhakrishnan
BSC, MCOM, AICWA
House No. 6, ATC Anna
Nagar, Dhasanaickenpatti
PO., Salem Dist. Salem.
- M/29327
Shri Nitul Sarmah
BCOM, AICWA
C/o. Sri Rama Kanta Kalita,
H. No. 3, (Bylane 4), Manik
Nagar, (Rajdhani Nursery),
Guwahati, Guwahati.
- M/29328
Shri Kishore Sanam
MSC, BED, AICWA
Virupakshi Apartments,
S 3/4, 2nd Main Road,
5th Cross, Sadashiv Nagar,
Belgaum 590 002
- M/29329
Shri S Subramanian
MCOM, AICWA
" Royale Tulip ", 18/47, 1st
Floor, C 3, B B Road, Vya-
sarpadi, Chennai 600 039
- M/29330
Ms V Yaminah
BCOM, MFM, AICWA
"Nalla Marathaar Illam",
4/50, Kassimia Street,
Rajaghiri, Thanjavur 614 207
- M/29331
Ms Navita Goel
BCOM(HONS), AICWA
Flat No. 192, Pocket No.
E, Mayur Vihar Phase II,
Delhi 110 091
- M/29332
Ms Saumini Saseedharan
Panikker, MCOM, AICWA
B 29 Arya Vishnu Prasad,
PHGE Road, Opp : Maratha
Mandir Hall, Vishnunagar,
Dombivli (W),
Thane 421 202
- M/29333
Shri Manoj Prabhakar
Shukla, MCOM, AICWA
203, Shikhar Co-op. Society,
Plot No. 20, Sector II,
Kharghar,
Navi Mumbai 410 210
- M/29334
Shri Shahnawaz Aziz
Chunawala, BCOM, AICWA
Shehnaz Villa, Next to Firdos
Apartments, Gulmohar Road
J. V. Post Scheme,
Mumbai 400 049

- M/29335
Ms Uma H. R.
BCOM, AICWA
C/o. National Centre for
Biological Sciences, TIFR,
GKVK Post, Bellary Road,
Bangalore 560 065
- M/29336
Shri R. Anandaraj
BCOM, MFM, AICWA
4/99, Melappatty, Rengat-
chippatty, Nanga-varam
Karur, Karur 639 110
- M/29337
Ms Ligi George Alapatt
MCOM, AICWA
P.O.Box 37076 Dubai United
Arab Emirates, Dubai
- M/29338
Miss Namita Bansal
BCOM, AICWA
Flat No. 215, Sookh Apart-
ments, Munshipulia, Indra
Nagar, Sector 16,
Lucknow 226 016
- M/29339
Shri Niraj Chandra
BCOM(HONS), AICWA
123 Dayanand Vihar, Vikas
Marg Extn., Delhi 110 092
- M/29340
Shri Vivek Manohar Chavan
BCOM, LLB, MBA(FIN),
AICWA
"Matruchaya", 1st Floor,
22, Ganesh Colony, Pratap
Nagar, Ring Road,
Nagpur 440 022
- M/29341
Shri Kaushik Kumar Joshi
BCOM, AICWA
301, Teachers Staff Quarters,
Atmiya Vidya Mandir,
PO Kolibharthana
Tal : Kamrej, Surat
- M/29342
Shri Sagar Shridhar Kokje
BCOM, AICWA
135, Shukrawar Peth,
Mangalmurti Society,
B Wing, 2nd Floor
Pune 411 002
- M/29343
Shri Rajesh Vijay Kolte
BCOM, LLB, AICWA
K 103, West End Village,
Rt. Bhusai Colony, Kothrud,
Pune 411 038
- M/29344
Shri L. S. Murali Krishnan
BCOM, AICWA
FF 1, Ganesh Enclave, 3/5,
Balaji Street, Kodambakkam,
Chennai 600 024
- M/29345
Shri Nakirikanti Vamsi
Krishna, BCOM, AICWA
H. No. 7-3-279, Ricca Bazar,
Khammam
Khammam 507 002
- M/29346
Ms Priyanka Kirit Mehta
BCOM, AICWA
3/424, Ramjharukha,
S.V. Road, Andheri West,
Mumbai 400 058
- M/29347
Shri Ranju Majumder
MCOM, AICWA
56/6, Baksara Village Road,
PO Baksara, Dist. Howrah
Howrah 711 110
- M/29348
Shri Sukrut Kirit Mehta
BCOM, AICWA
3/423, Ramjharukha, 71, S.V.
Road, Andheri West,
Mumbai 400 058
- M/29349
Ms Prema
BCOM, AICWA
1312, Vishwashree, 1st Block,
1st Main, BTM IV Stage,
Devarachikkanahalli,
Bangalore 560 076
- M/29350
Mrs Parvathy Jayanthi T.M.
BCOM, AICWA
H.No. 47, "KALYAN",
Cross Road No. 1, Indira
Nagar, K.P.Vallon Road,
Kadavanthara,
Kochi 682 020
- M/29351
Shri Kanchumoti Karuna
Krishna Prasad
MA, MBA, AICWA
7-1-15, Kottakotavari Street,
Amadalavalasa, Srikakulam
District, Srikakulam 532 185
- M/29352
Ms. Zankhana Yoginbhai
Patel, MCOM, AICWA
B/17, Panghat Park Society,
B/H Vrundavan Bus Stop,
Waghodia Road,
Vadodara 390 019
- M/29353
Shri Y.V.S. Surya Prakash
BCOM, AICWA
D.No. 26-31-108, Muralikri-
shna Homes (SF 2), A. T.
Agraharam 5th Line,
Guntur 522 004
- M/29354
Shri R. K. Singhal
MCOM, AICWA
15/1 B, GFL # 04, "DLF"
Ankur Vihar, Angintine
Bldg., Ahead to Tronica City,
Gram : Saudullabad, Loni
Area, Ghaziabad 110 049
- M/29355
Shri T. V. Thomas
BCOM, AICWA
Tharayelath House, PKRA
71, Pishari Kovil Road,
Eroor, Ernakulam,
Ernakulam 682 306
- M/29356
Shri Rahul Sharma
BCOM, AICWA
First Floor, Balaji Timber,
Anandi Pura, Kasba Road,
Modinagar,
Ghaziabad 201 204
- M/29357
Ms Hema Vanka
MCOM, MBA(FIN), AICWA
35-25, Prakruthi Nilayam,
Premnagar Colony,
Sainikpuri,
Secunderabad 500 094
- M/29358
Shri Prashant Ashok Yeole
MCOM, AICWA
N 8/E 2/25-3, Near Gajanan
Class, New CIDCO,
Nasik 422 009
- M/29359
Shri Abhijit De
BCOM(HONS), AICWA
172 / 20A, A.J.C. Bose Road,
Kolkata 700 014
- M/29360
Shri Joyanta Chowdhury
BCOM, AICWA
K S Road, Palash Bagan,
Beldanga More, Dipupara—
Kalo Rasta, Near Kali
Mandir, Asansol 713 302
- M/29361
Shri Sitakanta Prusty
BCOM, ACA, AICWA
No. 15, Kamber Street,
Periyar Nagar, Pallikarnai
Pallikarnai 600 100
- M/29362
Shri Venkatesh K
BCOM, ACA, AICWA
Madras Cements Ltd.,
Alathiyur Works, Cement
Nagar Post, Ariyalur
Ariyalur 621 730
- M/29363
Ms Anita Agrawal
BCOM, AICWA
F 373, MIG Flats,
Sector 11, Pratap Vihar,
Ghaziabad 201 009
- M/29364
Shri Sanjay Kumar Arya
BCOM, AICWA
I - 122, 1st Floor, Lalita Park,
Laxmi Nagar,
Delhi 110 092
- M/29365
Shri Chandramouli V.
MCOM, AICWA
AF2, Guru Raghavendra
Apartments, 10, I Main Road,
Ram Nagar, Nanganallur,
Chennai 600 061

- M/29366
Shri Arun Kumar Goyal
BCOM, AICWA
C 499, (Near Public High School), Chawla Colony, Ballabgarh, Dist-Faridabad Faridabad 121 004
- M/29367
Shri Ashish Gupta
BCOM, AICWA
B 166/G5, Shalimar Garden Main, Sahibabad, Ghaziabad 201 005
- M/29368
Shri Jasim Nalakath Puzhangara, BSC, AICWA
1st Floor, Bhavana, Bank Road, Kaloor, Cochin 682 017
- M/29369
Ms Anu Krishnamurthy
MCOM, MPHIL, MBA, AICWA
15, 39th Cross, 14th Main, 4th "T" Block, Jayanagar, Bangalore 560 041
- M/29370
Shri Arun Kumar,
BCOM, AICWA
House No. 1297, Sector 4, Panchkula, Panchkula 134 112
- M/29371
Shri Rajeev Kumar
BCOM, AICWA
344, Tribune Colony, Govind Vihar, Vill. Kansal, Dist. SAS Nagar, Mohali 160 103
- M/29372
Shri Anand Kumar
BCOM, AICWA
Flat No. A 301, Unique Apartments, Plot 38, Sector 6, Dwarka, New Delhi 110075
- M/29373
Shri Vipin Kumar
MCOM, AICWA
Qtr. No. C 56, Salal Power Station, Jyotipuram, Dist. Reasi, Jyotipuram 182312
- M/29374
Shri Mahesh V,
BCOM, AICWA
Vadhyar Paramb, Purakkad, Alappuzha, Alappuzha 690 551
- M/29375
Ms Smriti Nagar
MCOM, AICWA
Minal Complex II, 16/27 Govind Garden, Raisen Road, Bhopal 462 023
- M/29376
Ms Pratibha Palial
MCOM, AICWA
C/o Shyam Sundar Chadha, Vill. Gurunanakpura, Teh : Baba Bakala, PO Beas, Beas 143 201
- M/29377
Shri S Ramesh
BCOM, AICWA
8, 2nd Cross, Sakthi Kumaran Layout, Behind Sriram Weigh Bridge, Thadagam Road, Edayarpalayam, Coimbatore 641 025
- M/29378
Shri Battu Murali Reddy
MCOM, AICWA
Flat No. F 1, Plot No. 120, Manasa Arcade, Vivekanandapuram, Sainikpuri, Secunderabad 500 094
- M/29379
Shri Mohan Reddy Yadla
MCOM, AICWA
Plot No. 28B, 32B, 34B, Coronation Avenue, LUGOGO, UMA Show Grounds, Kampala, Uganda, Box No. 31376, Uganda
- M/29380
Shri Ramakrishnan Subramanian, MCOM, MBA, CFE, AICWA
875, North Eldridge Parkway, Apt # 378, Houston, Texas, U S A, PIN 77 079 Houston
- M/29381
Shri G Sivakumar
BSC, ACA, AICWA
Shiaka Bint Sultan AlMejran Building, 7th Floor, 705, Riqqa Road, Dubai, U A E, PIN 282427, Dubai
- M/29382
Shri Shiv Shankar Sahu
BSC, AICWA
1A, Varsha, Pavan Residency, Simhachalam Road, Gopalapatnam, Visakhapatnam 530 029
- M/29383
Shri S Venkateswara Prasad
BCOM, AICWA
No. 76, 4th Cross, Kalidasa Layout, Srinagar, Bangalore 560 050
- M/29384
Shri Upendra Kumar
BCOM(HONS), AICWA
J 39/3, Street No. 7, Amritpuri, Garhi, New Delhi 110 019
- M/29385
Shri Ajay Pandey
BCOM (HONS), AICWA
Qtr. No. 3R 11, H. M. Colony, PO Hind Motor, Dist. Hooghly, Hindmotor 712 233
- M/29386
Shri Prason Samuel Suwartic, MCOM, AICWA
6, Vrundavan Nagar Society, Near Vrajdhara Society, Sama, Vadodara 390 008
- M/29387
Ms Himanshi Navinchand Parekh, BCOM, AICWA
2nd Floor, Sheavan Vatika, Oberoi Block, Bhurdawadi Road, Andheri (West), Mumbai 400 058
- M/29388
Shri Sudeep Kumar Sinha
BCOM (HONS), AICWA
M 3/504, NAKSHATRAM, Premlok Park, Chinchwad, Near S K F Company, Pune 411 033
- M/29389
Shri Bhavin Rajeshbhai Shah
BCOM, AICWA
C/106, Shree Nidhi Flats, Vijay Nagar, Harni Road, Vadodara 390 006
- M/29390
Shri Anant Ramkrishna Medhekar, MCOM, AICWA
" Aditya ", 1103/B, Cosmos Heritage, Opp : Happy Valley, Pokharan Road No. 2, Thane 400 610
- M/29391
Ms Vazkar Sucheta Vinayak
BCOM, LLB, AICWA
A/3/21, "PRAKASH", RBI Officers Quarters, Near Malav Talav, Vasna, Ahmedabad 380 007
- M/29392
Shri K. Chandrasekaran
BCOM, AICWA
Plot #687/16A, Pelican Road, Makeni, Lusaka, Zambia, PIN 10101 Lusaka
- M/29393
Ms Priyanka Anant
BCOM, AICWA
H. No. 12, Marketing Board Colony, Sector 14, Panchkula 134 113
- M/29394
Shri Rajiv Kumar Bansal
BCOM, ACA, AICWA
House No. HB 74, Phase I, Mohali 160 055
- M/29395
Ms Sangeeta Bhagat
BCOM, AICWA
H. No. 215, Sector 16, Panchkula 134 113
- M/29396
Ms Reeta Gupta
MCOM, AICWA
56 A, Harmilap Nagar, Near Industrial Area, Baliana, Baliana 140 603

- M/29397
Shri Baljinder Kaur
BCOM, AICWA
144, Harmilap Nagar,
Baliana, Near Ind. Area,
Phase II, Baliana 140 603
- M/29398
Ms. Kalpana Yadav
MCOM, AICWA
D 2260, Indira Nagar,
Lucknow 226 016
- M/29399
Shri Gurtej Singh
BCOM(HONS), AICWA
VPO Gharuan, Dago Patti,
TEH Kharar, Dist. Mohali,
Mohali 140 413
- M/29400
Shri Soni Thakur
BCOM, AICWA
Vill. Ghroon, PO Dohag,
Teh : Dehra, Dist. Kangra,
Dera 176 029
- M/29401
Shri Pravin Laxman Bomble
BCOM, AICWA
G 1/701, Gangadham,
Phase II, Market Yard,
Pune 411 037
- M/29402
Shri Prashant Dilip Salunke
BCOM, AICWA
Sr. No. 692, Premnagar
Vasahat, Behind Raturaj
Hall, Market Yard,
Pune 411 037
- M/29403
Shri Mayank Agarwal
BCOM, AICWA
109/71, Model House,
Lucknow 226 001
- M/29404
Shri Sana Idris
BCOM, AICWA
66, Gaus Ganj, Wazeer Ganj,
Lucknow 226 018
- M/29405
Shri Shalinder Joshi
BCOM, AICWA
C/o Goverdhan Sharma,
Vijaynagar, Sector A,
H No. 199, Nilmatha,
Lucknow 226 002
- M/29406
Miss Nidhi Jagota
BCOM, AICWA
1307, Sector 15 B,
Chandigarh 160 015
- M/29407
Shri Raju Kumar Patel
BCOM, AICWA
MM-D1-219, LDA Colony,
Kanpur Road,
Lucknow 226 012
- M/29408
Shri Porus Saranjit Singh
BCOM, LLB, AICWA
Flat No. A/101, Bldg. No.
2, Saamna Pariwar CHS.
Khadakpada, Goregaon
East, Mumbai 400 063
- M/29409
Shri Atul Kumar Singh
MCOM, AICWA
12/663, Sector 12,
Indira Nagar,
Lucknow 226 016
- M/29410
Ms Pooja Srivastava
MCOM, AICWA
C 1400, Indira Nagar,
Lucknow 226 016
- M/29411
Shri Vinai Kumar Singh
MCOM, LLB, AICWA
Plot No. 365, Pant Nagar
Colony, Khurram Nagar,
Lucknow 226 022
- M/29412
Shri Ajai Kumar Singh
BCOM, AICWA
S66, L.D.A. Colony, Aishbagh,
Lucknow 226 004
- M/29413
Shri Vishal Saxena
BCOM, AICWA
F 128, Indralok Colony,
Krishna Nagar,
Lucknow 226024
- M/29414
Shri Amit Kumar Singh
MCOM, AICWA
2/663, Sector 12, Indira
Nagar, Lucknow 226016
- M/29415
Ms. Deep Shikha
MCOM, AICWA
Accounts Executive, Scoot-
ers India Limited, Post Bag
No. 23, Sarojini Nagar,
Lucknow 226 008
- M/29416
Ms. Gurpreet Kaur Sabhar-
wal, BCOM, AICWA
Chuhar Singh Colony,
Pandariba, Charbagh,
Lucknow 226 004
- M/29417
Shri Shashank Tripathi
BCOM, AICWA
11/205, Indira Nagar,
Lucknow 226 016
- M/29418
Ms Shweta Chhabra
BCOM, MBA, AICWA
887/8, Mehrauli,
New Delhi 110 030
- M/29419
Ms Cheena
BCOM, AICWA
WZ/H 28, Street No. 9,
New Mahavir Nagar,
New Delhi 110 018
- M/29420
Shri Puneet Kumar
BCOM, AICWA
Banarasi Dass Ravinder
Kumar, Shop No. 15,
Partap Cloth Market,
Rohtak 124 001
- M/29421
Shri Vijay Kumar Lohan
MCOM, AICWA
H.No. 3010, Jawahar
Colony, N.I.T. Faridabad,
Faridabad 121 006
- M/29422
Shri Rajiv Lakhani
BCOM, AICWA
2F/38, N.I.T. Faridabad,
Faridabad 121 001
- M/29423
Miss Deepa Mishra
BCOM, AICWA
A 13, New Ashok Nagar,
Delhi 110 096
- M/29424
Shri Santosh Kumar Shukla
BCOM(HONS), AICWA
Management Trainee, C&C
Constructions Ltd.,
Plot No. 70, Sector 32,
Gurgaon 122 001
- M/29425
Shri Vikash Kumar Singh
BCOM(HONS), AICWA
Assistant Manager, C & C
Constructions Limited,
Plot No. 70, Sector 32,
Gurgaon 122 001
- M/29426
Shri Bahadur Singh Saroha
MCOM, AICWA
Management Trainee, C & C
Constructions Limited,
Plot No. 70, Sector 32,
Gurgaon 122 001
- M/29427
Miss Nidhi Sharma
BCOM (HONS), AICWA
Assistant Manager, C & C
Constructions Ltd., Plot No.
70, Sector 32,
Gurgaon 122 001
- M/29428
Shri Nitin Totlani
BCOM, AICWA
Assistant Manager, C&C
Constructions Ltd.,
Plot No. 70, Sector 32,
Gurgaon 122 001
- M/29429
Shri Nikhil Agarwal
BCOM, AICWA
31/67, Lohar Gali,
Agra 282 003
- M/29430
Ms Ratnika Agarwal
BCOM, AICWA
C/o S. C. Agrawal, C 2K
Road, " Santoshi Bhawan ",
Mahanagar Extn.,
Lucknow 226 006
- M/29431
Miss Nirupma Singh
MCOM, AICWA
S/6, Canal Colony,
Udai Ganj, Lucknow

Advancement to Fellowship

Date of Advancement :
20th July 2010

M/4001

Shri Yakasiri Venkaiah
BCOM, FICWA
Venkaiah & Co., H. No. 8-3-222/1/3, Madhura Nagar, Hyderabad 500 038

M/4691

Shri Balavadra Mohapatra
BCOM, FICWA
At HIG 17 (7 Acres), Chandrasekharapur, Dist. Khurda Bhubaneswar 751 021

M/5880

Shri Kunal Mukherjee
MCOM, LLB, FICWA
19, Shyamapally, P.O. Behala, Kolkata 700 034

M/6429

Shri Ashish Banerjee
MCOM, FICWA
Sr. General Manager (Finance), Jaiprakash Associates Ltd., Jaypee Bela Plant, D8, Jaypee Puram, Rewa 486 450

M/6590

Shri Haridas Chakrabarti
BSC, FICWA
Subhadra Tower, Block A, Flat No. C/3, S.B. Gorai Road, Asansol 713 304

M/7321

Shri Virendra H. Bhandari
BCOM, FICWA
702, Lillum Tower, Mahindra Gardens, S. V. Road, Goregaon West, Mumbai 400 062

M/8775

Shri K. Umamaheswara Rao
BSC, FICWA
33-86/1, Plot No. 40, Venkateswara Officers' Colony, Ramakrishnapuram, Secunderabad 500 056

M/8821

Shri Sujit Dutta
MCOM, FICWA
Sujit Dutta & Associates, AE 582, Salt Lake City, Sector I, Kolkata 700 064

M/10497

Shri Asok Kumar Datta
BCOM, FICWA
Kali Kutir, Dakshinpally, P.O. Rahara, Kolkata 700 118

M/11192

Shri Narendra Peshne
MCOM, LLB, FICWA
Narendra Peshne & Associates, 202, Pramila Apartment, Above Khamla Auto Mobile, 15, Indraprastha Layout, Khamla Main Road, Nagpur 440 025

M/11661

Shri Ratti Ram Mainh
BCOM, FCS, FICWA
R.R. Mainh & Associates, Shop No. 8, B-18/1849-1E, Phase II, Focal Point, Opp. Kangaroo Industries, Metro Road, Ludhiana 141 010

M/14097

Shri Abdul Kariem P.A.
MCOM, FICWA
Manager – Financial Performance Evaluation, Saudi Telecom, P.O. Box 350144, Riyadh 11382

M/14930

Shri Amalaksha Thakur
BCOM (HONS), FICWA,
Executive, Jacobs Engineering India Pvt. Ltd., Jacobs House, Ramkrishna Mandir Road, Kondivita, Andheri (East), Mumbai 400 059

M/15906

Ms. Jagruti Ketan Trivedi
BCOM, FICWA
Accountant, Iman & Iman INC., 173, Advance Blvd. # 39, Brampton, Ontario

M/16105

Shri Amit Anand Apte
MCOM, FICWA
11/7, Laxmi Narayan Nagar, S. No. 11 & 12, Erandawane, Pune 411 004

M/16289

Ms. Indu Sharma
MCOM, FICWA
8, Ram Nagar Delhi 110 051

M/16655

Shri L. Prakash
MCOM, CMA(USA), FICWA
Flat No. 503, Building No. 52, Seawoods Estate – Phase II, NRI Complex, Sector 54/56/58, Palm Beach Road, Nerul, Navi Mumbai 400 706

M/16987

Shri Tamal Taru Roy
MCOM, BA, FICWA
13/27, Nitya Lal Kundu Lane, Birati, Kolkata 700 051

M/17373

Shri Ranabir Das
BCOM, FICWA
C 461, Chittaranjan Park, New Delhi 110 019

M/17382

Shri Narayan Durgayya
Dontul,
BCOM (HONS), FICWA
235/12, Telangi Pacha Peth, Solapur 413005

M/18405

Shri Ashok Kumar Singh
BCOM, ACA, FICWA
Chief Financial Officer, DHP India Ltd., 10, Middleton Row, Ground Floor, Kolkata 700 071

M/18515

Shri Ghanashyam
Upadhyay,
BCOM, MBA, FICWA
Bunglow 164B, Refinery Para, Near India Club, Digboi 786 171

M/19100

Shri Krishna Deo Yadav
BCOM, FICWA
K.D. Yadav & Associates, 40, Weston Street, 2nd Floor, Chandani Chowk, Kolkata 700 013

M/20177

Shri K. Ramachandra Rao
MCOM, MBA, FICWA
Dy. Chief Accounts Officer, A.P.S.R.T.C., Kadapa Zone, Kadapa 516 001

M/21085

Mrs. Dipanjana Bagchi
MCOM, MBA, FICWA
P 397, Keyatala Lane, Kolkata 700 029

M/22361

Shri Anupam Agarwal
MCOM, FICWA
Qrt No. MC 150, Madhuban, Paradeep 754 142

M/22538

Shri Manoj Kumar Singh
BCOM(HONS), FICWA
A 38, F/14, First Floor, Lane No. 2, Madhu Vihar, Patparganj, Delhi 110092

M/22992

Shri Ekadashee Sahoo
MA, LLB, MBA(FIN.), FICWA
General Manager Finance & Accounts, Zamil Steel Buildings India Pvt. Ltd., 101, Almonte Software Park, Kharadi, Pune 411 014

M/23215

Shri Alok Narayan Pandey
BCOM(HONS), FICWA
A.G.M. – Accounts & Company Secretary, Orient Craft Limited, 7D, Maruti Industrial Complex, Sector 18, Udyog Vihar, Gurgaon 121 015

M/24062

Shri Mridul Kanti Chakraborty, BSC, FICWA
M.K.C. & Associates, 23/2/8, K.B. Sarani (Mall Road), Kolkata 700 080

M/24118
Shri Neeraj Dhananjay Joshi
BCOM, MBA, FICWA
CMA Pride, 1st Floor, Plot
No. 6, S. No. 16/6, Eran-
dawana Hsg. Soc., Eran-
dawana, Pune 411 004

M/24632
Shri Lokesh Kumar
BSC, FICWA
190/6, Scheme No. 7, Shastri
Nagar, Meerut 250 004

M/25108
Shri Raj Chawla
BCOM(HONS), LLB, FICWA
204, Wadhwa Complex,
D 288/10, Laxmi Nagar,
Delhi 110 092

M/25137
Shri Bivas Acharyya
MCOM, MBA, FICWA
B. Acharyya & Associates,
4/4C, Jadu Mitra Lane,
Kolkata 700 004

M/25224
Shri Rajvardhan Mallikarjun
Indi, BE(MECH), FICWA
Professor in Finance,
Sinhgad Institute of Business
Admn. & Research, S. No.
40/4, Near Octroi Post,
Kondhwa-Saswad Road,
Kondhwa (Bk), Pune 411048

**Admission to Associateship
on the basis of MoU with
IMA, USA**
Date of Admission :
19th July 2010

C/29432
Mr. Binu Thomas
MCOM, CMA(USA),
AICWA
Section Head, Cost & Bud-
get Dept., Sheikh Khalifa
Medical City, P.O.Box 51900,
Abu Dhabi, U.A.E.

C/29433
Mr. Vivek Kumar
Shrivastava, BCOM, FCA,
CMA(USA), AICWA
C/o. Kapico Group Holding
Co., K.S.C.C., P.O. Box 4296,
Safat 13043, Kuwait

Admission to Associateship
Date of Admission :
20th July 2010

M/29434
Shri Nimesh Kumar
Saraswat,
MCOM, AICWA
Nehru Ganj, Anoopshahr,
Dist. Bulandshahr
Bulandshahr 202 390

M/29435
Shri Praveen Garg
BCOM(HONS), ACA. AICWA
C 5/65, Sector II, Rohini,
Delhi 110 085

M/29436
Shri Sannabiyalu Papaiah
Kesavaperumal,
BCOM, AICWA
BLK 321 A, # 03 - 08,
Anchorvale Drive,
Singapore 541 321

M/29437
Shri R Kalyanasundaram
BCOM, AICWA
No. 14/6, New Street,
A. M. Road, Srirangam,
TRICHY 620 006

M/29438
Miss Swati Chandrashekhar
Mehendale,
BCOM, AICWA
Chaitanya CHS.,
Flat No. 201, Bldg. No. 5,
Padma Nagar, Chiku Wadi,
Borivali (West),
Mumbai 400 092

M/29439
Shri Cherukumilli Anjaneya
Kiran Kumar, BA, AICWA
Dr.No.42-56-8,KiranAditya
Nilayam, Block # 3, Ajith
Singh Nagar,
Vijayawada 520 015

M/29440
Shri Ashish Mishra
BCOM(HONS), AICWA
Block 27, Flat No. 3E,
Diamond City North,
68 Jessore Road,
Kolkata 700 055

M/29441
Shri Ashok Ganapati Yadav
BE, AICWA
Flat No. 504, A1, Kumar
Primauera, Sainath Nagar,
Wadgoansheri,Pune 411014

M/29442
Mrs Suman Anil Pai
BCOM, AICWA
9/820 A, " Gowri ",
Kambiri Road, Pandikudi,
Cochin 682002

M/29443
Shri P Suresh Kumar
MCOM, AICWA
131, Banashankari
Nilayam, 2nd "A" Cross,
Doctors' Colony, Konana-
kunte, Bangalore 560062

M/29444
Ms Poornima M
BCOM, AICWA
B 3/303, Vishaldeep
Residency, Karadi, Chanda-
nagar, Pune 411014

M/29445
Shri Ramesh Talwar
BCOM(HONS), FCA, AICWA
1006 G Block, Shaheed
Bhagat Singh Nagar,
Pakhawal Road,
Ludhiana 141012

M/29446
Shri Rajesh Ramachandran
BSC, ACA, CFE, CIA, CPA,
AICWA
1755 Oswald Place, Santa
Clara CA USA, PIN 95 051
Santa Clara CA

M/29447
Mrs Sasikala Raviven-
kate-san,
BA, ACA, AICWA
157 (Old) 76 (New) BIG
Street, Triplicane,
Chennai 600 005

M/29448
Shri K. Ramachandran
BCOM, MBA(FIN), AICWA
No. 17, 8th Street, Shanthi-
nagar, Adambakkam,
Chennai 600 088

M/29449
Shri Raju Roy
BCOM, AICWA
C/o Manju, Door No. 8,
2nd Floor, Kanchreddy
Layout, Chausandra,
Bangalore 560 067

M/29450
Shri Dilipkumar Vitthalrao
Athavale, BSC, LLB, AICWA
Division 8, 14/E, Sardar
Nagar Society,
Near T.R. Patel School,
Vadodara 390 002

M/29451
Shri Ankit Sarin
BCOM(HONS), AICWA
F 2/48, Sector No. 16,
Rohini, Delhi 110 089

M/29452
Ms Shobha N.S.
MCOM, MBA, MPHIL, AICWA
No. 10, Opp : BOCC Bank,
V Main Road, Chamrajpet,
Bangalore 560 018

M/29453
Shri Fredrick Marian Pinto,
BCOM, LLB, AICWA
H No. 5/105, Nr. S.E. Corner
of Manickpur Cricket
Ground, Naupada,
Vasai Road (W),
Thane 401 202

M/29454
Shri Shekhar Hanuman Sane
BCOM, FCA, AICWA
Flat No. 6, Radha Krishna
Heights, Sadashiv Peth,
Pune 411 030

M/29455
SHRIJadhav Vasudev Arjun,
MCOM, AICWA
Anant B 13, Prasun Dham,
OPP : Aditya Birla Hospital,
Dattanagar, Chinchwad,
Pune 411 033

M/29456
Ms Binny Kapoor
BSC, AICWA
23, Avas Vikas Colony,
Rranipur Morh, Jwalapur,
Haridwar 249 407

- M/29457
Shri Sumantra Bhattacharya
BCOM (HONS), AICWA
93, Nirupama Devi Road,
PO Berhampore,
Dist. Murshidabad,
Berhampur 742 101
- M/29458
Shri Mithun Chakraborty
BCOM (HONS), AICWA
38 Motilal Gupta Road,
Kolkata 700 008
- M/29459
Ms Arpita Amol Fegde
MCOM, AICWA
Vimal, Vise Mala, Near
Janhavi Apartment,
Off College Road,
Nasik 422 005
- M/29460
Shri Ajay Kumar Ferwani
MCOM, AICWA
ET 20, ET Hostel, BHEL
Township, Industrial Area,
Jagdishpur, Dist. Sultanpur,
Sultanpur 227 817
- M/29461
Ms Anshu Gautam
MCOM, AICWA
P.N. 14, Krishna Kunj Colony,
Harnathpura, Kalwar Road,
Jhatwara,
Jaipur 302 012
- M/29462
Shri Shankar Gupta
BCOM (HONS), AICWA
3/3, Taltala Lane, First Floor,
Kolkata 700 014
- M/29463
Shri Gajanan Kamalakar
Hegde, BSC, AICWA
B 2, 102, Akhand Jyot Flats,
Near Anushakti Nagar,
New Sama Road
Vadodara 390 008
- M/29464
Shri Sharad Chandra Jha
BCOM, AICWA
R 210/8, Cotton Mill Lane,
Metiabruz,
Kolkata 700 044
- M/29465
Shri Manoj Shrinivas Jagtap
BE (ELEC), AICWA
Flat No. 4, Bldg. No. E, 2nd
Floor, " Shambhu Vihar ",
Survey No. 247/1, D.P. Road,
Aundh, Pune 411 007
- M/29466
Shri Ajay Kumar
MCOM, AICWA
Minda Corporation Limited,
Gat No. 307, Hissa No. 1,2,3
Nanekarwadi, Tal : Khed,
Chakan, Pune 410 501
- M/29467
Shri Jayant Kumar
MCOM, AICWA
WZ 635B, Nangal Raya,
New Delhi
- M/29468
Shri Rajat Kumbhat
BCOM (HONS), AICWA
C/o. D.M. Kumbhat, 162/
A/41, Lake Gardens, Flat 2B,
2nd Floor, Lake Residency,
Kolkata 700 045
- M/29469
Shri Pawan Kishore Kaushik
MCOM, AICWA
Finance Department,
Administration Building,
MRPL, Kuthethoor Post,
Mangalore 575 030
- M/29470
Ms Durvasula Kameswari
BCOM, AICWA
Flat No. 101, Pingalis
Vinayagar Kailash, Plot No.
9-19-38, C.B.M. Compound,
Visakhapatnam 530 003
- M/29471
Shri Ashish Ladha
BCOM, ACA, AICWA
2nd Floor, Unitag House,
Government Avenue,
P.O. Box 11774, Bahrain
Manama
- M/29472
Shri T.V. Ramana Murty
BCOM, AICWA
12, Water Tank Road,
Sowdamini Layout, New
Bank Colony (Nr. Bescom
Office), Konanakunte,
Bangalore 560 062
- M/29473
Ms Beena Ajith Nair
MCOM, AICWA
Museum Co-op. Hsg.
Society, B 1, Flat No. 11,
Near Anjali Hospital,
Off Dhole Patil Road,
Pune 411 001
- M/29474
Shri Sandeep Kumar Poddar
BCOM, AICWA
B-205, Chandulal Park,
Station Road, Bhayandar
(West), Thane
Thane 401 101
- M/29475
Shri Girish Baburao
Pednekar, AICWA
7 Kanchan, Ankor Society,
Best Nagar Marg,
Goregaon (West),
Mumbai 400 104
- M/29476
Shri Hirak Dyuti Pal
AICWA
20/1, Sikdara Para Street,
Kolkata 700 007
- M/29477
Shri Ramkumar H,
MCOM, AICWA
"RAM NIVAS",
T.C. 20-3100, Karamana,
Trivandrum 695 002
- M/29478
Mrs. Bhavani S.
MCOM, AICWA
NO.21, T.N. Sampandham
Street, Mohalingam Nagar,
Kunrathur, Chennai 600 069
- M/29479
Shri Indrapreet Singh
BCOM, AICWA
59 A/1, Charu Chandra
Place (E), Ground Floor,
Kolkata 700 033
- M/29480
Shri Utpal Kumar Saha
BCOM (HONS), AICWA
Santigarh, PO-Shyamnagar,
Dist. 24 Parganas (N),
Shyamnagar 743 127
- M/29481
Shri Satchidananda Sabat
MCOM, LLB, AICWA
S/o. Dibakar Sabat
At. Banibihar, (2nd Lane),
PO. Aska, Dist. Ganjam,
Aska 761 110
- M/29482
Shri Brijesh Kumar Tripathi
MCOM, AICWA
14 Madan Chatterjee Lane,
Singhi Bagan,
Kolkata 700 007
- M/29483
Ms Bibha Yadav,
BCOM (HONS), AICWA
207, Daimond Harbour Road,
Behala, Kolkata 700 034
- M/29484
Ms Swati Agarwal
BCOM, AICWA
31/67, Lohar Gali,
Agra 282 003
- M/29485
Shri Komal Ahuja
BCOM (HONS), MBA (F),
AICWA
3/61 Ramesh Nagar,
New Delhi 110 015
- M/29486
Ms Ruqsana Anjum
MCOM, MPHIL, PHD,
AICWA
2, New Gangammachari
Street, Motinagar,
Behind Bamboo Bazar,
Bangalore 560 002
- M/29487
Shri Sanjay Kumar Bakshi
MCOM, AICWA
C/o L M Thubrikar, F 161,
Katol Road, Friends Colony,
Nagpur 440 013
- M/29488
Shri Sunny Bathla
BCOM, AICWA
S/o A K Bathla, V/P.
Karanpur, Teh : Jaipur,
Kachipur, U.S. Nagar
Kachipur 244 712

- M/29489
Shri Rakesh Beri
BCOM(HONS), AICWA
B 2/239, Yamuna Vihar,
Delhi 110 053
- M/29490
Shri Girish Behal
BCOM(HONS), AICWA
C 12/234, Yamuna Vihar,
Delhi 110 053
- M/29491
Shri Arun Chadha
BCOM(HONS), MBA, AICWA
10, Chandu Park, Krishna
Nagar, Delhi 110 051
- M/29492
Ms Ravi Darshini
MCOM, MPHIL, AICWA
Rema Nivas, No. 631,
1st Cross, 8th Block,
Koramangala,
Bangalore 560 025
- M/29493
Shri Jithin George
BCOM, MBA(FIN), AICWA
B 202, Sidhivinayak
Enclave, N.L. Cross Road
Chincholi Bundar, Malad
West, Mumbai 400 064
- M/29494
Shri Kallubhavi Guru
Charan, BCOM, AICWA
Plot No. 52, Flat No. 201,
Naseer Enclave, Kaveri
Layout, Taverkere Main
Road, Near Ayyapa Temple,
Bangalore 560 029
- M/29495
Shri Daman Jeet
BCOM, AICWA
H.NO. 2636, Mohalla –
Audhalla, Mata Rani Road,
Ropar 140 001
- M/29496
Ms Dalia Jose
MSC, BED, AICWA
Flat No. GA 4, Ansal River
Dale, Eroor, Ernakulam Dist,
Ernakulam 682 306
- M/29497
Shri Kiran Babu D S,
BCOM, MBA, AICWA
605, 1st Floor, 1st Cross,
30th Main, BSK III Stage,
Bangalore 600 085
- M/29498
Miss Poonam Yadav
AICWA
11, 3rd Floor, Hargovind
Enclave, Vikas Marg,
Delhi 110 032
- M/29499
Shri Sandeep Srivastava
BCOM(HONS), AICWA
Block 13/2, Floor II,
Sector 16, Rohini,
Delhi 110 089
- M/29500
Shri R Sridhar
BCOM, ACA, AICWA
Old # 43, New # 7, Block
"C", 7th Street, Annanagar
East, Near Chintamani,
Chennai
- M/29501
Shri Jaladi Sudhakararao
MCOM, MBA, AICWA
1-8-702/81/1, C/o. G.
Padma Rao, Padma Colony,
Nallakunta,
Hyderabad 500 044
- M/29502
Shri Subhash Chandra Satyam
BCOM(HONS), AICWA
B 2, Plot No. 215, Neeti-
khand 1st, Indrapuram,
Ghaziabad 201 014
- M/29503
Shri Ram Prakash Sharma
MCOM, AICWA
MB 67A, Gali No. 2,
Shakarpur,
New Delhi 110 092
- M/29504
Shri Rajesh Rakheja
BCOM(HONS), AICWA
O 45, Sri Niwas Puri,
New Delhi 110 065
- M/29505
Shri Akshay Manohar
Prabhudesai,
BCOM, AICWA
2/4, Deepjyoti CHS., Rajaji
Path, Ram Nagar, Dombivli
East, Dombivli (East) 421 201
- M/29506
Shri Ashish Pasricha
BCOM(HONS), LLB, AICWA
Flat No. 145, Evergreen
Appts., Plot No. 9,
Sector 7, Dwarka,
New Delhi 110 075
- M/29507
Shri S Selva Kumar
BCOM, AICWA
No. 3387 4, II Main,
13th Cross, K. R. Road,
Sastry Nagar,
Bangalore 560 028
- M/29508
Shri S Senthil Kumaran
MCOM, AICWA
Plot No. 21, Door No. 10,
E.B. Colony, II Street,
Adambakkam,
Chennai 600 088
- M/29509
Shri Vikas Kaushik
BCOM, AICWA
S 5, Khirki Extension,
Near Sai Ram Mandir,
PO Malviya Nagar,
New Delhi 110 017
- M/29510
Shri Avinash Kumar
BCOM, AICWA
62B, DDA (LIG) Flats,
Rajouri Garden,
New Delhi 110 027
- M/29511
Ms Anjana Mukundrao
Gujar, BCOM, AICWA
1493 B, "Balaji Madhav
Building", Flat No. 6, 3rd
Floor, Near Century TVS
Services, Sadashiv Peth,
Pune 411 030
- M/29512
Shri Santosh Shankar Ahire
MCOM, AICWA
A 204, New Green Park CHS
Ltd., Karkunwadi, Papdy,
Vasai, Thane 401 207
- M/29513
Shri Chavan Rohan
Jagannath, BCOM, AICWA
1/10, Domnic D' Mello
Chawl, Ashok Nagar, Near
Church, Bhandup (East),
Mumbai 400 042
- M/29514
Shri Chetan Abhay Dike
MCOM, AICWA
"Swanand", Sudarshan
Nagar, Near Railway Power
House, Chinchwad,
Pune 411 033
- M/29515
Shri Pritam Prakash Gadkari
MCOM, LLB, AICWA
481/B9, "SAILAXMI",
Shrikrupa Hsg. Society,
Shahu College Road, Parvati,
Pune 411 009
- M/29516
Shri Jadhav Rohan Arun
MCOM, AICWA
C 14, Rajarshi Shahu Society
Pune – Satara Road,
Natubaug, Pune 411 037
- M/29517
Shri Maneesh Shrikant Kale
BCOM, AICWA
B 106, Vrundavan Garden
Society, Near Kinara Hotel,
Vanaz Corner, Kothrud,
Pune 411 038
- M/29518
Ms Ketkar Neha Amol
MCOM, AICWA
B 305, Balaji Prasad Apart-
ment, 471, Shaniwar Peth,
Pune 411 030
- M/29519
Miss Rupali Ramesh
Khopade, MCOM, AICWA
At/Po. Shirwal (Tambe-
nagar), Tal : Khandala,
Dist. Satara, Satara 412 801

- M/29520
Shri Solanki Vijaykumar Chandulal, BCOM, AICWA 603, Nand Park, Yashodhan Nagar, Lokmanaya Nagar, Pada No. 2, Thane 400 606
- M/29521
Shri Sane Mandar Vinayak MCOM, AICWA Flat No. 403, "Moraya Heights ", Warje, Pune 411 052
- M/29522
Shri Patankar Subhash Gangadhar, MCOM, AICWA 105, Devdatta Apts., Nav Sahyadri PO Karve Nagar, Pune 411 052
- M/29523
Ms Pataskar Gauri Dilip MCOM, AICWA G 10, Chintamani Residency, Chaitraban, Bibwevadi, Pune 411 037
- M/29524
Shri K.V.S.R.K.S. Trinadha Rao, BCOM, AICWA 1388, IInd Floor, Flat 1, Mourya Residency, Sukhravara Peth, Pune 411 002
- M/29525
Shri Shrikant Uttam Shevate MCOM, AICWA C/o. Nilesh Sadashiv Mitkari, 155, Mogeshwar Society, Sahakarnagar No.1, Opp : Kamgar Kalyan Kendra, Pune 411 009
- M/29526
Ms Medha Satish Sovani BCOM, AICWA 44/111, Navsatyadri Society, Karvenagar, Pune 411 052
- M/29527
Ms Manali Vijay Shaligram MCOM, AICWA 804/B, Abhishek Apartment, Bhandarkar Road, Pune 411 004
- M/29528
Shri Thakare Pravin Triambakrao, BCOM, AICWA C 2/12, Manibandha Complex, Opp : Nityanand Hall, Hingne Kh. Sinhagad Road, Pune 411 051
- M/29529
Shri Wehale Sudhir Sudamrao, MCOM, AICWA At/Po. Rajgurunagar, Behind S.T. Stand, Wafgaon Road, Tal : Khed, Pune 410 505
- M/29530
Shri Ippalpalli Shrikant Rajmogali, MCOM, AICWA 102 A/9, Bhavani Peth, Indira Vasahat, Solapur 413 002
- M/29531
Shri Kajal Chatterjee BCOM (HONS), AICWA C/o. Parimal Das, 20/2 B.N. Ghosal Road, Belgharia, Kolkata 700 056
- M/29532
Ms Bhaswati Datta BCOM, AICWA U 2, Vidyasagar Niketan, Salt Lake, Kolkata 700 064
- M/29533
Shri Vikash Kumar AICWA C/o. Gopinath Saha, 49, Santigarh Road, 1st Floor, Tollygunj, Kolkata 700 040
- M/29534
Ms Neha Poddar BCOM(HONS), AICWA 58 A, Padma Pukur Road, Alankar Building, Block B, Kolkata 700 020
- M/29535
Ms Anandi Banerjee BCOM(HONS), AICWA 93/1 Bakul Bagan Road, (Near Chakraberia High School), Bhowanipur, Kolkata 700 025
- M/29536
Shri Nitesh Kumar Chaudhary, BCOM, AICWA 123, M. C. Garden Road, Dum Dum, Kolkata 700 030
- M/29537
Shri Golak Bihari Das BCOM(HONS), AICWA 1/10, Tollygunge Central Govt. Qtrs., Type I, Kolkata 700 040
- M/29538
Shri Prosenjit Paul BCOM(HONS), AICWA Chatta Kalikapur Roy Para, PO Batanagar, Kolkata 100 140
- M/29539
Ms Bena Shah BCOM (HONS), AICWA C/o Aruna C Shah 493, B/1 G T Road, Panchsheel Apartment, A Block, 7th Floor, Flat 704, Shibpur, Howrah 711102
- M/29540
Shri Tapash Senapati BCOM (HONS), AICWA 159/A, Bidhanpally, Garia, Kolkata 700 084
- M/29541
Shri Avdhesh Bansal BCOM(HONS), AICWA 26/11 Shakti Nagar, Delhi 110 007
- M/29542
Shri Ankuj Manni BCOM, AICWA House No. 2215, Sector 3, Ballabgarh, Faridabad 121 004
- M/29543
Shri Jeeru Bharat Reddy BCOM, AICWA Flat No. 203, Raghavendra Towers, Hema Nagar, Opp : Bommak Function Hall, Boduppall Road, Uppal, Hyderabad 500 039
- M/29544
Shri Kotha Chandrashekar MCOM, AICWA H. No. 5-58, Adarshnagar Colony, Post Donbosconagar, Bandlaguda Jagir, Rajendranagar, Hyderabad 500086
- M/29545
Shri Ravi Chandra Gundepudi, MCOM, AICWA D 11, Surya Enclave, Vivekananda Puram, Behind Hyderabad Kali Bari Mandir, Sainikpuri, Hyderabad 500 094
- M/29546
Shri Y. Hari Babu BCOM, AICWA Crown Beers India Ltd., S. No. 301, Via Mallepally, M.D Kondapur, Dist. Medak, Medak 502 001
- M/29547
Shri Naresh Kumar Paladugu, MCOM, AICWA S/o. Paladugu Raja Rao, 8-16/1, Venkatapuram, China Ogirala Centre, Vuyyuru (M), Krishna Dist, Vuyyuru 521 245
- M/29548
Shri Selvaraj Ramasamy AICWA House No. 7, 1st West Street, Theeran Chinamalai Nagar, Karumathampatti, Coimbatore 641 659
- M/29549
Shri Shashidhar Reddy Kadukuntla, MCOM, AICWA H.No. 3-189, Nandi Hills, Meerpet Sarornagar Mandal RR Dist., Hyderabad 500097
- M/29550
Shri Shuvra Roy Choudhury AICWA 149, Ashoka Enclave 1, Sector 34, First Floor, Faridabad 121 003

- M/29551
Shri Mohammedamin Abdulmajid Mulla
BCOM, LLB, AICWA
281, Ceremonial Drive, Mississauga, Ontario Canada, L5R 2N9
Mississauga
- M/29552
Mrs. Mohini Rahul Wadadekar
MCOM, AICWA
16/116, Shiv Palace, Anand Nagar, Sinhgad Road, Pune 411 051
- M/29553
Shri Rahul Ramchandra Pore, MCOM, AICWA
6, Shhreeniwas, Plot No. 13, Sandhya Society, S. No. 83, Parvati Sahakar Nagar No. 2, Pune 411 009
- M/29554
Ms. Maitreyee Abhijeet Joshi
MCOM, AICWA
Sadaphulee, Row House No. 5, Alok Heights, Ganesh Nagar, Dhayari, Pune 411 041
- M/29555
Shri Prashant Sudhakar Gokhale,
BE, MMS(FIN), AICWA
Sr. Manager (Fin.), Tata Motors Ltd., CVBU Finance Dept., I Bldg., Pimpri, Pune 411 018
- M/29556
Shri Manoj Ghanshyam Malpani, AICWA
Deputy Manager Audit & Taxation, Bizsolindia Services Pvt. Ltd., 14 to 17, Suyash Commercial Mall, Baner, Pune 411 045
- M/29557
Shri Kaiwalya Vishnu Pingle
BCOM, MBA(FIN), AICWA
Asstt. Manager (Fin.), Bosch Chassis Systems India Ltd., Panchshil, Quadra-I, Magarpatta City Road, 238, Hadapsar, Pune 411 028
- M/29558
Shri Bhudev Vijaykumar Kulkarni, AICWA
Flat No. 4, Prarthana Society, 298, Kasba Peth, Pune 411 011
- M/29559
Shri Mandar Nilkanth Kadlaskar
BCOM, AICWA
Sr. Manager Costing, Cummins India Ltd., Dahanukar Colony, Kothrud, Pune 411 038
- M/29560
Shri Lalit Pramod Pimpalgaonkar,
BCOM, AICWA
A 4, Pancharatneshwar Society, Near Keshav Complex, Dhankawadi, Pune 411 043
- M/29561
Ms Ashwini Kedar Joshi
MCOM, AICWA
Flat No. D-404, Swami Residency, Shahu Colony, Lane No. 9, Karve Nagar, Pune 411052
- M/29562
Shri Laxman Ashok Kajarekar,
MCOM, AICWA
C/o. S V Karve, 181, Vikas Bungalow, Tarde Colony, Hingne Khurd, Sinhgad Road, Pune 411 051
- M/29563
Shri Sharad Punja Adke
BCOM, AICWA
C/o. K.M. Bhosale, Near Indra Prasth Hsg. Soc., Akurdi, Pune
- M/29564
Ms Rajashree Anand Kulkarni, BCOM, AICWA
Plot No. 54, Nivara, Gananjay Society No. 3, Opp : Woodland Society, Kothrud, Pune 411 038
- M/29565
Ms Monica Tarak Parikh
BCOM, AICWA
3, Shilpa Apartment, Behind Mira Housing Society, Off Shankarshet Road, Pune 411 037
- M/29566
Shri Sagar Ramesh Ghalsasi
MCOM, AICWA
A-14, Sai Ganesh Vihar, Bhausaheb Charwadnagar, Anandnagar, Sinhgad Road, Pune 411 051
- M/29567
Shri Sachin Shrikant Ekbote
MCOM, AICWA
Row Housing No. 3, Harshal Harmoni, Ganesh Nagar, Dhuyari, Pune 411 041
- M/29568
Shri Shishir Sharad Bhalchandra, MCOM, AICWA
"Moreshwarani Building", B1/7, Flat No. 1, Chintamani Nagar 2, Bibawewadi, Pune 411 037
- M/29569
Shri Nagesh Laxman Bhagane, MCOM, AICWA
Survey No. 13, Room No. B 10/20, Sambhaji Nagar, Dhankawadi, Pune 411 043
- M/29570
Shri Bhagwan Ganpat Nikam, BCOM, AICWA
Room No. 63-9/12, "A" Colony, Gautamnagar, Govandi, Mumbai 400 043
- M/29571
Shri Hrishikesh Sharad Ponshe,
BCOM(HONS), AICWA
A 25, Nachiket Apartments, Near Saket, Patwardhan Bave, Karve Nagar, Pune 411052
- M/29572
Ms Shweta Subhash Nazarkar, MCOM, AICWA
Shri Kripa Niwas, Near Vidyanand Bhavan High School, Nigdi, Pune 411 044
- M/29573
Ms Amruta Onkar Thosar
MCOM, AICWA
1349 'C', Sadashiv Peth, Near Chimnya Ganpati, Pune 411 030
- M/29574
Ms Chavan Aradhana Vilas
MCOM, AICWA
Premnagar Society, Plot No. 42, Flat No. 1, Bibvewadi Road, Pune 411 037
- M/29575
Shri Ganesh Sankar T.S.
BCOM, AICWA
D 3, Nutech Hive Apartments, 8/26 Abiramapuram 1st, Chennai 600 018
- M/29576
Shri Umesh Kumar
BCOM(HONS), AICWA
E 1, Flat No. 3, Kakade Park, Chinchwad Gaon Pune

OBITUARY

We inform with a heavy heart the sad demise of Shri R. K. Bose, a verteran Fellow Member of our Institute, on August 15, 2010. Shri Bose has been actively involved in development of our profession. We offer our deepest condolences to the family and friends of Shri R. K. Bose.

अविनाश कु श्रीवास्तव
संयुक्त सचिव
Avinash K. Srivastava
Joint Secretary



भारत सरकार
कारपोरेट कार्य मंत्रालय
नई दिल्ली
Government of India
Ministry of Corporate Affairs
New Delhi
Dated : September 22, 2010

Dear Shri Sharma,

This has reference to streamlining the filing of Balance Sheet and Annual Return to ROC by Companies during the month of October and November, 2010 and avoidance of the last minute rush and system congestion in MCA21 during that period.

The Ministry has initiated multipronged actions so that peak filing during the month of October and November, 2010 can be smoothened under MCA21. Initiatives have also been taken to augment the infrastructural facilities to meet the extra load during that period.

The Ministry seeks the support of the professionals from your Institute towards filing Annual Returns and Balance Sheets in an organized manner so that peak hour filing rush during the month of October and November, 2010 can be met smoothly.

The Ministry requests the Companies to plan filing of their statutory returns/Forms as per Schedule below drawn in alphabetical order of the names of companies. I seek your active co-operation in dissemination of the information amongst the professionals to plan and file the Annual Returns and Balance Sheets as per the following order :

Company Names Starting with	Preferable Dates for filing		
	September 2010	October 2010	November 2010
Alphabets A to D	All days during the month	1 st Oct. to 05 th Oct., 2010	1 st Nov. to 05 th Nov., 2010
Alphabets E to K	- do -	6 th Oct. to 10 th Oct., 2010	6 th Nov. to 10 th Nov., 2010
Alphabets L to Q	- do -	11 th Oct. to 15 th Oct., 2010	11 th Nov. to 15 th Nov., 2010
Alphabets R & S	- do -	16 th Oct. to 20 th Oct., 2010	16 th Nov. to 20 th Nov., 2010
Alphabets T to Z	- do -	21 st Oct. to 25 th Oct., 2010	21 st Nov. to 25 th Nov., 2010
Remaining/ Left out companies	- do -	26 th Oct. to 31 st Oct., 2010	26 th Nov. to 30 th Nov., 2010

With best regards,

Yours Sincerely

(Avinash Srivastava)

Shri B. M. Sharma,
President,
Institute of Cost & Works Accountants of India,
Institutional Area, Lodi Road
New Delhi-110 003



MINISTRY OF CORPORATE AFFAIRS GOVERNMENT OF INDIA

DEAR CORPORATES,

TO AVOID LAST MINUTE RUSH AND SYSTEM CONGESTION IN MCA21 DUE TO HEAVY FILLING IN LAST 10 DAYS OF THE MONTHS OF OCTOBER AND NOVEMBER 2010, IT IS REQUESTED THAT FILING OF ANNUAL RETURN AND BALANCE SHEET MAY BE DONE IN THE FOLLOWING ORDER :

Company Names Starting with	Preferable Dates for filing		
	September 2010	October 2010	November 2010
Alphabets A to D	All days during the month	1 st Oct to 05 th Oct., 2010	1 st Nov. to 05 th Nov., 2010
Alphabets E to K	- do -	6 th Oct. to 10 th Oct., 2010	6 th Nov. to 10 th Nov., 2010
Alphabets L to Q	- do -	11 th Oct. to 15 th Oct., 2010	11 th Nov. to 15 th Nov., 2010
Alphabets R & S	- do -	16 th Oct. to 20 th Oct., 2010	16 th Nov. to 20 th Nov., 2010
Alphabets T to Z	- do -	21 st Oct. to 25 th Oct., 2010	21 st Nov. to 25 th Nov., 2010
Remaining/ Left out companies	- do -	26 th Oct. to 31 st Oct., 2010	26 th Nov to 30 th Nov., 2010

YOU ARE REQUESTED TO PLAN YOUR ANNUAL GENERAL MEETING AND FILING ACCORDINGLY.

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International Financial Management—R.L. Varshney	200
Strategic Planning and Management—P.K. Ghosh	265
Strategic Management—L.M. Prasad	250
Mngt. Accounting—Performance Mngt.—V.K. Saxena, C.D. Vashist	325
Advanced Accounting, C.A. Final—V.K. Saxena	475

PUBLICATIONS FOR I.C.W.A. FOUNDATION COURSE

Organization & Management Fundamentals—C.B. Gupta	145
Accounting Fundamentals—R.L. Gupta & V.K. Gupta	300
Cost Accounting—Theory & Practice—M.N. Arora	125
Economics Fundamentals—I.C. Dhingra & V.K. Garg	140
Business Fundamentals—C.B. Gupta	100
Business Mathematics & Statistics Fundamentals—B.M. Aggarwal	300
Business Mathematics (All India)—Sanchehi & Kapoor	400
Statistics—Theory, Methods & Application—Sanchehi & Kapoor	400

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THE INSTITUTE OF COST AND WORKS ACCOUNTANTS OF INDIA

12, Sudder Street, Kolkata - 700 016

Telephones : (033) 22521031/34/35

Fax : 033-22521026, website : www.icwai.org, e-mail : exam.cb@icwai.org

Application for Inclusion in the panel of Moderators Paper-Setters, Head-Examiners and Examiners in the following Proforma in the following address to :

Chairman, Examination Committee, The ICWA of India, 12, Sudder Street, Kolkata-700 016.

Name in Full

Date of Birth

Address with Pin-code No.....

Telephone No. Mobile No.

e-mail

Qualifications : Academic

Professional

Distinction, if any

Subject in which specialized

If Member of ICWAI : Membership No. Associate/Fellow

Present Position held

Period

Teaching Experience if any give details :

Name of the College/University/Institute	Subject	Years of Experience

Terms served as an Examiner in ICWAI and the Subject

If acted as a Paper Setter, Moderator, Head-Examiner or Examiner elsewhere :

	For how long	Subject	Name of the University/Institution
As a Paper Setter			
As a Moderator			
As a Head-Examiner			
As a Examiner			

Books Published, if any

Preference for appointment as Paper Setter or Head-Examiner or Examiner :

Subject preference Any Other Relevant Information (Whether able to do the above job in Hindi medium)

**Extra sheet may be added if space is inadequate*

Signature of the applicant

THE INSTITUTE OF COST AND WORKS ACCOUNTANTS OF INDIA

Examination Time Table & Programme - December 2010

Certificate in Accounting Technicians [CAT]

Day & Date	Time	Foundation Course (Entry Level) Part I
Tuesday, 14 th December, 2010	02.00 P.M. to 05.00 P.M.	Organisation and Management Fundamentals
Wednesday, 15 th December, 2010	02.00 P.M. to 05.00 P.M.	Accounting
Thursday, 16 th December, 2010	02.00 P.M. to 05.00 P.M.	Economics and Business Fundamentals
Friday, 17 th December, 2010	02.00 P.M. to 05.00 P.M.	Business Mathematics and Statistics Fundamentals

Day & Date	Time	Foundation Course (Entry Level) Part II
Friday, 10 th December, 2010	09.30 A.M. to 12.30 P.M.	Financial Accounting
Saturday, 11 th December, 2010	09.30 A.M. to 12.30 P.M.	Applied Statutory Compliance

	Examination Fees	
Inland Centres	Foundation Course (Entry Level) Part I	Rs. 730/-
	Competency Level Part II	Rs. 730/-

1. Application Forms for CAT Examination can be down loaded from Institute's website www.icwai.org and filed on line also.
2. Last date for receipt of Examination Application Forms without late fee is **11th October, 2010** and with late fee of Rs. 100/- is **20th October, 2010**.
3. Examination Fees to be paid through Bank Draft of requisite fees drawn in favour of "ICWAI A/C CAT" payable at New Delhi.
4. Student will send their Examination Application Forms along with the fees to Directorate of CAT at "ICWAI Bhawan", 3, Institutional Area, Lodi Road, Delhi - 110 003.
5. **Examination Centres** : Agartala, Ahmedabad, Akurdi, Allahabad, Alwar (Rajasthan) Asansol, Aurangabad, Bangalore, Baroda, Bhilai, Bhopal, Bhubaneswar, Bilaspur, Bokaro, Berhampur(Ganjam), Calicut, Chandigarh, Chennai, Coimbatore, Cuttack, Dehradun, Delhi, Dhanbad, Durgapur, Ernakulam, Faridabad, Ghaziabad, Guwahati, Hardwar, Howrah, Hyderabad, Indore, Jaipur, Jabalpur, Jalandhar, Jammu, Jamshedpur, Jodhpur, Kalyan, Kannur, Kanpur, Kolhapur, Kolkata, Kota, Kottayam, Lucknow, Ludhiana, Madurai, Mangalore, Mumbai, Mysore, Nagpur, Naihati, Nasik, Neyveli, Noida, Panaji(Goa), Patiala, Patna, Pondicherry, Pune, Rajahmundry, Ran chi, Raigarh (Chattisgarh), Rourkela, Salem, Shillong, Solapur, Surat, Shahjahanpur, Thrissur, Tiruchirapalli, Tirunelveli, Trivandrum, Udaipur, Vapi, Vashi, Vellore, Vijayawada, Vindhyanagar, Waltair.
6. A candidate who is fulfilling all conditions will only be allowed to appear for examination.
7. Probable date of publication of result : Foundation Course (Entry Level) Part - I is **1st February 2011** and Competency Level Part - II is **20th February 2011**.

C. Bose
Sr. Director (Examination)

THE INSTITUTE OF COST AND WORKS ACCOUNTANTS OF INDIA

(Established by an Act of Parliament)

Examination Time Table & Programme - December 2010

Programme for Syllabus 2008

Day, Date & Time	Intermediate 09.30 A.M. to 12.30 P.M.	Final 02.00 P.M. to 05.00 P.M.	Foundation 02.00 P.M. to 05.00 P.M.
Friday 10 th December 2010	Financial Accounting	Capital Market Analysis & Corporate Laws	
Saturday 11 th December 2010	–	Financial Management & International Finance	
Sunday 12 th December 2010	Commercial and Industrial Law & Auditing	Management Accounting Strategic Management	
Monday 13 th December 2010	Applied Direct Taxation	Indirect & Direct – Tax Management	
Tuesday 14 th December 2010	Cost & Management Accounting	Management Accounting – Enterprise Performance Management	Organisation and Management Fundamentals
Wednesday 15 th December 2010	–	Advanced Financial Accounting & Reporting	Accounting
Thursday 16 th December 2010	Operation Management and Information Systems	Cost Audit & Operational Audit	Economics and Business Fundamentals
Friday 17 th December 2010	Applied Indirect Taxation	Business Valuation Management	Business Mathematics and Statistics Fundamentals

Programme for Management Accountancy – December 2010 Examination

Friday 10 th December 2010 09.30 A.M. to 12.30 P.M.	Friday 10 th December 2010 02.00 P.M. to 05.00 P.M.	Saturday 11 th December 2010 09.30 A.M. to 12.30 P.M.	Saturday 11 th December 2010 02.00 P.M. to 05.00 P.M.	Sunday 12 th December 2010 09.30 A.M. to 12.30 P.M.
Management Accountancy	Advance Management Techniques	Industrial Relations & Personnel Management	Marketing Organisation & Methods	Economic Planning & Development

Examination Fees

Group (s)	Final Examination	Intermediate Examination	Foundation Course Examination	Management Accountancy Examination
One Group (Inland Centres) (Overseas Centres)	Rs. 950/- US \$100	Rs. 850/- US \$90	Rs. 800/- US \$60	Per Group Rs. 2500/-
Two Groups (Inland Centres) (Overseas Centres)	Rs. 1800/- US \$100	Rs. 1600/- US \$90		

- Application Forms for Foundation Course, Intermediate and Final Examinations are available from Institute's Headquarters at 12, Sudder Street, Kolkata, Regional Councils and Chapters of the Institute on payment of Rs. 30/- per form. In case of overseas candidates, forms are available at Institute's Headquarters only on payment of US \$ 10 per form.
- Last date for receipt of Examination Application Forms without late fees is 11th October 2010** and with late fees of Rs. 200/- is **20th October 2010**.
- Examination fees to be paid through **Bank Demand Draft** of requisite fees drawn in favour of the Institute and payable at Kolkata.
- Students may submit their Examination Application Forms along with the fees at ICWAI, 12 Sudder Street, Kolkata -700 016 or Regional Offices or Chapter Offices. Any query can be sent to Sr. Director (Examination) at H. Q.
- Finance (No. 2) Act 2009, involving Assessment Year 2010-2011, will be applicable for the subjects Applied Direct Taxation (Intermediate), Applied Indirect Taxation (Intermediate) and Indirect & Direct – Tax Management (Final) for the purpose of December 2010 term of Examination under Revised Syllabus 2008.**
- Examination Centres** : Agartala, Ahmedabad, Allahabad, Asansol, Aurangabad, Akurdi, Bangalore, Baroda, Bhilai, Bhopal, Bhubaneswar, Bilaspur, Bokaro, Berhampur (Ganjam), Calicut, Chandigarh, Chennai, Coimbatore, Cuttack, Dehradun, Delhi, Dhanbad, Durgapur, Ernakulam, Faridabad, Ghaziabad, Guwahati, Hardwar, Howrah, Hyderabad, Indore, Jaipur, Jabalpur, Jalandhar, Jammu, Jamshedpur, Jodhpur, Kalyan, Kannur, Kanpur, Kolhapur, Kolkata, Kota, Kottayam, Lucknow, Ludhiana, Madurai, Mangalore, Mumbai, Mysore, Nagpur, Naihati, Nasik, Neyveli, Noida, Panaji (Goa), Patiala, Patna, Pondicherry, Pune, Rajahmundry, Ranchi, Rourkela, Salem, Shillong, Solapur, Surat, Thrissur, Tiruchirapalli, Tirunelveli, Trivandrum, Udaipur, Vellore, Vijayawada, Vindhyannagar, Vapi, Vashi, Waltair, and Overseas Centres at Dubai and Muscat.
- A candidate completing all conditions will only be allowed to appear for examination.**
- Probable date of publication of result : Foundation – 1st February 2011, and Inter & Final – 20th February 2011.**

C. Bose
Sr. Director (Examinations)



Certificate Course on International Financial Reporting Standards (IFRS) Convergence

COURSE DIRECTOR – DR. T. P. GHOSH, *Professor, Institute of Management Technology, Dubai*

Objective

India has taken a big initiative for IFRS Convergence effective 1 April 2011 in a phased manner. The Accounting Standard Board of India has already issued the Exposure Drafts of Converged Indian Accounting Standards. The ICWAI Certificate Course offers an excellent opportunity to learn IFRS and converged Indian Accounting Standards through distance learning mode that includes in-depth personal interaction sessions with expert faculty.

The course aims to help the participants to understand IFRS convergence and thereby enabling them to participate in IFRS convergence process.

Duration

Two months including assignment period.

Pedagogy

5 days' interactive classroom sessions with case-studies followed by Online Assignment Submission.

Methodology

- Course Material
- Large Question Bank with facilities to practice
- Online Assignment Submission
- Classroom Interaction : Classroom sessions of 40 Hrs. {Tue. to Sat. from 10.00 AM to 6.00 PM}

I. Online Assignment

1. The entire course is divided into four units as per the Syllabus given.
2. The participant shall be required to submit Four Assignments On-Line after the completion of each unit. Each assignment shall comprise of twenty five questions. The assignments can be submitted in any order.
3. The questions for the assignments will be randomly generated from the Question Bank containing about five hundred multiple choice questions for each unit.
4. A candidate shall have five attempts for solving each assignment totalling to twenty attempts for submission of all the four assignments.
5. The study period of the course can vary from a minimum of two months to a maximum of twelve months from the date of registration.
6. Any participant who is unsuccessful in completing all the four assignments within the maximum allowed tenure of the course will have to re-register by paying an additional amount of \$2.000/- (Rupees Two Thousand only) for the purpose of processing and evaluation of additional documents.

II Other Details / Information

1. A participant can join the classroom sessions at any point of time during the maximum allowed tenure of the course, i.e. twelve months.
2. The participants who have completed the 5-day classroom session but failed to complete the assignments are not required to participate in any subsequent classroom sessions. However, they may do so on payment of an additional fees of \$5.000/- (Rupees Five Thousand only),
3. The certificate shall be issued to those participants who would be securing a minimum of 80% of the total marks in all the assignments taking together and would have participated in 5 day (forty hours) classroom sessions.

Batch Size

50 (For the Classroom Sessions)

About Dr. T. P. Ghosh, M.Com, FICWA, FCA, Ph.D

Dr T. P. Ghosh, an eminent IFRS faculty, has so far conducted more than twenty five management development programmes on IFRS organised by the ICWAI in which executives of more than one hundred thirty organisations have participated. That apart, he enjoys practical experience of IFRS implementation.

Dr. Ghosh is author of widely acclaimed IFRS titles like Understanding IFRSs, IFRSs Simplified, and IFRSs for Finance Executives.

He is presently working as a professor in the Institute of Management Technology, Dubai. Earlier he taught in Management Development Institute, Gurgaon, Institute of Management Technology, Ghaziabad, and University of Burdwan as a Professor of Accounting and Finance. He was a visiting professor in the University of Wollongong in Dubai and Indian Institute of Management, Lucknow.

He writes extensively on contemporary accounting and finance issues in various national and international magazines.

FEE

- 25,000/- (Rupees Twenty Five Thousand only) per participant. The Fee includes faculty fee, course kit including course material, hall charges, lunch, tea/coffee and online assignment charges. (15% Discount on the Fee for the Practising Members and Students of ICWAI)

- The Payment of the Fee is to be made by Cheque/ DD in favour of The Institute of Cost and Works Accountants of India payable at New Delhi.
- Details for ECS Payment: State Bank of India, Lodhi Road Branch, New Delhi 110 003 Current A/c No.: 30678404793, MICR Code : 110002493, IFSC Code : SBIN0060321

For Whom

Members of ICWAI, ICSI, ICAI; Senior and Middle level executives of various Public and Private Sector organisations, Banks, Financial Institutions, Insurance

companies, Govt. Departments, Autonomous Bodies, Statutory Bodies, Multinationals etc.; Practicing Cost Accountants, Company Secretaries, and Chartered Accountants, Faculties of Universities, Management Institutions, and Autonomous Professional Institutions, Students pursuing the professional courses, and any other person involved in the IFRS process.

Venue of the classroom session

Delhi, Mumbai, Kolkata, Chennai, Bangalore, Hyderabad, and any other place where the registration of the participants exceed 50 (fifty).

IFRS CERTIFICATE COURSE SYLLABUS

Unit I

Financial Statements

IFRS	Corresponding Converged Indian Accounting Standards (Exposure Draft)
IAS 1 Presentation of Financial Statements	AS 1 (Revised) Presentation of Financial Statements
IAS 7 Statement of Cash Flows	AS 3 (Revised) Statement of Cash Flows
IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors	AS 5 (Revised) Accounting Policies, Changes in Accounting Estimates and Errors
IAS 10 Events after the Reporting Period	AS 4 (Revised) Events after the Reporting Period
IAS 12 Income Taxes	AS 22 (Revised) Income Taxes
IAS 21 The Effects of Changes in Foreign Exchange Rates	AS 11 (Revised) The Effects of Changes in Foreign Exchange Rates
IFRS 3 Business Combinations	AS 14 (Revised) Business Combinations
IAS 27 Consolidated and Separate Financial Statements	AS 21 (Revised) Consolidated and Separate Financial Statements
IAS 28 Investments in Associates	AS 23 (Revised) Investments in Associates
IAS 26 Accounting and Reporting by Retirement Benefit Plans	AS 36 Accounting and Reporting by Retirement Benefit Plans
IAS 31 Interests in Joint Ventures	AS 29 (Revised) Interests in Joint Ventures
IAS 33 Earnings per Share	AS 20 (Revised) Earnings per Share
IFRS 8 Operating Segments	AS 17 (Revised) Operating Segments
IAS 24 Related Party Disclosures	AS 18 (Revised) Related Party Disclosures
IAS 34 Interim Financial Reporting	AS 25 (Revised) Interim Financial Reporting
IAS 29 Financial Reporting in Hyperinflationary Economies	AS 34 Financial Reporting in Hyperinflationary Economies
IAS 26 Accounting and Reporting by Retirement Benefit Plans	AS 36 Accounting and Reporting by Retirement Benefit Plans
IFRS 4 Insurance Contracts	AS 39 Insurance Contracts
IFRIC 7 Applying the Restatement Approach under IAS 29 – Financial Reporting in Hyperinflationary Economies	AS 34 Financial Reporting in Hyperinflationary Economies – Appendix A
IFRIC 10 Interim Financial Reporting and Impairment	AS 25 (Revised) Interim Financial Reporting – Appendix A
14. IFRIC 17 Distributions of Non-cash Assets to Owners	AS 4 (Revised) Events after the Reporting Period – Appendix A
3. SIC 12 Consolidation – Special Purpose Entities	AS 21 (Revised) Consolidated and Separate Financial Statements – Appendix A
4. SIC 13 Jointly Controlled Entities – Non-Monetary Contributions by Venturers	AS 29 (Revised) Interests in Joint Ventures – Appendix A
SIC 21 Income Taxes	AS 22 (Revised) Income Taxes – Appendix A
Recovery of Revalued Non-Depreciable Assets	
SIC 25 Income Taxes – Changes in the Tax Status of an Enterprise or its Shareholders	AS 22 (Revised) Income Taxes – Appendix B

Unit II

Revenue and Expenses

IAS 2 Inventories	AS 2 (Revised) Inventories
IAS 11 Construction Contracts	AS 7 (Revised) Construction Contracts
IAS 18 Revenue	AS 9 (Revised) Revenue
IAS 23 Borrowing Costs	AS 16 (Revised) Borrowing Costs
IAS 19 Employee Benefits	AS 15 (Revised) Employee Benefits
IAS 20 Accounting for Government Grants and Disclosure of Government Assistance	AS 12 (Revised) Accounting for Government Grants and Disclosure of Government Assistance
IFRIC 5 Rights to Interests Arising from Decommissioning, Restoration and Environmental Rehabilitation Funds	AS 29 (Revised) Provisions, Contingent Liabilities and Contingent Assets – Appendix A
IFRIC 6 Liabilities Arising from Participating in a Specific Market – Waste Electrical and Electronic Equipment	AS 29 (Revised) Provisions, Contingent Liabilities and Contingent Assets – Appendix B
IFRIC 12 Service Concession Arrangements	AS 7 (Revised) Construction Contracts – Appendix A
IFRIC 13 Customer Loyalty Programmes	AS 9 Appendix B Customer Loyalty Programmes
IFRIC 18 Transfer of Assets from Customers	AS 9 Appendix D Transfer of Assets from Customers
IFRIC 14 (AS 19) – The Limit on a Defined Benefit Asset, Minimum Funding Requirements and their Interaction	AS 15 (Revised) Employee Benefits – Appendix A
IFRIC 15 Agreements for the Construction of Real Estate	AS 9 Appendix C – Agreements for the Construction of Real Estate
SIC 29 Disclosure - Service Concession Arrangements	AS 7 (Revised) Construction Contracts – Appendix B
SIC 31 Revenue – Barter Transactions Involving Advertising Services	AS 9 Appendix A Revenue – Barter Transactions Involving Advertising Services

Unit III

Liabilities and Equity

IAS 16 Property, Plant and Equipment	AS 10 (Revised) Property, Plant and Equipment
IAS 17 Leases	AS 19 (Revised) Leases
IAS 36 Impairment of Assets	AS 28 (Revised) Impairment of Assets
IAS 38 Intangible Assets	AS 26 (Revised) Intangible Assets
IAS 40 Investment Property	AS 37 Investment Property
IAS 41 Agriculture	AS 38 Agriculture
IFRS 5 Non current Assets Held for Sale and Discontinued Operations	AS 24 (Revised) Non current Assets Held for Sale and Discontinued Operations
IFRS 6 Exploration for and Evaluation of Mineral Resources	AS 35 Exploration for and Evaluation of Mineral Resources
IAS 32 Financial Instruments : Presentation	AS 31 (Revised) Financial Instruments : Presentation
IAS 39 Financial Instruments : Recognition and Measurement	AS 30 (Revised) Financial Instruments : Recognition and Measurement
IFRS 7 Financial Instruments : Disclosures	AS 32 (Revised) Financial Instruments : Disclosures
IFRS 9 Financial Instruments	AS 40 Financial Instruments
IFRS 2 Share-based Payment	AS 33 Share - based Payment
IFRIC 1 Changes in Existing Decommissioning, Restoration and Similar Liabilities	AS 10 (Revised) Property, Plant and Equipment Appendix A
IFRIC 2 Members' Shares in Cooperative Entities and Similar Instruments	AS 31 (Revised) Financial Instruments : Presentation, Appendix B
IFRIC 4 Determining Whether an Arrangement Contains a Lease	AS 19 (Revised) Leases, Appendix C
IFRIC 9 Reassessment of Embedded Derivatives Measurement – Appendix C	AS 30 (Revised) Financial Instruments : Recognition and Measurement – Appendix C
IFRIC 16 Hedges of a Net Investment in a Foreign Operation	AS 30 (Revised) Financial Instruments : Recognition and Measurement – Appendix D

IFRIC 19 Extinguishing Financial Liabilities with Equity Instruments	AS 30 (Revised) Financial Instruments : Recognition and Measurement – Appendix E
SIC 10 Government Assistance – No Specific Relation to Operating Activities	
SIC 15 Operating Leases – Incentives	AS 19 (Revised) Leases – Appendix A
SIC 27 Evaluating the Substance of Transactions involving the Legal Form of a Lease	AS 19 (Revised) Leases – Appendix B

Unit IV Conversion

IFRS 1 First Time Adoption of International Financial Reporting Standards	Ind. AS41 First Time Adoption of Indian Accounting Standards
Forthcoming Standards : Rate Regulated Activities Fair Value Measurement	
<p>Note: Standards are classified into various units based on major objectives, and requirements of a particular unit. However, impact of a standard is always overlapping across the units.</p> <p>A participant is expected to study various units in sequence and submit the required assignments in sequence. However, depending upon the level of understanding and topic preference, one may study various units in random order and submit assignments in random order.</p>	

5-Day Classroom Sessions Details

Day 1 : 09.30-10.00 Hrs to 10.00-11.30 Hrs

Session 1 : Inauguration

Introduction to IFRSs & Converged Indian Accounting Standards

- Brief description of IFRS 1-9 • IASs, IFRIC & SIC Interpretations • Basis of Asset Valuation in IFRS
- Comparative Analysis of IFRS and Converged Indian Accounting.

11.45-13.00 Hrs

Session 2 : Presentation of Financial Statements

- IAS 1 Presentation of Financial Statements • Components of IFRS based financial statements • Current non-current classification • Two-part Statement of Comprehensive Income • Statement of Changes in Equity • Capital Disclosures • Key sources of uncertainty in estimation • IAS 7 Statement of Cash Flows

14.00-15.30 Hrs

Session 3: Accounting Policies, Changes in Accounting Estimates and Errors

- IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors • Selection of accounting policies
- Retrospective application and retrospective restatement • Rectification of errors • Events after the Reporting Period • IAS 10 Events after the Reporting Period • Adjusting and Non-adjusting events •

Resolution of court cases • Impact on inventory valuation • Proposed dividend.

15.45-16.45 Hrs

Session 4 : Inventories

- IAS 2 Inventories • Core principles • Net realizable value versus fair value less costs to sale • Cost of inventories – Cost of inventories of a service provider
- Measurement of net realizable value – firm sales or service contracts – materials and other supplies used in the production of inventories • Recognition of Expense • Write – down and reversals of write down

16.45-17.45 Hrs

Session 5 : Income Taxes

- IAS 12 Income Taxes • Balance Sheet Liability method • Development of Tax base • Taxable temporary differences • Deductible temporary differences • Deferred taxation on fair value • Unused tax losses and unused tax credit • Recognition of Deferred Tax : Items recognized in the profit or loss; items recognized outside profit or loss • Presentation issues : Offsetting
- SIC 21 Income Taxes – Recovery of Revalued Non-Depreciable Assets

Day 2

10.00-12.15 Hrs

Session 6 : Property, Plant and Equipment (PPE)

- IAS 16 Property, Plant, and Equipment • Asset

Classification • Elements of Cost • Capitalisation of initial estimate of Decommissioning, Restoration and Similar Liabilities • Major spares, inspection costs • Depreciation – Componentisation of PPE • Residual Value • Useful life of PPE • Measurement of Fair Value – Earnings model and depreciated replacement cost method • IFRIC 1 Changes in Existing Decommissioning, Restoration and Similar Liabilities

12.15-13.00 Hrs

Session 7 : *Intangible Assets*

• IAS 38 Intangible Assets • Various types of intangible assets – market related, customer related, technology based, contract based and artistic related • Initial recognition and subsequent measurement • Cost and revaluation model • Restriction of applying revaluation model • Amortisation policy • Self-developed intangible assets – research phase and development phase • SIC 32 Intangible assets – Website costs

14.00-15.45 Hrs

Session 8 : *Lease Accounting*

• IAS 17 Leases • Classification of finance and operating lease – leasehold land • Accounting for finance and operating lease • IFRIC 4 Determining Whether an Arrangement Contains a Lease • SIC 15 Operating Leases-Incentives • SIC 27 Evaluating the Substance of Transactions in the Legal Form of a Lease • Lease accounting disclosures

15.45-17.00 Hrs

Session 9 : *Investment Property*

• IAS 40 Investment Property • Classification of Investment property, measurement principles • Initial recognition and subsequent measurement • Transfer to and from investment property • Disclosures

Non-current Assets Held for Sale and Discontinued Operations

• IFRS 5 Non-current Assets Held for Sale and Discontinued Operations • Classification of non-current assets held for sale/disposal group assets, measurement principles • Disclosures

17.00-17.45 Hrs

Session 10 : *Related Party Disclosures*

• IAS 24 Related Party Disclosures • Identification of related parties • Government related entities • Disclosures • Disclosure requirements

Day 3

10.00-13.00 Hrs

Session 11 : *Revenue Recognition*

• IAS 18 Revenue • Fair value of revenue • Swapping

of goods • Elimination of finance costs from revenue

- **Sale of goods :** ■ Bill and hold sales ■ Goods shipped subject to conditions of installation and inspection ■ Goods on approval when the buyer has negotiated limited right of return ■ Consignment sales ■ Cash on delivery sales ■ Sale under repurchase agreement ■ Sale to dealers and distributors

- **Sale of services :** ■ Application of stage of application method ■ Special cases of recognition of revenue for rendering of services ■ Revenue recognition for Software Companies, Telecommunication ■ Companies and Energy Transmission Companies ■ Financial services fees ■ Investment management fees ■ Franchise fees

- Recognition of royalties, interest and dividend • Disclosures • IFRIC 18 Transfer of Assets from Customers • IFRIC 13 Customer Loyalty Programme • IFRIC 15 Agreements for the Construction of Real Estate

14.00-15.30 Hrs

Session 12 : *Construction Contracts*

- IAS 11 Construction Contracts • Combining and segmenting construction contracts • Contract revenue and contract costs • Determination of stage of completion • Recognition of contract revenue and expenses • Construction work-in-progress • Recognition of expected loss • Change in estimates • Disclosures

15.45 -16.45 Hrs

Session 13 : *Service Concession Arrangements*

- IFRIC 12 Service Concession Arrangements • Receivables Accounting approach • Intangible Asset Accounting approach • SIC 29 Disclosures – Service Concession Arrangements

16.45-17.45 Hrs

Session 14 : *Operating Segment*

- IFRS 8 Operating Segments • Meaning of operating segments • Reportable segments • Aggregation criteria • Quantitative thresholds • Measurement • Reconciliations

Day 4

10.00-13.00 Hrs

Session 15 : *Financial Instruments*

- **IAS 32 Financial Instruments :** ■ Presentation ■ Meaning of financial assets, financial liabilities, equity, distinction between equity and liability, puttable financial instruments ■ Whether puttable financial instruments are equity or liability ■ Treasury stock ■ Compound financial instruments ■ Financial guarantee

- **IAS 39 Financial Instruments** : ■ Recognition and Measurement ■ Classification of financial assets ■ Trade date and settlement date accounting ■ Initial recognition and subsequent measurement ■ Derecognition criteria ■ Impairment of financial assets – impairment testing for receivables ■ Subsidized loans ■ Application of amortised cost method
- IFRS 9 Financial Instruments

14.00-15.30 Hrs

Session 16 : *Financial Instruments*

- Hedge Accounting ● Hedging instruments, hedged assets and hedging relationship ● Hedging effectiveness ● Accounting for fair value hedge, cash flow hedge and hedging net investments in foreign operations
- IFRIC 16 Hedges of Net Investments in Foreign Operations

15.45-16.45 Hrs

Session 17 : *Disclosures of Financial Instruments*

- IFRS 7 Financial Instruments : Disclosures ● Disclosures regarding categorization, reclassification, collateral, allowance for credit losses ● Defaults and breaches ● Hedge accounting disclosures ● Qualitative risk disclosures
- **Quantitative risk disclosures** : ■ Credit risk ■ Liquidity risk ■ Market risk ■ Sensitivity analysis

16.45-17.45 Hrs

Session 18 : *Provisions, Contingent Liabilities and Contingent Assets*

- Principles for provisioning ● Discounting and risk adjustments ● Expected disposal of assets ● Reimbursements ● Contingent assets

Day 5

10.00-11.30 Hrs

Session 19 : *Consolidation*

- IAS 27 Consolidated and Separate Financial Statements ● IAS 28 Investments in Associates ● IAS 31 Interests in Joint Ventures ● SIC 12 Consolidation – Special Purpose Entities

11.45-13.00 Hrs

Session 20 : *Share Based Payment*

- IFRS 2 Share Based Payment ● Equity settled transactions ● Cash settled transactions ● Optionally equity or cash settled transactions

Business Combinations

- IFRS 3 Business Combinations ● Measurement of goodwill ● Bargain purchase ● Reacquired rights ● Effect of change in share based payment ● Payment to management ● Indemnification assets

14.00-17.00 Hrs

Session 21 : *IFRS Conversion*

- IFRS 1 First-time adoption of IFRSs ● Mandatory and optional exemptions ● Reconciliations

17.00-17.45 Hrs

Open House

Tea Break 11.30-11.45 Hrs & 15.30-15.45 Hrs

Lunch 13.00-14.00 Hrs

About the Institute

The Institute of Cost & Works Accountants of India was established by the Government of India as an autonomous professional Institute in 1959 to provide training, education and research facilities in Cost and Management Accounting. The Institute is a member of the International Federation of Accountants (IFAC), the Confederation of Asian & Pacific Accountants (CAPA), and the South Asian Federation of Accountants (SAFA).

The Objectives

- To promote the knowledge of Cost and Management Accountancy, to provide educational facilities for training of young men and women for building careers in management accounting.
- To improve the decision making skills and administrative competence relevant to management accounting and corporate management in general.
- To create knowledge through research – both applied and conceptual – relevant to management accounting and its underlying disciplines so as to disseminate such knowledge through publications.

Registration Procedure

- By E-Mail followed by Payment by Post Courier alongwith the Registration Form.
- By Online Registration through ICWAI Website www.mdp.icwai.org followed by Payment by Post/Courier.
- By Courier/Speed Post/Post/By Hand alongwith the Registration Form and the Payment.

For Further Details Please Contact

Shri D, Chandru, Addl. Director (PD&P)

The Institute of Cost and Works Accountants of India
ICWAI Bhawan, 3 Institutional Area, Lodi Road, New Delhi 110 003

Phones : 011-24622156-57-58, 24618645 (D) 011-24643273 (M) 098186 01200

Tele-Fax : 011-43583642 / 24622156 / 24618645

E-mail : mdp@icwai.org, cep.chandru@icwai.org

Website : www.mdp.icwai.org, www.icwai.org.

REGISTRATION FORM

Shri D. Chandru, Addl. Director (PD & P)
 The Institute of Cost and Works Accountants of India
 ICWAI Bhawan, 3 Institutional Area, Lodi Road
 New Delhi 110 003

Dear Sir,

We hereby confirm that the following executives of our organization is/are being deputed as participants to your **Intensive Certificate Course on International Financial Reporting Standards (IFRS)** :

S. No.	Name	Designation	Phone/Mobile	E-Mail
1.				
2.				
3.				
4.				
5.				

Signature of Nominating Authority

Details of Nominating Authority

Name Designation

Name of the Organisation

Address

.....

Phone/Mobile Fax

E-mail

Payment Details

Cheque / DD No. Dated For

drawn on in favour of **'The Institute of Cost and Works Accountants of India'** payable at New Delhi.

CEP Notice

The Continuing Education Programme Directorate is Organising Following Programmes. For Further Details and on-line registration visit our website <http://mdp.icwai.org/> OR www.icwai.org (click the link Management Development Programmes).

Contact Person

Mr. D Chandru
Additional Director (PD&P)
CEP Directorate,
ICWAI Bhawan, 3rd Floor
3 Institutional Area, Lodi Road
New Delhi-110 003
Tel - 011-2464 3273 (D), 24622156/157/158

Name of the Programme	Duration	Venue	Fee (Rs.)
Contract Management	10-12 Nov, 2010	New Delhi	15,000/-
International Programme on Emerging Trends in Financial Management	22 Nov-2 Dec, 2010	Singapore, Kuala Lumpur, Bangkok	2,25,000/- (Residential Basis)
Advance Tax, TDS and Tax Planning	21-24 Dec, 2010	Shirdi	30,000/- (Residential Basis)
Internal Auditing for Effective Management Control	21-24 Dec, 2010	Shirdi	30,000/- (Residential Basis)
Recent Trends in Financial Management including IFRS Convergence	03-09 Jan, 2011	Dubai & Muscat	1,50,000/- (Residential Basis)
Management of Taxation – Service Tax, VAT, Excise & Customs, TDS and proposed GST	18-21 Jan, 2011]	Mahabaleswar	30,000/- (Residential Basis)
Finance for Jr. Finance and Accounts Officers and non Executives (F & A)	18-21 Jan, 2011	Mahabaleswar	30,000/- (Residential Basis)
Financial Risk Management	09-11 Feb, 2011	New Delhi	15,000/-
Valuation Management	16-18 Feb, 2011	New Delhi	15,000/-

BENEVOLENT FUND FOR THE MEMBERS OF THE INSTITUTE OF COST AND WORKS ACCOUNTANTS OF INDIA

An Appeal

Benevolent Fund for the members of the Institute of Cost and Works Accountants of India was created with the noble purpose of extending grants and financial assistance of prescribed amount to the members and beneficiaries of the Fund for medical treatment, financial distress and death. In the recent past, although the grants and financial assistance could be extended to the eligible members and beneficiaries of the Fund in time, it would have been possible to provide enhanced benefits if the membership of Fund had been larger. We, therefore, appeal to those members of ICWAI who have not yet become members to apply for life membership of the Fund immediately. For details and application form, please visit the website : www.icwai.org.

FOR ATTENTION OF MEMBERS PAYMENT OF MEMBERSHIP FEES

Members of the Institute who are having outstanding membership dues have been communicated individually to pay their dues. In addition, their due position is also uploaded on Institute's website www.icwai.org under the option **Members->Member Details->Search Details & Check Dues**. All members having outstanding dues are requested to pay the same immediately.

The Annual Membership Fee for 2010-2011 for Associate and Fellow Members of the Institute shall become due and payable on 1st April, 2010 at the following rates:

Associate Annual Membership Fee : Rs.500/- (Rs.125/- for members entitled to pay at reduced rate)

Fellow Annual Membership Fee : Rs.1000/- (Rs.250/- for members entitled to pay at reduced rate)

All members are requested to pay their respective membership fees along with arrears, if any, immediately and **not later than 30th September, 2010**, the last date of payment as per Regulations 7(6) & 7(7) of the Cost and Works Accountants Regulations, 1959. Moreover, the Elections to the Council and Regional Councils are scheduled to take place in 2011.

The fees may be paid by Cash/Demand Draft/Pay Order/Cheque at the Headquarters/Regional Councils/Chapters of the Institute. The Demand Draft/Pay Order/Cheque should be drawn in favour of "The ICWA of India" and payable at Kolkata. In case of outstation cheque not payable at Kolkata, Rs.50/- is to be added towards Bank Charges. Fees may also be paid online through the Institute's Internet Payment Gateway on the link: http://www.icwai.org/icwai/membership_payment. In case of payment made at the Regional Councils/Chapters of the Institute, the position will be updated upon receipt of the remittance at the Headquarters.

NOTE : MEMBERS SHOULD ENSURE TO INDICATE THEIR NAME AND MEMBERSHIP NO. ON

THE REVERSE OF DEMAND DRAFT/PAY DRAFT/CHEQUE TO BE DRAWN IN FAVOUR OF "THE ICWA OF INDIA" PAYABLE AT KOLKATA IN CASE PAYMENT IS TENDERED BY DEMAND DRAFT/PAY ORDER/CHEQUE. IT SHOULD ALSO BE ENSURED NOT TO ENCLOSE ANY OTHER INTIMATION etc. ALONG WITH THE REMITTANCE OF MEMBERSHIP FEE.

FOR ATTENTION OF MEMBERS PROCEDURE FOR CHANGE OF ADDRESS & OTHER PARTICULARS

Members are requested to check their status from the option **Members -> Member Details -> Search Details & Check Dues** from the website www.icwai.org and inform the Institute with respect to the following :

1. In case of any change in the professional address and other particulars , the same is to be intimated through a signed hard copy preferably in the format (Format "A" - Please see Annexure I) given below to :	Additional Director-cum-Joint Secretary Membership Department The Institute of Cost and Works Accountants of India 12, Sudder Street Kolkata - 700 016. The signed intimation may also be sent by fax to no. 033-22521723. Otherwise, a scanned file of the signed intimation may be sent to e-mail address: membership.kb@icwai.org
2. If the journal mailing address is desired to be changed as per the professional address, the intimation in (Format "A" - Please see Annexure I) is also to be made to :	Additional Director-cum-Joint Secretary Membership Department The Institute of Cost and Works Accountants of India 12, Sudder Street Kolkata - 700 016.
3. In case of any change in the journal mailing address only , the same is to be intimated through a signed hard copy or by e-mail preferably in the format (Format "B" - Please see Annexure I) given below to :	The signed intimation may also be sent by fax to no. 033-22521723. Otherwise, a scanned file of the signed intimation may be sent to e-mail address: membership.kb@icwai.org Deputy Director (Research & Journal) The Institute of Cost and Works Accountants of India 12, Sudder Street Kolkata - 700 016. e-mail: research@icwai.org / rnj.arpan@icwai.org

ANNEXURE I

Format "A"

CHANGE OF ADDRESS & OTHER PARTICULARS IN THE LIST OF MEMBERS		
IN BLOCK LETTERS	NAME IN FULL :	
	MEMBERSHIP NO. :	
	QUALIFICATION :	
	ADDRESS :	
	CITY :	
	STATE :	
	PIN CODE :	
	PHONE NO. (OFFICE) :	
	PHONE NO. (RESIDENCE) :	
	PHONE NO. (MOBILE) :	
	E-MAIL :	
	SIGNATURE OF MEMBER :	DATE:

NOTE : PLEASE INDICATE N.A., IF ANY OF THE COLUMNS IS NOT APPLICABLE.

Format "B"

CHANGE OF ADDRESS IN THE JOURNAL MAILING LIST		
IN BLOCK LETTERS	NAME IN FULL :	
	MEMBERSHIP NO. :	
	QUALIFICATION :	
	ADDRESS :	
	CITY :	
	STATE :	
	PIN CODE :	
	SIGNATURE OF MEMBER :	DATE:

NOTE : PLEASE INDICATE N.A., IF ANY OF THE COLUMNS IS NOT APPLICABLE.

FOR ATTENTION OF PRACTISING MEMBERS
PROCEDURE FOR CHANGE OF PROFESSIONAL ADDRESS & OTHER PARTICULARS

Practising members are requested to check their status from the option **Members -> Practising Cost Accountants -> Search Details** from the website www.icwai.org and inform the Institute with respect to their professional address and other particulars as reflected in the List of Members Holding Certificate of Practice.

In case of any change in the professional address and other particulars, the same is to be intimated by furnishing a duly filled in and signed Professional Development Information Form given below to:

Additional Director-cum-Joint Secretary
 Membership Department
 The Institute of Cost and Works Accountants of India
 12, Sudder Street
 Kolkata - 700 016.

The signed intimation may also be sent by fax to no. 033-22521723.

Otherwise, a scanned file of the duly filled in and signed Professional Development Information Form may be sent by attachment to e-mail address : membership.kb@icwai.org.

PROFESSIONAL DEVELOPMENT INFORMATION FORM

For ICWAI Members in Practice

Date.....

Please return this Form duly filled in and signed to :

Additional Director-cum-Joint Secretary
 Membership Department
 The Institute of Cost and Works Accountants of India
 12, Sudder Street
 Kolkata - 700 016.

for inclusion in the "List of Members Holding Certificate of Practice."

IN BLOCK LETTERS

Name

Qualification

Professional

Address

.....

.....

Telephone

Number(s) Office :

Residence:

Mobile :

Fax Number

E-mail Address

(Signature of Member)

Membership No.....