# THE MANAGEMENT ACCOUNTANT

ISSN 0972-3528

February 2023 | VOL 58 | NO. 02 | Pages - 124 | ₹ 100





Journal of

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

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#### Last Date Extended for submission of Nomination: 15<sup>th</sup> February 2023

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All companies (Listed or Unlisted) Including LLP

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- A1) Private Sector Mega
- A2) Private Sector Large
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- A5) Private Sector Micro
- A6) Public Sector Mega
- A7) Public Sector Large
- A8) Public Sector Medium
- A9) Public Sector Small
- A10) Start Up (as per DPIIT

#### notification)

#### (B) Service Sector

- B1) Banking, Financial Services and Insurance (BFSI)
- **B2) Transportation and Logistics**
- B3) Power Distribution and
- Transmission
- B4) City Gas Distribution
- B5) Retail & E-commerce/Hospitality &
- Tourism/Healthcare
- B6) Infrastructure and Construction
- B7) Information Technology & Telecommunication
- **B8)** Consulting
- B9) Start Up (as per DPIIT notification)
- B10) Others

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- **THE INSTITUTE OF COST ACCOUNTANTS OF INDIA** (erstwhile The Institute of Cost and Works Accountants of India) was established in 1944 as a registered company under the Companies Act with the objects of promoting, regulating and developing the profession of Cost Accountancy.
- On 28 May 1959, the Institute was established by a special Act of Parliament, namely, the Cost and Works Accountants Act 1959 as a statutory professional body for the regulation of the profession of cost and management accountancy.
- It has since been continuously contributing to the growth of the industrial and economic climate of the country.
- The Institute of Cost Accountants of India is the only recognised statutory professional organisation and licensing body in India specialising exclusively in Cost and Management Accountancy.



#### VISION STATEMENT

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



#### MISSION STATEMENT

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#### Institute Motto

असतोमा सद्गमय तमसोमा ज्योतिर् गमय मृत्योमीमृतं गमय ॐ शान्ति शान्ति शान्तिः From ignorance, lead me to truth From darkness, lead me to light From death, lead me to immortality Peace, Peace, Peace

Delhi Office CMA Bhawan, 3 Institutional Area Lodhi Road, New Delhi - 110003

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

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on behalf of The Institute of Cost Accountants of India, 12, Sudder Street, Kolkata - 700 016, P. S. New Market, West Bengal



PRINTED AT - SAP Print Solutions Pvt. Ltd. Plot No. 3, Sector II, The Vasai Taluka Industrial Co-op. Estate Ltd., Gauraipada, Vasai (East), Dist. Palghar - 401 208, India on behalf of The Institute of Cost Accountants of India, 12, Sudder Street, Kolkata - 700 016, SAP PRINT SOLUTIONS PVT. LTD. P. S. New Market, West Bengal

PUBLISHED FROM - The Institute of Cost Accountants of India, 12, Sudder Street, Kolkata - 700 016, P. S. New Market, West Bengal

CHAIRMAN, JOURNAL & PUBLICATIONS COMMITTEE -CMA (Dr.) K Ch A V S N Murthy

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  - > Non-Receipt/Complementary Copies/Grievances journal@icmai.in

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#### The Management Accountant technical data

Periodicity: Monthly Language : English

Overall Size: - 26.5 cm x 19.6 cm

Subscription

Inland: ₹1,000 p.a or ₹100 for a single copy

Overseas: US\$ 150 by airmail

Concessional subscription rates for registered students of the Institute:

₹300 p.a or ₹30 for a single copy

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#### The Management Accountant Journal is Enlisted in:

'UGC-CARE REFERENCE LIST OF QUALITY JOURNALS'

#### The Management Accountant Journal is Indexed and Listed at:

- Index Copernicus and J-gate
- Global Impact and Quality factor (2015):0.563

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# **EDITORIAL**

he development of infrastructure has been one of the key factors for driving the overall growth of India, along with the aim of becoming a 'five trillion dollar' economy by 2025. Infrastructure is the lifeblood of our country – as we need electricity, roads, highway projects, bridges, railways, mass rapid transport systems, ports, airports, telecommunication, generation and distribution of power, irrigation, water supply, sanitation and other facility of similar nature for our vast economic sectors.

As per data availed from the Department of Economic Affairs, Government of India (GoI), "the country needs to invest USD 4.5 trillion for the development of the infrastructure sector before 2030 to ensure its perpetual growth at a fast pace and achieve its goal of becoming a USD 5 trillion economy by 2025."

India is on the verge of a new energy revolution - it is home to some of the largest coal fields and solar power plants in the world. Thus, it is a lucrative market for investment in the energy sector.

The Government of India has launched various schemes and programmes for infrastructure development namely, the National Infrastructure Pipeline (NIP) combined with other initiatives such as 'Make in India' and the Production-Linked Incentives (PLI) Scheme to augment the growth of infrastructure sector. Apart from these, there are other government schemes in effect such as Pradhan Mantri Aawas Yojna, UDAN Scheme - "Ude Desh ka Aam Nagrik", Jal Jeevan Mission, Gati Shakti - National Master Plan, aimed at developing an integrated infrastructure to reduce logistics costs.

The Government of India has accorded 'Infrastructure and Investment' a top priority for the upcoming fiscal year 2023-24, and called it one of the seven 'Saptarishi' - a reference to ancient sages - guiding the country

through the Amrit Kaal.

Budget 2023-24 puts infrastructure investment in focus as capital expenditure for the coming financial year has been shot up by 33% to ₹10 lakh crore. The capital investment outlay is now proposed to be 3.3% of India's GDP.

It is well proven that Investments in Infrastructure and productive capacity have a large multiplier impact on growth and employment. With a focus on job creation, the Union Budget has also made provisions for infrastructure investment by States through Grants-in-Aid which is targeted towards bringing the effective capex by the central government to ₹13.7 lakh crore - 4.5% of GDP.

The finance minister has allocated ₹1.3 lakh crore to extend the 50-year interest-free loan to state governments for another year with an aim to spur infrastructure investment accompanied by complementary policy actions.

In order to fund megaprojects, a capital outlay of ₹2.4 lakh crore has been allocated for the railways. In addition to this a further ₹75,000 crore including ₹15,000 crore from private sources would be used to fund 100 critical transport infrastructure projects encompassing sectors including coal, steel, fertiliser, and food grains, along with port connectivity. The Government of India will additionally revive 50 airports, heliports, water aerodromes, and advanced landing grounds to improve regional air connectivity. The government also proposed to establish an Urban Infrastructure Development Fund (UIDF) to create urban infrastructure in Tier II and III cities through priority sector lending shortfall. The allocation of ₹10,000 crore per annum will be managed by the National Housing Bank.

Infrastructure development serves as the *sine qua non* of economic growth. Cost and Management Accountants



(CMAs) always play a pivotal role to gain competitiveness in the infrastructure industries. CMAs can identify business risk and ensure its mitigation. They can evaluate operating efficiency and effectiveness of project and cost management which leads to reduction in operating costs and ensures optimum utilization of resources. There is adequate opportunity and environment for the CMAs to take up the challenges in order to deliver the best. CMA in the present competitive scenario are technically competent to act as appraisers, advisors, consultants relating to Infrastructure Investment. They can lead without compromising the interests of the modern society and dynamically changing nature.

The issue of sustainability, undoubtedly is an eternal as well as an inevitable need. Our institute, since its inception, is making timely endeavours to match the pace of sustainability issues and create awareness among our students, members and other stakeholders. However, considering the increasing speciality in the subject globally, a need was felt to constitute a Sustainability Standards Board (SSB). In its maiden meeting held on January 18, 2023, the SSB felt the need to educate the masses in general and our members in particular on recent developments in Sustainability. The Board, hence, decided to come out with an exclusive section in The Management Accountant Journal titled "Sustainability Leaf" from this issue.

The Institute on its own way through this publication has attempted to cover contemporary topics which would provide valuable insights to practical aspects in various fields especially infrastructure investment. It is hoped that the esteemed readers will find them useful.

We look forward to constructive feedback from our readers on the articles. Please send your emails at editor@icmai.in.

We extend our thanks to all the contributors to this important issue.



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# THE MANAGEMENT ACCOUNTANT

# **PAPERS INVITED**

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

March 2023	Theme	Corporate Governance: A pathway to Economic Sustainability	Subtopics	000 000000	Robust governance: a key factor in driving long-term, sustainable growth Board Room Challenges in the Post-Pandemic era Board's Role in strengthening Governance to accelerate Environmental, Social and Governance (ESG) Integrating CSR into the Corporate Governance Framework The Two Sides of the Governance Coin: Competition and Regulation Regulation in Corporate Governance; in India and Elsewhere Drivers – the impact of the credit crunch Essential ingredients of good governance Startup Governance: Crucial Building Block for Sustainable Success Corporate Governance in the forthcoming years: what more to add on
April 2023	Theme	Evolving Health Care System: Challenges, Opportunities and Way Ahead	Subtopics	000 000000 000	Prominent changes in the healthcare sector particularly with consumer behaviour Financial constraints hospitals facing: Ways to overcome those glitches Lack of investment in organizational development—how to draw private investor's attention?  Health Care Pricing Increasing patient satisfaction and gaining competitive edge Value-based healthcare: aligning prices for services towards patients Cost reduction programs and strategies: Resource mapping process Essentiality of Healthcare Cost Management Possible opportunities for Sustainable Health Care System in the new normal post Pandemic Telemedicine and digital healthcare Health financing & Health infrastructure Medical Waste Management
May 2023	Theme	Cost Management in Agriculture Sector	Subtopics	00000000000000	Budget 2023: What Does Indian Agro Sector Need? Agricultural Innovations for Resilient Agri-Food Systems Climate Smart Agriculture Food Security: Challenges and Opportunities Agri Banking and Agri Entrepreneurship Crop Diversification and Input Cost Management Agricultural Marketing Infrastructure & Development Leveraging power of policies to achieve Doubling farmers' income Agricultural Engineering & Innovations for Smart Farming Efficient and balanced use of fertilizer for Soil Management Supply Chain Management in Agriculture Sector Biofuels as Renewable Energy: Agricultural Waste Management Infrastructure and Value Chain Development for Agri Exports
June 2023	Theme	Changing Landscape of Management Accounting	Subtopics	00000000	Role of Management Accounting in enabling Sustainability in Businesses Global Collaboration for Inclusive Growth Tomorrow's Accountant: More Pertinent, Strategic, and Creative Than Ever Emerging Tech imposing spearheading Management Accounting Practices Fintech innovations redefining decisional aspects in Management Accounting Impact of Digital Technology in Responsibility Accounting Systems and Performance Evaluation Mechanisms Shifting Role of Professional Accountancy Bodies in the Era of Digital Disruption Financial Automation: Scope for the CMAs

The above subtopics are only suggestive and hence the articles may not be limited to them only.

Articles on the above topics are invited from readers and authors along with scanned copies of their recent passport size photograph and scanned copy of declaration stating that the articles are their own original and have not been considered for anywhere else.

Please send your articles by e-mail to editor@icmai.in latest by the 1st week of the previous month.



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"Never stop fighting until you arrive at your destined place — that is, the unique you. Have an aim in life, continuously acquire knowledge, work hard, and have perseverance to realize the great life."

- Dr. APJ Abdul Kalam

My Dear Professional Colleagues,

ndia has registered another milestone when the country celebrated its 74<sup>th</sup> Republic Day on January 26, 2023. Our Institute also participated with immense pride and happiness in the Republic Day celebrations with the support of its Regional Councils and Chapters spread all across the country.

On the occasion of the Republic Day, the celebrations began with the unfurling of the national flag at CMA Bhawan, New Delhi and at CMA Bhawan, Noida. Further, I am pleased to share that on this auspicious day, in the loving memory of Hon'ble CMA Rakesh Singh, President (2012-13), I inaugurated "Rakesh Singh Memorial Hall" and "3rd floor Office Premises" at CMA Bhawan, Noida in the presence of my council colleagues CMA H. Padmanabhan, Chairman - Committee for Accounting Technicians (CAT), International Affairs Committee & Public Relations Committee and CMA Chittaranjan Chattopadhyay, Chairman - Indirect Taxation Committee, BFSI Board and MSME & Start-up Promotion Board and other dignitaries, members and officials of the Institute. The Republic Day celebration was also organized at the Headquarters, Kolkata, in the presence of former Presidents of the Institute CMA Biswarup Basu, CMA Mahesh Shah, CMA Amal Kr. Das, CMA Harijiban Banerjee, Council members and the officials of the Institute.

#### **UNION BUDGET 2023-24**

We welcome the Union Budget 2023-24, presented by Hon'ble

# PRESIDENT'S COMMUNIQUE

Finance, Minister, Mrs. Nirmala Sitharaman. This Budget has something positive for every strata of the society and it strikes an excellent balance between the need for growth with the need for inclusion, keeping in mind the needs of future India.

I thank Hon'ble Finance Minister on reposing the trust on Cost Accountants under Section 142(2A)(ii) of the Income Tax Act, wherein mentioned to get inventory valued by Cost Accountants in specific cases and reporting thereof. I strongly believe that this amendment will broaden the avenues for The CMA fraternity.

I now present a brief summary of the activities of various Departments/Committees/ Boards of the Institute, in addition to those detailed above:

#### DIRECTORATE OF STUDIES

#### Exemption/Credit Transfer with IGNOU/ICSI under New Syllabus:

I am pleased to share that the Institute entered into a MoU with IGNOU and now our students can join MBA/MCOM/BCOM (ODL/Online) programmes of IGNOU with certain credit transfer/exemptions. The syllabus mapping will be notified shortly.

I am happy to inform that the mutual exemption process with new CMA Syllabus vis-à-vis new Syllabus of ICSI will be published very soon.

#### Students Admission for June 2023 Term:

I am delighted to inform that like the last few years the Institute is witnessing a tremendous growth in students' admission, for June 2023 term also under new Syllabus 2022 with the introduction of 15 months mandatory Practical Training, World Class Skills Training, Industry-ready Curriculum, continuous Placement drives and various other student engagement activities over the year. I wish more students will join CMA Course in the days to come to become future-ready professionals.

#### Seminar on National Education Policy 2020 & CMA Syllabus - 2022

I am pleased to convey that the Directorate of Studies of the Institute organized a Seminar on National Education Policy 2020 & CMA Syllabus – 2022 at Eastern Zonal Cultural Centre, Kolkata on January 14, 2023.

We were privileged to have **Dr. Subhas Sarkar, Hon'ble Union Minister of State, Ministry of Education, Government of India** as the Chief Guest of this knowledge event. Dr. Sarkar, in his address, expressed his heartfelt thanks to the Institute for organizing such an eventful Seminar and also for the holistic approach towards developing such a professionally enriched syllabus and expressed that he is glad to know that the Directorate of Studies of the Institute has made efforts to craft the CMA Syllabus 2022 in the light of particularly those provisions of the National Education policy 2020 which are considered relevant and appropriate in the best interest of students and other stakeholders,

and to the extent feasible keeping in view the enormity and nation-wide spread of students. The predominant objective is to nurture today's students to tomorrow's globally oriented and socially responsible CMA professionals. The Institute is striving to set up frontiers of research with greater industry-professional institute linkage in which students would get opportunities to participate as field level researchers and analysts. *Data Analytics* has been added as a separate section of a subject. Technical skill training for SAP Finance Power User, Microsoft Office, and E-Filing is an integral part of the curriculum now.

In the Inaugural Session, CMA (Dr.) Balwinder Singh, Chairman, Training & Education Facilities Committee delivered the welcome address. Special addresses were delivered by CMA Debasish Mitra, Chairman, Board of Advanced Studies & Research, CMA Chittaranjan Chattopadhyay, Chairman, BFSI Board, CMA Biswarup Basu, Chairman, Professional Development Committee and CMA Rakesh Bhalla, Vice President of the Institute. The Hon'ble Minister along with the dignitaries released the CMA Prospectus. The session was concluded by the Vote of Thanks offered by CMA Kaushik Banerjee, Secretary of the Institute. CMA (Dr.) Paritosh Basu, Senior Director, Former Sr. Professor, NMIMS University, Mumbai was the Key Note Speaker in the Technical Session.

## BANKING, FINANCIAL SERVICES AND INSURANCE BOARD

The reconstituted Banking, Financial Services & Insurance Board (BFSIB) of the Institute and the BFSI department continued to operate under the active leadership of CMA Chittaranjan Chattopadhyay, Chairman of the BFSI Board. A brief synopsis of the activities and initiatives taken are as follows -

# A. Representations for inclusion and expanding scope of CMAs

The BFSIB has continued with its efforts for further development of the profession in the BFSI sector with representations to authorities and employers for inclusion of CMAs in the sector. The concerted and diligent efforts have resulted in numerous opportunities for CMAs. I am pleased to note the following further developments: -

- CMAs are eligible to apply for the post of Chief Risk Officer for Tamilnad Mercantile Bank
- CMAs are eligible to apply for the post of Sr. Manager (Credit) and Manager (Credit) in Union Bank of India
- CMAs are eligible to apply for the post of Head-Central Internal Audit Division of The Nainital Bank Ltd.
- CMA Firms are eligible to apply for empanelment as Stock Auditors in the Guwahati Zone of UCO Bank

#### **B.** Certificate Courses on Banking

The Certificate Course on Treasury and International Banking (6<sup>th</sup> Batch) have commenced from February 4, 2023. The admission window for two Certificate Courses are currently going on as stated below: -

 Certificate Course on Concurrent Audit of Banks (8<sup>th</sup> Batch)  Certificate Course on Credit Management of Banks (8<sup>th</sup> Batch)

I call upon all members and students to take the opportunity for capacity building and knowledge enhancement by enrolling in such courses for which the link of admission is https://eicmai. in/advscc/Home.aspx

#### C. Pension Month Blended Programme

The BFSI Board organized the blended programme on January 27, 2023 on the topic on "NPS: From an assured contribution to an assured return". The programme was hosted at the Indian Chamber of Commerce Auditorium and graced by Shri Supratim Bandyopadhyay, Former Chairperson, PFRDA along with CMA Prasenjit Deb, Director (Cost), Government of India. CMA Soumit Das, Chief Mentor - Financial Goal Achievers was the speaker in the technical session. The programme was moderated by CMA Debashish Lahiri, Advocate.

#### D. Webinars

The BFSI Board organized two webinars in the month of January, 2023 as follows:

- Webinar on "Scope of CMAs as Surveyors in General Insurance Companies in India": The speaker was CMA (Dr.) P. Siva Rama Prasad, Former AGM, State Bank of India and was conducted on January 22, 2023.
- 2. Webinar on "Fintech in India": The speaker was CMA Sudipto Roy, Founder & Director, Finlabs India Pvt. Ltd. and was conducted on January 30, 2023.

#### E. Chairman's meetings with various dignitaries: -

a) CMA Chittaranjan Chattopadhyay, Chairman, BFSIB met Shri Soma Sankara Prasad, MD & CEO of UCO Bank along with CMA (Dr.) K Ch A V S N Murthy, Chairman, Journal and Publications Committee along with CMA Biswarup Basu, Past President on 16th January, 2023 to release the special issue on Banking of The Management Accountant, January, 2023 issue.

b) CMA Chittaranjan Chattopadhyay, Chairman, BFSIB met Shri R. Kesavan, Regional Director, Reserve Bank of India, Kolkata RO at his Office on 30th January, 2023 to discuss various activities of the Institute in enhancing capacity building and scope of CMAs in various fields in BFSI sector.

#### F. Release of the 12th issue of the BFSI Chronicle

The BFSI Board released the 12<sup>th</sup> issue of the BFSI Chronicle for the quarter from September to December 2022. The BFSI Chronicle contains articles in the BFSI sector along with the activities of the BFSI Board in last quarter. The link is stated as: https://icmai.in/upload/BI/BFSI\_CHRONICLE\_12th\_EDITION.pdf

#### **DIRECTORATE OF CAT**

#### **CAT Examination: January 2023 Term**

The result of CAT Course Part- I Examination-January 2023 was declared after the examination was successfully concluded on 22nd January, 2023. I would like to congratulate all the

students who have passed the examination. Since passing the CAT examination makes them eligible to take direct admission in the Intermediate Course of the Institute, I urge them to enrol in the CMA Course.

#### WEBINT

The CAT Directorate resumed virtual learning through the WEBINT on IND AS, in association with International Affairs Committee, Public Relations Committee and AAT Board for the benefit of students and Members of the Institute. I would like to thank resource person CMA Dr. Gopal Krishna Raju, and coordinators CMA Chittaranjan Chattopadhyay, Council Member & CMA (Dr) K Ch A V S N Murthy, Council Member for their continuous support and making this series a grand success. I would like to place on records the thoughtfulness of team CAT under the leadership of my Council colleague CMA H. Padmanabhan, Chairman-CAT.

## REGIONAL COUNCIL & CHAPTERS COORDINATION COMMITTEE

The Regional Council & Chapters Coordination Committee under the Chairmanship of CMA (Dr.) K Ch A V S N Murthy organized a WEBINT on "Accounting as perceived in Classical Indian Thought" on Friday, January 13, 2023.

CMA (Dr.) K Ch A V S N Murthy, Chairman of Regional Council & Chapters Coordination Committee addressed the participants along with my council colleague CMA Chittaranjan Chattopadhyay on this unique topic. The Guest speaker for the event was CMA B R Prabhakar, former General Manager Finance of Hindustan Aeronautics Limited. CMA Prabhakar shared his vast experience and knowledge and blended contemporary accounting practices and principles with a touch of classical Indian thought in a unique presentation which was very well researched. The WEBINT was attended in large numbers and was very well received by the participants.

#### **CORPORATE LAWS COMMITTEE**

I am pleased to share that February 2023 shall be celebrated as Corporate Law Month by the Corporate Laws Committee on a PAN India basis. The Committee proposes to cover various activities like Programs/seminars/workshops on topics like NCLT and role of CMAs, LODR and ICRD under Securities Law and SEBI, Corporate Social Responsibility (CSR), CARO, Stock exchange listing, inbound and outbound foreign investments, role and responsibility of Directors in Integrated Reporting, Companies Act, 2013 and its related rules and regulations to name a few.

Various programmes through online and offline platforms will be offered by the Regional Councils and Chapters for their members and students. I appeal to the members to contribute to the growth of our profession in the not much explored area of Corporate Laws. The Committee makes constant endeavour to create awareness among members on Corporate and other related laws through various activities and programmes. Corporate Law Committee will start a fortnightly Bulletin 'Corporate Law Connect' for constant updation of members in these areas.

#### **MSME & START-UP PROMOTION BOARD**

I convey my best wishes to the newly formed MSME and Start-up Promotion Board (MSPB) under the chairmanship of CMA Chittaranjan Chattopadhyay. I also heartily congratulate the MSME & Start-up Promotion Board for successfully carrying out the first WEBINT on "Performance Management in MSMEs" held on January 19, 2023 from 6.00 P.M. CMA Chittaranjan Chattopadhyay, Chairman, MSPB welcomed the speakers, dignitaries and attendees. CMA R Venkataramani, Member, MSME & Start-up Promotion Board and CMA T.C.A. Srinivasa Prasad, Member (Co-opted), Regional Council & Chapters Co-ordination Committee were the noted speakers for the evening WEBINT. CMA (Dr.) K Ch A V S N Murthy, Chairman, Regional Council & Chapters Co-ordination Committee summed up the session.

### CONTINUING EDUCATION PROGRAMME COMMITTEE

I am pleased to inform you that the registration for the 8<sup>th</sup> batch of e-MCBT is extended upto February 5, 2023. I urge the practitioners who have taken Certificate of Practice (COP) on and after February 1, 2019 and have not undergone the MCBT to avail this opportunity and comply with the requirements of MCBT for smooth renewal of CoP for F.Y. 2023-24.

Continuing Education Programme Committee organised a programme on "MS Excel as a Financial Analysis Tool" on January 6, 2023 held at the J N Bose Auditorium of the Institute in Kolkata. The chief speaker of the program was Dr. Madhu Agnihotri, Assistant Professor, Information Technology, Department of Commerce, St. Xavier's College (Autonomous), Kolkata. The program was graced by CMA Biswarup Basu, Chairman of CEP Committee, former presidents of the Institute, CMA Amal Kr. Das and CMA Harijiban Banerjee, and also by Regional Council member CMA Arundhati Basu. A good number of members attended this valuable program and the program ended with question-answer session and vote of thanks.

During the month, around fifty-five webinars and programmes were organised by the different committees of the Institute, Regional Councils and Chapters of the Institute on varied topics of professional relevance and importance like New Requirements for Filing GST Returns, Fintech in India, Stock and Book Debts Audit, Workshop on TDS Applicability and filing of TDS returns, Voluntary Liquidation Under IBC – 2016, Scope of CMAs as Surveyors in General Insurance Companies in India and so on.

We are sure our members are immensely benefitted with the deliberations in the sessions.

#### PROFESSIONAL DEVELOPMENT COMMITTEE

I am pleased to note that practicing Cost Accountants and Firms are getting enrolled under the Multipurpose Empanelment Scheme (MES) of the Institute, which was implemented on January 1, 2023. As this being the first year of empanelment, the Institute has extended the timeline for submission of application for empanelment under MES upto February 15, 2023. All the Practicing Professionals (Proprietor / Firm) are requested to enroll for the same at MES portal of the Institute: https://eicmai.

in/mesportal/Default

PD Directorate submitted representations to various organizations for inclusion of cost accountants for providing various professional services.

Please visit the PD Portal for Tenders/EOIs during the month of January 2023 where services of the Cost Accountants are required in M.P. Poorv Kshetra Vidyut Vitaran Co. Ltd., HSCC India Ltd., The Shipping Corporation of India Ltd., Shri Saibaba Sansthan Trust, Shirdi, West Bengal State Electricity Transmission Co. Ltd., Maharashtra State Electricity Distribution Co. Limited, Steel Authority Of India Limited, West Bengal Pollution Control Board, District Health & Family Welfare Society (DH&FWS) NUH (Mewat), UCO Bank Guwahati Zone, Intelligent Communication Systems India Ltd., Coal India Limited, National Textile Corporation Limited, Rashtriya Raksha University, Haridwar Natural Gas Pvt Ltd., Indian Institute of Management Bangalore (IIMB), Indian Oil Corporation Ltd., Western Coalfields Limited, Telecommunications Consultants India Ltd., Bharat Dynamics Limited (BDL), National Health Mission, Thiruvananthapuram, Hazaribagh Municipal Corporation, Karnataka State Seeds Corporation Ltd., etc.

Under the flagship of Azadi ka Amrit Mahotsav (AKAM), Professional Development Committee organised webinar on "Emerging Trends in Digital Era Action@75" on January 17, 2023 wherein CMA Rameesh Kailasam, CEO & President - IndiaTech.org (TSIA) and CMA Neha Dharukar, Manager (Financial Services), PwC were the eminent speakers in the webinar who shared their valuable thoughts on the topic. We have received an overwhelming response from the members.

Professional Development Committee in association with PHD Chamber of Commerce and Industry organised seminar on "Search, Seizure and Arrest under GST & Decriminalization of Offences under GST Act" on January 11, 2023 at PHD House, New Delhi.

#### **AWARDS 2022**

We are happy to share with you that the Institute is receiving nominations from various companies/organisations for the 18<sup>th</sup> National Awards for Excellence in Cost Management 2022 and from CMAs in employment for 7<sup>th</sup> CMA Awards 2022. Considering the requests from the organizations and members, Institute has extended the last date of submission of nomination upto February 15, 2023.

I urge all the companies/organisations and CMAs in employment for their active participation. For submitting nominations for Awards, please visit the website of the Institute:

For National Awards 2022: https://icmai.in/Awards/National\_Awards/index.php

For CMA Awards 2022: https://icmai.in/Awards/CMA\_Awards/index.php

# INSOLVENCY PROFESSIONAL AGENCY OF INSTITUTE (IPA ICAI)

Insolvency Professional Agency of Institute of Cost Accountants of India, in its endeavour to promote professional development and sharpening the skills of the professionals have constantly been conducting various professional & orientation programs across the country and bring out publications for the benefit of stakeholders at large. Towards that, IPA ICAI has undertaken several initiatives, as enumerated below, during the month of January 2023.

A three-day Master Class on Liquidation was conducted by our eminent faculties from January 6-8, 2023, wherein the provisions relating to Liquidations and its recent amendments were discussed with professional member participants at length. The program brought out a number of take away for the benefit of participants.

In order to sensitise the environment about case laws and the recent judgements under IBC, an online Workshop on Judicial Pronouncement under IBC, 2016 was conducted on January 13, 2023, which received an overwhelming response from over 81 participants who got benefitted with the knowledge sharing.

A two-day Online Learning Session on Analysis of Financial Statements under PUFE Transactions organised on January 20-21, 2023 which revealed various nuances and sensitized IPs about the Avoidance Transactions under IBC.

Joint IP Conclave was conducted by IBBI in association with IPA ICAI, IIIPI and ICSIIP on January 20, 2023 in Chennai. The program received good response from over 120 participants.

In our perseverance to sensitize the IPs about their role under IBC, one-day workshop on Contingent Liabilities under IBC, 2016 was conducted on January 28, 2023, important processes to deal with the liabilities under IBC were discussed with professional member participants at length. The interactive session and exchange of views on the subject, during the workshop was the highlight of the program.

In its endeavour to promote profession, knowledge sharing and sensitisation of the environment, IPA ICAI published Au-Courant (Daily Newsletter), weekly IBC Dossier and monthly e-Journal which are hosted on its website.

## ICMAI REGISTERED VALUERS ORGANISATION (RVO)

I am pleased to inform that ICMAI RVO has successfully organized five "50 Hours Training Programs" for Securities or Financial Assets, Land and Building Assets, and Plant and Machinery Assets. RVO organized fourteen "Professional Development Programs".

RVO also conducted one program each at the State Bank of India, Punjab National Bank and Union Bank of India. RVO developed associations with valuers organizations of Thailand, Nepal and Bangladesh. RVO invited 3 International speakers for online CPE programs.

I wish that every tomorrow of yours is filled with immense happiness which has over-flown from your yesterdays.

With warm regards,

-

**CMA Vijender Sharma** February 06, 2023



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Basic Course Fee: ₹20,000/-

**Duration:** 100 Hrs



#### **SAP Finance Power User Course** (SAP Learning Hub & SAP S/4HANA)

Basic Course Fee: ₹20,000/-

**Duration:** 80 Hrs



#### Certificate Course in Advanced Business Excel for Finance Professionals

(with Microsoft Certification) Basic Course Fee: ₹6,000/-

**Duration:** 50 Hrs



#### Diploma in Financial Modelling & Valuation

For CMAs & CMA Students Only

Basic Course Fee: ₹15,000/-

**Duration:** 100 Hrs



#### Executive Diploma in Cost & Management Accounting for Engineers

Basic Course Fee: ₹30,000/-

Duration: 100 Hrs



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For CMAs & CMA Students Only

Basic Course Fee: ₹9,900/-

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Basic Course Fee: ₹20,000/-**Duration:** 50 Hrs

#### Executive Diploma in **Business Valuation**

Basic Course Fee: ₹20,000/-**Duration:** 100 Hrs

\*Applicable GST will be Charged

For more details, please visit: https://icmai.in/Advanced\_Studies/

**Online Admission:** 

https://eicmai.in/ADVSCC/DelegatesApplicationForm-New.aspx



#### THE INSTITUTE OF **COST ACCOUNTANTS OF INDIA**

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**Dear Professional Colleagues**,

"No matter what is the environment around you, it is always possible to maintain brand of integrity." - Dr. A P J Abdul Kalam

#### Greetings!!!

he International Cooperative Alliance (ICA) defines a Cooperative as "an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise."

The cooperative societies can be further being stated as an autonomous association of people who have voluntarily come together to meet their common economic, social and cultural needs, and aspirations via a jointly-owned and democratically-controlled enterprise. It tends to help poor, illiterate and unskilled people.

As businesses under cooperatives are driven by values, not just profit, cooperatives share common agreed principles and act together to build a better future through cooperation. Putting fairness, equality and social justice at the heart of the enterprise, cooperatives around the world are allowing people to work together to create sustainable enterprises that generate long-term jobs and prosperity.

Even before formal cooperative structures came into being through the passing of a law, the practice of the concept of cooperation and cooperative activities were prevalent in several parts of India. The Cooperative Movement in India started in 1904 when the first cooperative Credit Societies Act was formed. By 1911, there were 5,300 societies in existence with a membership of over 3,00,000.

With the developments in terms of growth in the number of cooperatives, far exceeding anticipation, the Cooperative Societies Act, 1912 became a necessity and cooperatives could be organized under this Act for providing non-credit services to their members. The Act also provided for Federations of cooperatives.

After the 1912 Act, the first Cooperative Housing Society, the Madras Cooperative Union in 1914 and the Bombay Central Cooperative Institute in 1918 was formed and similar institutions in Bengal, Bihar, Punjab etc. came up. In 1919, with the passing of the Reforms Act, Cooperation as a subject was transferred to the provinces.

With the emergence of cooperatives having a membership from more than one state, the Multi-Unit Cooperative Societies Act was passed in 1942, which delegated the power of the Central Registrar of Cooperatives to the State Registrars for all practical purposes.

After India attained Independence in 1947, the Cooperatives were officially made a part of the mixed economy of India. It was considered as the balancing element between Public and Private. It was an integral part of the Five Years Plan (FYP). The First FYP (1951-56), outlined the vision of the cooperative movement in India

# FROM THE DESK OF CHAIRMAN

Co-operative Development Board of The Institute of Cost Accountants of India

#### CMA Chittaranjan Chattopadhyay

and the rationale for emphasizing cooperatives and panchayats as preferred organizations for economic and political development. Cooperative development received a boost, with cooperatives being given a vital role in the various plans formulated by the Planning Commission.

In 1958, NDC (National Development Council) had recommended a national policy on cooperative. The Government of India made a National Policy of Cooperative in 2002.

With the objective of introducing a comprehensive central legislation to facilitate the organization and functioning of genuine multi-state societies and to bring uniformity in their administration and management, the Multi-State Cooperative Societies (MSCS) Act, 1984 was enacted. The earlier Multi-Unit Cooperative Societies Act, 1942 was repealed.

The MSCS Act, enacted in 1984, was modified in 2002, in keeping with the spirit of the Model Cooperatives Act. Unlike the State Laws, which remained as a parallel legislation to co-exist with the earlier laws, the MSCS Act, 2002 replaced the earlier Act of 1984

In a historic move, a separate 'Ministry of Cooperation' has been created by the Government of India in July, 2021, for realizing the vision of 'Sahkar se Samriddhi'. The newly formed Ministry of Cooperation, headed by Shri Amit Shah, will aim to strengthen the cooperative movement in the country. This ministry will provide a separate administrative, legal and policy framework for strengthening the cooperative movement in the country. It will help deepen Cooperatives as a true people based movement reaching up to the grassroots.

Recently, the Lok Sabha has referred the Multi-State Cooperative Societies (Amendment) Bill, 2022 to a joint committee of Parliament. The Bill is aimed at overhauling the Multi-State Cooperative Societies Act, 2002, which was enacted 20 years ago.

Cooperatives are under state subject in the Indian Constitution. State cooperatives law and its implementation widely differ. The role of the board in cooperatives need strictness in authority and responsibility.

The role of the Cooperative is very essential when it comes to the spirit of collectivism and democracy. It helps in maintaining the social capital base of the country. It aids in generating and utilizing social capital which is directly proportional to the development of a country.

As a premier professional body, the Institute of Cost Accountants of India and its members always think positively and have full faith in the dynamic leadership of India's beloved Prime Minister and on his mission. Cooperative Development will construe the performance documents to achieve the vision of 'Make in India' successful and our CMA fraternity will play a pivotal role in it.

Wishing you a Happy & Prosperous New Year-2023 ahead, Warm regards,

CMA Chittaranjan Chattopadhyay

February 06, 2023

#### Blended Programme on



#### Pension Month on the topic

# "NPS: FROM AN ASSURED CONTRIBUTION TO AN ASSURED RETURN"

Organized by:

#### The Banking, Financial Services and Insurance Board

on 27th January, 2023

he BFSI Board organized a blended programme on 27th January, 2023 from 5 p.m. to 8 p.m. The programme was on observance of the Pension Month on the topic "NPS: From an assured contribution to an assured return". The programme was hosted at the Indian Chamber of Commerce Auditorium, Kolkata and graced by Shri Supratim Bandyopadhyay, former Chairperson, PFRDA along with CMA Prasenjit Deb, ICoAS, Joint Secretary and Advisor (Cost), Ministry of Food and Public Distribution. CMA Soumit Das, Chief Mentor, Financial Goal Achievers was the speaker in the Technical session. The programme was moderated by CMA Debashish Lahiri, Advocate.

CMA Chittaranjan Chattopadhyay, Chairman, BFSIB deliberated the opening remarks by stating that Shri Supratim Bandyopadhyay was the pioneer for germinating the thought of organizing the Pension Month by the Institute. He also stated that like previous year we are organizing the Pension Month with a blend of youth and experienced experts.

CMA Prasenjit Deb, graced the event as Guest of Honour and congratulated CMA Chittaranjan Chattopadhyay, Chairman, BFSIB and the Board for organizing such a programme on NPS.

Shri Supratim Bandyopadhyay in his address stated the journey of the NPS from it's inception. He stated that the association with the Institute with PFRDA is more than a year and have successfully organized an online programme in the last year i.e. January 2022. The life expectancy of an individual has increased compared to the earlier times with advent of better health facilities and better consciousness of citizens. He stated that living too long is now a reality and it is estimated that presently number of senior citizens in the country is more than 12 crore. He stated that individuals are not prepared to have an income post their retirement. He iterated that there is a migration from a defined payout of pension has been severed by the Government by both, Centre and the State due to huge burden to the Government's exchequer. Presently the corpus of NPS is Rs. 6 lakh crore. He briefed the features of NPS, Atal Pension Yojana and eligibility conditions for each scheme. He stated that Provident Fund is provided by all employers but Pension is not undertaken due to various reasons by the organizations. NPS has the flexibility of deposit, asset class, switching fund manager, lower fund management cost and the CAGR of NPS ranges from 12-14 %. He also iterated that medical inflation has enhanced in multifold times and sizeable corpus post the retirement is the need of the hour. He stated that NPS ensures pension and all individuals would get the benefit through Annuity schemes at the time of Superannuation. He discussed the various schemes of Annuity which is dependent on the requirement of an individual. He also stated assured return is very difficult to be provided by the NPS and the proposal has been placed to the Board of PFRDA for approval and till now it has not been finalized. He stated that the return is fixed for a tenure of one year and thereafter it fluctuates year to year, depending on the market conditions/ bond coupon rate. He concluded his presentation with the quote that NPS is to create a pensioned society and give a dignity of life to individuals with self-respect.

CMA Soumit Das, in the technical session explained the various phases of a human life with the concept of the circle of life. He explained the pillars of financial planning comprising of emergency fund, lifelong earning and provision to beat inflation. He iterated the big mistakes of financial planning which an individual commit during their various phases of life. The key features, tax and other benefits, architecture, investment options of NPS, charge structure were discussed at length. He also provided compounding tables to depict money multiplier effect. He also stated that asset allocation, risk appetite are the variables for return on investment. The returns since inception from various fund managers of NPS were also depicted to show the comparative performance of them. He also explained the benefit at various CAGR to depict the corpus after a defined time period.

The online and offline Q& A round had relevant, pertinent and thought provoking questions and all were answered by the learned speakers. The session ended with a vote of thanks delivered by CMA Shubhro Michael Gomes, Director and HoD, BFSIB.



Lighting of the Lamp: CMA Soumit Das, Speaker and Chief Mentor, Financial Goal Achievers, CMA Prasenjit Deb, ICoAS, Joint Secretary and Advisor (Cost), Ministry of Food and Public Distribution, CMA Chittaranjan Chattopadhyay, Chairman, Banking, Financial Services and Insurance Board (BFSIB), Shri Supratim Bandyopadhyay, Former Chairperson, PFRDA, CMA Debashish Lahiri, Advocate and moderator & Director and HoD, BFSIB at the seminar "NPS: From An Assured Contribution To An Assured Return" at the Indian Chamber of Commerce, Kolkata on 27th January 2023 (R to L)



CMA Prasenjit Deb, ICoAS, Joint Secretary and Advisor (Cost), Ministry of Food and Public Distribution, Government of India being felicitated by CMA Chittaranjan Chattopadhyay, Chairman, BFSIB at the seminar "NPS: From an assured contribution to an assured return" at the Indian Chamber of Commerce, Kolkata on 27th January 2023 (L to R).

Shri Supratim Bandyopadhyay, Former Chairman, PFRDA is seated in the extreme right.



CMA Soumit Das, Chief Mentor, Financial Goal Achievers (centreleft) being presented with a plant by CMA Chittaranjan Chattopadhyay, Chairman, BFSIB (centre-right) at the seminar "NPS: From An Assured Contribution To An Assured Return" at the Indian Chamber of Commerce, Kolkata on 27th January 2023.

CMA Debashish Lahiri, Advocate and moderator of the session is seated in extreme-left and CMA Prasenjit Deb, ICoAS, Joint Secretary and Advisor (Cost), Ministry of Food and Public Distribution is seated in the extreme-right.



CMA Chittaranjan Chattopadhyay, Chairman, BFSIB felicitating Shri Supratim Bandyopadhyay, Former Chairperson, PFRDA at the seminar "NPS: From an assured contribution to an assured return" at the Indian Chamber of Commerce, Kolkata on 27th January 2023 (R to L).



CMA Chittaranjan Chattopadhyay, Chairman, BFSIB delivering the opening speech during the inaugural session of the seminar" NPS: From an assured contribution to an assured return" at the Indian Chamber of Commerce, Kolkata on 27th January 2023.



CMA Soumit Das, Chief Mentor, Financial Goal Achievers conducting the presentation upon the topic "NPS: From An Assured Contribution To An Assured Return" at the Indian Chamber of Commerce, Kolkata on 27th January 2023

#### **ICAI-CMA SNAPSHOTS**



Republic Day Celebration at CMA Bhawan, New Delhi Office



Republic Day Celebration at CMA Bhawan, Noida Office



Inauguration of "3rd floor Office Premise" of Noida Building of the Institute held on Thursday, the 26th January, 2023 at CMA Bhawan, C-42, Sector 62, Noida, Uttar Pradesh



Republic Day Celebration in Headquarters Kolkata



Saraswati Puja held at Institute Headquarters Kolkata on 26th January 2023



CMA Neeraj D Joshi, Council Member and CMA Ashish P Thatte, Council Member extending greetings to Dr. Bhagwat Karad, Minister of State, Ministry of Finance on 17th January 2023



CMA Ashish P Thatte, Council Member and CMA Neeraj D Joshi, Council Member extending greetings to Dr. Bhagwat Karad, Minister of State, Ministry of Finance on 17th January 2023

#### **ICAI-CMA SNAPSHOTS**





The Institute has organised the 1st Meeting of the "MSME & Start up Promotion Board of the Council and 1st Meeting of Corporate Laws Committee on 9th Jan 2023 at Hyderabad Centre of Excellence. The Council Members CMA Chittaranjan Chattopadhyay, CMA Niranjan Mishra, CMA A.G.Dalwadi, CMA (Dr.) K.CH.A V S N Murthy, CMA Papa Rao Sunkara, CMA Neeraj D.Joshi, CMA (Dr.) Ashish P. Thatte and CMA Shubhro Michael Gomes Secretary MSME & Start Up Promotion Board, Vibhu Agarwal Secretary Corporate Laws Committee and other nominees of the Institute has attended the meeting.



Shri Soma Sankara Prasad, MD & CEO ( 3rd from left ) of UCO Bank releasing the Management Accountant January 2023 issue in presence of CMA (Dr.) K Ch A V S N Murthy, Chairman, Journal and Publications Committee ( 2nd from left ) along with CMA Chittaranjan Chattopadhyay, Chairman, BFSIB ( 2nd from right) and CMA Biswarup Basu, Past President, ICAI ( extreme right )



(LtoR) CMA Chittaranjan Chattopadhyay, Chairman, BFSIB presenting a bouquet to Shri R. Kesavan, Regional Director, Reserve Bank of India at his Office on 31st January, 2023





LOCCA celebrated its second anniversary at the Saraswati Pujo of the London based charitable organisation Heritage Bengal Global on Sunday, 22nd January, 2023 with a congregation of its members for a cake cutting ceremony, attended by British MP Virendra Sharma, who is also the chair of the Indo British Parliamentary Group, Mr Sanjay Sharma, Deputy Director of Nehru Centre, Cultural Arm of the Indian High Commission, representing the Indian High Commission and representative of the Royal Army.

# BUDGET 2023-24 AND ITS IMPACT ON THE SUSTAINABLE DEVELOPMENT GOALS

# 1. Introduction – What metrics should be used to assess the Budget?

here are many ways to assess a budget. One can look at whether it supports macroeconomic stability (measured by such indices as the size and direction of the fiscal deficit) so that inflation is controlled and the budget deficit does not harm the balance of payments (external stability). Another way is to consider whether it will spur economic growth. However, growth alone is insufficient. Besides, macroeconomic stability and growth are merely instruments towards achieving ultimate development outcomes Therefore, perhaps the more meaningful exercise is to examine the extent of developmental impact that a budget will have.

Development is multi-faceted. The single measure of GDP and size of the economy is quite insufficient as obviously an economy the size of India will have a large GDP. India has reached the rank of fifth among all countries in terms of size given by GDP which currently is USD 3.5 trillion or so. This certainly is a matter of considerable pride. However, IMF placed its rank at 144<sup>th</sup> in terms of per capita income in 2021 out of 194 countries, which indicates that we still have a long way to go.

Even per-capita income is not a good metric to assess development. It does not, for instance, consider income distribution, and given that India's income distribution is highly skewed, most of our population lives well below the per-capita income. Also, income indicators do not tell us about other dimensions of development such as human development, availability of decent work, access to basic infrastructure, the quality of the environment and so on. Hence in course of time better indicators have been developed such as the Human Development Index (in 1990 based on the work of Mahbub ul Haq and A. K. Sen) which relied on three indicators – per capita income, life expectancy at birth and mean years of schooling. As these were also inadequate, the Millennium Development Goals (adopted in 2000) which relied on 8 development goals, and finally the Sustainable Development Goals (SDGs), which expanded the goals to 17 were established in 2015 through



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consensus among the worlds' economists and development practitioners. The SDGs are now considered the best standard against which the development of countries can be gauged.

How has India fared on the SDGs? A study done by this author recently looked at both India's comparative standing on latest SDG attainments, as well as its prospects towards achieving the SDG targets by 2030 which is the terminal year.<sup>2</sup> The study found that India's progress on the SDGs leaves much to be desired.

For example, to make a comparative assessment, the study compared India's attainments on 41 SDG indicators for which data is available to the World average (which consists mainly of developing countries) as well as the average of East Asia and Pacific countries. The study found that in 19 indicators (46 percent) India's SDG indicator values were worse than both the World's as well as East Asia and the Pacific sub-region's. In case of 13 indicators (32 percent) India's indicator values were worse than one of these two comparator sets. In only 9 indicators out of 41 were India's indicator values better than both.

<sup>&</sup>lt;sup>1</sup> According to the IMF World Economic Outlook (April - 2021), GDP (nominal) per capita of India in 2021 is projected at \$2,191 at current prices. India is at 144th position out of 194 economies in terms of GDP (nominal) per capita.

<sup>&</sup>lt;sup>2</sup> Shiladitya Chatterjee (2022). *The Sustainable Development Goals: A Future Within or Beyond Reach?* Economic and Political Weekly, 30 April 2022.

When making projections of current trends in improvement of the SDGs, the study found that 25 of the 41 indicators (61 percent) will fail to reach the accepted SDG targets set out for 2030. The main areas of concern were:

Goal 2: Hunger – especially incidence in children; and low agricultural productivity given by low cereal yields.

Goal 3: Health – particularly non-communicable diseases; and insufficient health personnel. Reducing high deaths from road accidents are also a priority.

Goal 4: Education – concerns are regarding ensuring education for all at pre-primary, primary and secondary, especially.

*Goal 5*: Gender equality – several indicators show that considerable gender inequality persists.

Goal 7: Clean energy – concerns are about inadequate access to clean fuels for cooking; and insufficient renewable energy mix in total electricity production.

Goal 8: Decent work – the main concern is rising unemployment in general and particularly among youth.

Goal 9: Industry and innovation – concerns relate to inadequate manufacturing share in GDP; and insufficient spending on research and development (R&D).

*Goal 10*: Reducing inequalities - rising inequality is a major concern.

Goal 11: Liveable cities – air pollution is a major problem

Goals 14 and 15: Protection of natural resources - insufficient protection is being provided for both marine and terrestrial natural resources.

2. Assessing Budget 2023-24 expenditures on their likely impact

#### on the SDGs

Against the backdrop of the main areas of unfulfilled or insufficient development indicated above how does the Budget 2023-24 address these needs? One way to answer this question is to look at the expenditure priorities set out in the budget. While much more study will be necessary of the budget documents to arrive at a fuller picture, even a cursory look at the expenditure figures can provide some answers.

Table 1 below shows the major items of development and nondevelopment expenditures taken from the table of Expenditure on Major Items (page 10 of Budget at a Glance - Expenditure). To place these expenditure numbers in perspective, they have been first divided by total expenditures in the corresponding years - 2021-22 (Actuals), 2022-23 (Revised Estimates) and 2023-24 (Budget Estimates) to provide an indication of how allocation priorities over these years have changed; and then also divided by the corresponding GDP values in current prices to express these expenditures as proportions of GDP to indicate development impact. The GDP figures are from Table 1.6 of the Statistical Appendix of the Economic Survey 2023. For 2021-22 (Actuals) they are the provisional estimates; for 2022-23 they are the advance estimates provided in the table. For 2023-24, the GDP figures are estimated based on the data in the Economic Survey.3

The expenditure numbers and ratios in the table have been colour coded by observing both the allocation priorities and the possible development impact. Green indicates higher allocations and/or higher impact compared to 2021-22 for the subsequent years and brown indicates the reverse. The following can be surmised from the table on each of the areas of concern indicated in the previous section.

Goal 2 Hunger. With major cut in allocation to agriculture compared to 2021-22 and also lower share in GDP compared to 2021-22 the budget continues from the past the low priority accorded to this major sector which employs over 40 percent of the workforce including most of the poor. Lack of sufficient investment in agriculture will continue the stagnation of this vital sector. This will be amplified by the cut in PM-Kisan allocations as well as the cut in rural development outlays, particularly the MNREGA outlays which have had a major impact in lowering rural poverty and hunger. The MNREGA allocation has been cut nearly 40 percent of the amount allocated in 2021-22 and by 34 percent of the 2022-23 allocation (Table 2).4 In addition, food subsidies for food procurement under the National Food Security Act have been slashed by over 30 percent of the outlays in 2021-22 and 2022-23 which will hurt nutrition in poor families. Although the Integrated Child Development Scheme (Umbrella ICDS) has seen a marginal (1.4 percent) increase

<sup>&</sup>lt;sup>3</sup> The Economic Survey projects a real growth of 6.5 percent (page 40) to which the inflation numbers have to be added to arrive at the nominal GDP for 2023-24. Page 142 of the Survey quotes the RBI as projecting an average of 5.2 percent for the first two quarters. Hence two inflation figures have been assumed – 5.0 percent and 4.0 percent (more optimistic) yielding possible GDP growth of 11.5 percent and 10.5 percent in nominal terms. These were used to arrive at two estimates of the GDP for 2023-24 both of which were used.

<sup>&</sup>lt;sup>4</sup> See Pages 16-17 "Outlay on Major Schemes" in Budget at a Glance, reproduced for selected Schemes in Table 2 in this paper.

- in nominal terms over 2022-23, it is actually a fall in real terms.
- Goal 3 Health: India has been underfunding its health sector and health has remained a major development concern. Yet the budget does not indicate much enhanced priority for the health sector. Allocation towards health in overall expenditures has fallen since 2021-22 as well as a share of GDP – given the paucity of allocation, a major step up is necessary but did not take place. A part of the explanation is the reduction in anti-Covid-19 expenditures as the pandemic has receded. There has been a step up of the core health programs – the National Health Mission and the Ayushman Bharat health insurance scheme which is welcome.
- Goal 4 Education. The Budget has prioritized education and the National Education Mission has seen a whopping increase in allocation of 54 percent over 2021-22 and 19 percent over 2022-23.
- Goal 5 Gender equality. Gender inequality has continued as a major problem in India. The reduction in the allocation for the Ministry of Women and Child Development is therefore a matter of some concern (Table 2). On the other hand, there is an increase in some individual schemes for women such as Mission Shakti. The overall impact is therefore uncertain.
- Goal 7 Clean Energy. The allocation for energy overall (Table 1) as well as the priority accorded to renewable energy

- has increased (Table 2).
- Goal 8: Decent work -The budget having slashed MNREGA will directly impact adversely on rural employment. The budget has also de-emphasized agriculture which provides the most jobs among sectors. The budget has however increased allocation and emphasis on the MSME sector (Table 2) by increasing outlays for the MSME Ministry. This may help revive MSMEs and jobs in the industry sector. The National Livelihoods Mission has also received increase allocations. The overall impact on jobs is therefore uncertain.
- Goal 10: Reducing inequalities rising inequality remains a major concern. The low priority accorded to agriculture; the reduction in rural employment generation efforts and no major efforts to increase further progressivity to the taxation structure, which remains broadly dependent on indirect taxes, implies that the current state of high inequality is not likely to be much improved through this budget.
- Goal 11: Liveable cities
   Urban development has suffered a major reduction in priorities as evident from fall

- in share in overall expenditures as well as share in GDP compared to both 2021-22 as well as 2022-23. It has also suffered a cut in absolute amounts compared to 2021-22. However, there has been an increase in the allocation for Urban Rejuvenation Mission and Smart Cities Mission (Table 2). It is unlikely that this component alone will overcome the overall de-emphasis on urban development. **Progress** towards improvement of city life and citizens' welfare seems therefore likely to slow.
- Goals 14 and 15: Protection of natural resources and insufficient protection is a matter of concern and the budget does not help dispel this. The allocation for Environment and Forests remains virtually unchanged in terms of share in overall expenditure as well as share in GDP.

On the other hand, the budget lays considerable emphasis on developing infrastructure as can be seen from Table 1. There are large increases in outlays for roads, railways, reneable energy etc. The idea seems to be that this emphasis on infrastructure development will spur economic growth. While this is very likely, the fact that the budget fails to address sufficiently the concerns relating to hunger, health, gender equality, employment and development of industry and innovation, reducing inequality, and protecting natural resources implies that such growth may not be sufficiently inclusive and the efforts towards advancing such inclusive growth appear not to be sufficiently emphasized.

		Table 1:	Analysis of E	xpenditures	in Budget 200	23-24				
	Expenditures( Rs Crores)			% of Total Expenditures			% of GDP at Current Prices			F
	2021-22 (A)	2022-23 (RE)	2023-24 (BE	2021-22 (A)	2022-23 (RE)	2023-24 (BE)	2021-22 (A)	2022-23 (RE)	2023-24 (BE)	2023-24 (BE)
1. Non-developmental		-					10000		(Growth 11.5%)	(Growth 10.5%
Pension	198946	244780	234359	524	5.85	5.20	0.84	0.90	0.77	0.78
Defence	366546	409500	432720	9.66	9.78	9.61	1.55	1.50	1.42	1.43
Subsidy -	446150	521585	374707	11.76	12.46	8,32	1.89	1.91	1.23	1.24
Fertiliser	153758	225220	175100	4.05	5.38	3.89	0.65	0.82	0.58	0.58
Food	288969	287194	197350	7.62	6.86	4.38	1.22	1.05	0.65	0.65
Petroleum	3423	9171	2257	0.09	0.22	0.05	0.01	0.03	0.01	0.01
Interest	805499	940651	1079971	21.23	22.46	23.98	340	344	3-55	3.58
Subtotal- non-developmental	2263291	2638101	2496464	59.66	63.00	55-44	9.56	9.66	8.20	8.27
2A. Developmental - Rural, Urban and Social	HACE.	2150	10177777	1000	- 0.00	2000	1000	- 25		
Agriculture and Allied (Exluding PM-K)	76492	76279	84214	2.02	1.82	1,87	0.32	0.28	0.28	0.28
PM-Kisan	66825	60000	60000	1.76	143	1.33	0.28	0.22	0.20	0.20
Commerce and Industry	47068	37540	48169	1.24	0.90	1.07	0.20	0.14	0.16	0.16
Development of North East	2653	2755	5892	0.07	0.07	0.13	0.01	0.01	0.02	0.02
Education	80352	9988t	112899	2.12	2.39	251	0.34	0.37	0.37	0.37
Health	84091	77351	88956	2.22	1.85	1.98	0.36	0.28	0.29	0.29
Rural Development	228760	243317	238204	6.03	581	529	0.97	0.89	0.78	0.79
Social Welfare	40595	46502	55080	1.07	1.11	1.22	0.17	0.17	0.18	0.18
Urban Development	106840	74546	76432	2.82	1.78	1.70	0.45	0.27	0.25	0.25
Subtotal - developmental 2A	733676	718171	769846	1934	17.45	17.10	3.10	2.63	2.53	2.55
28. Developmental - Infrastructure, Science & Innov	ation									
Energy	53696	70936	94915	1.42	1.69	2.11	0.23	0.26	0.31	0.31
Transport	332238	390496	517034	8.76	933	11.48	140	1.43	1.70	1.71
IT and Telecom	25053	74106	93478	0.66	1.77	2.08	0.11	0.27	0.31	0.31
Scientific Departments	27772	25626	32225	0.73	0.61	0.72	0,12	0.09	0.11	0.11
Subtotal - developmental 2B	438759	561164	737652	11.57	13.40	16.38	1.85	2.05	2.42	244
Grand Total	3793801	4187232	4503097	100.00	100.00	100.00	16.03	1533	14.79	14.92
GDP Current (Assuming growth 2023-24 at 11.5%)	23664637	27307751	30448142							
GDP Current (Assuming growth 2023-24 at 10.5%)	C 11-071-202	31/2001003	30175065	Ų.						

	The second secon			% of Total Expenditures			% of GDP Current Prices			
t k	2031-55	2022-23 RE	2023-24 BE	1011-55	1012-23 RE	2023-24 BE	2021-22 (A)	2022-23 (RE	2023-24 (BE)	1023-24 (BE
Demand for Grants of Selected Ministries									(Growth 11-5%)	(Growth 10.5%)
MSMEs	14980	15629	22138	0.39	0.37	0.49	0.06	0.06	0.07	0.07
Environment & Forests	2433	2478	3079	0.06	0.06	0.07	0.01	0.01	0.01	0.01
Women & Child Development	21653	23913	25449	0.57	0.57	0.57	0.09	0.09	0.08	80.0
North Eastern Region	2653	2755	5892	0.07	0.07	0.13	0.00	0.01	0.02	0.02
Minority Affairs	4324	2613	3098	0.11	0.06	0.07	0.02	0.01	0.01	0.01
Social Justice	7435	11660	12847	0.20	0.28	0.29	0.03	0.04	0.04	0.04
Law and Justice	4029	3318	3975	0.11	9.08	0.09	0.02	0.01	0.01	0.01
Roads & Highways	123551	217027	270435	3.26	5.18	6.01	0.52	0.79	0.89	0.90
Renewable Energy	6583				0.17	0.23	0.03	0.03	0.03	0.03
Ports	1528	1793	2219	0.04	0.04	0.05	0.01	0.01	0.01	0.01
Power	21595	13107	20671	0.57	031	0.46	0.00	0.05	9.07	0.07
Railways	135242	162312	241268	3.56	3.88	5.36	0.57	0.59	0.79	0.80
Total Expenditures	3793801				-		16.03	15-33	14.79	14.92
GDP Current (Assuming Growth 11.5 % in 2023-24)			30448142							566
GDP Current (Assuming Growth 10.5% in 2023-24)			30175065	•						
Outlays on Selected Major Schemes	-	- 2000			1 - 2711 - 2	117-1117	Barrery.	1 10 000		
MNREGA	98468	80400	60000	2,595	2.135	1.332	0.416	0.327	0.197	0.199
Umbrella Program for Minorities	1428				0.013	0.014	0.006	0.002	0.002	0.002
Umbrella Program for STs	3779	3874	4295	0.100	0.093	0.095	0.016	0.014	0.014	0.014
Umbrella Program for SCs	4979				0.184	0.200	0.021	0.028	0.031	0.031
Umbrella Program (Others)	1745		2194	0.046	0.046	0.049	0.007	0.007	0.007	0.007
Avushman Sharat (PMJAY)	3116			0.082	0.153	0.160	0.013	0.004	0.024	0.024
Avushman Bharat (Infrastructure)	584			0.015	0.045	0.093	0.002	0.007	0.014	0.014
National Education Mission	25305		38953	0.667	0.779	0.865	0.107	0.119	0.128	0.129
National Health Mission	32955				0.805	0.817	0.139	0.123	0.121	0.122
National Livelihood Mission	10177				0.332	0.314	0.043	0.051	0.046	0.047
PM Awas Yojana radhan	90020				1.842	1.767	0.380	0.282	0.261	0.264
PM Gram Sadak Yolana	13990				0.454	0.422	0.059	0.070	0.062	0.063
PM Krishi Sinchai Yolana	11278			0.207	0.193	0.240	0.048	0.030	0.035	0.036
Swachh Bharat Mission	1952				0.048	0.111	0.008	0.007	0.016	0.017
Swachh Bharat Mission (Gramin)	3099		1000		0.119	0.160	0.013	0,018	0.024	0.024
Urban Rejuvenation and Smart Cities	13868		0.000	100000000000000000000000000000000000000	0.365	0.355	0.059	0.056	0.053	0.053
Mission Shakti (Women's Empowerment)	1912			0.050	0.054	0.070	0.008	0.008	0.000	0.010
Child Protection & Child Welfare	761		W. A.	1000000	0.026	0.033	0.003	0.004	0.005	0.005
PM Poshan		12800			0.306	0.258	-	0.047	0.038	0.038
Rashtriya Krishi Vikas Yojana	4	7000			0.167	0.159	100	0.026	0.023	0.024
Umbrella ICDS	18182			0.485	0.484	0.455	0.078	0.074	0.068	0.068
Food Subsidy to FCI under NFSA	208020			5.507	5.127	3.047	0.883	0.786	0.451	0.455
Food Subsidy for Decentralized Procurement	79790				1.726	1,328	0.337	0.265	0.196	0.198
Metro Projects	23260				0.373	0.433	0.008	0.057	0.064	0.065

#### 3. Conclusions

The budget provides a strong impetus to growth both through expanding infrastructure spending as well as trying to generate consumer demand through income tax reliefs. However, it hasn't sufficiently emphasized on some of the core areas of concern regarding inclusivity and the SDGs such as agriculture, rural and urban development, environment, employment generation, reducing inequality, improving health outcomes and its impact on improving gender equality is uncertain.

# FINANCING INDIA'S URBAN INFRASTRUCTURE: ISSUES AND CHALLENGES



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#### INTRODUCTION

espite the economic uncertainty brought on by Russia's war in Ukraine, India is predicted to grow by about 7 per cent this year. According to a recent prediction by New York-based investment firm Morgan Stanley and S&P Global, this trend is anticipated to continue, assisting it to surpass Germany and Japan to become the third-largest economy in the world. India is expected to achieve that status by 2028, according to the International Monetary Fund. The largest economies on the planet are those of China and the United States. According to the most recent World Bank study on the Indian economy, which was published in December 2022, India is better positioned than the majority of other emerging markets to withstand global headwinds.

The Indian economy's main driver is the infrastructure industry. The Government places a lot of emphasis on the

#### **Abstract**

Indian economy is expected to be one of the top performers in the world economy in the post covid era. While all the major economies of the world are finding it difficult to come back to pre-covid level, the Indian economy is on the path of a speedy recovery. With significant urbanization taking place, India will need to make a significant investment in its urban infrastructure. It is expected that \$840 billion of investments is required in urban infrastructure over the next 15 years. This private player will have a significant role to play. This article attempts to identify the significant constraints in financing such a massive infrastructure needs of India.

industry because it is vital to India's overall development. Numerous actions have been done at both the Federal and State levels to assist infrastructure developments across the nation. However, there are still several obstacles in the way of developing first-rate, cutting-edge infrastructure across all industries. India will need a strong and trustworthy national infrastructure to achieve higher growth that is sustainable and a competitive manufacturing sector.

India is increasingly urbanizing and as a result, cities' financial demands are also growing. To support economic expansion, enhance living standards and living conditions and strengthen resistance to the anticipated effects of climate change, there must be a sustained increase in investments in urban infrastructure. Cities, however, face formidable obstacles. Despite a significant rise in fiscal transfers to cities over the past ten years, there is a significant resource gap compared to the needs. Previously, the Government of India (GoI) estimated that 80 per cent of the funding needed for urban infrastructure was not being provided, and it emphasized the possibilities for private financing to close this gap, particularly through municipal borrowing and public-private partnerships (PPPs). Although the GOI and several States have taken steps to facilitate commercial financing, its use is still quite limited, especially in economically robust cities. Greater

flows of private funding appear to be hampered by systemic restrictions in the urban economy.

India has the second highest infrastructure deficit in the world (after Brazil), as a result of its fast 6 per cent growth during the early 1990s without a corresponding rise in supply. With 600 million people predicted to live in cities by 2036, India is rapidly urbanizing. Drinking water, sanitization, sewage systems, power and gas distribution, urban transportation, primary health services, and environmental management make up the urban infrastructure. Numerous of these services fall under the category of "local" public goods, meaning that only those city residents who reside there will benefit from enhanced urban infrastructure in that city. The already overburdened urban infrastructure and services in these places would be further stressed by this. In order to properly fulfil the needs of this rapidly expanding population, India is predicted to require \$840 billion in investments in urban infrastructure over the next 15 years, or \$55 billion each year on average. Even if public sector funding has recently increased, there is still a sizable lack of resources in comparison to these demands. This imbalance can be significantly filled with funding from private and commercial sources, such as municipal debt and publicprivate partnerships. However, the use of such financing is very limited at present even in financially strong cities. The total urban investment for the financial year 2011 - 18 stands at US \$85 billion. At present, Central and State Government finance over 75 per cent of urban infrastructure, while urban local bodies (ULB) finance 15 per cent through their surplus. Private commercial financing plays a very insignificant role in financing urban infrastructure in India. As of now, only 5 per cent of the urban infrastructure investments are coming from the private sector.

The development of related industries, such as townships, housing, built-up infrastructure and construction development projects, works as a driver for India's economic growth. India has become one of the top destinations for infrastructure projects in the eyes of international investors. India offers a better rate of return on infrastructure investments due to its large domestic market, growing middle class, and the youth bulge.

# INITIATIVES FOR URBAN INFRASTRUCTURE

Urban infrastructure is one of the main emphasis areas of the National Infrastructure Pipeline (NIP), which the Government has launched for the FYs 2020–25. In order to reduce the cost of logistics, the Government has introduced the ambitious *Gati Shakti* scheme, which aims to coordinate the design and execution of infrastructure projects.

A Government-backed organization called the National Investment and Infrastructure Fund (NIIF) was created to finance the nation's infrastructure sector over the long term. It was established as a Category-II Alternate Investment Fund in December 2015.

India, Israel, US, and UAE (I2U2) launched a new quadrilateral economic forum in November 2021 to concentrate on regional infrastructure development initiatives and enhance bilateral cooperation.

A Bill to establish the National Bank for Financing Infrastructure and Development (NaBFID) to finance infrastructure projects in India was approved by the Parliament in March 2021.

#### CHALLENGES AHEAD

The enormous infrastructure finance gap, which is believed to be greater than 5 per cent of the GDP, is India's biggest problem.

Obtaining land, placing competitive

bids, and dealing with non-performing assets are the major obstacles for infrastructure PPPs (public-private partnerships).

As a result of the significant amount of stressed assets that India is currently dealing with, public sector banks must resume expanding their lending portfolios for the economy to continue growing.

Banks' stressed assets may experience further and perhaps catastrophic deterioration if there is insufficient bank capital.

Additionally, the unpredictability of credit interest rates creates a serious risk for sector investments.

The fact that the majority of infrastructure projects in India are predicated on predicted returns in USD rather than user fees leads to an imbalance and has an impact on the total amount of foreign infrastructure investments coming into the nation.

#### KEY FACTORS INFLUENCING PRIVATE FUNDING FOR URBAN INFRASTRUCTURE

In India, investment in urban services and infrastructure is still far behind what is required. Despite a history of initiatives, borrowing and PPP-based private funding has not reached anywhere close to the expected scale and volume. It has been noted that strengthening the income base, creditworthiness, and institutional capacity of ULBs and local agencies is necessary to increase private finance to a level that significantly contributes to the needs for urban infrastructure. Despite these limitations, several sizable cities with great potential are currently not leveraging enough commercial financing concerning their current potential and as a result, they should be the immediate focused support to make incremental improvements. The followings are the main restraints in private funding:

#### **Principal Restraints**

• Demand-side issues are the

main obstacles blocking more private funding for urban infrastructure in India. These include -

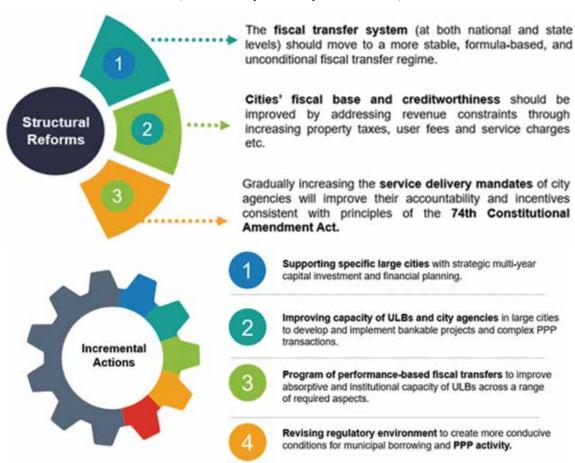
- Policy and political economy choices that affect revenue levels and the funding base for private financing.
- ▲ Weak absorptive and implementation capacities of city agencies for capital expenditures.
- Restrictive intergovernmental frameworks that lessen accountability and provide incentives for city agencies to make more ambitious infrastructure investments.
- A State-level regulatory and policy elements that mediate the supply and demand for finance.

#### **Secondary Restrictions**

• Many secondary restrictions,

such as those related to the financial market that reduce the supply of financing and poor financial management and fiduciary performance, exacerbate the primary constraints.

The following two different types of policy actions namely fundamental reforms and gradual changes may help to overcome the financing problem of urban infrastructure in India:



#### CONCLUSION

India will need to invest more in urban infrastructure as more and more people move to urban areas. India needs \$840 billion in investments in urban infrastructure over the next 15 years, according to World Bank projections. This mostly pertains to transportation and water; it excludes housing, healthcare, and other services. One of the major obstacles will be finding the money to finance

such a significant infrastructure expenditure. Bringing in outside capital providers can aid in bridging this gap. Public-private partnerships (PPPs) with a strong organizational structure and a convincing business case are sought after by equity investors and debt lenders. Many urban infrastructure projects include a significant portion of social advantages. For instance, a low-cost public transportation system increases

individuals' social and economic mobility by enabling them to take advantage of distant opportunities. From a PPP standpoint, it's crucial to structure the project's risk and returns so that private capital can enter. There are many ways to attract outside capital, including (some) pricing freedom, reassuring income predictability (on price, quantity offtake, or both), low-cost financial help or government guarantees,

Obtaining land, placing competitive bids, and dealing with non-performing assets are the major obstacles for infrastructure PPPs

etc. Capital can come in a variety of forms, from yield-seeking long-term investors (long-term bank loans, pension funds, sovereign funds) to riskier equity investors (who may expect to gain from the upside that urban growth offers).

The establishment of the Solar Energy Corporation of India (SECI) in the renewables industry is a regulatory innovation that has been very successful in luring private money. The tripartite agreement between the Centre, State, and the power generator, which guarantees the generator that payments owing to them will be processed and made on time, is the foundation of the agreement. A similar independent

intermediary might be established at the Centre for urban investments to serve as a financial middleman. This could assist spur private investments, for instance, by "securitizing" a portion of the Centre's contributions to ULBs and states. Building urban infrastructure is essential to ensuring that residents have a higher quality of life. It takes creativity to envision the duties and responsibilities of the ULBs and to coax investors and financiers into becoming partners in progress to build and finance this infrastructure.

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Ref.No.: G/82(136)/02/2023 13<sup>th</sup> February, 2023

#### NOTIFICATION

In pursuance of Regulation 146 of the Cost and Works Accountants Regulations, 1959, the Council of the Institute at its 341st Meeting held on 7th February and 8th February, 2023 by virtue of power conferred therein has constituted the following Chapter of The Institute of Cost Accountants of India covering the area of Rewari District in the State of Haryana.

The Institute of Cost Accountants of India – Rewari Chapter

CMA Chapter Rewari 444, Old Court Road, Model Town Rewari, Rewari – 123 401 Haryana.



(CMA Kaushik Banerjee) Secretary

# REINFORCING OUR INFRASTRUCTURE FOR THE FUTURE: ACHIEVING RESILIENCE IN THE WAKE OF THE COVID-19 PANDEMIC

#### Abstract

The COVID-19 pandemic has highlighted the need for increased resilience and exposed flaws in the infrastructure systems of many nations. Diversifying supply chains, investing in digital infrastructure, enhancing the resilience of the infrastructure itself, strengthening public health systems and improving emergency response systems are all ways that Governments and other organisations can increase the resilience of infrastructure. It's crucial to take into account community involvement, the private sector, and potential climate change effects. Building infrastructure systems that are better able to withstand upcoming shocks and meet the needs of populations all over the world is possible by using a thorough and co-ordinated approach.

#### INTRODUCTION

# The COVID-19 Pandemic and the Importance of Infrastructure Resilience

lobal infrastructure systems have been severely impacted by the COVID-19 pandemic, underlining the necessity for increased resilience in the event of major catastrophes. The systems, networks, and facilities that enable a society to function, such as the ones for transportation, communication, water and sewage, electricity, healthcare and food, are referred to as infrastructure. The numerous ways that Governments and other organisations might strengthen infrastructure resilience in the wake of the pandemic will be discussed in this article, along with the significance of a thorough and well-coordinated strategy to creating resilience.

#### **BUILDING RESILIENT INFRASTRUCTURE:**



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#### STRATEGIES AND APPROACHES

# Diversifying Supply Chains to Reduce Vulnerability to Disruptions

The need for supply chain diversification has been highlighted as one of the major lessons of the pandemic. Due to disruptions in global supply networks, many nations have encountered shortages of necessities like medical supplies and personal protective equipment (PPE). Due to this, it has become more challenging to deliver necessary services and support populations during lockdowns and other steps to stop the virus' spread. Supply chains must be diversified, and the domestic production of essential items must be increased, to lessen the effects of upcoming disruptions. This can make sure that nations have consistent access to basic necessities and are less susceptible to supply chain interruptions.

# **Investing in Digital Infrastructure to Support Remote Work and Online Learning**

Additionally, the COVID-19 epidemic has brought attention to the significance of digital infrastructure. High-quality internet connectivity and other digital infrastructure are crucial to ensure that people can access important services and stay connected, especially as remote employment and online learning become more common. To increase the resilience and meet the requirements of their populations, Governments and businesses should invest

in digital infrastructure.

#### Improving Emergency Response Systems to Address Pandemics and Other Crises

Systems for addressing emergencies such as pandemics and other crises must be effective. This entails having adequate supply of personal protective equipment and other medical supplies, as well as efficient communication systems to coordinate reactions and inform the general public. It is crucial to solve these problems and boost readiness for upcoming crises because the COVID-19 pandemic exposed the flaws in many nations' emergency response systems.

#### Strengthening Public Health Systems to Improve Capacity and Response to Health Crises

The significance of public health systems has also been made clear by the pandemic. Due to a lack of hospital space and a paucity of qualified healthcare professionals, several nations have failed to provide their citizens with basic healthcare. A nation's capacity to respond to upcoming health emergencies can be improved by making investments in public health systems, especially through training programmes and infrastructural enhancements. As the first line of defence in the case of a pandemic or other health disaster, primary care systems must be strengthened.

# Enhancing the Resilience of Infrastructure Itself

In addition to attending to immediate demands, it is critical to make investments in infrastructure that is more resilient and better prepared to handle upcoming shocks. In order to do this, infrastructure systems that are redundant, adaptable,

The COVID-19 pandemic has emphasised the need for increased resilience and revealed flaws in the infrastructure systems of many nations

and flexible must be designed and built. For instance, transportation systems ought to be planned with various routes in case one of them is affected. To ensure that important services can be maintained, energy systems should be varied and contain backup power sources. Systems for providing water and waste should be built to withstand threats such as natural catastrophes.

# Role of the Private Sector in Building Infrastructure Resilience

Additionally, essential to the development of resilient infrastructure is the private sector. Many of the crucial infrastructures and utilities, including telecommunications networks, water and sewage systems, and energy infrastructure, are run by private corporations. Strong cooperation between the public and private sectors are essential to ensuring the robustness of these systems. Governments can collaborate with private businesses to identify possible infrastructure weaknesses and create solutions. This may entail offering financial incentives to businesses so that they would invest in more resilient infrastructure, setting rules to assure compliance with standards, or offering technical support to businesses so they may develop more durable systems.

# Supporting Communities to Build Resilience

The function of communities is a key factor in developing infrastructure resilience. Resilience-building is a task that falls outside the purview of merely Governments and other big businesses. Communities are key in making sure that crucial services are accessible and operating during emergencies. Communities can be helped to become more resilient by Governments and other groups by giving them the tools, training, and other assistance they need to prepare for and handle emergencies. Programmes for emergency preparedness training, funding for the creation of community-based resilience plans and technical support for helping localities construct infrastructure that is more resilient to natural disasters and other threats are a few examples of what this could entail.

# The Impact of Climate Change on Infrastructure Resilience

Along with the previously indicated actions, it is critical to think how climate change can affect the resilience of the infrastructure. Droughts, floods, and other extreme weather conditions can harm or interfere with infrastructure systems. By creating infrastructure that is more resistant to these kinds of occurrences and by creating adaptation techniques to lessen the effects of extreme weather, Governments and other organisations can take action to address the threats posed by climate change. This can entail making investments in infrastructure made to withstand harsh weather, such sea walls to prevent floods or crops tolerant to drought to guarantee food security.

APPROACH	UPFRONT COST	LONG-TERM BENEFIT		
Diversify supply chains	Moderate	Reduced vulnerability to disruptions		
Invest in digital infrastructure	High	Improved connectivity and access to essential services		
Improve emergency response systems	Moderate to high	Enhanced capacity to respond to crises		
Strengthen public health systems	High	Improved healthcare capacity and response to health crises		
Enhance infrastructure resilience	High	Reduced vulnerability to disasters and other threats		

#### **CONCLUSION**

#### A Comprehensive and Coordinated Approach to Building Infrastructure Resilience

A thorough and coordinated strategy involving the public, commercial, and community sectors is required to construct truly resilient infrastructure. Both short-term actions to meet urgent demands and long-term investments in more durable and flexible infrastructure are included in this. Together, we can create systems that are more resilient to upcoming difficulties and capable of meeting the demands of people all around the world.

The COVID-19 pandemic has emphasised the need for increased resilience and revealed flaws in the infrastructure systems of many nations. Diversifying supply chains, investing in digital infrastructure, enhancing emergency response systems, bolstering public health systems, and improving infrastructure resilience itself are just a few of the actions that Governments and other organisations can take to make infrastructure more resilient. It is crucial to take into account the community involvement, the business sector, and potential climate change effects. Building infrastructure systems that are better prepared to resist upcoming shocks and meet the demands of communities all over the world is attainable by using a thorough and coordinated strategy. MA

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#### **CONGRATULATIONS**



Our heartiest congratulations to CMA Sanjeev Singhal, Member of the Institute for being entrusted with an additional charge of Chairman & Managing Director, Mazagon Dock Shipbuilders Ltd. (MDL) with effect from 1<sup>st</sup> February 2023.

Shri Singhal joined MDL as Director(Finance) on 8th January 2020. He stared his career with SAIL at Rourkela Steel Plant and later elevated to Director (Finance) at Mishra Dhatu Nigam Ltd.

He has a distinguished career of more than 35 years with rich and varied experience. He has been conferred with the prestigious "Jawaharlal Nehru Award" at SAIL for being an outstanding PSU executive.

We wish CMA Sanjeev Singhal the very best for his future endeavors.

# SOLAR ENERGY FOR ELECTRICITY GENERATION AND INVESTMENT CRITERIA IN SOLAR PROJECT

#### **Abstract**

Nature is the source of both non-renewable and renewable energy. Non-renewable energy source (fossil fuel-coal, oil, gas) will exhaust from our Planet-Earth, sooner or later. Renewable energy (sunlight, wind, rain, tides, waves, biomass, geothermal, hydrogen) is also derived from natural resources that replenish themselves in a very short period of time without depleting the planet's resources. Renewable energies are virtually inexhaustible and causes little climate or environmental damage. Here we will discuss solar energy and investment criteria in solar project.

#### ADVANTAGES OF RENEWABLE ENERGY

- Unlimited source and natural replenishment.
- Emits no or low greenhouse gases.
- Emits no or low air pollutants.
- Low / nil raw material cost.

# RENEWABLE ENERGY IS THE ONLY ALTERNATIVE

It is predicted that non-renewable energy source will be exhausted by the end of this century. Oil can last up to the n next 50 years; natural gas may be available for another 55 years and availability of coal may be for a maximum 75 to 80 years more. Hence, it is the renewable energy which will cater to our needs in future.

#### **CLIMATE TRANSITION**

Extensive use of fossil fuel resulted in intense extreme weather, scarcity of potable water and polluted climate. Transition to renewable energy from fossil fuel will help gradual normalisation of the weather, increase the availability of potable water and result in less pollution in the climate.



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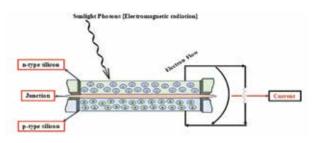
# **SOLAR ENERGY AS RENEWABLE ENERGY**Solar (Light) Energy conversion to Electrical Energy

The life on earth is blessed with Sun which provides enormous amount of energy in the form of Sunlight (caused due to fusion reaction in the Sun). Energy cannot be created nor be destroyed, but can be converted to another form. Sunlight in the form of light energy can be converted to electrical energy through photovoltaic cell.

The basic physics behind this is as follows:

- i. Electricity is the flow of electrons.
- ii. Light consists of small packets of energy called photons  $(\gamma)$ .
- iii. Photovoltaic cells (PVC) are made of semiconductors (silicon) with one layer containing positive (+ve) [p-type] charged and other negative (-ve) [n-type] charge lined adjacent to each other.
- iv. When photons  $(\gamma)$  with high energy strike PVC, it is absorbed by -ve layer of PVC, transfers its energy to the electrons of PVC.
- v. With increase in energy in -ve layer of PVC electrons escapes to +ve layer of PVC [to balance], causes a flow of electron i.e., electric current.

#### PICTORIAL DIAGRAM OF FUNCTION OF PVC FOR GENERATION OF ELECTRIC CURRENT



# TECHNICAL PARAMETERS FOR DETERMINING CURRENT GENERATION FROM SOLAR ENERGY

Solar energy project is a highly capital-intensive project and needs a lot of technical parameters in framing the financial viability of the project.

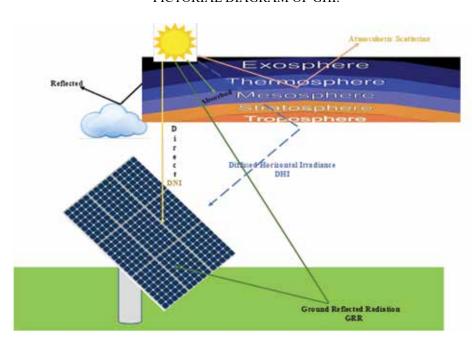
In order to formulate a financial viability of a solar power system, assessment of the following basic technical parameters is highly desirable in determining the capacity of net electric current generation:

Irradiance resource estimation / Solar resource assessment

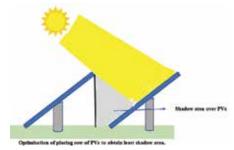
- ii. The size of the modules and the total module area / total area utilized by the project or the ground coverage ratio.
- iii. System losses and energy yield estimate including system degradation
- iv. Energy yield estimates. PV Model/ modules selection. These are elaborated hereunder.
- i) Solar irradiation is the amount of electromagnetic radiation (power) received from Sun per unit area (in square meter). It is measured in watts per square meter (W/m²). Solar irradiance is the integration "∫" of energy (measured in joule[J]) emitted in a particular surrounding for a given period of time. {1W = 1J/second}

Global Horizontal Irradiance (GHI) is the total solar radiation incident on a particular horizontal surface. It is the sum of Direct Normal Irradiance (DNI), Diffuse Horizontal Irradiance (DHI) and ground-reflected radiation (GRR). GHI is required to compute flat-panel PV output.

#### PICTORIAL DIAGRAM OF GHI:



ii) Row spacing between PVC modules depends on (i) Ground-coverage ratio (GCR), i.e., the ratio of module area to land area. In other words, it describes the proportion of the system area that is used to collect sunlight, (ii) Row spacing of the PVC to be installed in such a way that the sun angles in a specific time range gets maximum exposure.

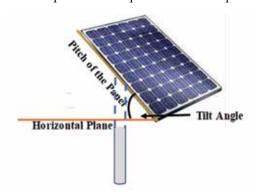


More the distance between the PVC larger the ground area required to get desired results.

One of the major challenges in development of solar power plant is the acquisition of huge parcel of land to install PVC.

The above two main factors guide the investment decision in solar power plant.

- *iii)* Achieving maximum electrical energy from a PVC plant is difficult since the plant output energy is affected by the PVC module losses.
- a. Installation loss (Tilt angle): Tilt angle of a solar plant is the angle formed between the horizontal plane and the pitch of the solar panels.



Non optimisation of tilt angle leads to an attenuation of solar radiation resulted to reduction of generation of electric current by the PV panels.

- b. Soiling Loss: Soiling loss is when dust and bird dropping accumulated on PVC surfaces over time, lowering the sunlight that reaches the solar panels.
- c. Rainfall: Low cloudy weather increases the availability of Solar energy but reduces rainfall which causes higher cleaning cost and vice versa.
- d. Environmental Loss (Snow/High temperature Loss): Loss due to snow fall on PVC (reduces exposure to sunlight) is tricky since it is very dependent on the site like in the area of Jammu & Kashmir. At the same time high temperature also reduces the efficiency of PVC.
- e. Time Loss (System degradation): Like anything technical, the materials in solar cells lose efficiency over time. This is known as system degradation. Silicon solar panel consists of silicon wafers, over time, these items will be worn out due to thermal expansion and contraction, UV light, and from windblown particles.
- f. DC to AC conversion Loss: Direct Current (DC) is generated in PVCs, which is then converted to alternative current (AC) for running electrical devices or for transmitting through Transmission Grid.
- g. PV wiring Loss: In an electric circuit, several

- components can cause a voltage drop, which includes resistors, wiring connectors, diodes etc.
- h. Transmission Loss: Loss in transmission till grid and loss due to transmission through grid.
- i. Battery Discharge: Off grid solar power system preserves electrical current in battery (lithium ion). Battery loss during charging and discharging. Battery discharge occurs even when the battery is idle.

Successful loss reduction requires information about the sources of the loss and their relative impact on the plant performance.

*iv)* Energy yield from a PVC depends on type of solar panel.

A sensitivity analysis has been given hereunder to determine the choice of solar panel, efficiency and cost of generation.

Solar Panel	Efficiency	Cost per Watt		
Monocrystalline	20%-25%	Rs. 95 to Rs.125/ Watt		
Polycrystalline	15%-20%	Rs.85 to Rs.100/ Watt		
Thin-Film	10%-15%	Rs.60 to Rs.90/ Watt		

The above mentioned factors are considered to be critical parameters while determining the feasibility of a solar power project. A CMA as a finance person should understand the financial effect of the above critical technical parameters after thorough discussion with the technical persons, while framing the financial module of the project. Missing or miss calculation of any of the parameters may be catastrophic for the viability of the project.

# FINANCIAL PARAMETERS TO DETERMINE COST OF GENERATION FROM SOLAR ENERGY

After selection of the project size, technology adoption, derivation (based on actual data available) of critical technical parameters for determining expected net energy generation, the CMA has to consider the following aspects for framing financial module to determine the viability of the project:

- 1. Capital Cost:
  - b. Generation Equipment
  - c. Balance of Plant
  - d. Land acquisition / Lease
  - e. Interconnection
  - f. Development Cost & Fee
  - g. Reserves & Financing Cost
- 2. Financing:
  - a. Construction Financing: (Construction Period,

- Interest rates, Interest during construction)
- Permanent Financing: (% Debt & Equity, Interest rate on term debt, Lender's Fee, DSCR [average, minimum-DSCR], IRR [pre-tax and post-tax], WACC, Closing Cost.
- c. Repayment strategy of loan (Episodic payments).
- d. Loan amortisation.

[DSCR = Debt servicing coverage ratio

IRR = Internal rate of return

WACC = Weighted average cost of capital]

- Cost base tariff rate structure and its escalation clauses.
- 4. Power sales agreement in determining revenue. (PPA with customer)
- Calculation of carbon credit/ renewable energy certificate (REC).
  - Measured at cost or net realisable value, whichever is lower
  - b. Applicability of AS 26/ Ind.AS 38 and AS/Ind. AS 2
  - c. Income recognition as per AS 9/ Ind.AS 18
  - d. Disclosures
- 6. Grants & Incentives by Govt. (AS 12/ Ind.AS 20)
  - a. Capital approach/ Income approach.
  - b. Repayment of Govt. Grants
  - c. Disclosures
- 7. Operation & Maintenance Cost.

- 8. Accounts Receivable / Accounts Payable Period.
- 9. Depreciation based on useful life. (AS 10/ AS 6/ Ind.AS 16)
- 10. Average life of PV modules 25 to 30 years.
- 11. Monthly yield based on the critical technical parameters.
- 12. Projected Cash Flow/ Fund Flow Statement (Monthly/ Quarterly/ Yearly).
- 13. Normal Tax & Deferred Tax calculation.
- 14. Contingencies.
- 15. Projected Balance Sheet and Profit & Loss Account (Monthly/ Quarterly/ Yearly).

# SPECIAL EMPHASIS BY GOVERNMENT OF INDIA ON SOLAR POWER.

Recognizing the importance of renewable energy, investment in this sector is soaring up. India has taken bold steps to invest in renewable source of energy, mainly solar to become energy independent country by 2070 with net zero emission. India has announced to meet 50 per cent of its electricity requirements from renewable energy source by 2030. India's sheer size and its huge scope for growth will increase the demand of energy more than that of any other country in this world in the coming decades. It therefore makes sense that Prime Minister Narendra Modi has announced ambitious targets to install 500 gigawatts of renewable energy capacity by 2030. "One Sun, One World & One Grid will not only reduce storage needs but also enhance the viability of solar projects....." by our PM, indicates the importance of investing in solar power projects in India.

# HORIZONTAL IRRADIATION (HI) IN INDIA AND STATE WISE SOLAR POWER GENERATION POTENTIAL



Source: https://solargis.com

State	Solar Power (MW)
1. Rajasthan	1,42,310
2. Jammu & Kashmir	1,11,050
3. Maharashtra	64,320
4. Gujarat	35,770
5. Madhya Pradesh	61,660
6. Andhra Pradesh	38,440
7. Karnataka	24,700
8. Him achal Pradesh	33,840
9. Tamil Nadu	17,670
10. Uttar Pradesh	22,830
11. Odisha	25,780
12. Telangana	20,410
13. Chhattisgarh	18,270
14. Uttrakhand	16,800
15. Jharkhand	18,180

Source: https://mnre.gov.in

#### GHI- Period 2000-2021

Daily totals:	3.4	3.8	4.2	4.6	5.0	5.4	5.8	6.2
Yearly totals:	1241	1387	1534	1680	1826	1972	2118	2264

kWh/m<sup>2</sup>

[1Megawatt (MW) is equal to 10<sup>3</sup> Kilowatts (KW) & 1Gigawatt (GW) is equal to 10<sup>6</sup> MW]

Biggest 12 solar power electricity generation projects in India as below:

S.N	Solar Power Generation Station	Area in acres	Capacity MW	Investment INR	Commssion Year	
1	Bhadla Solar Park, Rajasthan	14,000	2,700	10,000	1st Comm. 2018	
2	Pavagada Solar Park, Karnataka	13,000	2,050	14,425	2019	
3	Kurnool Ultra Mega Solar Park, Andhra Pradesh	5,932	1,000	7,000	2017	
4	NP Kunta, Andhra Pradesh	7,925	1,200		2016-Ph-I 2018-Ph-II	
5	Rewa Ultra Mega Solar, Madhya Pradesh	1,590	750	4,500	2018	
6	Charanka Solar Park, Gujarat	4,900	690	5,365	2021	
7	Kamuthi Solar Power Project, Tamil Nadu	2,500	648	4,550	2017	
8	Lawan-Purohitsar Solar Farm, Rajasthan		600			
9	Bikanir Solar Firm, Rajasthan		600			
10	Ananthapuramu – II, Andhra Pradesh	5,928	400	1,000	2019	
11	Galiveedu solar park, Kadapa, Andhra Pradesh		400		2018	
12	Mandsaur Solar Farm, Runija, Madhya Pradesh	283	250	45	2017	

Source: https://wikepedia

Upcoming solar power projects in India

- 1. Kutch Solar Park (Gujarat-4.75 GW), 2. Omkareshwar Reservoir Project (MP-600MW),
- 2. Ramagundam Reservoir (Telangana-100 MW).

statistics shows that India is going to be a pioneer in solar power generation in the world, which will not only make India as an energy independent country but also as a non-polluter of the environment.



Image Source: Engineering News

Till date the cost of solar power generation plant is extremely high. In near future it will be the endeavour of the scientists to reduce the cost of solar energy in comparison with other power generation plants (other sources).

With better technological invention of solar cells, it will require less cost to generate clean, green, renewable energy and will find more applications that take up less space and produce more electricity, to meet the energy needs.

Sun shines constantly over our Earth for ever and deploying enormous solar cells to generate electricity is the future.

"We have this handy fusion reactor in the sky called the Sun; you do not have to do anything; it just works it shows up every day." – Elon Musk. MA

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# INFRASTRUCTURE FINANCING **IN INDIA:** A STUDY OF RECENT INITIATIVES

#### **Abstract**

This article elaborates on the changes that have taken place in the realm of infrastructure investment in India and its mode of financing. In India in the initial stages of development, the Government played a dominant role in infrastructure financing. Today, India gives top priority to the Private-Public Participation mode of financing infrastructure. Considering the importance of infrastructure, new schemes like PM Gati Shakti, the National Infrastructure Pipeline, and National Monetization Pipeline have been introduced by the government to give a fillip to the infrastructure sector in India. All these programs will enrich the 'Amrit-Kaal' to take India to the galaxy of developed countries in the world.

#### Introduction

ndeed, infrastructure has been singled out as the key driver of growth in most developing economies like India. For India to take forward its celebrated growth trajectory even in the aftermath of the Covid-19 pandemic, and the global headwinds exacerbated by unabated geopolitical tensions, the country needs to step up its investment in the core economic infrastructure areas viz. roads, railways, ports, and the like. Over the last few years, India has witnessed tremendous and envious progress in infrastructure, particularly in the construction of road networks. The ambitious dream of realizing an economy of the size of US\$5 trillion by 2025 makes it necessary for the country to scale up its infra invest at least to the tune of US\$1.4 trillion. The real problem in infrastructure development in India often comes in the form of a growing demand for adequate and affordable finance far exceeding its supply. The problem of infrastructure financing is rampant everywhere in the world. By 2040, it is estimated that the global infrastructure financing gap will be accentuated to the extent of \$15 trillion (Mohseni-Cheraghlou & Aladekoba, 2022). It calls for the world to spend not less than \$1 trillion every year to catch up with the estimated figure. What worries us is the growing



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inability on the part of developing economies to catch up with their growing demand for infrastructure finance. This article looks into the recent trends in initiatives of infrastructure investment in India by the government to address the issue of the mounting mismatch between the demands for infra funds and its supply.

#### The objective of the study

The present study intends to look into the changes that have been rampant in the field of infrastructure financing in India. The study attempts to bring out the change in the role of government over the years and the progress of infrastructure development under different modes of financing. Apart from this, the study also throws light on the recent experiments in infrastructure plans and their financing especially taking into account the 'Amrit Kaal' before the economy.

#### Methodology

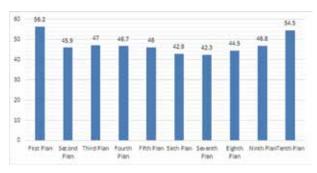
Collecting and collating data on infrastructure financing is rather a herculean task primarily due to two reasons: Firstly, there has been no consensus among development economists and policymakers as to the definition of the term infrastructure itself, although some would assert that as the word 'infrastructure' need not be defined as it is identifiable and recognizable (Grimsey & Lewis, 2002). Sometimes, in certain studies, the data on fixed capital formation has been taken as a proxy for the financing of infrastructure. Secondly, reliable data on the infrastructure financing has been seldom available. Nevertheless, the present study makes use of secondary data available from different sources. Besides these sources, data published in

research articles, government reports, and policy documents have also been used for the study.

#### Infrastructure Deficit and the Role of Government

In the recent past, in India, the strenuous fiscal space of the government has been excessively used to finance big-ticket infrastructure projects citing the reason that the private sector would no longer be interested in the longterm infra investment where the possibility of quick return seems remote. Around 70 percent of the total financial commitment of high-scale infra projects has been met using budgetary provisions. For instance during the period till the Tenth Plan in India, of the total plan outlays, near about fifty percent went to the infrastructure sector in India. In the first plan, 56.2 percent of the plan outlay was used for infrastructure whereas in Sixth Plan it declined to 42.9 percent, and thereafter with the Tenth Plan, it went up to 54.5 percent (Fig No.1). This clearly shows that the plan support for the infrastructure development in India has been substantial in the Indian economy. But with the dismantling of the five-year plans, the outlay on infrastructure from plan allocation was discontinued. It is important to note that in many countries, private participation in infrastructure investment kicked off only after 1991 (Agrawal, Gupta, & Gupta, 2011).

Figure 1 Outlay on Infrastructure under the Five-Year Plan in India



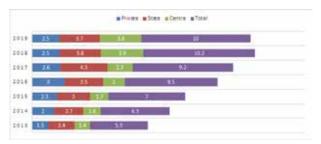
Source: Taneja and Myer, Economics of Development and Planning

This has not only put much strain on the fiscal position of the government but also brought in inefficiencies in the execution of the projects.

India, perhaps as in the case of every developing economy, has been marred with the issue of finding enough resources for infrastructure financing. As is obvious, the Indian economy given its huge size, demographic factors, and diversity in many spheres quite unlike many of the presently developed economies need to invest heavily in the field of both economic and social infrastructures to enhance the quality of life of its people and to step up the pace of GDP growth. Nevertheless, it is apparent

that despite many steps towards increasing infrastructure investment, for a long time India has never been able to realize its objective of enhancing both economic and social infrastructure. The low income of the people has not permitted the economy to raise sufficient internal sources for investment. This has put a lot of limitations on the economy, and consequently, the problem of infrastructure financing has continued to exist. To tackle the issue of infrastructure deficit, the governments both the center and state governments have continued to put a lot of money in infrastructure projects in India. For instance, in 2013 Rs.5.3 lakh crore was used for infrastructure investment out of which Rs.1.4 lakh crore was contributed by the Centre government, but by 2019 the contribution of the Center went up to Rs.3.8 lakh crore (Fig No.2). This shows that the Center government has been increasingly financing infrastructure project in India.

Figure 2 Infrastructure Investment in India (Source Wise) From 2013 to 2019



Source: Report of the Task Force Department of Economic Affairs Ministry of Finance (Figure are in Rs Lakh Crore)

#### **Recent Changes in Infrastructure Financing in India**

As India has started growing at an unprecedented rate barring the period of the pandemic, there has been a growing demand for newer and innovative avenues for infrastructure financing in India. The conventional way of relying on budgetary sources and allocations under plan support for infrastructure financing has proved to be unproductive and inefficient in light of the growing fiscal deficit on the part of the government. As the fiscal deficit enlarged, it put enormous pressure on the government which included tightening the key monetary rates in an attempt to tame the escalating inflationary pressures. In the pre-reform period, it is obvious that India failed to attract private investment in the field of infrastructure mainly on account of the nature of economic policies followed at that time. But, since the liberalization was introduced in 1991, efforts at attracting private investment in infrastructure have gathered momentum. Policy changes have been made effectively to pave the way for the entry of private players into the field of infrastructure in India. As the private sector has been averse to investment requiring a long gestation

period, the government first came out with a strategy of Private Public Partnership (PPP mode). It ensured a shared responsibility for both the private sector and the government to build and operate big-ticket infrastructure projects in India. During the period 2005 to 2021, projects worth 458079.17 cores rupees were either sanctioned or executed in India which shows the wide popularity that the PPP mode received amid growing apprehensions about the likely success of this mode of infrastructure financing and implementation. It is interesting to note that most of the studies that dealt with infrastructure issues in India during the period between 1989 and 2015 discussed the importance and dominance of Public Private Partnership as an effective mode of financing and running key infrastructure projects in India (Kumari & Sharma, 2016). It is worth mentioning here that India witnessed the establishment of a specially designed financial institution called The India Infrastructure Finance Company Ltd (IIFCL) in 2006 with the objective of fostering a private sector stake in infrastructure development in many key areas of growth in India through PPP Mode. One of the intentions behind the setting up of IIFCL was that it would reduce the fiscal pressure on the governments in finding funds for necessary and indispensable infrastructure investment in India. IIFCL has been envisioned to assist infrastructure companies to find out long-term finance from the financial markets. It is obvious that some infrastructure projects may be economically significant from the standpoint of the larger interest of the economy but may not be commercially viable through the lens of profit motives and quick return, and in such cases, the government would give 40 percent of the project cost as the capital grants.

Post-immediate liberalization period did not witness tremendous improvements in infrastructure investment in the country despite taking many measures towards ensuring private participation in the field of infrastructure. For instance, during the period 2002-07, India could do only US\$55 billion investment against the expectation of a much higher level of investment to the tune of US\$240 billion (Roy, 2015). The emerging East Asian Economies were investing around ten percent of their Gross Domestic Product in infrastructure projects whereas India was struggling to spend at least five percent of her GDP on the infrastructure sector. This dwindling infrastructure investment had a negative consequence on the growth prospects of the Indian economy. In these circumstances, IIFCL lent ears to the growing demand for infrastructure investment in India, and it succeeded in raising finance from the Indian capital market, thereby contributing to the development of 20000 kilometres of roads in India, in addition to building ports, airports, and power projects.

#### PM Gati Shakti

With the intention of ensuring multi-level infrastructure

#### 'Make in India' to be successful, the support of a vibrant and resilient infrastructure is of utmost priority

connectivity and speeding up infrastructure projects in areas like roads and railways, Prime Minister Sri Narendra Modi launched this ambitious platform called P M Gati Shakti. This will ensure the uninterrupted flow of merchandise items, services, and people from one particular mode of transport to another mode of transport, thereby ensuring a fruitful and productive integrated transportation infrastructure. This will cover schemes presently in operation by various ministries of the Centre government and State governments in India. A single window platform will ensure connectivity among different schemes, which will provide unending synergy in the actions of various entities of governments at different levels.

#### **National Infrastructure Pipeline (NIP)**

The key objective of this program is to enhance the quality of life of people living in India by enabling them to enjoy infrastructure at par with what is available in the world. In a way, it is an extension of the PPP mode discussed above, and beyond that, it is a step forward in the PPP mode of infrastructure investment in India. It also attempts to ensure private participation in infrastructure investment to a greater extent. This program recognizes that for 'Make in India' to be successful, the support of a vibrant and resilient infrastructure is of utmost priority.

#### **National Monetization Pipeline (NMP)**

This is yet another initiative on the part of the central government to give a fillip to the financing of big-ticket infrastructure projects in India. Here the ownership of the assets of ministries is not monetized but only the right to use such assets is monetized which means ownership still rests with the government. Therefore, it is not a privatization attempt. This scheme aims at giving the right to use brownfield assets under the control of the Centre government. It is expected that NMP will fetch Rs.6 lakh crore to the exchequer of the government which shall be used for financing infrastructure projects in India.

#### Conclusion

To sum up, it could be said that India has been witnessing changes in the way of financing infrastructure projects. The conventional way of government investment in infrastructure has been replaced by more private participation. For this to happen, a lot of supportive initiatives have been taken up by the government. At the same time, through innovative schemes like National Monetization Pipeline, new avenues

for financing infrastructure investment have been opened up by the government, and that too without selling the brownfield assets of government departments. All these programs will enrich the 'Amrit-Kaal' to take India to the galaxy of developed countries in the world.

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Research Bulletin, Vol. 48 Nos. IV January 2023 (ISSN 2230 9241)

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#### **Guidelines to submit full Paper**

- » Soft Copy of the full paper should be submitted in double space, 12 font size, Times New Roman, keeping a margin of 1 inch in four sides, MS Word (.doc) format.
- » Each paper should be preferably within 5000 words including all.
- » An abstract of not more than 150 words should be attached.
- » The cover page should contain the title of the paper, author's name, designation, official address, contact phone numbers, e-mail address.

#### Papers are invited on the following topics, but not limited to:

- Applications and adoption of Cryptocurrency in India and abroad
- Foreign Exchange Risk Management
- Green Finance: Progress and Challenges
- Role of Microfinance in Women Empowerment in India.
- Mutual Funds in India
- Sustainability Accounting and Reporting
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Papers must be received within 28th February, 2023 in the following email id: research.bulletin@icmai.in



veteran banker having about four decades of experience, took charge as the MD & CEO of the Bank with effect from 04th September, 2022. Earlier, CMA Krishnan was the MD & CEO of Punjab & Sind Bank. During his period there was total transformation of the Bank on all fields. Further, during his period, the Bank was turned around. Prior to joining Punjab & Sind Bank as MD & CEO, he was the Executive Director of Syndicate Bank and Canara Bank from 01st November 2017 to 03rd September 2020. He spearheaded the merger process of Syndicate Bank with Canara Bank. He started his Banking career in January 1983 at Indian Bank. In a career spanning more than three decades, he gained expertise in almost all the key areas of banking. He headed vital verticals of the Bank like Risk Management, Information Systems Security, HR, etc. He was also Executive Secretary to the Board of Indian Bank. He was a member of the Managing Committee of IBA and also alternate Chairman of IBA's Standing Committee on Agriculture and Allied Activities. He was also a member of IBA's Sub-Committee on Performance Management System in Public Sector Banks.

Q1. What is the one goal above all others that you hope Banking sector in India should have achieved by the end of 2022? And why is it so important in the forthcoming years?

Ans. When the people in the country needed various support and relief measures for the survival of their lives and revival of their business, I think, the Indian Government did its best by way of

releasing various relief packages for the People of India and took care of common public, agriculturists, small traders, MSME Sector and also the Industrial segments depending on their basic needs by shedding more than 27 lakh crore in various forms, making it among the most substantial in the world. This was one of the most important reasons as to why India is successfully progressing through the revival of its economy among all the developing economies in the world.

Q2. As MD & CEO of Tamilnad Mercantile Bank (TMB), what's the biggest challenge ahead of you that you hope to accomplish before you finish this role?

Ans. The advancement of technology and the expectation of customers through Digital Banking can be looked upon as challenges if we are unaware of the fact that these

are opportunities. I would like to see that the necessity for customers to visit the branch for fulfilling their banking needs is as minimal as possible by providing all possible banking services digitally at the convenience of our customers.

- Q3. And thinking of your kind of career in banking, which is about to be four decades now; share with us some of your significant achievements?
- Ans. 1. The turnaround of the Punjab & Sind Bank during my tenure as MD & CEO of the Bank, I would consider as paramount of my achievements
- 2. My contribution, during the merger process of Canara Bank & Syndicate Bank, in making the operations made available seamlessly to the customers from the very first day of the merged entity, would be the next among the significant achievements in my banking career.
- Q4. RBI has authorised TMB for undertaking Government Business on behalf of RBI. Can you briefly explain its prospective effect on growth and expansion of TMB?

Ans. This was a much-awaited approval for the Bank. This approval authorises the bank to carry out various services like collection of all types of taxes such as direct tax, indirect tax, GST & Customs Duty, Pension payment services, handle various State/Central Government sponsored scheme on behalf of the Government. Hitherto, we were dependant on other authorised bank to provide tax payment facility for our customers, now we will be able to provide the services to our customers directly.

We are in the process of providing these services to our customers shortly through our branch and various digital channels.

As the Bank's Head Office is located in Port City, enabling Customs Duty payment for our customers will not only benefit our customers to a large extant but also create an opportunity for the Bank to become eligible to be among the empanelled Banks for Indian Port Association, to handle various

business for its 13 member ports situated across the country.

## Q5. What is your Capital Adequacy ratio? Are there any plans to raise capital?

Ans. CRAR as on 30.09.2022 is 24.58%. No plan to raise further capital.

Q6. The RBI has increased Reporate by 225 basis points. Will that hike have any impact on your credit growth?

Ans. There is no significant impact on the credit growth of our bank.

## Q7. What are some of the most significant projects with which the TMB is involved in recent times?

Ans. We are working on shortly introducing new improved TAB Banking facility, enhanced Mobile Banking, new variants of Credit Cards, Government Business including Direct Tax, In-direct Tax, GST and Customs Duty Collection, opening of Digital Banking Units, etc.

## Q8. What enhancement TMB visualise on forex operations/ international business to the customers?

Ans. We have been working on extending centralised Forex operations services which will enable all our branches to handle forex transactions with a quicker TAT in delivering forex services to our customers.

# Q9. What is your outlook on the emerging digital shifts? What are areas TMB is working on to be the best-in-class global practice in technology?

Ans. DBU is going to be a game changer in the Banking Industry. Availability of 5G across the country, Digital on-boarding, recent pilot launch of e-Rupee are likely to change the way of Banking in the forthcoming years.

We are working on operationalising Credit Automation including digital lending platform for our customers during next financial year.

Q10. What is your growth outlook for FY 2023?

Ans 10-12%

## Q11. A few words on CSR activities of TMB- benefits to the local people/ economic development.

Ans. We have been actively contributing towards various activities for the social cause under CSR activity. We have spent a lot during and post Covid-19 for various awareness and vaccination camps, contributed to many hospitals for treatment of covid affected patients, contributed for social causes like developing Miyawaki forest, contributed to various schools and educational institutions where downtrodden students are provided education, for the students' wellbeing. provided assistance to poor people for their livelihood on various occasions,

## Q12. Is there anything else you would like to share with our readers?

Ans. We are a Tamilnadu based private sector bank. The recent listing of our bank's shares have opened new windows for the bank to expand its presence across the length and breadth of the country. We are in the process of opening as many branches as possible during the next 2 financial years with a view to expand our business.

# Q13. What are the various ways your organization can integrate with our Institute for the diverse avenues in professional development matters?

Ans. The Bank can associate with the institute in imparting the knowledge about the banking and other industries and also admit interns wherever possible.

## Q14. Parting advice for our CMA students.

Ans. India is poised to become a powerful economic growth engine: it has one of the fastest-growing economies in the world, the third-largest start-up ecosystem, and tech services, digital, and manufacturing sectors on track to become global powerhouses. McKinsey Global Institute partner Anu Madgavkar describes, "Growth pays the bills for sustainability," and accelerating development could propel India forward as a leader in sustainable, inclusive growth.

## SEBI'S PUSH TO THE MUNICIPAL BOND MARKET



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#### Introduction

he first two tiers of the Government in India are the Central Government and State Government. Municipalities are the third tier of the Government (after Central and State Governments) and are so recognized in the Constitution of India as well. Municipalities play an important role in the development of a country as they plan for economic and social development, laying roads and bridges, create infrastructure for public health, sanitation, conservancy as well as solid waste management among other things. In the United States, Municipal bonds have been a huge success - the total amount of outstanding municipal bond in US market is approximately \$4.00 trillion and has helped fund creation and operation of urban infrastructure over a century or more.

#### Municipal bonds - what are they?

While Municipal corporations traditionally depend on the Central or State governments to fund them through grants, they can also levy taxes, duties and fees on the residents within the municipality. Subject to the laws governing the municipality, they can also borrow from commercial banks, developmental financial institutions and can also borrow through issuance of bonds or debentures. A municipal bond is a bond or a debenture or a debt security issued by a municipality or urban local body to an investor. The proceeds of issue are generally used to finance general administration as well as infrastructure projects such as roads and bridges, slum rehabilitation, parks, amenities like street lights, parking facilities, public health, sanitation & solid waste management, etc.

#### **Revenue – municipalities**

Municipalities derive revenue from property tax, toll tax, advertisements, parking contractors, and other miscellaneous receipts.

#### **Evolution - Municipal bonds**

Municipal bonds have been around for centuries. Massachusetts<sup>1</sup> seems to have issued the first such bond, in 1751 and New York in 1812<sup>2</sup> and such issuances have only grown over the years.

In Europe too, municipal bonds have flourished, particularly in Italy and Germany.<sup>3</sup>

In India the Bangalore (now Bengaluru) Municipal Corporation issued municipal bonds for the first time in 1997, for an amount of Rs.125 crore. Subsequently, other Municipal corporations like Ahmedabad, Nashik, Madurai, Hyderabad, Chennai etc. followed the suit.

#### Status of municipal corporations

In terms of SEBI regulations, municipal bonds can be issued by any municipality or any Statutory Body or Board or corporation, Authority, Trust or Agency established or notified by any Central or State Act or any Special Purpose Vehicle notified by the State Government or Central Government subject to the condition that it undertakes one or more functions that may be entrusted under Article 243W of the Constitution of India.

A municipality means an institution of self-government constituted under Article 243Q of the Constitution of India.

## India and the municipal bond market – Government and SEBI initiatives

The government, as part of the Union Budget 2014-15, talked about initiatives for establishment of around 100 'Smart' cities in India<sup>4</sup>. Development of smart cities entails significant expenditure for creation of urban infrastructure such as water supply, sanitation, public health, roads transportation etc. At this juncture, in order to provide an alternative to bank and financial institution financing as well as an alternative to grants, it was thought appropriate by SEBI, to bring in a regulatory framework relating to

<sup>&</sup>lt;sup>1</sup> This is a state in the US

<sup>&</sup>lt;sup>2</sup> https://www.sechistorical.org/museum/galleries/mun/mun02a\_share\_growth.php

<sup>3</sup> https://www.tandfonline.com/doi/full/10.1080/00343404.2022.204 7914

<sup>&</sup>lt;sup>4</sup> A smart city is a technologically modern urban area. See https://smartcities.gov.in/

municipal bonds.

#### SEBI and the municipal bond framework

SEBI, in December 2014, issued a consultation paper inviting comments on a proposed regulatory framework for issuance of debt securities by Municipalities<sup>5</sup>. On July 15, 2015, SEBI issued the SEBI (Issue and Listing of Municipal Debt Securities) Regulations, 2015 ('ILDM Regulations')<sup>6</sup>. These regulations, inter-alia, deal with:

- the eligibility requirement for public issue,
- listing requirements for both public issues and private placement,
- conditions for continuous and trading of debt securities,
- obligations of intermediaries and issuers etc.

The ILDM Regulations defined "municipal debt securities" to mean non-convertible debt securities which create or acknowledge indebtedness, and include debenture, bonds and such other securities of an issuer.

After receiving representations from municipalities, merchant bankers, Stock exchanges and other market participants to expand this market segment, SEBI, on August 21, 2019, revamped the then ILDM Regulations relaxing certain provisions in the framework to help smart cities and other registered entities working in areas of city planning and urban development work like municipalities to raise funds through issuance and listing of their debt securities. The major areas of relaxations were:

- appointment of a monitoring agency,
- filing of viability certificate or Detailed Project Appraisal Report,
- setting up of a separate project implementation cell,
- maintenance of 100% asset cover with specification of resources and mandatory backing of state or central government etc.

#### Why is India primed up for issue of Municipal bonds?

Presently, India's population is around 1.4 billion<sup>7</sup> and is only expected to grow. This would result in requiring necessary infrastructure being enhanced in the cities. Consequently, the need for more and more funds to satiate the building and operating such urban infrastructure by municipal corporations around the country.

## General conditions for an issuer under the ILMDS Regulations

An issuer desirous of issuing municipal bonds shall comply with the following conditions:

- Listing is mandatory; The issuer should obtain an in principle approval from one or more recognised stock exchanges.
- The issuer shall obtain credit rating from at least one credit rating agency registered with the Board, which shall in the offer document or placement memorandum.
- The issuer shall enter into agreements with a depository for issue of securities in demat form.
- Appointment of merchant banker is compulsory.
- The issuer shall appoint a debenture trustee.
- The issuer can come with a public issue or private placement of municipal debt securities.

#### Financials of a municipal bond issuer

An issuer of municipal bonds shall ensure that financials are prepared as per:

- i. National Municipal Accounts Manual or;
- ii. Municipal Accounts Manual as adopted by the respective State Governments; or
- iii. Accounting standards, applicable to issuers, as prescribed under the Companies Act or;
- iv. Accounting standards/policies, applicable to issuers, as specified in their constitution document.

#### Disclosures to be made in the document

The draft offer document shall contain inter-alia, the following disclosures:

- Details of the issuer
- Risk factors in relation to the issue
- Capital structure
- Objects of the issue
- Tax benefits, if any
- Sign Issuer specific information like credit enhancement mechanism, DRR, rationale for credit rating, coupon, terms of payment, escrow payment mechanism etc.
- Financial information for the past three years.
- Government approvals
- Material litigation

SEBI may issue observations, if any, within 21 days of such filing.

#### Use of issue proceeds

• The funds raised from public issue of debt securities shall be used only for projects that are specified

<sup>&</sup>lt;sup>5</sup> https://www.sebi.gov.in/sebi\_data/attachdocs/1419931499189.pdf

<sup>6</sup> https://www.sebi.gov.in/legal/regulations/sep-2019/securities-and-exchange-board-of-india-issue-and-listing-of-municipal-debt-securities-regulations-2015-last-amendment-on-august-03-2021-\_34611.

<sup>&</sup>lt;sup>7</sup> https://www.business-standard.com/article/economy-policy/ the-global-economy-needs-a-new-powerhouse-india-is-steppingup-123012800994 1.html

#### **SUSTAINABILITY LEAF**

under objects in the offer document.

• The proceeds of the issue shall be clearly earmarked for a defined project or a set of projects for which requisite approvals have been obtained from concerned authorities.

#### **Creation of Escrow Accounts**

A specific condition for a municipal bond issuer is that the issuer shall create a structured payment mechanism and maintain specific escrow accounts for the purpose of debt servicing of the municipal debt securities.

Creation of these accounts facilitate better monitoring by Debenture Trustees of the debt servicing by municipalities.

#### **Execution of Trust deed**

- A trust deed for securing the issue of debentures shall be executed by the issuer in favour of the debenture trustee.
- In case of private placement by a corporate municipal entity, the trust deed shall, contain such clauses as prescribed under section 71 of the Companies Act, 2013 and Companies (Share Capital and Debentures) Rules 2014.

The issue proceeds shall not be utilised until the Trust deed is executed.

#### **Continuous listing conditions for municipalities**

- All the issuers making public issues of debt securities or seeking listing of debt securities issued on private placement basis, shall comply with conditions of listing including continuous disclosure and other requirements specified by SEBI.
- Where the issuer is corporate municipal entity, 1/3rd of its Board shall comprise of independent directors, as defined in section 149 of the Companies Act, 2013.
- Every rating obtained by an issuer shall be periodically reviewed by the registered credit rating agency and any revision in the rating shall be promptly disclosed by the issuer to the stock exchange(s) where the debt securities are listed.
- Any change in rating shall be promptly disseminated in such manner as the stock exchange where such securities are listed may determine from time to time.
- The issuer, the respective debenture trustees, wherever appointed, and stock exchanges shall disseminate all information and reports regarding debt securities including compliance reports filed by the issuers and the debenture trustees, if appointed, to the investors and the general public by placing them on their websites.

## Amounts raised through recent issuances of Municipal bonds

Details of amounts raised through municipal bonds under the SEBI municipal bond framework are as follows:

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Name of Municipality	Date of Issue	Amount of Issue (Rs. in cr.)	Coupon			
Pune Municipal Corporation	June 20, 2017	200	7.59			
Greater Hyderabad Municipal Corporation	Feb 16, 2018	200	8.9			
Indore Municipal Corporation	June 28, 2018	139.9	9.25			
Greater Hyderabad Municipal Corporation	Aug 14, 2018	195	9.38			
Bhopal Municipal Corporation	Sept 25, 2018	175	9.55			
Greater Vishakhapatnam Municipal Corporation	Dec 21, 2018	80	10			
Ahmedabad Municipal Corporation	Jan 11, 2019	200	8.7			
Surat Municipal Corporation	Feb 27,2019	200	8.68			
Greater Hyderabad Municipal Corporation	August 20, 2019	100	10.23			
Lucknow Municipal Corporation	November 13, 2020	200	8.5			
Ghaziabad Nagar Nigam	March 13, 2021	150	8.1			
Vadodara Municipal Corporation	March 24, 2022	100	7.15			
Total		1939.9				

#### **Green municipal bonds**

The urban infrastructure created by municipal corporations at times are for 'green' purposes. Accordingly, the bond issuance can also be considered being made as green bonds, which were developed as financing tools for sustainable investment.

#### **SUSTAINABILITY LEAF**

In November 2022<sup>8</sup>, SEBI clarified that a municipal corporation under the ILDM Regulations may issue a 'green debt security' or Green Municipal Bonds, if it falls within the definition of "green debt security", as per Regulation 2(1)(q) of the NCS Regulations, 2021.

SEBI is in the process of making changes to the sustainable bond finance framework *to*:

- amplify the definition of green debt securities on the lines of the green bond principles of the ICMA

   by including soil remediation, waste to energy plants etc.
- introduce the concept of blue bonds<sup>9</sup>;
- reduce the compliance cost of green bond issuers with SEBI regulations for bond issuance while not creating any perverse incentives that may lead to 'greenwashing'.

Vide Gazette Notification dated February 02, 2023<sup>10</sup>, the definition of the green debt security was amended to this effect. Further, the revamped disclosure norms, to give effect to the above framework is expected to be issued shortly.

#### SEBI's municipal bond outreach programme

SEBI recently organized an outreach programme on Municipal Bonds and Municipal Finance on January 20 and 21, 2023 at New Delhi to provide a common platform for stakeholders to discuss the concerns of the issuers of Municipal Debt Securities, the requirements of investors, the extant regulatory framework and to recommend measures to increase awareness of and improve traction in the market for Municipal Debt Securities.

The two-day event saw participants representing all stakeholders including the Ministry of Housing and Urban Affairs, Municipal Corporations, Stock Exchanges, Credit Rating Agencies, Merchant Bankers, Debenture Trustees, Lawyers, NGOs and Institutional investors.

Participants at the workshop had detailed discussions among various stakeholders on their concerns, suggestions and recommendations. The two-day event also brought focus to the use of existing revenue-generating assets managed by Municipal Corporations and the financing of green projects undertaken by Municipal Corporations.

8 https://www.sebi.gov.in/legal/circulars/nov-2022/is-sue-of-green-debt-securities-by-an-issuer-under-securities-and-exchange-board-of-india-issue-and-listing-of-municipal-debt-securities-regulations-2015 65404.html

To assist municipal debt issuers and other stakeholders in the Municipal Debt market, SEBI launched an Information Database including a repository of information pertaining to Municipal Bonds on its website. The Information database can also be accessed by way of a Quick Response Code (QR Code):



The information database / repository<sup>11</sup> contains a wide range of information in the form of statistics and regulations, circulars, guidance note and Frequently Asked Questions issued by SEBI in respect of Municipal Debt Securities. Significantly, the repository contains various checklists for pre-listing requirements and sample letters and certificates from various intermediaries to be obtained by an Issuer who plans to tap the Municipal Bond Market. Templates for agreements between various stakeholders and an indicative Due Diligence Questionnaire for Merchant Bankers are also included. While this repository would serve as a guide, it is also hoped that it would result in more awareness.

#### Conclusion

While SEBI has introduced the framework for municipal bond issues in India, the same is waiting to be tapped. That, coupled with the new sustainable finance framework is expected to give a big fillip to the green municipal bonds in India. Municipal bonds have great potential, and can supplement bank financing and institutional financing. There are also possibilities of using InVIT/REIT structures by municipalities for revenue generating assets owned by municipal corporations. Considering these options – issuance of municipal bonds or harnessing REITs/InvITs, will go a long way in bridging the funding requirements of municipal corporations, furthering the cause of realisation of objectives, particularly infrastructure development and further the cause of the 'Smart City' mission in India, while also lending a hand in developing the market for such instruments. MA

<sup>&</sup>lt;sup>9</sup> Blue bonds refer to the funds raised in the form of debt to finance sustainable projects towards ocean conservation, and related areas like offshore wind energy, fishing, coastal tourism, ocean waste disposal and so on.

https://www.sebi.gov.in/legal/regulations/feb-2023/securities-and-exchange-board-of-india-issue-and-listing-of-non-convertible-securities-amendment-regulations-2023 67798.html

<sup>11</sup> https://www.sebi.gov.in/mdr-repository/mdr\_repository.html



# DARWIN'S DARWINISM FOR DIGITAL DARWINISM AND MOVING AHEAD WITH DIGITAL TRANSFORMATION



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#### Introduction – Evolutions and Extinctions

cientists have always been overwhelmed by total number living species that have ever lived in earth. Their estimates have varied as widely as one can imagine with wildest stretch. Encyclopaedia have reported that the number have ranged between 3 to 30 million species of plants, animals, bacteria, fungi, algae, single cell living elements, etc. However, only 1.2 million have reportedly been identified and named so far, and the most of those are insects.

While many of such species have helped each other to survive and thrive in the chain of nutrients, certain species have consumed others away as food. Many living elements have evolved over millions and thousands of years and gradually improved over their previous generations to survive in the everchanging environment of earth. The greatest example is mankind. Some could not adopt and adapt and the inevitable has happened through natural extinctions.

But certain stories of extinction are different like that of the non-flying Dodo birds of Mauritius. One school of researchers is of the view that people from other countries carried dogs, cats, monkeys, and other pet animals for coinhabiting. Dodos of that tiny island could not adapt for co-existence and reproduction. it is thus a story proving the old maxim 'survival of the fittest'. The other view is that those migrants have eaten away Dodos since there were shortage of eatables.

The third major reason for extinction is indirect. For industrialisation and urbanisation mankind has not followed any regulation, ruthlessly exploited nature, and severely disrupted environment. This is continuing to cause global warming and disbalance biodiversity. Animal kingdom is under severe threats due to deforestation and wildfire.

Image Source: https://nttdata-solutions.com/us/services/digital-transformation-as-a-service/

Even honeybees are alarmingly reducing due to natural calamities. Ultimately survival of mankind is also being feared to be shrouded with uncertainty.

#### **Objective**

The primary question is whether such stories can be linked and corroborated with what all has happened so far with digital technologies in this short span of about thirty years of present industry 4.0 era. Should lessons be learnt, and cautions be exercised so that painstakingly created digital technologies can be nurtured to survive, evolve, and move ahead for pervasive and inclusive happiness of humanity? The point that may cross many readers' mind that answers may be lying in 'Darwin's Darwinism'. The author also through so.

There were plenty of criticisms and oppositions from scientists right in Darwin's own time after he propagated the theory of evolution. Many of them have also provided alternate views. Even philosophers had also commented on Darwin's theory. Despite their being such criticisms, since about last 16 decades researchers, irrespective of the nature of their fields of research including even management, have referred to Darwin's theory if confronted with any issue related to evolution and extinction. The objective of this article is also the same. An attempt will be made to first understand what Darwin's Darwinism briefly is. Thereafter the author will try to write about certain contemporary developments in the field of digital technologies and digital transformation. Objective would be to corroborate whether those have happened following the guiding lights from the five pillars of theme related to Darwin's theory of evolution.

#### **Darwinism**

The above stories of survival and extinctions in the ultimate analysis establish one fact that any living specie, that have ever lived on earth, had to remain under existential threats from other species and always had to strive hard for survival and growth. Many are continuing to do so. Again, survival is dependent on enduring pains and consistently evolve with better capabilities to adapt, adopt, and struggle. Hence species that are presently living have evolved with unique attributes and differential capabilities to fight, reproduce, survive, and thrive. Perhaps all these had led Charles Robert Darwin, an eminent English naturalist, geologist, biologist, and cerebral thinker, to theorise his own ism called Darwinism in his famous book 'On the Origin of Species' in 1859.

Stanford Encyclopaedia of Philosophy<sup>1</sup> writes that, "Darwinism identifies a core set of concepts, principles and methodological maxims that were first articulated and defended by Charles Darwin, and which continue to be identified with a certain approach to evolutionary questions." The fundamental and pivotal point of Darwin's theory is the "The nature, power and scope of selection".

This phrase had created baffling impacts in minds of Darwin's contemporaries and scientists till date.

Encyclopaedia Britannica<sup>2</sup> has defined this phrase, "natural selection, process that results in the adaptation of an organism to its environment by means of selectively reproducing changes in its genotype or genetic constitution. .... increase an organism's chances of survival and procreation are preserved and multiplied from generation to generation at the expense of less advantageous variations. Evolution often occurs as a consequence of this process."

Readers may be puzzled at this stage why under the Column named 'Digital Transformation' Darwin's theory of evolution is being narrated despite there being very many criticisms right from Darwin's own era. But it is a common knowledge that Darwin's theories explaining evolution of living species and their survival by mutation have also been applied to many inanimate substances and creationism. His theories have also helped thinkers to appreciate how any object of any field is connected and impacted by various objects and developments in related fields in terms of impacts on evolution, procreation, mutation, and survival.

Researchers on general management has also adopted and applied the themes of Darwin's Darwinism for analyses of reasons behind demises of Fortune 500 companies because organisational genomics comes into play. It is popularly said that with changes in leadership positions operating strategies may change within a short while, but it takes several decades for genomic characteristics of the organisation to change which have been inherited from a series of previous CEOs and CXOs. Demise of large organisations, like Kodak, Polaroid, have testified that failure to believe and adopt changes is the single most root cause.

Capgemini in their research-based publication titled 'Volatility and Corporate Darwinism' has written that, "Since 2000, 52% of companies in the Fortune 500 have either gone bankrupt, been acquired or ceased to exist. US corporations in the S&P 500 in 1958 remained in the index for an average of 61 years. By 1980, the average tenure of an S&P 500 firm was 25 years, and by 2011 that average shortened to 18 years based on seven-year rolling averages."

Readers can observe that survival period of such companies has reduced by about 70% in a span 53 years, i. e., by an average of about 1.32% every year. Two major reasons of such crisis of existence, as quoted by Capgemini are, "In most organizations, decision cycles lag technology cycles. .... organizations becoming complacent is management inertia – failure to sense the need to change." The lag in decision cycle indicates that both top leadership team and board of directors of those companies failed to keep pace with time, foresee changes, adapt, and adopt with changing dynamics of technology and business ecosystem. Lack of foresight has also severely hindered

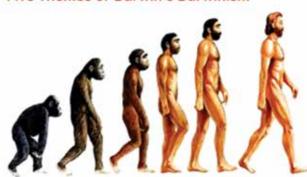
#### **DIGITAL TRANSFORMATION**

their ability to proactively achieve a state of readiness for coping with the negative impacts of dynamic environment and thus evolve by coping with changes,

In the domain of science and technology-based companies it is a common event. Business leaders could not in many cases even believe themselves, rely on their own innovations and discoveries, not to speak of foreseeing the inevitable of future. Otherwise, Kodak would have not failed. After having discovered digital photography and having most of the patents for that, they did not commercialise it. Kodak

continued to deal on paper and chemical-based films and led their company to its coffin. This by all probabilities justifies Darwin's second pillar of theme for evolution, 'The nature, power and scope of selection' as listed in the following graphic. This also proves the fifth pillar 'The tempo and mode of evolutionary change' If one specie, (please read as management group) does not know how to survive by understanding and appreciating the evolutionary changes, others will recognise that, adopt, adapt, and eventually drive the first group to extinction.

#### **Five Themes of Darwin's Darwinism**



- Probability and chance
- The nature, power and scope of selection
- Adaptation and teleology
- Nominalism vs. essentialism about species
- The tempo and mode of evolutionary change

Sources

Picture: https://www.linkedin.com/pulse/human-evolution-tradition-software-development-kai-stevens/Themes: https://plato.stanford.edu/entries/darwinism/#:~:text=Darwinism%20designates%20a%20distinctive%20form,Origin%20of%20Species%20in%201859

This doctrine is proved by the fact that telecommunication companies adopted new technologies have evolved over the years. The technology has recently entered 5G or the 'Fifth Generation' era. The story right from the invention of Alexander Graham Bell in 1876 to introduction of the first cellular phone by Nippon Telegraph and Telephone in 1979 speaks volume of both the second and fourth pillars of Darwin's theme. In course of this development one entity called Nokia, once the king of wireless handsets, has been overtaken by Samsung and Apple using Android and iOS technology. Research and development activities and such recognition of outcomes therefrom by forward-looking companies proves Darwin's last theme, 'The tempo and mode of evolutionary changes'.

Again, the technology for world wide web (www) has now reached Web 3.0 to which have converged for collaboration many digital technologies like blockchain, AI, AR, VR, etc. Readers may refer to the authors' article<sup>4</sup> on these subjects which was published under this Column in October 2022. Such integration of ICT and digital technologies have brought in overwhelming changes in the present Industry 4.0 era. This phenomenon that confirms collaboration and cooperation between entities in two or more technology domains have also helped them to survive and grow.

#### **Digital Darwinism**

There is no scope for argument that the overwhelming speed of changes in digital technologies, their adoption, and applications for transformation of business and even governmental services are continuously influencing people's way of living life. Some of those technologies have also started taking over routine and repetitive tasks of human beings. All these are not only happening and impacting life but also gaining momentum with quantum leap at shorter intervals in qualitative terms and newer applications. Digital transformation is also solving latent demands of society for solving complex problems.

In the context of the theme of this article, therefore, it would be useful to examine whether there is a scope to testify and apply 'Darwin's Darwinism' at each step. Objective should be to pick up learning points to ensure better results from what all are being done to ensure sustainable prosperity and avoid extinction of both technologies and mankind. One may also add deterioration in unique capabilities and qualities of human being. Extinction of less effective technologies would be good for humanity if better technologies evolve from previous ones.

The author is of the view that it is an imperative for all to think through whether stakeholders of digital technologies must keep in mind the learning points and wisdom that has emerged from applying 'Darwin's Darwinism' in other domains, including management. A few examples of those related to life science have been narrated in introduction segment.

It is generally accepted by all without much of arguments that digital technologies are also continuously evolving. Hence at this juncture it would be useful to revisit two words, viz., 'evolution' and 'Darwinism' to appreciate what exactly those indicate from the perspective of ideal and widely acceptable meaning. Reference to Oxford Dictionary reveals the following:

- Evolution (mass noun) = "The process by which different kinds of living organism are believed to have developed from earlier forms during the history of the earth."
- Darwinism (mass noun) = "The theory of the evolution of species by natural selection ... Darwin argued that since offspring tend to vary slightly from their parents, mutations which make an organism better adapted to its environment will be encouraged and developed by the pressures of natural selection, leading to the evolution of new species differing widely from another and from their common ancestors ......"

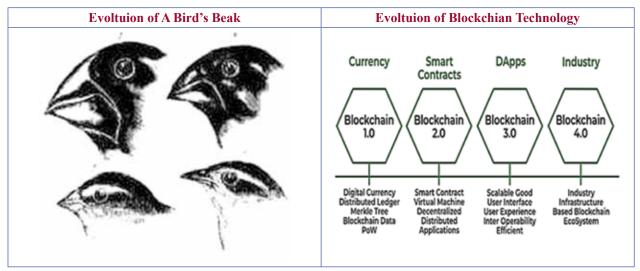
In the light of the above let the proposition be examined. It is globally being perceived that intensive collaboration

by and between ICT technologists, digital scientists and business community are enhancing the process of development and applications. All these are being further accentuated by young stars through their innovations in search of new more. They are continuously questioning the prior ideas. Along with them other stakeholders like business entities are driving the transformation process for survival and growth. The target customers, i. e., common people are also accepting and adapting to the new way of living life. Extending the core theme of the above definition of Darwinism will it be right to conclude that new species of digital technologies are evolving due to the stakeholders being driven by the process of selection? Let the readers further reflect on the points.

If readers, who are also being influenced by such processes of digital transformation, keenly watch, and analyse the situation, the revelation that would be that all such stakeholders are working with the thought process of doing better driven by Darwin's postulate of 'The nature, power and scope of selection'. Business architects are challenging and disrupting their predecessors' ways of conducting operations by innovatively applying the power of further advanced digital technologies. Digital scientists are also continuously using the 'The nature. power and scope of selection' and striving with 'Probability and chance' for digital technologies to evolve for success.

#### Digital Darwinism and Blockchain Technology

Let this be kept in mind that, "The core of Darwin's theory is natural selection, a process that occurs over successive generations and is defined as the differential reproduction of genotypes. Natural selection requires heritable variation in a given trait, and differential survival and reproduction associated with possession of that trait." The following graphics show how a bird's beak has changed over generations to help survival vis-à-vis how blockchain has also evolved over the years.



Source: Bird's Beak

https://www.globalchange.umich.edu/globalchange1/current/lectures/selection/selection.html#:~:text=The%20core%20 of%20Darwin's%20theory,with%20possession%20of%20that%20trait

Source: Blockchain https://www.geeksforgeeks.org/phases-of-evolution-of-blohain/

#### **DIGITAL TRANSFORMATION**

The above picture reveals that the bird's head and beak evolved over the years to become longer and sharper in angle. This has increased its ability to pick up small food items lying on a flat surface or hanging in a suspended condition. The fourth form of the beak, as shown in the picture, has also helped it to dig into items like soft fruits for eating the flesh and fibre.

In a similar manner blockchain technology has also evolved. Its first version was only useful for handling cryptocurrency transactions. Over the years insertion of smart contracts have made the technology useful for decentralised and distributed applications. Its third version has made it more adaptable to scalability and interoperability. Finally, the present fourth version has rendered it to be a useful platform for multivarious industrial applications. Governmental agencies are also appreciating the qualities and importance of blockchain and adopting for various purposes.

All these does indicate that evolution of technology has also followed the path of selection, preservation, mutation, transformation, and evolution further for adaptation. Darwin himself said that<sup>5</sup> "I have called this principle, by which each slight variation, if useful, is preserved, by the term Natural Selection." Vast applications of digital technologies with continuous metamorphosis have squarely changed BFSI sector by heralding the new era of FinTech. This again testifies Darwin's statement of preservation. In the reverse way one can say that functioning of banking and financial sector has evolved for the better when supported by digital technologists. Blockchain is now being used as a platform for introducing central bank digital currencies (CBDC) by many sovereign nations.

Therefore, it is understandable that no theory can do without *teleology*, i. e., as per the words of narratives of oxford dictionary, "... the explanation of the phenomenon in terms of the purpose they serve rather than the cause by which they arise." Seeing the power and benefits of blockchain technology, industry and governmental organisations are more and more adapting to blockchain for generating more values. Blockchain is gradually evolving from a high impacting to foundational technology. This is

what is enshrined in the third pillar of theme in Darwin's Darwinism, viz. 'Adaptation and teleology'.

#### Digital Darwinism and Artificial Intelligence

There is no need to write more about similar evolution in the domain of cognitive technologies, viz., Artificial Intelligence, Machine Learning and Deep Learning. These technologies are continuously evolving by becoming more and more versatile and adapting in nature. These serve the critical need of solution designers by solving complex problems and helping management professionals to take strategic decisions. AI has further extended its domain by combining with mechatronics. Mechatronics first gave birth to robotics technology by combining three domains of engineering, viz., mechanical, electrical, and electronic with control technology of ICT.

AI joined this club in creating artificially intelligent robots leading to a new domain called AI-Robotics. This new technology has again given birth to humanoids that can mimic certain tasks of human beings by attaining and applying elementary level of human intelligence. In the ICT software domain also, AI has helped in crafting artificially intelligent automated processes for transaction handling called RPA or robotic process automation.

#### Digital Darwinism and Web3

The first version of world wide web, i.e., Web1 brought in the era of 'Information Economy' in 1990s. It evolved at a faster speed and the world experienced Web2 from around 2005 which ushered in the era of 'Platform Economy'. And now the world is experiencing Web3.0 which has become possible not only because of evolution of www but also collaboration with digital technologies like Blockchain. AI, AR, VR, etc. Such collaboration of technologies has also given birth to a new world of virtual experience called Metaverse. Readers can know more about this from the author's article<sup>6</sup> published under this column in March 2022. The following table by listing the features succinctly narrates transformation from Web1 to Web3:

	Web 1.0	Web 2.0	Web 3.0
INTERACTION	Read	Read-Write	Read-Write-Own
USER DATA	Cookies	3 <sup>rd</sup> Party Controlled	Portable and Personal
MEDIUM	Static Text	Interactive Content	Virtual Economies
ORGANIZATION	Companies	Platforms	Communities
INFRASTRUCTURE	Personals Computers	Cloud & Mobile	Blockchain Cloud
CONTROL	Centralized	Centralized	Decentralized
AD-SPENT	Page Views	Cost Per Click	User Engagement

#### **DIGITAL TRANSFORMATION**

Readers will agree that the most important factor for success in digital transformation is user-centric solution designing. This is primarily because users and customers are also evolving to become more demanding, intelligent, adapting to change, and quick adopters of technologies. Such developments in turn are making them more imaginative to expect solutions several steps ahead of what digital scientists could think through and/or design. It has rather become a debate of who is leading what in technology domain. Is it the customers and users influencing the solution designers or the other way round? Here again Digital Darwinism comes into play through Darwin's fifth pillar of theme, 'The tempo and mode of evolutionary change'.

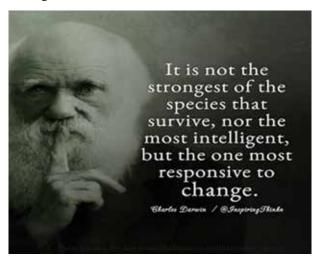
From the perspective of the fourth pillar of Darwin's theme of 'Nominalism vs essentialism about species', the author is of the view that digital transformation has an underlying essence of first serving people's inherent nature to innovate and perform tasks in a better manner after picking up lessons from what happened in the past. This characteristic of helping to do better has made them what they are today. That is why digital gospellers is of the view that digital transformation is a never-ending journey and not a destination. Prima facie common people think that all these are being done only for the purpose of doing business and earning profit by deriving competitive advantages from digital technologies. But none looks at the joy of self-actualisation digital scientists derive by making technologies to evolve and serve humanity by applications in solving their problems.

#### Digital Darwinism - The Guiding Light

At this juncture it may not be an exaggeration to write that knowingly or unknowingly both business architects and technology architects have been guided by the light of Darwin's Darwinism. These two groups have jointly gone through the process and helped continuous evolution through which path they have followed the five pillars of theme of Darwin's Darwinism. They have made all that for the digital world to evolve. They have made older technologies to move towards extinction by following the principle of creative destruction, innovated newer and better versions of previous technologies by following Darwin's theme, 'The nature, power and scope of selection'. Thereafter they have crafted improved solution with the newer version of technologies.

Therefore, by all probabilities the light of Darwin's Darwinism has guided them to make digital technologies to evolve and leave the earlier version behind. Brian Solis, an eminent author, and digital anthropologist has opined that, "Digital Darwinism shines a light on the future by exploring technology, society, and lessons from the past so you can understand how to adapt, what to embrace and what to ignore. ... If you want your organization to succeed in the post-digital age, you need to be enlightened by

Digital Darwinism". By any stretch of logic or imagination it may not be possible for any stakeholder, connected with the tasks of digital transformation, to ignore the following message of Darwin:



Source: https://medium.com/quartictech/survival-of-the-fittest-b178b4336f5c

#### Conclusion

The author is consciously aware of that this is a daring attempt on his part to write anything on the "...concepts, principles, and methodological maxims" related to Darwin's theory of evolution. More daring is the task of correlating the same with what have happened and are expected to happen in the field of digital transformation. But Darwin's theory has always amazed him to the extent that in the back of mind always there remained a desire to reflect on the emerging dynamics of digital transformation in the light of Darwin's Darwinism. This article is the outcome of that desire. The question will remain whether this attempt could meet expectations till some feedbacks are received from readers. The author would remain committed to think and reflect more on this amazing phenomenon of evolution.

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## FINANCIAL CRISES AND HOW TO DEAL WITH IT: 2022 NOBEL PRIZE IN ECONOMICS



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#### Abstract

The Nobel Prize in Economics celebrates decades of research in specific fields that have helped to improve the fundamental understanding of the subject and in many cases led to applications for attaining superior conditions of life. Since many parallel ideas emerge during the course of research, the relevance and criticality of these in addressing core concerns of the human being and the nature gets prominence for the award of the greatest accolade. Understanding sources of financial crisis and policies to lessen its impacts is a natural candidate for Nobel Prize, as has been the case for the award in 2022.

inancial crisis, of which currency crisis is one of the dominant drivers, has been dealt with by some of the most distinguished economists of our times, such as Peter B. Kenen, Rudiger Dornbusch (who famously stated, do not let any financial crisis go futile), Paul Krugman and others. These eminent researchers have left a strong legacy towards understanding the causes and consequences of economic meltdown across the world. In more recent times, (no less than last three decades), Ben S. Bernanke of The Brookings Institution, Douglas W. Diamond of the University of Chicago, and Philip H. Dybvig of the Washington University in St. Louis, have made important breakthroughs in characterizing banking regulations contemplated as a crucial factor behind financial and economic crises. These renowned experts received the Nobel Prize for Economic Science in the year 2022.

At the outset this article provides a brief background to the concurrent research on these matters and tries to establish the link clearly. According to Frank Allen and Douglas Gale (2000) the prevalence of financial crisis, generally speaking, often sends a signal that the financial sector is unusually susceptible to shocks. In fairly recent times, the spread of shocks from one sector to another and then as a wildfire to the rest of the world is a testimonial to the well-known contagion effects discussed in these studies. Michael Bordo and others (2001) define financial crises as episodes of financial market volatility marked by significant problems of illiquidity and insolvency among financial-market participants and/or by official intervention to contain such consequences. Out of this general description, they further note that banking crisis would be qualified as financial distress resulting in the erosion of most or all of the aggregate banking system capital (also in G. Caprio and D. Klingebiel, 1996). On the other hand, the currency crisis as commonly described is a forced change in parity, abandonment of a pegged exchange rate, or an international rescue. They comment that crises often come in waves, with a new one breaking out before the recovery from its predecessor is complete. The analogy is largely influenced by the series of crisis involving the European exchange rate crisis of 1992-93, the Tequila crisis of 1994-95, the Asian crisis of 1997-98, the Brazilian crisis of 1998-99, and the Russia-LTCM affair (see G. Kaminsky and C. Reinhart, 1998 for an explanation on banking and balance of payment crises).

Amidst this large base and an expansive literature, it is certainly not an easy task to identify and curate research questions that serve contemporary curiosities. The evolving realities and empirical patterns concerning financial and economic crises needed re-evaluation and close theories to be able to predict more accurately the onset of future crises. The Economics Nobel Laureates of 2022 had offered these in series of writings that adorn the textbooks for a wide range of curriculum across the world. For example, Ben Bernanke is a household name even in India for having authored the Principles of Economics that is part of the undergraduate coursework for students of Economics. For the graduate students, the researchers and the policymaking community, hundreds of studies published in financial economics, banking, and economic regulations by the trio offers a wealth of resources to cultivate ideas, procedures, techniques and applications for the present and future. The fairly common practice of how financial intermediaries pool resources, manage risks and avoid default, owes significantly to the technical contributions of Diamond and Dybvig. The Nobel committee recognizes that Diamond and Dybvig's optimal solution to how banks function without default by satisfying both the lenders (those who save money with banks) and the borrowers (say, those who borrow against mortgage of property) with uninterrupted cash flow is a significant contribution to the subject of financial economics. Their work simultaneously predicts the possibility of 'bank runs' wherein even rumors that banks might not be able to return the savings can snowball into an economy-wide phenomenon causing the banks to return all deposits within a very short span leading to high default risk at that point despite no real crisis. Diamond and Dybvig suggest that the deposit insurance supported by the Government (and why not, since Governments stand behind the currency) could prevent such bank runs. Do all Governments and respective Finance Ministers understand and honour that?

Ben Bernanke supplemented these in his own way and as the 14th Chairman of the Federal Reserve from 2006 to 2014 working closely with the Obama administration saw through the financial crisis of 2008. He has not only analyzed the Great Depression of the 1930s, but was the most active policymaker during the mortgage crisis turning into a global crisis during 2007-08. The Nobel Committee notes that "among other things, he showed how bank runs were a decisive factor in the crisis becoming so deep and

prolonged. When the banks collapsed, valuable information about borrowers was lost and could not be recreated quickly. Society's ability to channel savings to productive investments was thus severely diminished." In fact, the well-known Taper Talk of May 2013 led to worldwide changes in the direction of capital flows. The withdrawal of support that the Federal Reserve was offering to the fledgling firms and especially the mortgage banks and other intermediaries in the United States of America was sending signals to a large number of investors to bring back their funds over to the source country. This led to significant outflow of foreign currency from the developing and emerging economies (later analyzed by Jeffrey Frankel at Harvard University) and brought over negative effects of the financial crisis that these countries largely avoided thus far due to lesser degrees of financial integration. The capital flight was reminiscent of the East Asian crisis that happened owing to a different signal and coined as an example of financial 'herd behavior' by Abhijit Banerjee. To many, the announcements by the Chairman of the Federal Reserve as policy to lessen crisis in USA had precipitated another crisis on the capital-importing nations. The major impact of the contagion of financial crisis across countries leads to larger economic crisis and in the least, currency crisis. The trade related contagion of negative effects on trade partners is a variation of what has been discussed above and is known as the beggar-thy-neighbor policy which Jagdish Bhagwati had theorized many decades ago. Indeed, the theoretical and empirical foundations laid by the Nobel laureates inevitably expand the scope of the analysis to global evaluations. But, first of all, the recurrence of crises suggests that countries do not attend to many shortcomings in due course and remain responsible for precipitating crises on others.

## WHY DO ECONOMIES NOT LEARN FROM HISTORICAL

#### **CRISES?**

One reasonable answer to this question is that almost every time, the global crisis emanates from a new source that previous analysts had neither imagined, nor anticipated from contemporary observations from the macroeconomic characteristics. Moreover, various short-run imbalances at times precedes financial crisis and these have strong historical antecedents that are often undermined and poorly documented. The present generation of economics graduates is also inadequately acquainted with the economic and social history of the world. If the courses included these more categorically, as it used to be, then some of the present facts would not perhaps appear unprecedented. In fact, the COVID-induced crisis also has examples from the last century as to how pandemics debilitate economies. Many economists around the world claimed that they have not known anything source and impactwise that could guide them during the present situation.

Charles Kindleberger wrote that the first quarter of the Seventeenth Century up to and through the beginnings of the Thirty Years' War in Germany following the defenestration at Prague in 1618, has been widely described as a period of crisis. Eric Gould (1954) and Barry Supple (1957) among others discuss that the crisis was particularly acute between 1619 and 1623 and despite localized impact in some cases it was generally described as a commercial crisis. Rudiger Dornbusch and others (2000) discussed at length the role of international trade in crisis contagion. It is argued that the local shocks, such as a crisis in one economy, can affect the economic fundamentals of other countries through trade links and currency devaluations. By contagion, a major trading partner of a country that has been exposed to financial crisis could also experience declining asset prices and large capital outflows. It could also become the target of speculative attacks as investors anticipate a decline

in exports to the crisis country and hence deterioration in the trade account. Crises may spread further through competitive devaluations whereby countries competing for the same third country export market are forced to devalue their respective currencies following devaluation in the country of first crisis. The noncooperative nature of the currency devaluation games between countries could result in still greater depreciation compared with what could have been attained in a cooperative equilibrium. During the East Asian crisis in 1997, exchange rates depreciated substantially even in economies such as Singapore, Taiwan, and China that were not exposed to the same factors causing the crises in South Korea, the Philippines and Thailand.

To reiterate, the contagion by its very nature is an international phenomenon; particularly since the cross-country financial and trade flows reached epic proportions in the present millennium. Both the Mexican crisis and the East Asian crisis involved many countries in South America and Asia, respectively, with far reaching impacts. Therefore, "contagion is best defined as a significant increase in cross-market linkages after a shock to an individual country (or group of countries), as measured by the degree to which asset prices or financial flows move together across markets relative to this co-movement in tranquil times" (Dornbusch and others, 2000, p. 178). However, note that increase in co-movements need not reflect irrational behaviour on the part of investors. When one country is hit by a shock, firms encounter losses and the consequent liquidity constraints can force investors to withdraw funds from other countries. Importantly, financial transactions been usually conducted by agents rather than by principals also lends the issue to incentive problems triggering volatility. Besides, the herd behaviour is already known for creating excess volatility. Finally, since there is very little coordination between investors - unless they are

Even rumors that banks might not be able to return the savings can snowball into an economy-wide phenomenon

part of a multinational financial group – country-specific liquidity problems spill over to other countries quite easily.

On a related note, financial crisis is also driven by trade deficits leading to asset price shocks and exchange rate fluctuations. A number of studies, in particular those by R. McKinnon and H. Pill (1997), Paul Krugman (1999) etc. suggest that excessive Government intervention and bail-out policies (such as subsidies and nationalization) could make financial institutions and banks take riskier decisions including holding of large foreign currency denominated debts (see, R. Chang and A. Velasco, 2000). Consequently, over borrowing or imprudent lending practices could trigger general as well as currency crises via the routes we have discussed so far. These and several related aspects researched and converted into polices have earned Bernanke, Diamond and Dybvig the distinction that they rightly deserve understanding the sources of financial crisis and making the world a safer place for investors, workers and the people at large is undoubtedly worthy of global recognition. MA

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## DISCLOSURES OF KEY PERFORMANCE INDICATORS IN OFFER DOCUMENT

#### Abstract

The amendments made to the Securities Exchange Board of India (Issue of Capital and Disclosure Requirements) Regulations, 2018 [SEBI ICDR] dated 21st November, 2022 included certain provisions of great relevance to the profession of CMA mandating disclosure of Key Performance Indicators (KPI) in the offer document under the section dealing with "Basis for Issue Price" in addition to disclosures of financial indicators. This article after giving a brief introduction to the subject covers the amendments in the regulatory framework.



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## "If you can't measure it, you can't improve it"

- Peter Drucker

#### INTRODUCTION

EBI has taken various steps from time to time to strengthen the quality and standards of disclosures for the purpose of ensuring dissemination of information in a transparent manner to all the investors. The regulations relating to disclosures and reporting with respect to the issue of capital in the primary market are mainly contained in Schedule VI to the Securities and Exchange Board of India (Issue of Capital and Disclosure Requirements) Regulations, 2018 (hereinafter referred to as SEBI

ICDR). Significant amendments which are of great interest and relevance to the CMA professionals were made to the SEBI ICDR vide the Fourth Amendment Regulations dated 21st November 2022 providing for the first-time detailed regulations with respect to disclosures relating to "Key Performance Indicators" (KPIs) in the offer document under Section K -Basis for Issue Price. In this article the concept of KPIs is briefly explained and an attempt is made to highlight the salient points of the new requirements arising out of the SEBI amendments concerning the KPIs.

#### UNDERSTANDING KPIs

Peter Drucker, a renowned management expert, is known to have said "What is measured gets done"

thereby highlighting the importance of measurement of performance from a strategic perspective. Measurement of \performance is of vital importance to ensure that the work and processes carried out are effective in creating the desired impact and in case of any lag it helps to focus on the measures required to be taken for improvement. These measures relating to performance may be with reference to inputs or resources utilised, processes, outputs, outcomes or even project milestones.

When drilled down and analysed, it is noticed that the term KPI has three powerful words namely "key", "performance" and "indicators."

An "indicator" refers to a measure used to quantify performance with reference to a particular parameter. For example, merely computing total labour hours worked over a month in a manufacturing unit by itself does not convey any meaning. But when related to the total labour hours available in the month in the said unit, it helps the management to assess the idle time or the extent of capacity utilisation.

A "performance indicator" is a quantitative or qualitative measurement or other criterion against or by which performance or achievement of a person, department or company is assessed usually against a target, standard or a budget. Thus, in the cited example, if it is targeted to contain idle time to 10 per cent and the actual measurement in the given period is 15 per cent, this 15 per cent against 10 per cent is a performance indicator

Now all performance indicators are not "key performance indicators". To qualify as a "key performance indicator", the performance indicator should be among the most critical indicators for success at the highest level of strategic management. KPIs are those measures that are used to assess and evaluate the progress made towards achieving the strategic business goals. In the cited example, if the unit is operating at a high break-even point level, maximising capacity utilisation and minimising controllable idle time could be two of the KPIs.

Typically, most strategic teams track around 20 to 25 KPIs that span across four broad perspectives namely financial, customer, process and people.<sup>1</sup>

#### Key steps in the KPI process



Source: https://www.techtarget.com/searchbusinessanalytics/definition/key-performance-indicators-KPIs

#### QUALITIES OF GOOD AND EFFECTIVE KPIS

The process of setting KPIs requires a thorough understanding of the various business functions, activities and processes so as to be able to identify the key success variables that have a closely measurable correlation with the success and sustainability of the business of the company. Having said this, the qualities of good and effective KPIs can be aptly summarised by the acronym "RAMA".

**Realistic:** It is obvious that KPIs should be realistically attainable; otherwise they may remain as pipe dreams contributing to internal bickering, one-upmanship and other negativity within the organisation thus doing more harm than

good. A proper balance should be established when setting ambitious and yet practically achievable KPI targets that motivate that extra effort in the organisation.

Aligned to the Objective: KPIs should be aligned to the overall business objective, goal, outcomes and strategies. Thus, for a sales and marketing team enquiry conversion or strike rate could be a KPI because higher strike rate would contribute to a higher revenue.

*Measurable*: KPIs are incomplete without they being capable being measured with reasonable accuracy. Now that there are various tools of data analytics to choose from, this should not be a constraint.

Actionable: The purpose of setting KPIs should be to seek continuous improvement and this calls for outlining the steps required to be taken to reach the targeted KPI levels. Thus, good and effective KPIs are those that inspire positive action.

#### Common Mistakes in Choice of KPIs

Some of the common mistakes that are continued to be made in the choice of KPIs can be classified into two categories namely -

- Choosing KPIs that has been historically measured, so-called time tested and therefore should be continued as KPIs. In a rapidly changing dynamics of the economics of business environment and with the availability of advanced data analytics and AI tools, relevant information is the key to success.
  - Given the availability of relevant information, the KPIs should be subject to review and should be modified to fit into new realities as a continuing exercise.
- Ochoosing KPIs that are simple, easy to understand and easy to measure. Though being simple and easy to understand and / or measure with respect to a KPI is a great virtue, over emphasising on simplicity rather than on attention to being relevant to strategy can lead to meaningless results. This is particularly the most likely scenario when decision making is based on KPIs that are not in alignment with strategy.

#### **Making KPIs Work**

Introducing KPIs at the workplace is not free from challenges. If KPIs are used as tools for enforcement of performance, any success achieved will be short-lived and not sustainable in the long run. KPI systems instead work better in organisation that places more emphasis on the right approach and processes rather than on achieving results with the latter being any way not guaranteed. The right approach would be to create a right MRI (monitoring, reporting and improvement) culture which motivates managers at all levels as well as the staff and workers to put in their best efforts. This is not difficult to achieve if the processes are backed by a strong performance management system that is consistent, simple and transparent. The performance management

<sup>&</sup>lt;sup>1</sup> https://www.clearpointstrategy.com/18-key-performance-indicators/

system should provide for assigning responsibility for each KPI to specific department / managers to track and report the progress. Periodicity should be defined for reporting on the performance be it daily, fortnightly, monthly or quarterly. Regular monitoring and reporting is the key to make KPIs work with the focus being on improving performance rather than on enforcement of performance.

## OVERVIEW OF REGULATORY REQUIREMENTS

The SEBI ICDR was amended on 21<sup>st</sup> November, 2022 to provide for regulations with respect to KPIs vide the Securities and Exchange Board of India (Issue of Capital and Disclosure Requirements) (Fourth Amendment) Regulations, 2022. The salient features of the amendments made to the SEBI ICDR concerning the KPIs are briefly discussed in the following paragraphs.

- 1. Amendment to Schedule VI of the SEBI ICDR: The fourth amendment has added two new sub-paras namely
  - O Sub-paras (3) (a) to (i) and
  - O Sub-para (4(f))

under the head "(K) – Basis for Issue Price" in Part-A (dealing with disclosures in offer document / letter of offer) of Schedule VI to the SEBI ICDR.

- 2. Applicability: It has been provided in the amendment notification that the new provisions shall apply for all Red Herring prospectus (RHP) filed on or after the effective date namely 21st November 2022.
- 3. KPIs to be defined consistently and precisely [sub-para 3(a)]: The Regulations require that the KPIs are defined consistently and precisely. These shall be disclosed by the issuer in the offer document. The emphasis of the Regulations is on the usage of simple English words, terms, and phrases for the definition of

If KPIs are used as tools for enforcement of performance, any success achieved will be short-lived and not sustainable in the long run

KPIs. Further, where technical terms are required to be used in explaining the KPIs, appropriate clarifications shall be given in such a manner that they are simple and easy to understand from an investor's perspective.

- Audit Committee approval [sub-para 3(b)]: The Audit Committee shall approve the KPIs disclosed in the offer document of the issuer.
- 5. Certification of the KPIs [sub-para 3(c)]: Issuer shall obtain certification of the KPIs from one of the following professionals: -
  - Statutory auditors of the company or individual CAs or a firm of CAs holding a valid peer review certificate or
  - CMAs holding a valid peer review certificate.

It is understood that the Institute of Cost Accountants of India is in the process of setting up the requisite peer review mechanism.

- Certificate to be included in the material documents [sub-para 3(d)]: The certificate referred to in sub-para (3)(c) shall form part of the material documents listed in the offer document.
- Period for the KPIs [sub-para 3(e)]: The period for which the KPIs are disclosed in the offer document shall be co-terminus with the period in respect of which financial statements are disclosed in the offer document.

In this connection, it may be noted that audited consolidated financial statements prepared in accordance with IND-AS for three full years and the stub period (part of the year), where applicable shall be included in the offer document. Thus, the KPIs that are disclosed in the offer document should be aligned with the periods covered by the CFS. It should also be remembered that the end of the stub period shall not be older by more than six months.

Further, a question has been raised as to whether the KPIs should also be disclosed on a consolidated basis. While there is no clear guideline on this point as yet, it appears that KPIs have to be disclosed on a consolidated basis if that is the manner in which the management of the Issuer has been historically analysing, tracking or monitoring the operational / financial performance of the company, as provided in the following sub-para (3)(f).

- 8. Comprehensive [sub-para 3(f)]:
  The Regulations provide that the KPIs that are disclosed in the offer document should be comprehensive. It is also provided that there should be explanation as to how the KPIs have been used by the management for historically analysing, tracking or monitoring both the operational and financial performance of the issuer company.
- 9. Additions or Dispositions to Business and Comparison over time [sub-para 3(g)]: The Regulations provide that when KPIs are compared over a period of time, adjustments shall be made for additions or dispositions to the business and explained. This is necessary from an investor point of view

for better understanding.

- 10. Disclosures under the "Basis for Issue Price Section" [Subpara 3(h)]
  - a. Period of Disclosure [subpara 3(h)(1): The issuer company shall disclose all the KPIs that have been disclosed or shared with the investors during a period of 3 years before the date of filing of draft Red Herring prospectus (DRHP) / Red Herring prospectus (RHP). Further, in view of sub-para (3) (e) discussed above, such disclosure of KPIs should be co-terminus with the period of disclosure of the audited financial statements.
  - b. Confirmation by Audit
    Committee [sub-para 3(h)
    (2)]: The issuer company
    shall obtain confirmation
    from the Audit Committee
    that they have "verified
    and audited" the details
    for all the KPIs that have
    been disclosed by the
    issuer company to the
    investors during the three
    years before the filing of
    DRHP / RHP. The offer
    document shall contain
    this confirmation.
  - c. Disclosure of other relevant KPIs [sub-para (3)(h)(3)]: It is open to the issuer company in consultation with the lead merchant banker to disclose other relevant and material KPIs of the business of the issuer company as may be reckoned to be apposite for the purpose of arriving at the basis for issue price.
  - d. Cross Referencing of the KPIs [sub-para (3)(h) (4)]: In case the issuer company has disclosed KPIs in other sections of

- the offer document, they may be cross referenced in the "Basis for Issue Price" section of the offer document.
- e. Comparison with listed peer companies [sub-para(h)(5)]: Wherever available, the issuer company shall disclose the comparative KPIs of the listed peer companies (Indian or Global) as identified.

The identified peer companies shall be -

- comparable in terms of size
- belonging to the same industry and
- operating on a similar business model.

In case the identified peer companies are not strictly comparable, suitable notes may be added to explain the differences.

11. Continual Disclosures [sub-para(3)(i)]: Issuer companies shall continue to disclose the KPIs forming part of the offer document on a periodic basis, the frequency of which shall be at least once in a year or a period of lesser frequency as may be decided by the issuer company.

The minimum duration during which the disclosures shall be continued to be made is specified as:

- a. one year after the listing date or such a period as specified by SEBI or
- until the utilisation of the issue proceeds for the objects of the issue as disclosed in the offer document

It is further provided that if there are any changes in the KPIs during the continuing period, the issuer company

- shall provide explanation.
- It is also provided that a Chartered Accountant or Cost Accountant referred to in subpara (3)(c) shall certify the ongoing KPIs covered herein.
- 12. Recommendation of a Committee of Independent Directors [sub-para (4)(f)]: The recommendation of a Committee of Independent Directors of the issuer company with regard to the justification of the price band in the price band advertisement shall contain a reference of the justification based on quantitative factors and KPIs disclosed in the offer document in the "Basis for Issue Price" section vis-à-vis the weighted average cost of acquisition (WACA) of the primary issue / secondary transaction disclosed in the said section.

#### **WAY FORWARD**

"Not everything that can be counted counts and not everything that counts can be counted" -

#### -Albert Einstein

Now that it has been recognised that KPIs are the driving force in the form of important inputs to the strategic management process, the regulatory prescription by SEBI requiring the issuers to disclose the KPIs in the offer document goes a long way in helping institutional investors in the primary market to take well informed decisions with respect to subscribing to public offers. How far it would impact the response of the retail investor, however, remains to be seen. In any case, the new Regulations have given the professionals including CMAs who have got through this recognition a new avenue for professional practice. It is now up to the CMAs to grab this opportunity and demonstrate their prowess through achieving excellence in this new area of professional opportunity. MA

## VISIBLE LEADERSHIP A TRANSFORMATIONAL JOURNEY



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hen you study great organizations, what fascinates you, visible leaders or visible leadership? To simplify this captivating debate, let me begin by sharing a very common advice received by almost every employee during their career conversation sessions. During periodical reviews of direct reports, managers often say, "You need to be more visible; you need to improve connect with people." Sounds very familiar, isn't it? Now then, what does this assertion really mean and how does visibility and connect impact the overall growth of an organization? Let's deep dive.

Terms like 'visibility' and 'connect' are regularly misconstrued as being seen with people who matter most in overall scheme of things, i.e., individuals who have considerable say on key decision making or on overall direction of a project or organization. More explicitly, it is considered as moving around with senior managers, group leaders or inter-departmental spearheads within the organization. Honestly, visibility has a much wider connotation. It revolves around actions taken by an individual that builds trust and helps people work with a purpose towards achieving organizational goals. It is a culture of establishing transparency, ensuring accessibility, nurturing dependability, fostering empathy and thereby unleashing an ultra-effective workforce, which remains ready to walk the extra mile for reaching cherished goals. To put it differently, these core assets are thoughtfully curated within an organization. They create synergy among individual efforts and, converge them towards the desired, collective purpose. Visibility and connect help organizations build an ecosystem of improved bonding, superior understanding, and a joyful work environment.

#### Abstract

A good student does not necessarily go on to become a good teacher and an excellent teacher need not have been extraordinary in academics, during his student life. Likewise, in organizations, a good performer does not inevitably grow up to be a great leader. So, what is that unique selling proposition (USP) that makes good performers transcend to inspiring leaders? In this narrative, an attempt has been made to uncover some of the finer points in one's professional journey - from being a decent individual contributor to an upright leader.

Thus, when employee engagement is at its peak, it gives organizations a razor-sharp edge to deal with endless uncertainties. In a nutshell, visibility and connect entail a transformational journey of an organization, through the actions and behavior of its employees.

To explain this phenomenon in detail, let me elaborate the concept of visible leadership. In any organization you must have noticed that key managerial persons (KMP) are adept in articulating issues with focused teams, discussing available options, deliberating pros and cons of various alternatives, and deciding on the best course of action for overcoming the obstacles. Additionally, to ensure smooth roll out of any project, they conduct periodical review meetings, and thereby keep a tab on the overall progress and when essential, make alterations in the operating plans, programmes and schedules, during execution. Thus, they remain visible, and their presence is felt at every stage, starting from conceptualization to brainstorming to implementation. But to ensure visibility, KMPs are not only expected to be highly competent in these core themes, but also be genuinely good at specific innate attributes, like being transparent, effective in communication, approachable and most significantly being dependable. One ought to make himself available for the cause and be accessible to people. These distinct virtues result in inspiring colleagues and building confidence among the stakeholders. Thus, visibility of an individual is not a physical aspect but an enlightening transformation. It

is the inner journey of individuals to be empathetic to people yet remaining strong and result oriented. This compassionate attitude creates high employee morale and enhance productivity.

'Visibility' does not essentially mean hogging the limelight; rather it has lot to do with gaining acceptance from co-workers. And to create acceptance, one needs to share valuable inputs with teammates, from time to time. These inputs may comprise of anything, like project updates, customers' feedback, status reports, dos, and don'ts, what's going well and what's not, organization's direction, mood of the industry, technological advancements, past experiences, or can even be national or global trends. In today's volatile uncertain complex and ambiguous (VUCA) environment, every business is undergoing rapid changes. Result being, one might have started in a specific direction but unless he foresees the forthcoming changes and maneuvers plans and programmes according to the situation, he will falter. Goals won't be reached within the stipulated timelines as per expectations of stakeholders. Frequent updates and feedback thus become extremely necessary for every individual to perform his/her duties with greater efficiency and effectiveness. However, one must also bear in mind that for achieving any goal one must keep moral compass of actions always pointing north i.e., follow every ethical practice and behavior at workplace. Any shortcuts or unscrupulous means to achieve a goal, can have damaging consequence, both for the individual and the organization.

The second key attribute to visible leadership is good communication. You will never find any successful individual, who is not proficient in this trait. More than three decades of my working in corporates, has made me conclude that if one wishes to have better and quicker results, he

'Visibility' does not essentially mean hogging the limelight; rather it has lot to do with gaining acceptance from co-workers

must communicate a lot. In Sanskrit, a saying goes, 'adhikantu na doshaya', which means excess does not cause harm. I agree, over communication by superiors or colleagues, at times may appear extremely irritating but believe me, it is thousand times better than having too little or no info and individuals compelled to assume things in their day-to-day conduct. When one communicates repetitively, he helps team members remove their doubts and execute flawlessly. Here, the emphasis on communication is to instill greater clarity and better understanding, which help everyone decipher, what is expected out of them at any given point of time. This voyage of continuous reassessing priorities, reassigning responsibilities, redrawing accountabilities, coupled with frequent feedback, paves the way for superior results. As, expectations and deliverables are understood well, it culminates in timely and successful execution of plans and programmes. Corollary to this outer communication is one's inner communication or self-talk. Reflection of thoughts and ability to decode reasons behind actions taken during the day, can go a long way to strategize on future course of action. It serves well to evaluate individual strengths and weaknesses and work consciously to eliminate these shortcomings. More often one speaks to himself, more is the chance of his remaining selfassured about his own abilities. It also helps individuals remain hopeful of positive results and work diligently towards goals. Thereby, anxieties related to performance and fear of failure tends to fade away gradually.

This active contemplation helps to visualize the outcomes of actions prior to their initiation. Always remember, communication with people outside may determine your success but communication with your own self can help you remain calm, committed, and absorbed. It assures stability within you, promises peace of mind, and happiness.

Transparency is another very important attribute that must manifest in an individual's day to day business. It is not necessarily important what we say, but what we do, and how well we conduct ourselves with people, impacts our overall results. Ability to interpret challenges and the way we respond to the external stimuli, determines our destiny. We ought to keep in mind that our response must be measured and well thought out. One very useful technique for achieving this wisdom, is through continuous practice. If you earmark sometime during the day or week (it can be as little as 15 to 20 minutes from your busy schedule) and make yourself available to listen to peoples' woes, you can benefit immensely. It is an opportunity to absorb different perspectives. Moreover, this exercise can build massive confidence among team members. As you practice this empathetic approach, people start associating with you more closely. They consider you as one among them and are convinced that none of your actions or decisions shall be detrimental to their advancement within the organization. They would be more than willing to offer the requisite help, whenever you need them. Such accessibility and acceptability can even make you become their ultimate seeker not merely for their official concerns but also to address their personal issues. It is a rare prospect. From being an ordinary manager or colleague, you can transcend to be an inspiring role model. In today's multi-locational organizational setup, it may not always be possible to remain present physically with every team

member you are associated with, but to overcome the physical barrier and remain connected, you can make use of technology. Try to be in touch, either through phone calls or through text messages. Respond, like, comment and share ideas. Recognize individual's contribution and wherever possible reward them. When an assignment gets completed, a simple smile, a thank you or even a pat at the back may seem to be rewarding. These gestures can create a bond which money cannot buy. This charming quality may even draw the attention of your superiors. They may be mighty pleased both by your ability to deliver results and your man management skills. You can earn their trust which they are looking for within the organization. This tag can indeed be a valuable gift in professional life and you will treasure it lifelong.

To summarize, there is a considerable difference between being in contact and remaining visible and

connected. When you are in contact with someone, it simply means that you know the person, or the person knows you. May be, both of you reside in one another's phonebook and exchange pleasantries, when you occasionally meet. But when you are connected to a person, it implies that a meaningful relationship has been developed between you two. Both of you can be rest assured of receiving the support of the other. Anytime an opportunity arises or a critical input is required, this person can be approached or consulted for immediate involvement. It indicates that individuals value one another, not merely for what they bring to the table (i.e., their share of knowledge and expertise), but also their willingness to share work responsibilities shoulder to shoulder for achieving organization's goals. It is obvious that in every organization, people will require support from one other, but the willingness and spontaneity of support will ultimately be decided by the depth of your relationship i.e.,

the rapport that has been developed over the years through careful nurturing. Undeniably, this warmth in the relationship can act as a supernutrient. The next time your superior asks you to improve your visibility and connect, be sure that he wishes you to work on these innate qualities and engage in active networking. Happy bonding.

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# FORGOTTEN SOLDIERS: FACTORS INFLUENCING RELENTLESS WORK-STRESS AMONG PUBLIC SECTOR BANK EMPLOYEES IN THE VUCA WORLD

#### **Abstract**

Public sector bank employees have been fighting a lonely battle against ever-increasing work stress over the last few years — a situation they neither anticipated nor prepared for. Using a sample of 228 respondents, the study investigates the precise factors affecting work stress experienced by public sector bank employees in Goa against the backdrop of the rapidly changing VUCA world. Role Conflict, Management Practices and the Banking Environment stamp themselves as predictors impacting work stress, while Customer Hostility and the VUCA world also emerge as closely related variables.

#### 1. Introduction

orking in the banking sector has been comparable to signing up for battle over the last few years. As foot soldiers executing top management decisions, front-desk bank employees face increasingly demanding customers on a daily basis.

Battling against unrealistic targets, bank employees are also armed with insufficient infrastructural support, creating a situation ripe for work-related stress.

#### 1.1. Work-Stress in the Banking Sector: A Daily Battle

A fundamentally inherent characteristic that makes banking a stressful occupation is that bankers confront huge financial risks everyday (Sinha, 2016). Long working hours, workload, management pressure, deadlines, poor working conditions, physiological sickness, role ambiguity and job insecurity (Rahman et al., 2013) add to this inevitability.

Lack of participation, poor peer relations and low status were other factors found to affect bankers cutting across



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gender differences (Issac & Krishnaveni, 2018).

## 1.2. Intensifying Stress among Public Sector Bank Employees: A Battle they didn't sign up for

The present situation is uniquely precarious for public sector employees. For example, previous studies have unearthed the unreasonable group and political pressure experienced by public sector bank employees as compare to their private sector counter-parts (Dhankar, 2015).

The present study argues that the work-related stress faced by public sector bank employees is particularly significant since they did not expect to confront it. The sweeping changes in the banking sector in the last few years have been dramatic - from the 2016 Indian bank note demonetisation, the intensified drive for financial inclusion to the recent mergers.

Public sector employees face the increasing confusion of customers who are perturbed by the unprecedented wave of mergers and acquisitions, coupled with their own anxiety over a possible merger.

## 1.3. Public Sector Banking in the Covid-19 Era: An Unprecedented VUCA World

Although, the acronym VUCA, which expands to Volatile, Uncertain, Complex and Ambiguous, was coined in the year 1987 (Deepti, Sinha & Sinha, 2020)

it exploded in unmatched magnitude during the Covid-19 pandemic.

The pandemic particularly spelled out uncertainty for public sector bankers who now went to war against a faceless enemy.

#### 2. Literature Review

#### 2.1. Role Conflict

The essence of inter-role conflict is the degree to which an employee is subjected to pressures within one role that are incompatible with the pressures that arise within another role. (Kopelman et al., 1983). The demand from employees to perform tasks that should be done in an alternate way and assignments which are unbalanced to the employees' manpower are among factors that cause role conflict (Belias et al., 2015).

Predictably, lower levels of role conflict are associated with higher levels of job satisfaction (Tosi, 1971). Interestingly, even perceived role conflict is found to influence emotional exhaustion (Jawahar et al., 2007).

#### 2.2. Management Practices

Supervisory support shares the closest relationship with affective work outcomes (Yavas & Babakus, 2010). Further, supportive leadership is also associated with employee resilience (Cooke et al., 2019). Especially, in the Covid-19 VUCA world, this factor plays a critical role, having been established that compassionate managerial leadership can influence an employees' fear of job (in)security, work overload and delayed payment" (Oruh et al., 2021).

#### 2.3. Banking Environment

Major milestones in the recent banking environment such as demonetization have been shown to cause stress and emotional exhaustion to banking employees. (Karthika Malini, Sriram Supreeth, Eunice Kennet, n.d.)

In a dynamic world of mergers and acquisitions, it has also been proven that the stress level is very high for banking employees post-merger (Joshi, 2013).

#### 2.4. Customer Hostility

Disproportionate and ambiguous expectations coupled with verbal aggression, are the main channels through which customers induce work-stress for bank employees (Dormann & Zapf, 2004).

Besides, customer aggression is also linked with heightened employee burnout (Ben-Zur & Yagil, 2005)

#### 2.5. VUCA World

The accelerated globalization, volatile world economy, prolonged global crisis and political hybrid catagenesis (Khalatur et al., 2021) confluence to make the present

banking environment extremely unpredictable. This fear of the unknown, coupled with the ongoing Covid-19 pandemic, form the backdrop inducing stress to bank employees.

#### 3. Research Methodology

#### 3.1. Research Aim

The aim of the present study is to determine the unique interplay of factors that induce work-stress among public sector bank employees in Goa.

#### 3.2. Research Gap

The public sector banking landscape of Goa is filled by a significant number of persons of non-Goan origin – a factor that can potentially influence the stress levels faced by the employees due to the language barrier, home sickness, cultural factors etc. However this aspect has received very little academic attention.

The present study attempts to fill this crucial gap.

#### 3.3. Sources of Data

- Primary Data: The study employed a well-structured, closed ended questionnaire to extract primary data on the work-stress of public sector bank employees, which was distributed to 250 employees working in the state of Goa. A total of 228 questionnaires were returned duly filled.
- Secondary Data: Research articles, thesis and public databases were utilized to obtain secondary data for the study.

#### 3.4. Objectives of the Study

- 1. To determine the factors influencing work-stress among public sector bank employees in Goa.
- To analyze the relationship between role conflict, management practices, banking environment, customer hostility, the VUCA world and workstress among public sector bank employees in Goa.

#### 4. Data Analysis

The 228 participants in the study cut across different age groups, with the 31.6% belonging to the age group of 30-35 years. A little more than half of the participants (55.3%) had a total of 5-10 years of service in the bank. Interestingly, an overwhelming 71.1% of the respondents were not Persons of Goan Origin, although they were working in Goa.

The questionnaire comprised of 4 items each measuring the 5 factors of work-stress namely, role conflict, management practices, banking environment, customer hostility and VUCA world.

#### 4.1. Correlation Analysis

**Table 1: Pearson Correlations** 

	Role Conflict	Mgmt. Practice	Banking Env.	Customer Hostility	VUCA World	Work Stress
Role Conflict	1					
Mgmt. Practice	.800**	1				
Banking Env.	.523**	.697**	1			
Customer Hostility	.540**	.642**	.444**	1		
VUCA World	.644**	.704**	.678**	.557**	1	
Work Stress	.785**	.864**	.691**	.582**	.688**	1
**. Correlation is significant at the 0.01 level (2-tailed).						

Source: Author's Compilation

The above table demonstrates that all the independent variables are positively correlated with the dependent variable, namely Work Stress with a statistical significance at p< 0.01. The highest correlation is witnessed between Management Practices and Work Stress (r = .864). Role conflict emerges as the factor with the second highest correlation standing at r = .785.

The Banking environment and the VUCA World – both representative of the current climate for banking - are found to be moderately correlated with work stress (r = .691 and r = .688 respectively). For public sector bank employees in Goa, customer hostility carries the lowest correlation with work stress (r = .582).

#### 4.2. Regression Analysis

**Table 2: Regression Analysis** 

Independent Variables	Dependent Variable	Adj. R <sup>2</sup>	Standardized Coefficients (Beta)	t	Sig.	Impact
Role Conflict			.265	5.021	<.001	Significant
Mgmt. Practice			.482	7.348	<.001	Significant
Banking Env.			.173	3.710	<.001	Significant
Customer Hostility			.028	.673	.502	Insignificant
VUCA World	Work Stress	.787	.045	.926	.356	Insignificant

Source: Author's Compilation

#### Supervisory support shares the closest relationship with affective work outcomes

The regression analysis crystalizes that role conflict, management practices and the banking environment have a statistically significant impact on work stress. The implication is that these three independent variables influence the work stress of public sector bankers.

Although customer hostility and the VUCA world are

found to be insignificant at p > 0.05 individually, however the  $R^2$  standing at .787 justifies that collectively, all the five independent variables explain 78.7% of the variance in work stress.

#### 5. Conclusion

The study reinforced the reality that management practices influence the work-stress among public sector bank employees. Role Conflict and the external Banking Environment are the other major factors impacting work stress. Customer hostility and the VUCA World are found

to be closely related to high work stress among employees.

These issues deserve to be addressed on priority in order to battle the shadow pandemic of stress and anxiety experienced by bankers braving the public sector banking battleground.

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## AN INSIGHT INTO CRYPTO-CURRENCY ACCOUNTING UNDER INDIAN ACCOUNTING FRAMEWORK VIS-À-VIS INTERNATIONAL ACCOUNTING FRAMEWORK AND US-GAAP

#### Abstract

In the last decade, the market size of cryptocurrencies multi-folds, as more and more individuals and businesses including investment entities shown interest in this asset class. Despite ambiguity due to the dicey stand of regulators towards cryptocurrency, across the world; there are around 21,581 Cryptos traded over 521 exchanges, with a market value above \$1 trillion as on 31st October 2022. This also makes accounting for cryptocurrency a much debatable concern among accounting professionals in addition to holders (as well as miners) of crypto-currency units, especially in absence of specific standards and guidelines on recognition, measure, and presentation of crypto assets in books of accounts. This article evaluates the existing Indian Accounting Frameworks vis-à-vis International Accounting Framework and US-GAAP to suggest the accounting for cryptocurrencies in the books of the holder from three perspectives, the Trader, Investor, and Miners' perspective.

#### NEED FOR CRYPTO-CURRENCY ACCOUNTING

rypto-currencies emerge as investment asset class apart from technological alternates to fiat currency (as plausible medium of exchange) and resultantly its market value grew multi-fold during the last decade from \$1.686 billion (\$1,686,950,016) as on 30<sup>th</sup> April 2013 to \$1025 billion (\$1,025,469,678,138) as on 31<sup>st</sup> October 2022. There are around 21,581 cryptos traded over 521 Exchanges, with trade volume during the last 24 hours being \$74.026 billion as of 31<sup>st</sup> October 2022.

Bitcoin (BTC), which was launched in 2009 by Satoshi Nakamoto (a pseudonym) keeps on losing the market share



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to Altcoins but is still dominating the market with 38.7 per cent share, followed by Ethereum (ETH) with 19.3 per cent share. Crypto currency other than Bitcoin, are collectively known as alternate currencies<sup>2</sup>, in short, Altcoins.

Since many leading corporates including investment entities have shown interest in cryptocurrency in the recent past accounting for crypto-currency is a much debatable issue among accounting professionals as well as holders and miners of crypto-currency.

## CRYPTO CURRENCY - FEATURE AND UNDERLYING TECHNOLOGIES

A crypto currency is a digital currency not reliant on any central authority; it works through distributed ledger technology over a computer network, typically a blockchain that serves as a public financial transaction database. Crypto currency got its name because it uses cryptography technology to encrypt transaction-related data and store the same in the blocks which are further validated through *timestamping* (using either proof-of-work or proof-of-stake scheme). Here the role of miners emerged for the validation task, who earn unit/s of cryptocurrency as a reward.

## ACCOUNTING FOR CRYPTOCURRENCY UNDER INDIAN ACCOUNTING FRAMEWORKS

In the absence of specific standard that deals with the accounting of crypto assets, to recognize, measure and present crypto currency in financial statements one has to

refer to the existing set of Indian Accounting Standards (Ind AS) as well as Accounting Standards (AS) here-in-after will be referred as Indian GAAP. Since accounting has to be done in the books of the holder this issue can be seen from the perspectives of the trader, investor, and miner.

#### Cryptocurrency is neither Cash nor Cash Equivalent

In India, crypto currencies are not given status of legal tender and hence not an acceptable medium of exchange and resultantly crypto currencies *can't be considered as cash*, as per Para AG3 of Ind AS 32.

From Table 1 given below, it can be observed that crypto currencies are subject to price volatility and hence carry *significant risk of changes in value;* therefore, they *can't be categorised as cash equivalent* as per Para 6 of Ind AS 7 read with Para 5.2 of AS 3.

TABLE 1 – VARIATIONS IN VALUE OF BITCOIN OVER LAST 5 YEARS

Date	Value	Remarks
17 December 2017	\$19,783	Recorded appreciation of 1,824 per cent since 1 <sup>st</sup> January 2017. <sup>3</sup>
16 <sup>th</sup> March 2020	\$5,000	25 per cent value lost in just 24 hours (outbreak of COVID-19).4
27 July 2020	\$10,944	Price recovered to pre- covid level. <sup>5</sup>
20th October 2021	\$66,974	Hit all-time high. <sup>6</sup>
31st October 2022	\$20,357	Started the year with \$47,733 then fallen to level of \$17,769 as on 18th June 2022 (drop of 13% on single day). <sup>7</sup>

## Cryptocurrency is also not Property, Plant, and Equipment (PPE)

Crypto currencies, being digital items, don't have tangible substance and hence cannot be accounted as PPE under Para 6 of Ind AS 16 as well as Para 6 of AS 10.

#### **Cryptocurrency is also not an Investment Property**

Para 5 of Ind AS 41 as well as Para 3.4 of AS 13, describe land, building, or part thereof as investment property and hence crypto currencies cannot be accounted as investment properties.

#### Cryptocurrency is also not a Financial Assets

As discussed earlier crypto currency is not cash. It is neither an equity instrument of another entity nor settled in the entity's own equity instruments. Further, it doesn't result in any contractual right for the holder to receive cash or any other financial asset in exchange for crypto currency units. Hence crypto currencies don't qualify to be financial assets with reference to Para 11 of Ind AS 32.

#### Cryptocurrency is an Investment under Indian GAAP

Investments are assets held for capital appreciation as per Para 3.1 of AS 13. Further, in terms of Para 5 of AS 13 some investments have no physical existence and are represented merely by certificates or similar documents. Crypto currencies being digital assets have no physical substance, but the same can be dealt over crypto exchanges for capital appreciation and hence can be recorded as an investment for those holders, who hold it as investor under Indian GAAP.

If crypto currency is held as current investments, then initial recognition shall be at cost of holding and subsequently carried at a lower of cost or fair value (market value is the best evidence of fair value, if active market exists) in the balance sheet. If the crypto is held as non-current investments, then they shall be recorded and carried at cost. If there is decline, other than temporary, in value then the carrying amount shall be reduced to record the effect.

#### **Crypto currency is Inventory for traders or brokers**

Para 6 of Ind AS 2 as well as Para 3.1 of AS 2 provide inventories consisting of assets that are held for sale in the ordinary course of business and hence when an entity is holding crypto currencies for the sale in the ordinary course of business, it can account it as an inventory because the Standard equally applies to inventories of intangible assets.

As per Para 9 read with Para 3(b) of Ind AS 2, inventories shall be carried at a lower of cost or net realizable value. Traders as well as brokers who deal in crypto currencies shall measure their inventories at fair value reduced by cost of selling.

Para 5 of AS 2, also provides that inventories should be valued at lower of the cost or net realizable value.

## Crypto currency is Intangible Asset for Miners under Ind AS framework

Crypto currencies are not held by the miner for use in the production or supply of goods or services and hence do not qualify to be recognised as intangible assets under Para 6.1 of AS 26 (Indian GAAP). However, under Ind AS framework, it shall be recognised as intangible asset by the miners, because it is an identifiable (capable of being separated and sold, transferred, or exchanged individually) non-monetary asset (traded on an exchange at prevailing prices.

As per Ind AS 38, if intangible assets have an active market then they shall be measured using a revaluation model, wherein intangible assets shall be carried at fair value less accumulated amortization and impairment. An appreciation and decrease in carrying amount shall be recognized in other comprehensive income (OCI) and statement of P&L respectively, with reversal to balance of earlier change, to the extent possible.

TABLE 2 – RECOGNITION OF CRYPTO-CURRENCIES UNDER INDIAN ACCOUNTING FRAMEWORK

Holder	Purpose	Ind AS Framework	Indian GAAP Framework
Investor	Capital Appreciation	-	Investment (AS-13)
Trader or Broker	Sale in the ordinary course of business	Inventory (IndAS-2)	Inventory (AS-2)
Miner	Earned as a reward	Intangible Assets (IndAS-38)	-

## Disclosures under Indian Accounting Framework<sup>8</sup>

If the company has traded or invested in crypto currency during the financial year, w.e.f. 1st April 2021, Schedule III to the Companies Act, 2013, requires the following disclosures, in addition to the disclosure under the relevant Accounting Standards:

- a. Profit or loss on transactions involving crypto currency
- b. Amount of currency held as of the reporting date,
- Deposits or advances from any person for the purpose of trading or investing in crypto currency

# A C C O U N T I N G O F C R Y P T O - C U R R E N C Y UNDER INTERNATIONAL ACCOUNTING FRAMEWORK (IAS AND IFRS)9

Currently, there is no specific IAS or IFRS that describes the accounting of crypto currencies. In June 2019 the IFRS Interpretation Committee published its agenda decision, wherein it observed that since crypto currencies can't readily (in the absence of being legal tender) be exchanged for any goods or service, it cannot be considered to be equivalent to cash under IAS 7 and IAS 32. Further due to significant price volatility, it cannot be classified

as cash equivalent under IAS 7. It also fails to meet the criteria of financial asset under IFRS 9.

It was concluded that if crypto currency is held for sale in the ordinary course of business, then it shall be considered as inventory and hence IAS 2 (Inventories) would apply whereas in other cases, the provisions of IAS 38 (Intangible Assets) would be applicable.

Accounting treatment for crypto currencies under IAS 38 and IAS 2 is exactly similar to what is suggested under Ind AS 38 and Ind AS 2, respectively because Ind AS is a modified version (convergence<sup>10</sup> with certain carve-ins and outs) of the International Reporting Framework.

#### ACCOUNTING OF CRYPTO-CURRENCY UNDER US-GAAP<sup>11</sup>

Currently, there is no specific Standard that deals with accounting of crypto currencies under US GAAP. Hence we need to consider the existing set of Standards and glossary.

Crypto currency got its name because it uses cryptography technology to encrypt transaction-related data

Under the current US GAAP, crypto currency can't be dealt with as inventory because ASC Master Glossary covers only items of tangible property under the definition of inventory. It is neither cash nor financial asset. The best course is to account for crypto currencies as intangible assets, because ASC Master Glossary describes intangible assets as assets (not including financial assets) that lack physical substance. Crypto currencies have no prescribed life and hence they shall be classified as indefinite-lived intangible assets.

Crypto currencies will be recorded at cost at initial recognition. The subsequent recognitions are subject to impairment; being indefinite intangible assets it shall be tested for impairment at least annually and more frequently if events or changes in circumstances indicate that it is more likely than not that it is impaired. The intangible asset model will capture only declines in the value of the crypto currency.

Mining activity in the books of accounts of miners shall be accounted for like any other income-generating activity. The mining income account will be credited. Newly generated crypto currency assets shall be recognized at fair market value.<sup>12</sup>

It is worth here to note that on 9th March 2022, to ensure responsible development of digital assets, including crypto currencies the U.S.

#### FINANCIAL REPORTING

President signed an executive order calling for a whole-of-government approach.<sup>13</sup>

#### **CONCLUSION**

The absence of any specific Standard to describe accounting for crypto currencies under the accounting frameworks leads to ambiguity and subjectivity, wherein business models become critical to determine how to account for them in the books of accounts. Since crypto currency and the market thereof are growing the need of determining fair accounting treatment for cryptocurrency is inevitable and therefore the regulator should step in after deliberation with stakeholders.

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#### **CONGRATULATIONS**

Our heartiest congratulations to CMA Dilip Kumar Pal for being awarded Ph.D. Degree in Law by The WB National University of Juridical Sciences, Kolkata with effect from 20th December 2022 under the supervision of Dr. Lovely Dasgupta. He was earlier awarded Ph. D. Degree in Business Administration in 2018 by the University of Kalyani.

We wish CMA Dilip Kumar Pal the very best for his future endeavors.

## EXPLORING UNDER PRICING OF SELECT NSE-LISTED IPOS IN INDIA WITH RESPECT TO DIFFERENT MACRO-ECONOMIC SECTORS

#### **Abstract**

Initial Public Offerings (IPOs) are subscribed by the interested investors at the offer price or issue price. Eventually, under-pricing or over pricing is seen after listing of securities and many factors influence the price performance of IPOs. In this backdrop, the current study analyses the first day price performance of IPOs on the basis of the various macro-economic sectors of the NSE. The study explores the various measures of first day returns on the basis of the different categories of the NSE-based sectors of the sample IPOs companies.



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## 1. BACKGROUND OF THE STUDY

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he issuance of initial public offerings (IPOs) in the primary capital market plays a vital role in the capital formation and economic development of an economy. In a cyclical manner, the additional disposable income of the people gets a chance to be invested in the deficit sectors of an economy. This causes capital formation and eventually leads to national economic development (*Tadesse*, 2004). In the primary capital market, securities are issued for the

first time and money mobilisation takes place accordingly. One such form of new security issuance is the issuance of IPOs (Saha, 2021). After getting listed in the secondary market, the price of the IPOs fluctuates from the price at which it was issued known as the offer price or the issue price. The listing day price performance of IPOs determines whether the IPOs are under-priced or overpriced. If the first day closing price is higher than the issue price of the IPO, the IPOs get a positive return. If such return is statistically significant, the IPO is said to be under priced. Under pricing usually takes place to attract the investors (Madhusoodanan and Thiripalraju, 1997). Now, under pricing of IPOs is not always deliberate. Usually, the issuing company, in consultation with the merchant banker, decides upon the issue price (in case of fixed price method of pricing of IPOs) or price-band (in case of book-building method of pricing of IPOs) (Daily et. al., 2005). Additionally, cases of overpricing of IPOs are also not uncommon. Due to several far fetching objectives, companies might wish to overprice their issues as well (He, 2020). In this backdrop, it is remarkable to analyse the average returns of the sample IPOs of different NSE-based sectors.

#### 2. PAST STUDIES

In recent times, under pricing has been a pertinent cause of concern for the researchers. The existence of under pricing has been studied over the years by many researchers. Zhou and Lou (2012) found that among the manufacturing companies of the ChiNext IPOs, the equity balance remarkably affected the IPO under pricing. Brau and Carpenter (2013) documented their support for the small firm uniqueness. Jeribi and Jarboui (2015) studied the impact of several factors on the under-pricing of IPOs. Rosyidah and Hartono (2015) in their study, examined the several variables affecting under pricing. Gounopoulos et. al. (2016), in their study observed that political donations may lead to efficient IPOs pricing and performance. Hedau (2016), found that quantitative factors play an important role in imparting valuable and significant information about the company.

#### Research Gap

The following research gaps are identified on the basis of the past studies:

- i. Very few studies have considered macro-economic variables for understanding under pricing of IPOs.
- ii. None of the studies have done the analysis of average returns on the basis of different categories of factors affecting the returns of the IPOs.
- iii. Very few studies have shown analysis of various measures of the first day returns taken together, on the basis of various categories of any macroeconomic or industry related variable.

#### 3. RESEARCH OBJECTIVES

The objectives of this study are as follows:

- To analyse the distribution of the sample IPOs into the various categories of NSEbased sectors (Refer Para 5.1 infra);
- To examine the average initial returns, average MAARs, average annualised initial returns, average annualised MAARs of the sample IPOs of different NSE-based sectors (Refer Para 5.2 infra);
- iii. To test the statistical significance of the average initial returns, average MAARs, average annualised initial returns, average annualised MAARs of the sample IPOs of different NSE-based sectors (Refer para 5.3 infra).

## DATA AND RESEARCH METHODS

#### 4.1 Data and Sample Design

The study is exploratory in nature where secondary data is used. The sample consists of 224 IPOs based companies. The IPOs are considered for the dataset got listed on the National Stock Exchange (NSE) in India during 1st April, 2000 to 31st March, 2017. However, only the listing-day based performance of the IPOs are explored here. The sample of 224 IPOs is selected through a non-probabilistic sampling technique called Judgement Sampling.

## **4.2 Determination of NSE-based sectors for the study**

For the purpose of the study, the broad macro-economic variables considered by the National Stock Exchange are considered for grouping the sample IPOs. The sectors identified are commodities, consumer discretionary, financial services,

FMCG, healthcare, industrials, IT, services and others. The last group includes telecommunication, energy and utilities. The purpose of grouping the telecommunication, energy and utilities is that they had a smaller number of companies grouped under the them.

## 4.3 Statistical Measures, Tools and Package used

Initial return is computed as (P<sub>1</sub>  $-P_0$ ) ÷  $P_0 \times 100$ ; where  $P_1$  is the closing price of the IPO as on listing day and P<sub>0</sub> is the offer price. MAAR is computed as  $[(P_1 - P_0) \div P_0 - (M_1)]$  $-M_0$ ) ÷ $M_0$ ] × 100; where  $M_1$  is the closing NIFTY 50 as on listing day and M<sub>0</sub> is the closing NIFTY 50 on the last day of the offer period. Annualised return is computed as Initial Return × 365/ No. of days taken for listing Annualised MAAR is computed as MAAR x 365÷ No. of days taken for listing. One-sample t-test is used to test the statistical significance of the average returns under every category of the parameter at 5% level of significance. Package used for the analysis of the data are MS Excel 2016 and SPSS 21.

#### RESULTS AND ANALYSIS

The objectives of the study are addressed here for exploring the research findings.

#### 5.1 Analysing the distribution of the sample IPOs into the various categories of NSE-based sectors

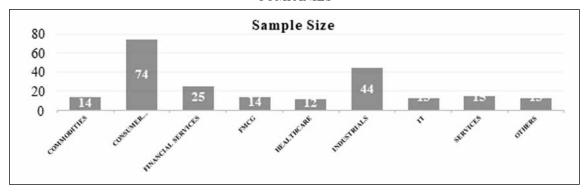
The sample companies are divided into nine groups namely commodities, consumer discretionary, financial services, FMCG, healthcare, industrials, IT, services and others. The last group, 'Others' included telecommunication, energy and utilities. The groups are made on the basis of the NSE based macroeconomic sectors.

TABLE 1: SAMPLE SIZE OF COMPANIES SEGREGATED ON THE BASIS OF NSE-BASED SECTOR OF THE IPO COMPANIES

Different Categories	<b>Different Categories of Sector</b>	Sample Size
Category-1	Commodities	14
Category-2	Consumer Discretionary	74
Category-3	Financial Services	25
Category-4	FMCG	14
Category-5	Healthcare	12
Category-6	Industrials	44
Category-7	IT	13
Category-8	Services	15
Category-9	Others	13
	Total	224

[Source: Compilation of Secondary Data using MS Excel 2016]

FIGURE 1: SAMPLE SIZE OF COMPANIES SEGREGATED ON THE BASIS OF NSE-BASED SECTOR OF THE IPOS COMPANIES



[Source: Based on Table 1]

#### **Findings**

The highest number of companies from the sample is within consumer discretionary, followed by industrials. All other groups have more or less similar number of companies.

5.2 Examination of the average initial returns, average MAARs, average annualised initial return returns, average annualised MAAR of the sample IPOs from each of the categories on the basis of NSE-based sectors

The various measures of average returns are computed for each of the categories on the basis of NSE-based sectors from which the sample IPOs belong.

TABLE 2: VARIOUS MEASURES OF AVERAGE RETURNS ON THE BASIS OF NSE-BASED SECTOR OF THE IPOS COMPANIES

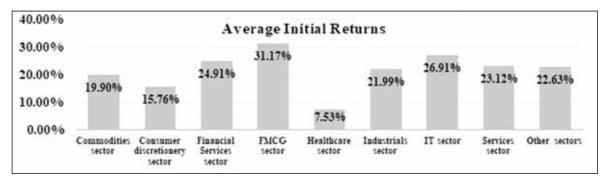
Different Categories of Sector	Sample Size	Average Initial Returns	Average MAARs	Average Annualised initial return Returns	Average Annualised MAARs
Average returns for companies belonging to the Commodities sector (Category-1)	14	19.90%	16.41%	467.29%	473.80%

#### **IPO MARKET**

Average returns for companies belonging to the Consumer Discretionary sector (Category-2)	74	15.76%	15.87%	337.98%	342.51%
Average returns for companies belonging to the Financial Services sector (Category-3)	25	24.91%	24.89%	602.31%	598.48%
Average returns for companies belonging to the FMCG sector (Category-4)	14	31.17%	25.92%	295.10%	261.81%
Average returns for companies belonging to the Healthcare sector (Category-5)	12	7.53%	9.40%	124.21%	158.53%
Average returns for companies belonging to the Industrials sector (Category-6)	44	21.99%	19.66%	443%	411.97%
Average returns for companies belonging to the IT sector (Category-7)	13	26.91%	28.25%	418.22%	430.75%
Average returns for companies belonging to the Services sector (Category-8)	15	23.12%	22.14%	595.27%	585.17%
Average returns for companies belonging to the Other sectors (Category-9)	13	22.63%	22.51%	329.95%	317.49%

[Source: Compilation of Secondary Data using MS Excel 2016]

FIGURE 2:
AVERAGE INITIAL RETURNS ON THE BASIS OF NSE-BASED SECTOR OF THE IPOS COMPANIES

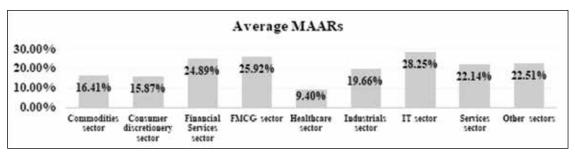


[Source: Based on Table 2]

#### **Findings**

It is evident that the highest average initial return is generated by the FMCG sector, followed by the IT sector. Both these categories do not have the maximum number of companies in the sample. The lowest average initial return is generated by the healthcare sector.

FIGURE 3: AVERAGE MAARS ON THE BASIS OF NSE-BASED SECTOR OF THE IPOS COMPANIES

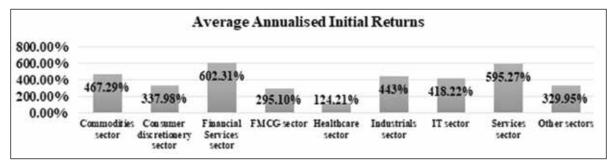


[Source: Based on Table 2]

#### **Findings**

The result for the average MAARs is slightly different from the result of the average initial. The highest number of companies is in the IT sector followed by the FMCG sector. The lowest average MAAR in this case is in the healthcare sector.

FIGURE 4:
AVERAGE ANNUALISED INITIAL RETURNS ON THE BASIS OF NSE-BASED SECTOR OF THE IPOS
COMPANIES

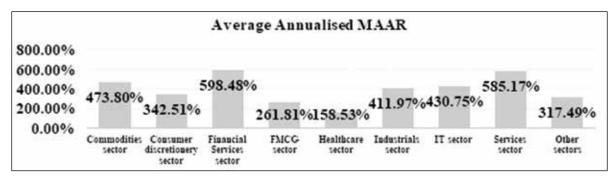


[Source: Based on Table 2]

#### **Findings**

It is evident that the average annualised initial return is highest for the financial services sector, followed by the services sector. This is not similar to the results seen in the average initial returns earned by the sample companies.

FIGURE 5: AVERAGE ANNUALISED INITIAL RETURNS ON THE BASIS OF NSE-BASED SECTOR OF THE IPOS COMPANIES



[Source: Based on Table 2]

#### **Findings**

Table 2 and Figure 5 show that the highest average annualised MAAR is recorded for the financial services sector closely followed by the services sector. This is similar to the results derived from the previous section for average annualised initial returns. The lowest annualised MAAR is generated from the healthcare sector.

## 5.3 Testing the statistical significance of the average initial returns, average MAARs, average annualised initial returns, average annualised MAARs of each category of the NSE-based sectors

Under this section, the four measures of average returns considered, namely, average initial returns, average MAARs, average annualised initial returns, average annualised MAARs are tested for the statistical significance with the help of one-sample t-test.

TABLE 3:
RESULT OF ONE-SAMPLE T-TEST OF AVERAGE INITIAL RETURN

Different Categories of Sector	Average Initial Returns (H <sub>0</sub> :The average initial returns as on 1st Day after listing is equal to 0)	Average MAARs  (H <sub>0</sub> :The average  MAARs as on 1 <sup>st</sup> Day  after listing is equal  to 0)	Average Annualised initial return Returns (H <sub>0</sub> : The average annualised initial returns as on 1 <sup>st</sup> Day after listing is equal to 0)	Average Annualised MAAR (H <sub>0</sub> :The average annualised MAAR as on 1st Day after listing is equal to 0)
Category-1	19.90%	16.41%	467.29%	473.80%
Category-2	15.76%*	15.87%*	337.98%*	342.51%*
Category-3	24.91%*	24.89%*	602.31%*	598.48%*
Category-4	31.17%	25.92%	295.10%*	261.81%*
Category-5	7.53%	9.40%	124.21%	158.53%*
Category-6	21.99%*	19.66%*	443%*	411.97%*
Category-7	26.91%*	28.25%*	418.22%*	430.75%*
Category-8	23.12%*	22.14%*	595.27%*	585.17%*
Category-9	22.63%	22.51%	329.95%	317.49%

[Source: Compilation of secondary data using SPSS 21.0]

#### **Findings**

For Average Initial Returns

O It is clear (refer Table 3) that the null hypothesis is rejected at 5 per cent level of significance for the following sectors: consumer discretionary, financial services, industrials, IT and services. The average initial returns generated by the sample companies under each of these sectors are statistically significant.

#### For Average MAARs

It is evident that the null hypothesis is rejected at 5 per cent level of significance for the sectors like consumer discretionary, financial services, industrials, IT and services. The average MAARs generated by the sample

#### IT sector becomes the highest underpriced sector which is statistically significant

companies under each of these sectors are statistically significant.

The highest average MAAR is generated by IT sector, followed by the FMCG sector. It is interesting to note that out of these sectors; only the IT sector shows statistically significant average MAAR.

For Average Annualised Initial Returns

 Here, the null hypothesis is rejected at 5 per cent level of significance for all the cases apart from the average annualised initial returns earned from the commodities sector, healthcare sector and other sectors. This means that the average annualised initial returns of all the remaining sectors are statistically significant.

For Average Annualised MAARs

O Table 3 shows that the null hypothesis is rejected at 5 per cent level of significance for all the cases apart from the average annualised MAARs earned from the commodities sector, healthcare sector and other sectors. This implies that the average annualised MAARs of the remaining sectors are statistically significant.

#### 6. CONCLUSION

It is observed that the maximum number of companies from the sample companies belong to the NSE-based macro-economic sectors like consumer discretionary followed by industrials sector. The one-sample t-test of the average initial returns show that the underpricing of the commodities sector, FMCG, healthcare and the others (telecommunication, energy and utilities combined) sector is not statistically significant. All other sectors show statistically significant under-pricing. Therefore, IT sector becomes the highest underpriced sector which is statistically significant. In the case of average MAARs also, the commodities sector, FMCG, healthcare and the others (telecommunication, energy and utilities combined) sector did not show significant under-pricing. All the other sectors portray significant under-pricing based on the average MAARs. The study confirms the existence of significant under-pricing among the sample IPOs on the basis

of sectoral division. MA

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#### **NOTES FOR AUTHORS**

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## IMPLICATIONS OF THE PROPOSED COMPREHENSIVE CHANGES IN FORM GSTR-3B ON TAX COMPLIANCE

#### **Abstract**

*Tax compliance through filing of GST returns* is a critical process because it authenticates tax payments, qualifies for input tax credits and ensures timely tax refunds. For this purpose, the Government has introduced various forms under GST law, including FORM GSTR-3B<sup>[1]</sup>. It is a summary return that was initially introduced as a temporary return to collect the tax amount from the taxpayer. However, it is designated as a default return on the advice of the GST Council. Considering the shortcomings of the existing GSTR-3B, discussions on comprehensive changes in Form GSTR-3B were held in the 47<sup>th</sup> Meeting of the GST Council on June 28 and 29, 2022, and the concept paper on comprehensive changes to Form GSTR-3B is published for public review to solicit views, comments, and suggestions<sup>2</sup>. This research paper is an attempt to review the proposed changes in Form GSTR-3B, gauge their implications on tax compliance by the taxpayers and propose measures to strengthen GST compliance.

#### INTRODUCTION

egular taxpayers are required to file Form GSTR-3B, which is a summary return including the details of GST payable and ITC availed for a given tax period. The trade has often questioned the use of Form GSTR-3B in front of the judiciary. The goods and services tax (GST) was implemented with many initial challenges and the use of Form GSTR-3B is seen as a result of such challenges. Form GSTR-3B was never a part of the return filing process. GST return filing process was designed to involve uploading invoices to the GST portal and automatically using this information to populate input tax credits for the recipient based on the information provided by the supplier in Forms GSTR-1, GSTR-2, and the monthly return, Form



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GSTR-3, was supposed to be filed under section 39 of the CGST Act, 2017. However, due to lack of necessary IT infrastructure and concerns about the real-time filing of returns, the requirement of filing of Form GSTR-2 and Form GSTR-3 was delayed for the first two months and later indefinitely. Form GSTR-3B was introduced as a temporary measure to collect taxes from taxpayers[3][4] and subsequently, it was accepted by the Government<sup>[5]</sup> as the permanent method for collecting taxes from taxpayers. The drafting of such a return is full of deficiencies and the form was not introduced keeping in mind the requirements of the law. It is also not in sync with the annual return, i.e., Form GSTR-9. As a result, the comprehensive changes to Form GSTR 3B were discussed in the 47th GST Council meeting [6], and the concept paper on the subject was made public for stakeholders' feedback.

#### **OBJECTIVES OF THE STUDY**

- To outline the present structure of Form GSTR-3B and its shortcomings.
- To evaluate the implications of the proposed changes in Form GSTR-3B on the stakeholders.
- To propose measures to strengthen GST compliance through Form GSTR-3B.

#### RESEARCH METHODOLOGY

The present study is descriptive and explanatory in nature and is based on the concept paper on comprehensive modifications in GSTR-3B released by the Central Board of Indirect Taxes and Customs (CBIC) and the GST Council meeting agendas and minutes. The data is gathered from the websites of the CBIC and Customs and the GST Council.

## A N A L Y S I S A N D INTERPRETATION

The study analyzes and interprets present Form GSTR-3B, and proposed changes to overcome shortcomings and evaluate potential challenges for stakeholders.

## Structure of present Form GSTR-3B

Present Form GSTR-3B<sup>[1]</sup> is a selfdeclared summary return required to be filed by a registered person under section 39 of the CGST Act, 2017. It shows GST liability on outward supply, reverse charge and eligible input tax credit for a tax period. It is required to be filed by 20th of the month following the tax period, in the case of monthly filers, or on 22<sup>nd</sup> or 24<sup>th</sup> following the quarter for which the return is filed in the case of quarterly filers depending upon the registered state of such a person. The existing form is bifurcated into six parts, namely:

• Parts 1 and 2: Contain the basic information about a

- registered person. i.e., GSTIN and name of the registered person
- Part 3: Information on outward supply, zero-rated supply, nil-rated supply, exempted supply, non-GST supply, and supply by or supplies through an e-commerce supplier is reported in this Table. It also includes the details of inward RCM supply and details of supplies made to an unregistered person, a composition person, and a UIN holder.
- Part 4: Details of eligible input tax credit on account of import of goods, import of services, RCM credit, ISD credit, and all other ITC, ITC reversal on account of rules 38, 42, and 43, ineligible credit under section 17(5) and other reversals are presently reported in this Table. Reporting of ITC reclaimed, which was temporarily reversed earlier and ineligible credit on account of POS is also required to be done in this Table<sup>[7]</sup>.
- Part 5: Details of inward supplies on account of composition supply, exempt supply, nil-rated supply, and non-GST supply are furnished in this table.
- Part 6: Information regarding tax payable, tax paid through ITC and in cash, is provided in this Table.

#### **Shortcomings of Form GSTR-3B**

The following shortcomings can be identified by analyzing the structure of the current Form GSTR-3B:

- a. It is a summary return that does not provide a detailed breakdown of transactions by nature.
- b. Presently, a registered person

- is not allowed to make any changes or corrections to their returns once it has been filed.
- c. Reporting of negative values in both the outward and inward side is not allowed in the current form of return [E.g., reporting of credit notes more than outward supply or reversal of ITC more than ITC available.]
- d. There is no facility to report separately the transactions of the previous period in the current period.
- e. There is no arrangement to report comprehensive details of ITC availed in Form GSTR-3B with Form GSTR-2B. This results in a discrepancy between the details of Form GSTR-3B and Form GSTR-2B. No separate facility is given to report previous period credit, causing discrepancy with credit claimed inform GSTR-2B.
- f. There is no clarity on the reversal of ITC and the treatment of ineligible credit resulting in an incorrect IGST settlement.
- g. A registered person is not allowed to file a payable return.

## The framework of Proposed Changes in Form GSTR-3B

A concept paper on the proposed changes to Form GSTR-3B has been placed in the public domain by CBIC. The concept paper is prepared against the backdrop of amendments made by the Finance Act, 2022, and changes are proposed in such a manner to ensure the linking of Form GSTR-1 and Form GSTR-2B is intact. Following are the broad changes:

 Auto-population of the details of an outward supply in Form GSTR-3B from the details

- reported in Form GSTR-1
- Amendments will be allowed in the details of inward and outward supply for earlier periods. A separate Table is provided to report on the amendments.
- A registered person is allowed to carry forward negative values to subsequent periods.
- Provision for permanent and temporary reversal will be made available to the registered person, which will smoothen the reclaim procedure of ITC and ensure that settlement of IGST can be done correctly.

## Structure of proposed Form GSTR-3B

Form GSTR-3B is composed of five different sections, as follows:

- 1. Basic Information (Tables 1 and 2): The basic details of a registered person, such as GSTIN, legal and trade names, ARN number and date of filing of return will be reported in this table.
- 2. Details of outward supply and inward supply: The details under this Table are bifurcated into four parts. Part A contains details of outward supply such as regular B2B supply, exports, supplies to SEZ or SEZ developer, deemed export, inward supply under the reverse charge mechanism, supply through or by an e-commerce operator, and outward supply such as nil-rated, exempted, non-GST outward supplies, etc. Most of the details of such Tables are auto-populated from Forms GSTR-1 & GSTR-2B, with the facility to edit each Table. Details of interstate supplies made to unregistered persons,

composition taxable persons, UIN holders, etc., are to be given in Part B which will be auto-populated from the relevant tables of Form GSTR-1. Amendments in Part and Part B including debit and credit notes are shown in Part C. A separate row is provided to amend the details of inward supply liable to reverse charge. Details are auto-populated from Forms GSTR-1 & 2B and are non-editable except RCM details.

Negative values carried forward to subsequent tax periods shall be shown in Part D. It's a non-editable field. A facility is provided to report unreported invoices in Form GSTR-1 in Part A and Part B of Table 3. No such facility is available for Parts C and D of Table 3.

3. Eligible and Ineligible Credit Details (Table 4): The details of eligible and ineligible credit shall be reported here. Details of credit availed and reclaimed shall be declared in Part A followed by details of credit reversed in Part B of Table 4. Table 4(A) contains information of ITC on imports of goods and services, ITC on RCM (other than imports of services), ISD credit, and ITC availed on domestic supplies, including ineligible credit and reclaimed ITC after fulfilling requisite conditions. Except for reclaimed ITC and import of services, figures are auto-populated.

Table 4 (B) contains the details of the reversal of ITC. Reversals may be permanent or temporary in nature. Permanent reversal includes reversal under rules 38, 42, and 43 of CGST Rules and

- reversal under section 17(5) of the CGST Act. Temporary reversal includes a reversal of ITC on account of non-receipt of goods or services or both, non-payment of consideration within 180 days from the date of the invoice, etc. which can be claimed subsequently on fulfillment of requisite conditions. Net ITC available would be the difference between Tables 4(A) and 4(B).
- 4. Separate Table 4A: New Table 4A is provided to report the details of amendments in ITC claimed and reversed other than changes on account of debit and credit notes. Amendments in the reversal of ITC on account of rule 38, 42, and section 17 (5) is also reported in this Table.
- 5. Payment of Tax (Table 5):

  Details of tax payable and tax paid during the period are reported in this Table. Details are auto-populated and will not be editable.

## FINDINGS AND SUGGESTIONS

The following findings and necessary suggestions are made, on the basis of the analysis and interpretation of the present and proposed structure of Form GSTR-3B:

- 1. Proposed GSTR-3B is more comprehensive than the current one, with most fields auto-populated from Form GSTR-1, reducing manual intervention and ensuring consistency in information.
- 2. Proposed Form GSTR-3B lacks B2C reporting. A separate row should be added for reporting B2C supplies.
- 3. Details of inward supply liable to reverse charge (other than

the import of services) in Table 3. Such information is auto-populated from Form GSTR-2B, which includes details of inward supplies received from a registered supplier. A separate sub-row should be added to report inward details of unregistered suppliers liable for RCM. Rows should be highlighted in red when RCM liability is less than an auto-populated liability.

- 4. Part C of Table 3 provides amendments in Parts A & B including information on debit and credit notes. It is a non-editable Table except for RCM amendments. The Table heading should be changed to "Amendment Tables including debit and credit notes" to align with Form GSTR-1 to avoid ambiguity. A separate row should be inserted to report the debit and credit notes, which shall be auto-populated from Form GSTR-1, with an option to report the unreported details in Form GSTR-1.
- 5. The linking of Form GSTR-2B with ITC taken in Form GSTR-3B will facilitate the availability of better-quality data for scrutiny and audit and thereby help revenue in the mobilization effects of tax administration.
- 6. It is expected to avail credit according to Form GSTR-2B of the month. This may create a mess in the future where a registered person is debiting in-eligible ITC to expense accounts directly. Similarly, in the case of goods in transit, it is suggested to align the credit claim in GSTR-3B with the receipt of goods, under section 16(2)(b) of the CGST Act, instead of linking

Form GSTR-3B was introduced as a temporary measure to collect taxes from taxpayers

> with the reported month in Form GSTR-2B, to avoid discrepancies and operational issues in reconciling credit with books.

7. A separate row should be provided in Form GSTR-3B for reporting the final adjustments made under rule 42 pertaining to the financial year made in Form GSTR-3B before the due date for filing Form GSTR-3B for the month of September following such year to reclaim excess ITC reversed.

#### **CONCLUSION**

After exhaustive analysis and interpretation of the changes proposed in the concept paper on comprehensive changes in Form GSTR-3B, it is concluded that the proposed changes in Form GSTR-3B are more beneficial for avoiding disputes between tax authorities and taxpayers while enhancing the governance and improving tax administration under GST law. But it requires certain modifications as suggested above. The final version of Form GSTR-3B should be notified after due discussions with taxpayers and concerned stakeholders and after considering the practical difficulties to be encountered in the future. The proposed Form GSTR-3B deliberates mainly on the reporting of ITC and hence a model for reporting of ITC in Form GSTR-3B is proposed by a research scholar to overcome the present challenges faced by the taxpayer in reporting ITC in Form GSTR-3B. MA

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  Council Secretariat.
- 7. Notification No 14/2022 Central Tax (July 05, 2022)

#### Proposed Model on ITC available and reversed in Form GSTR-3B

#### 4. Details of Input Tax credit availed and reversed during the period

#### Part I: Credit available as per GSTR-2B

1 411	1: Credit available as per GSTR-2B			C C C C TTP /	
	Description	IGST	CGST	SGST/ UTGST	Cess
	1	2	3	4	5
(a)	Unutilised credit as per Form GSTR-2B for previous tax periods (See Note 1)		<auto-no< td=""><td>on-Editable&gt;</td><td></td></auto-no<>	on-Editable>	
(b)	Credit as per Form GSTR-2B for the current period (Including debit credit note) (Except RCM)	<auto-non-editable></auto-non-editable>			
(c)	Total Credit available as per Form GSTR-2B ((a)+(b))		<auto-no< td=""><td>on-Editable&gt;</td><td></td></auto-no<>	on-Editable>	
(d)	Less: Ineligible credit under section 17(5) (See Note 2)		<ma< td=""><td>anual&gt;</td><td></td></ma<>	anual>	
(e)	Net credit available ((c)(-)(d))		<a< td=""><td>uto&gt;</td><td></td></a<>	uto>	
Part	II: Eligible Input tax Credit available and reversed				
	Description	IGST	CGST	SGST/ UTGST	Cess
	1	2	3	4	5
(A) I'	TC Available (Net of Debit and Credit Notes) (As per books and ma	tched with l	FORM GST	R-2B) (See Note	3 & 4)
(1)	Import of goods		<a< td=""><td>auto&gt;</td><td></td></a<>	auto>	
(2)	Import of services		<ma< td=""><td>anual&gt;</td><td></td></ma<>	anual>	
(3)	Inward supplies liable to reverse charge (other than 2 above)	<auto></auto>			
<u> </u>	Inward supplies from ISD	<auto></auto>			
(5)	ITC on Domestic Inwards Supplies (excluding 1 to 4)	<auto></auto>			
(6)	ITC reclaimed				
(	a) On account of the second proviso to section 16(2)		<ma< td=""><td>anual&gt;</td><td></td></ma<>	anual>	
(	b) On account of excess reversal under rule 42	<manual></manual>			
(	c) Others	<manual></manual>			
- ' '	Total ITC available during the period (1 to 6 above)		<a< td=""><td>uto&gt;</td><td></td></a<>	uto>	
	Total ITC to be considered for comparison with 2B [(1)+(4)+(5)]		<a< td=""><td>uto&gt;</td><td></td></a<>	uto>	
(9)	Difference [Part 4(I)(e)(-)Part 4(II)(8)]		<a< td=""><td>uto&gt;</td><td></td></a<>	uto>	
(B) I'	TC reversed				-
<u> </u>	As per rules 38,42 and 43	<manual></manual>			-
(2) period	As per section 17(5) (if availed in Part II(A) above in the previous d)	<manual></manual>			
(3)	On account of the second proviso to section 16(2)	<manual></manual>			
	Other reversal	<manual></manual>			
(5)	Total ITC reversed during the period	<auto></auto>			
	et ITC available [(A)(7)(-)(B)(5)]		<a< td=""><td>uto&gt;</td><td>,</td></a<>	uto>	,
	Credit of Form GSTR-2B carried forward to next period [4(I)(e) I)(8)(-) 4(II)(B)(1)&(2)]		<a< td=""><td>uto&gt;</td><td></td></a<>	uto>	

#### **Notes:**

- 1. An option to report matched credit of previous periods not taken in Form GSTR-3B may be given to a registered person while reporting credit for the first time with the certification of CA/CMA
- 2. A registered person is supposed to report ineligible credit pertaining to the current tax period as available in Form GSTR-2B.
- 3. A registered person should report only matched credit in Table II(A)(1),(4) and (5)
- 4. A registered person should not be allowed to save ITC Table where the difference in Table II(A)(9) is negative

# FUTURE & CHALLENGES OF THE HEALTHCARE INDUSTRY-THE GROWTH ENABLER OF THE INDIAN ECONOMY

#### **Abstract**

The world has faced an unprecedented epidemic named Coronavirus which was detected in the Hubei Province in China on Nov. 17, 2019, according to the South China Morning Post. This pandemic glaringly exposed the gap in healthcare service delivery worldwide and we have seen the death of our near ones merely for want of a bed in a hospital. A detailed study is done to understand the ground reality of the healthcare delivery systems of India.



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#### INTRODUCTION

he healthcare sector of India is growing at a compound annual growth rate (CAGR) of 22 per cent and is expected to reach 362.70 billion USD by the financial year 2022-23 from 110 billion USD in financial year 2016. This sector substantially contributes to the Indian GDP and provides huge employment in India.

The hospital vertical contributes to 80 per cent of the healthcare industry and is expected to touch USD 132 billion by 2023.

A detailed study has been done to understand the current gap,

challenges and required strategies to be implemented for encasing the opportunities.

## THE GAP ANALYSIS Hospital Beds distribution

Currently, 65 per cent of the total hospital beds of India are concentrated in 7 States namely West Bengal, Maharashtra, Tamil Nadu, Karnataka, Kerala, Telangana, and Uttar Pradesh where 50 per cent of the Indian population live and the balance 35 per cent of beds are spread over in the other 21States and 8 Union Territories where the rest of 50 per cent of the population live. In 2017 the number of beds per 1000 population in India was 0.5 (reference

World Bank Data).

#### **Experienced Nursing Staff**

There is a severe shortage of qualified staff nurses in India. Currently, the availability of staff nurses is 1.96 per 1000 beds (*Press Trust of India, April 5, 2022*) as against the recommendation of 5 per 1000 beds.

#### **Oualified Doctors**

Number of qualified allopathic physicians is 0.65 per 1000 beds as against the requirement of 1 per 1000 beds. Moreover, doctors are not interested to shift to semi-urban or rural areas.

TABLE 1: THE CRITICAL GAP IN THE HEALTHCARE INDUSTRY IS HIGHLIGHTED AS FOLLOWS

Current Hospital Bed	Target	Current Physicians	Required as perWHO
1.3 Beds / 1000 Population	3 Beds/ 1000 Population by 2025	0.65 Physicians/ 1000 Population	1 Physician/ 1000 Population

Source: NITI Aayog (2021)

#### **Employment Opportunities**

The NSDC forecasted that 7.5 million people will be employed directly in the healthcare sector by 2022. It was forecasted that in the next 5 years, there will be job opportunities for 1.9 million nurses and midwives. Healthcare provided 4.7 million direct employments as of 2021.

#### **Opportunities at a Glance**

As per NITI Aayog (2021) by 2025 India needs -

- A minimum of 3 million beds
- Another 1.5 million physicians
- Additional 2.4 million nurses

#### **Challenges**

#### For Government Sector

Government hospitals, both in rural and urban India have many challenges to overcome.

For geopolitical reasons Government mostly focuses on rural areas. The Central Government spent

Rs 30000 Cr on rural healthcare compared to Rs 850 Cr in urban India during the financial year 2019.

- Only 11 per cent of sub-canters, 13 per cent of Primary Health Centers (PHCs), and 16 per cent of Community Health Centers (CHCs) in rural India meet the Indian Public Health Standards (IPHS).
- Most of the treatment centers in rural India are managed by unskilled or semi-skilled paramedical staff in the absence of qualified doctors.
- The number of qualified nurses is also farless than the actual requirements
- Even basic drugs are not steadily available.
- Emergency patients are referred to tertiary care hospitals frequently.

#### For Pvt Sector

The private investors are not coming forward considering the perceived high risk on return on investment (ROI) and delayed break-even point in the hospital industry, particularly for the green field projects in semi-urban or rural areas considering other investment options available to them. The National Institution for Transforming India (NITI Aayog) published a white paper (Reimagining Healthcare in India through Blended Finance) in February 2022 acknowledging this practical problem. The recent devaluation of the Rupee against the USD is one more challenge for importing high-tech medical equipment essential for treatment. Qualified and trained manpower is also a critical success factor for the hospital industry across the globe and India is not out of this crisis. The number of Medical Colleges, Nursing Colleges and paramedical colleges is scarce against the actual requirement of the industry, making it difficult for the industry to expand as per its potential growth opportunity.

#### RESEARCH OBJECTIVES

The study has been done to analyze the "Future & Challenges of the Healthcare Delivery Industry". This study analyzes the opportunity available for healthcare delivery sector and the challenges to overcome to encashing the opportunities.

#### LITERATURE REVIEW

After studying the available vast literature, books and journals, the following literature have been selected for review to understand the gap in this topic.

- i. In the paper titled "Healthcare: The neglected GDP driver Need for a paradigm shift" (Executive Summary- FICCI-KPMG-KP) the authors highlighted that India will be the highest populated country in the world with 1.45 billion population by 2028 of which 168 million will be of geriatric age. The disease pattern in India is changing due to the lifestyle and disposable income of citizens in addition to increased life expectancy by birth. The study suggests considering investment by Government on an economic perspective rather than on social perspective.
- Investment Opportunities in India's Healthcare Sector Publishing Agency, NITI Aayog(2021) - This article explained the opportunities available for the investors to invest in healthcare.
- iii. The initiative taken by Union Government, called Ayushman Bharat (PM-JAY) will create more demand inTier 2 and Tier 3 Cities and will create a demand of 2.5 Physicians per 1000 population and 5 Nurses per 1000 population by 2034.

The opportunity of getting incentives for the promoters to start projects out of "Metro Cities" and scope of Medical Value Travel (MVT) is also highlighted in this report.

According to this article, more than 20 per cent of nonlife insurance premium comes from the healthcare to Insurance Sector.

iv. The future of healthcare, Finding the opportunities that lie beneath the uncertainty Shubham Singhal, Brian Latko, and Carlos Pardo Martin (January 2018) published in McKinsey & Company Healthcare Systems and Services Practice:

This article talks about the role and responsibilities of value chains attached to healthcare services delivery. The study highlighted the continuous increase of life expectancy by birth vis-vis exorbitant treatment costs. Law enforcement authorities are bringing stringent rules and patients are also becoming more knowledgeable and demanding about their care and comfort. The study suggests that the organization willing to win have to utilize their assets properly, to be agile, innovative, and flexible to adapt to the first changing fiercely competitive industry demands.

#### RESEARCH METHODOLOGY

The exploratory method has been followed in this study.

A Stratified Random Sampling method has been applied to collect a combination

of qualitative & quantitative data from 147 respondents attached to 35 multi-specialty hospitals that are in operation for a minimum of 3 years in metro cities.

#### **Data Collection**

Through structured questionnaires and /or semi-structured interviews primary data was collected from CMD/MD/CEO/COO/CFO/Procurement Head/Biomedical Head of 35 hospitals.

Secondary data has been collected through extensive literature reviews, journals, books, and Governmjent reports, to explore the research gap pertinent to existing studies.

Given here under are the major highlights relating to Government sector based on secondary data:

Govt Initiatives: As per the Economic Survey of 2022, India's public expenditure on healthcare stood at 2.1 per cent of GDP during 2021-22 against 1.8 per cent during 2020-21 and 1.3 per cent during 2019-20. The Government of India allocated Rs2,34,846 Crore for healthcare for the financial year 2022-23 (FY22) also was planning to increase the healthcare budget to 2.5 per cent of GDP by 2022.

TABLE-2

FDI Limits Permitted in Healthcare Segments in India				
Sector	Automatic Route (Percent Allowed)	Government Approval Route (Percent Allowed)		
Construction of Hospitals	100%			
Healthcare (Greenfield)	100%			
Healthcare (Brownfield)	Up to 74%	Above 74%		
Medical Devices	100%			
Biotechnology (Brownfield)	Up to 74%	Above 74%		
Biotechnology (Greenfield)	100%			
Pharmaceuticals (Brownfield)	Up to 74%	Above 74%		
Pharmaceuticals (Greenfield)	100%			
Insurance – Intermediaries	100%			

#### Medical Tourism

International experts have already predicted a 110 per cent growth in Indian medical tourism, (*Mangla Dembi, 2022*) As per the prediction of international experts, the Indian medical tourism industry will grow to 13 billion USD by 2022 from 5-6 billion in 2019.

TABLE 3: AVAILABILITY OF STAFF

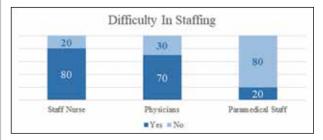


TABLE 4: PROJECT INTEREST SHOWN BY THE OWNERS

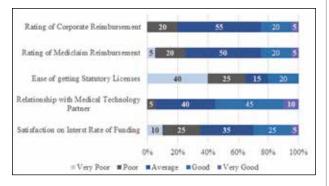
Type of Project Interested			
Greenfield	30%		
Brownfield	60%		
Both	10%		

Place of Interest				
Tier – I	80%			
Tier – II	15%			
Tier – III	5%			

**TABLE 5: ACCREDITATION** 

Ease of Renewing Accreditation (JCI/NABH/NABL)	
Yes	65%
No	35%

TABLE 6: RESPONSES ON FINANCIAL ASPECTS



#### **ANALYSIS**

Though the Hospital industry has enormous growth potential in India it has its own challenges to overcome both for Public Sector & Pvt Sector. A study is being done to analyze the challenges of respective areas and found the probable best possible solution.

#### DISCUSSION

The outcome of the study will help to formulate holistic approach by both the Public and private sectors to bridge the gap in healthcare delivery that observed during the pandemic.

The study reveals that if the challenges of the industry can be overcome with the joint efforts of Government and private owners there is an enormous growth opportunity for healthcare service delivery. Some of the challenges are unique to private and Government respectively and others are common for the industry. Major support required from Government are:

- To cover the maximum number of people under Ayushman Bharat
- Increase the budget allocation of at least 3 per cent of the GDP
- Speedy settlement of incentives and tax holidays to private owners for setting up projects in Tier II and Tier III cities
- Increase the medical insurance coverage limit under section 80D of the Income-tax Act,1961to attract more investments in health insurance. This will reduce out of pocket expenses (OOP) of citizens of India.
- Liberalize statutory requirements to enable private sector to set up medical colleges, nursing colleges

#### Though the Hospital industry has enormous growth potential in India it has its own challenges to overcome both for Public Sector & Pvt Sector

- and paramedical institutions with a single window for issuance of licenses.
- Onvert District-level hospitals (DHS) into medical colleges under public private partnership (PPP) programme for augmenting the talent pool and rendering affordable treatment in the rural sector.

Even with partial implementation of the above, the industry is expected to reach 500 billion USD by 2030

#### **LIMITATION:**

The author of this study could not collect primary data from public hospitals due to the lengthy approval process required for conducting the study. Small nursing homes and diagnostic centers were excluded due to the unorganized fragmented nature of their operation.

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# ASSESSMENT OF POTENTIAL TOURIST DESTINATIONS BY AN INTEGRATED TOURISM INVESTMENT MODEL USING ANALYTICAL HIERARCHY PROCESS (AHP)



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#### **Abstract**

Defining potential tourist destinations among all the tourist destinations is one of the important purposes for tourists as well as tourism investors. The objective to be achieved in this study is to assess the potential tourist destinations based on the tourism investment criteria and also to rank all those individual potential tourist destinations by Integrated Tourism Investment Model using Analytical Hierarchy Process (AHP) method. In this study, the Alipurduar District of the State of West Bengal, India, has been chosen as the study area. Tourism in the Alipurduar District is one of the most promising and emerging sectors. The study uses both analytical and practical research methods.

#### INTRODUCTION

electing the major criteria of any individual tourist destination is an important and critical decision for tourism investors. A suitable tourist destination is not only helps to increase the market share and profitability of the tourism industry but also enhances the convenience of tourists as well as tourism investors. Establishing a fine location also shortens the payoff period for fixed capital investments. Potential tourist spots or destinations are essential for the improvement of tourist attractions also. In this study, our proposed major criteria and sub-criteria of the integrated tourism investment model and analysis of the Analytical Hierarchy Process (AHP) may assist the tourism investors to draw their financial roadmap, enhancing their comfort zone in taking on the risk and considering an appropriate mix of investments to generate revenue through tourism stakeholders before selecting any tourist destination for investment in Alipurduar District of the State West Bengal.

#### FIGURE:1



Tourism offers excellent prospects for emerging economies and evolving countries. Tourism industry increases the revenue, generates employment, develops the infrastructure of a country and enriches an intellect of cultural exchange. Revenue in the travel and tourism market was projected to reach US\$734.60bn in 2022. Foreign direct investments (FDI) trends for the last couple of years in the Asia Pacific region have incredibly increased. In the total contribution of travel and tourism to gross domestic product (GDP) in the Asia-Pacific region in 2021, China was on top, followed by Japan and India. (WTTC, Asia; APAC; 2021).

In view of the worldwide growth rate of the travel and tourism industry, it's important for tourism investors to find in which area/ sector/ of a particular potential tourist destination, they need to invest. To find out that perspective, we have done our study in a particular promising tourist destination of a district of West Bengal, India, namely Alipurduar District. Tourism in the Alipurduar District is one of the most promising and emerging sectors. This district is sharing borders with Bhutan on the northern side, and Assam on the eastern side, while the western and southern parts are surrounded by Jalpaiguri & Coochbehar Districts of the State, West Bengal, (Figure 1). Alipurduar District is one of the newly formed districts (June 2014) of West Bengal, India.

The scope of our study is relevant for the tourism investor to decide where actually to invest among the tourist destinations..

We have explained an integrated tourism investment model consisting of five major criteria and eighteen subcriteria which were further analyzed by the Analytical Hierarchy Process (AHP) as a multi-criteria decision-making tool to get the ranks among the potential tourist destinations of Alipurduar District.

#### LITERATURE REVIEW

In the tourism scenario in Romania, *Mitrut et al.* (2009) have explained the potential of tourism in a region by

minimizing the imbalance of infrastructure within the entire region and determine a selection of potential travelers and tour operators who perceive Ethiopia as a tourist destination. To identify areas that need special attention in order to attract international tourists a study was done Shanka & Frost (1999). Mohaidin, et al. (2017) found that tourists' interest in choosing a sustainable tourism destination is inclined towards eco-friendly attitudes, inspiration, and word-of-mouth, whereas destination image and professed service quality didn't have a profound or significant effect. Nahar et. al. (2015) identified and ranked the attractive tourism site of Bangladesh and equivalent tourist spots among a group of available alternatives dependent on several decision-making criteria that were obtained through learning and processing of one hundred and three samples by using the AHP Method (an MCDM Technique). Hsu et. al. (2009) used the AHP method to select a tourist destination based on the influencing factors preferred by tourists. Blešic et. al. (2021) highlighted Croatian coast as a tourist destination with the most important characteristics like tourism infrastructure, destination facilities including environmental features, human capital, cultural attributes and cost after analyzing through the AHP method. Sari (2021) explained the AHP-SAW Method in the decision support system to select the best tourism village in Indonesia. Using an AHP to select the preferable ecotourism destinations in the Purulia District of West Bengal (India) has also been explained by Dolui(2022).

#### **DATA COLLECTION & ANALYSIS**

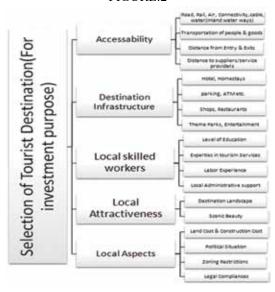
In this study, as per existing literature, we have developed an integrated model for tourism investment. The most important factors for the selection of tourist destinations from the tourism investment perspective are on the basis of the following five major criteria (Figure:2)

- Accessibility which is one of the major criteria, that also as a deciding factor for tourist destination on investment issues. Ouariti and Jebrane (2020) explained that transport and tourism are associated with developing accessibility infrastructures i.e., highways, airports, and railway stations, which have a constructive impact on the overnight stays of tourists in a particular tourist destination. Transport infrastructure, community and eco-friendly infrastructure at a regional level could be the key factors for the tourism infrastructure to make the tourism destination more attractive as found by the Tourism and Transport Forum (2012). Accessibility is the key function of tourism as transportation is always mandatory to access any tourist destination by tourists using any transportation mode (Ahmed et. al., 2010).
- b. Destination Infrastructure: Availability of tourist friendly infrastructure at the tourist destination is

highly related to the development of tourism in that destination. Our study mainly focuses on three types of tourism infrastructure namely (i) hotels and accommodations, (ii) internet of things (IoT) infrastructure, shops, restaurants, parking, ATMs, etc., and (iii) infrastructure related to entertainment. Nguyen, Q. H.(2021) explained that to make an investment in the tourism sector, transport and communications infrastructure would get the first priority, the restaurant and hotels industry would get the second priority, and recreation amenities would have the last priority. Similarly, Khadaroo and Seetanah (2007) also emphasized that a destination could become more attractive depending on the transportation infrastructure. The infrastructure of a destination and tourism are correlated as defined by Suleiman and Albiman (2014); Mandi'c et al. (2018). Tourism growth is proportionally dependent on destination infrastructure, which was studied by Seetanah et al. (2011) and Yu (2016). In international domains, Lim et al. (2019) worked on the rejuvenation of destination infrastructure to make a perfect balance between tourism infrastructure and the arrivals of international visitors. Samimi et al. (2017) described that tourism development is inter-related with foreign direct investment. We can find from the above studies, that the effect of destination infrastructure has positive impacts on tourism growth.

- c. Local Skilled Worker: Tourism is a global force for economic growth and development, creating US\$ 1.7 trillion yearly; this signifies about 4 per cent of worldwide GDP and about 29 per cent of service distribution. Tourism accounted for one in ten jobs in the world in 201, and the tourism sector reinforced about 300 million jobs globally (UNWTO, 2019). These employment opportunities are directly related to the Local/destination's skilled workers who are actually providing tourism-related services to the tourists.
- d. Local Attractiveness: If the destination's scenic beauty doesn't add any value to the customer, then tourists will not select that place as a tourist destination. Steady arrivals of tourists to a particular destination are definitely encouraged by impressive drives on scenic roads, as defined by Hennessey et al.(2008).
- e. Local Aspects: Land cost & construction cost, political situation, zoning restrictions, legal compliances and economic conditions are a few subcriteria that come under this final attribute. These factors need to be considered. Even if the place is naturally beautiful, for an investor other costs like construction costs may also become an issue.

#### FIGURE:2



(Conceptualized and Compiled by the Authors)

On the basis of these five major criteria and their eighteen sub-criteria, among eleven tourist places of the Alipurduar District, primary data have been collected on the basis of questionnaire with 5-Level of the Likert Scale- as a tool for collecting data.

#### **USE OF AHP & ITS ANALYSIS**

Previous studies recommended three parameters namely. (a) Physical feature (scenic beauty/landscape/ forestry), (b) Cultural Feature and (c) Heritage Feature. The studies by Bhuiyan et al.,(2011); Royo-Vela, (2009); Bhatia, (2013); Olimovich, (2015); Bachi et al.(2020); Krešić and Prebežac, (2011); Maksin, (2012); O'Leary and Deegan, (2005); Beeho and Prentice, (1997); Baral et al., (2017); Shijin et al., (2020); (Majumder and Hossain, (2011) were adopted to examine the eleven probable potential tourist destinations and to finalize only eight (Table:1), potential tourist destinations (alternatives) of the Alipurduar District to rank the exact potential tourist destinations for our research work.

TABLE:1

	Alipurduar Town
	Bhutanghat
	Buxa-Jayanti
	Chilapata
*******	Hasimara
ALIPURDUAR	Jaigaon
DISTRICT	Khayerbari
	Kunjanagar
	Madarihat
	Jaldapara
	Rangamati

In his study, *Chen* (2006) proposed the analytical hierarchy process (AHP) as a decision-making tool comprised of a pairwise comparison matrix between criteria, to frame an analytical structure with criteria and its associated weights for location selection. From the tourism investment point of view, the already selected five major criteria have been analyzed, with their eighteen subcriteria. We have collected data through a questionnaire by mentioning the questions of each sub-criteria. After consolidating all the sub-criteria questions into five major criteria and by using Analytical Hierarchy Process (AHP); the weights of these five individual major criteria have been defined. These weights are considered criteria weights for the analysis of the rest of the study.

In our study, we have considered forty-five experts' opinions to fill up the following comparison matrix based on five major criteria from investors' points of view on an AHP qualitative nine scale. Based on the experts' replies, in this comparison matrix, we have prioritized local attractiveness as three times more important than accessibility, two times more important than destination infrastructure, four times more important than local skilled workers, and five times more important than local aspects. We have also considered destination infrastructure as two times, three times, and four times more important than accessibility, local aspects, and local skilled workers consecutively. Accessibility is prioritized as two times and three times more important than local aspects and local skilled workers, and local aspects are considered four times more important than local skilled workers in the primary hierarchy of analytical hierarchy process (Table A1).

TABLE A1

A1					
	Accessability	Destination Infrastructur e	Local skilled workers	Local Attractivenes s	Local Aspects
Accessability	1	0.5	3	0.33	2
Destination Infrastructur e	2	1	4	0.50	3.0
Local skilled workers	0.33	0.25	1	0.25	0.25
Local Attractivenes s	3.0	2	4	1	5
Local Aspects	0.5	0.33	4	0.2	1

Table A1 is the comparison matrix of size 5 x 5. Based on the values in the qualitative scale of the A1 matrix, we have taken the summation of each column. Then we normalize each column entry by dividing them by their respective sum values column-wise and we achieved the following normalized matrix A2.

TABLE A2

	A2				
	Accessability		Local skilled workers	Local Attractivenes s	Local Aspects
Accessability	0.146412884	0.12254902	0.1875	0.144736842	0.177777778
Destination Infrastructur					
0	0.292825769	0.245098039	0.25	0.219298246	0.266666667
Local skilled workers	0.048316252	0.06127451	0.0625	0.109649123	0.02222222
Local Attractivenes s	0.439238653	0.490196078	0.25	0.438596491	0.44444444
Local Aspects	0.073206442	0.080882353	0.25	0.087719298	0.08888889
column sum	1	1	1	1	1

After taking the row-wise average of each cell in the normalized matrix, we got the *Eigen Vector X* (Table A3), which is also called Priority Vector or criteria weights, and got the rank among all five major criteria.

TABLE A3

Eigen Vector X				
05 Major Criteria	Priority Vector/Criteria weights	Rank		
Local Attractiveness	0.412495133	1		
Destination Infrastructure	0.254777744	2		
Accessability	0.155795305	3		
Local Aspects	0.116139396	4		
Local skilled workers	0.060792421	5		

In the next step, we calculated the Consistency Ratio (CR) as under::

Consistancy ratio=(C.I/RI) 0.059787 <.10

The mean values were calculated from the received data from the questionnaires and consolidated those mean values into five major criteria. These consolidated mean values of major criteria were further used for the AHP method to form five pairwise comparison matrices for individual five major criteria. Finally, we achieved the weightage of all potential tourist destinations of Alipurduar District based on the above-mentioned five major criteria by using AHP.

TABLE A4

Accessability(0.1 557953048)	Priority Vector/Criteria weights
Alipurduar town	0.137363686
Buxa-Jayanti	0.1369863
Jaigaon	0.129967167
Jaldapara	0.126797236
Chilapata	0.124155626
Khayerbari	0.118872409
Kunjanagar	0.114909995
Bhutanghat	0.110947582

Based on one major criteria of 'accessibility', Alipurduar Town got the highest value, as roads, rail connectivity and good transportation facilities are already available there and it's also the district town. Another alternative i.e. Bhutanghat got the lowest priority, which means that the transportation facilities are poor with respect to other probable tourist destinations of Alipurduar District as shown in above Table A4.

TABLE A5

Destination Infrastructure(02 54777744)	Priority Vector/Criteria weights
Jaldapara	0.137542982
Buxa-Jayanti	0.136292591
Alipurduar town	0.131291028
Chilapata	0.129207044
Jaigaon	0.125039075
Khayerbari	0.120871106
Kunjanagar	0.110972179
Bhutanghat	0.108783995

Based on the criteria 'destination infrastructure', alternative Jaldapara got the highest value and Bhutanghat got the lowest priority. Investors can invest on the basis of this particular criterion of Alipurduar district for improvement. Table A5 shows the final outcome among the eight (alternative destinations of Alipurduar District by the criteria weight of 'destination infrastructure' after analysis through AHP.

TABLE A6

Local Skilled worker(0.06079242 1)	Priority Vector/Criteria weights
Jaldapara	0.134525179
Buxa-Jayanti	0.132165088
Alipurduar town	0.132165088
Chilapata	0.130100009
Jaigaon	0.120807151
Khayerbari	0.119774611
Kunjanagar	0.118948579
Bhutanghat	0.111514293

Based on the criteria of 'local skilled workers', the alternative i.e. Jaldapara got the highest value, and Bhutanghat and Kunjanagar respectively got the lowest priorities (Table A6).

TABLE A7

Local Attractiveness (0.4124951334)	Priority Vector/Criteria weights
Jaldapara	0.143671621
Buxa-Jayanti	0.135974927
Chilapata	0.134692145
Kunjanagar	0.125712668
Bhutanghat	0.119726339
Khayerbari	0.116733192
Alipurduar town	0.115735393
Jaigaon	0.107753716

Based on the criteria of 'local attractiveness', one of the most important criteria for tourists as well as for tourism investors, the alternative Jaldapara got the highest value and Jaigaon got the lowest priority as per Table A7.

TABLE A8

Local Aspects(0.1161 393964)	Priority Vector/Criter ia weights
Jaldapara	0.137210062
Alipurduar town	0.137210062
Buxa-Jayanti	0.129859523
Chilapata	0.128634433
Khayerbari	0.12577589
Bhutanghat	0.124346619
Jaigaon	0.124346619
Kunjanagar	0.092616792

Based on the criteria 'local aspects', alternative Jaldapara got the highest value and Kunjanagar got the lowest priority as per Table A8.

#### Establishing a fine location also shortens the payoff period for fixed capital investments

#### FINDINGS AND RECOMMENDATIONS

Multiplying the priority Matrix, which we achieved after comparing all alternatives(destinations) based on individual criteria, with their criteria weights; we finally got the rank of individual potential destinations shown in the following Table A9. According to Table A9, the most potential tourist destination of Alipurduar District is Jaldapara. Kunjanagar and Bhutanghat got the lowest rank, though both destinations have very good scenic beauty. Tourism investors may make investments in these particular places as per the five major criteria of the Alipurduar District.

TA	$\mathbf{p}_{\mathbf{I}}$	Е	٨	a

Destinations (Alternatives)	Weightage with all 5 major criteria	Rank as per AHP analysis
Jaldapara	0.139762163	1
Buxa-Jayanti	0.134178031	2
Chilapata	0.131081967	3
Alipurduar town	0.126561065	4
Khayerbari	0.119355829	5
Jaigaon	0.117433621	6
Kunjanagar	0.116019173	7
Bhutanghat	0.11560815	8

Jaldapara, one of the popular National parks, enriched with biodiversity and scenic beauty, got the highest rank as per this study. Our study sets the quantitative basis of the subsequent literature and contributes to the selection of tourism destinations in investment layout, and formulating development plans. It may also help the development of the tourism industry in the Alipurduar District. A cautious assessment of the existing studies reveals that research on the effect of investment on tourism is still insufficient and desires more consideration; so is the effect of investment on tourism. Finally, this analysis is driven to the conclusion that it maintains a balance between a tourist and an investor's choice for the selection of potential tourist destination.

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## SUSTAINABLE MANUFACTURING PRACTICES FOR INDIAN SMES MAKING SELF-RELIANT INDIA

#### **Abstract**

The focus of this study is on highlighting the importance of Indian SMEs for achieving India's Aatma Nirbhar Bharat vision while addressing the global environmental needs of manufacturing a product. For this, the study discusses some innovative manufacturing practices that brings sustainability in overall operation by small and medium enterprises. This study also highlights the role that Industry 4.0 technologies play in the implementation of Sustainable Manufacturing Practices, which in turn motivate companies to replace their outdated manufacturing facilities with newer generations of pillar technologies. The study supports SLR process and finalized 112 research articles with the help of PRISMA diagram. The main objective of this study is to highlight the current research trends in this area and to create a connection between Industry 4.0 and SMPs, SMPs and SMEs, and lastly SMEs and self-reliant India. The results show that SMP adoption by Indian SMEs is difficult in many ways, which reduces their effectiveness in realizing the objective of an independent India.



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#### 1. INTRODUCTION

#### 1.1 Self-Reliant India aka Aatmanirbhar-Bharat

he self – reliant India aka *Aatamanirbhar Bharat* was a COVID-19 pandemic relief economic package (*Mishra*, n.d.) launched in year 2020 by the Prime Minister of India which outlines the economic development plans of a nation and was based on five basic tranches (*National Investment promotion and Facilitation Agency*, n.d.) (i) business including MSMEs, (ii) poor including farmers, (iii) agriculture, (iv) growth horizon and (v) Government reforms and enablers.

Aatmanirbhar Bharat, however, is a broad umbrella concept that includes a number of economic reforms to increase the nation's GDP while fighting the COVID-19

pandemic. This programme was built upon the following five pillars:.



Figure 1 – Five Tranches of Aatmanirbhar Bharat Source – India Budget 2020



Figure 2 – Five Pillars of self reliant India Source – India Budget 2020

The emphasis of this study is to observe how SMEs are influencing one of India's important economic reforms and helping the country become more self-reliant.

#### 1.2 Sustainable Manufacturing Practices (SMP)

The word 'sustainability' is now the fundamental term of the 21<sup>st</sup> Century used by manufacturing firms which adds social and environmental values apart from profit earned by companies (Wiśniewska-Salek, 2021) and hence the three major aspects are economic, environment and society. Since the advent of Industry 4.0 technologies, businesses have been concentrating on integrating product design and technology, which has led to the development of sustainable products that have multiple product lifetimes and are competitive with conventional products that are purchased and thrown away after use (Prause, 2015). According to Gupta et al., (2018), lean practises (LP), agile practises, customization, sustainable supply operation & distribution and practices for product recovery & return all contribute to sustainable manufacturing.

As a result, the authors are working to find answers to the research problems listed below about sustainable manufacturing techniques for SMEs in developing nations like India.

- RQ1 What trends existing literature related to SMPs in SMEs is showing?
- RQ2 How Industry 4.0 technologies support SMPs in Indian SMEs?
- RQ3 What are the main research gaps and future pathways to bring sustainable manufacturing practices in Indian SMEs?

## 2. DESCRIPTIVE STATISTICS OF THE LITERATURE

#### 2.1 Sustainable Manufacturing Practices & SMEs

Sustainable manufacturing is defined as the

manufacturing process that has the least negative effects on environment. This can be accomplished by considering a product's entire life cycle, beginning with the sustainable sourcing of raw materials and ending with the possibility of the product's components being recycled or used in other contexts. This enables businesses to maximize a product's benefits while minimizing its adverse effects on the environment. A holistic approach encompassing the product, the manufacturing methods used to create it, the complete supply chain, including the production systems throughout various product life-cycles, is necessary to achieve sustainability in manufacturing (Jayal et al., 2010).

Sustainable manufacturing brings sustainability (Hami et al., 2018). Research on SMP received a good attraction from authors around the world; earlier researches only mentioned about 3R approach i.e., Reduce, Reuse and Recycle which seems less sustainable than other approach which are shown in the following Table 1. The authors proposed various SMPs for companies to bring about sustainability. Some most common SMPs (Hami et al., 2018; Jayal et al., 2010; OECD, 2010) are presented in the said Table

TABLE – 1 SUSTAINABLE MANUFACTURING PRACTICES

Practices	Definition	Sources
Cleaner production	Prevention of pollution at source	(OECD, 2010)
Eco-efficiency	More Products with minimum ecological impact	(OECD, 2010)
Employee relation	Wellbeing of employees	(Hami et al., 2018)
Supplier relation	Good collaboration with suppliers	(Jayal et al., 2010)
Customer relation	Managing customers relation	(Hami et al., 2018)
Community relation	Improving community performance	(Hami et al., 2018)
Closed loop production	Increased sustainability in supply chain management can be attained by closing the material cycle.	(OECD, 2010)
Industrial Relation	Collaborating with neighborhood organizations	(Jayal et al., 2010)

Source – Author's Own Work

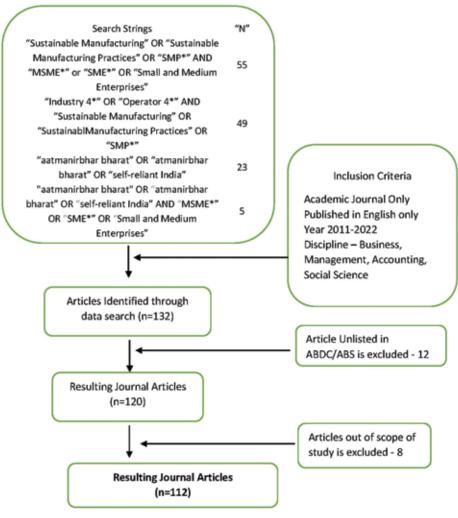
#### 3. DATA COLLECTION AND INTERPRETATION

#### 3.1 Research methodology

The study is backed by SLR and research papers are accessed through Scopus which is considered as a largest citation database for peer-reviewed journals in the field of social science (*Ferreira*, 2018; *Pattnaik et al.*, 2020). PRISMA framework was used for data collection and filtration procedures to obtain the final sample of published data.

#### 3.2 PRISMA

FIGURE 3 – THE PRISMA MODEL



Source - Author's Own Work

#### 4. FINDINGS AND DISCUSSION

#### 4.1 Publication Trend

The different search strings used in this paper are classified into four categories namely A, B, C and D. The publication trends of each search string are depicted in the Figure-4 of yearly distribution of articles. This figure shows that research on SMEs in respect of SMPs and Industry 4 technologies gained significant interest in recent years only and after the launching of *Aatmanirbhar Bharat Abhiyan* movement the number of articles sharply increased.

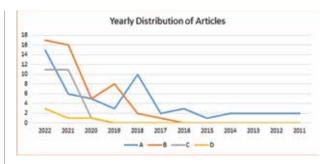


FIGURE – 4 ARTICLE'S YEARLY DISTRIBUTION *Source - Scopus* 

#### 4.1.1 Article classification

Our final sample of a total of 112, was divided into two major categories—conceptual and empirical—to help us better understand the development of sustainability research through time. Following the procedure of systematic literature review we further classified them into three categories; Qualitative (which is subjective and dynamic), Quantitative (which deals with numbers and statistics which are universal) and Mixed (which combines the quality of both qualitative and quantitative) (Calder, 1977). Table 2 depicts the classification of final sample into above mentioned categories.

#### 4.1.2 Globally referred knowledge pool

Citation of an article demonstrates its significance and impact; widely cited articles are regarded as having more influence in a given field of study (*Bhatt et al.*, 2020).



#### 4.2 Novelty in research and future pathways

#### 4.2.1 Challenges of SMPs in Indian SMEs

Indian SMEs not only play a substantial role in the progress of the country, but they also encounter many challenges in their quest to become sustainable. Sustainability is associated with environmentally friendly manufacturing practices and implementing these practices entails high costs, which is the biggest problem for Indian SMEs looking to implement SMPs in their business. Majority of the studies done to look at the sustainability of SMEs either concentrated on the impact of green, lean, innovation and other enablers of sustainable performance or identified the drivers and challenges of implementing sustainability (*Dey et al., 2021*). Following similar approach on the barriers available in literature, this study identifies and explains the three major obstacles to sustainable manufacturing as follows-

#### $(O_1)$ Awareness Issues of sustainability

SME businesses in India are battling to manage their profit goals and are working with limited resources (Gupta et al., 2022). SME owners don't pay attention to sustainability issues; thus, they aren't familiar with the concepts. Most of the time, the higher management is unaware of the procedures being used on the shop floor, which further reduces an organization's productivity (Bhanot et al., 2017).

S. No	Article Type	Methodology	No. of Article
		Qualitative	53
1	Conceptual	Quantitative	20
		Mixed	04
		Qualitative	15
2	<b>Empirical</b>	Quantitative	13
		Mixed	07
3	7	Total	112

#### (O,) Adopting SMPs Increase cost of production

As mentioned earlier, SMEs struggle to achieve their profit goals and any move toward sustainability invites high initial costs that de-motivate SMEs owners and make them to abandon their efforts when their ROI is low (Mathiyazhagan et al., 2013). As a result, additional support from the Government, other businesses and academics is necessary to help them in implementing sustainable technologies.

### $(O_3)$ Lack of support from big giants and Government hodies

The adoption of SMPs in Indian SMEs is at a very early stage and since the SMEs lack resources to incorporate these expensive technologies into their production facilities, the role of the Government and other institutions that support the environment becomes crucial. Researchers recommended that Governments and large corporations introduce supportive measures for SMEs in both financial (in a form of subsidy and Incentives) and non-financial (In a form of awareness programs) ways.

## 4.2.2 Interlinking of SMPs fused SMEs and Self-Reliant India

Small and medium-sized businesses constitute the backbone of the economy of the nation (Cugno et al., 2022; Mukherjee & Mukherjee, 2022) and they are essential for realizing the vision of a self-reliant India. For manufacturing firms to compete on a global scale and increase productivity, cutting-edge technologies are essential. Additionally, research suggests that successful implementation of Industry 4.0 may be able to mediate the interaction between the factors influencing Industry 4.0 and TBL sustainability (Javashree et al., 2021). Research shows that SMEs are becoming more committed to adopting sustainable practices to improve their performance over the long term (Ali et al., 2021), Additionally, it was discovered that SMPs and environmental legislation compliance work together to improve SMEs' sustainability. For example, the research conducted by Citybabu & Yamini, (2022) highlights the role of Lean Six Sigma (LSS) which acts as a comprehensive instrument for raising productivity and

quality by decreases process variances and flaws while also getting rid of waste and non-value-added activities that the client won't be prepared to pay for. Countries all over the world have begun the process of transforming their small manufacturing facilities with the newest technologies that can increase their productivity and efficiency while also addressing sustainability issues. In response, India launched the *Samarth Bharat Udyog Abhiyaan* to encourage the adoption of these technologies that will improve the sustainability of Indian SMEs.

## 4.2.3 Role of Industry 4.0 technologies in Sustainable Manufacturing Practices

The emergence of Industry 4.0 set a new pathway for SMEs to innovate their manufacturing process which led to improved efficiency and effectiveness in to their operations, but it also provides opportunities to SMEs to adopt sustainable manufacturing practices. Manufacturing companies can use the core technology of Industry 4.0 which helps them to achieve their societal and environmental objectives apart from profit earned by companies. Successful implementation of Industry 4.0 can act as a mediator in the interaction between the determinants of Industry 4.0 and TBL sustainability (Jayashree et al., 2021). Most of the studies are conducted in relation to industrialised nations and larger businesses. In contrast, the notion of a self-reliant India encourages SMEs to reform in order to meet the nation's GDP target as well as to adopt environmentally friendly manufacturing techniques that will enable India to meet international environmental standards. Also, due to the distinctive nature of SMEs, their use of SMP in operations differs significantly from that of larger companies (Hami et al., 2018).

#### 5. CONCLUSION

The number of publications in the field of Industry 4.0 has grown significantly over the past few years. This study is timely because it reviews prior research, highlighting the major players who have shaped Industry 4.0 research both in terms of what has been studied and what has yet to be explored. We believe that research on Industry 4.0 is expanding on its own and that additional studies are required to analyse its strategic management and applicability in various contexts and industries. This paper adds to the body of knowledge for Industry 4.0-based research by offering a complete academic overview of the preceding 10 years. In India, Government initiatives to support SMEs are changing as to how they conduct business; but, in order to move them toward sustainability and help India achieve its goal of being self-reliant, support from academia is also required which will make India Aatmanirbhar, MA

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## START-UP GOVERNANCE: CRUCIAL BUILDING BLOCK FOR SUSTAINABLE SUCCESS



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ccording to data of the Department for Promotion of Industry and Internal Trade, India's 73205 officially recognised startups created more than 7.5 lakh jobs in our country till mid of 2022. In another survey by HR tech firm Better Place, it is mentioned that more than 80 lakh jobs were created by e-commerce, logistics and mobility industries during 2021-22 in our country. Despite layoffs by many of them in recent months, start-ups have added net manpower in employment.

No doubt, start-ups have become a crucial building block for sustainable growth of many economies of the world, including India. They have become tools to bring creativity, innovation and social changes. They are trying to address the real problems of the world with fresh thinking and innovative products and services. From services like blood testing to elderly care and from providing innovative edible dishes to providing suggestions for climate change, they are trying to address the complicated issues of our economy with their fintech solutions. Today, India, Singapore, Hong Kong, China etc have become hot spots for start-ups.

The success of any economy depends on some factors, like innovation, affordable products and services to common man, more comfortable and easy life for citizens especially senior ones, wealth creation, quality education to all and easy availability of employment opportunities to youngsters. In a country like India, factors like creation of jobs, affordable products and services and wealth creation for self and nation are extremely important and the start-up ecosystem can become a game changer.

Till 1990, India was known as a country of snakecharmers all across the world. Our economy was an "economy of scarcity" where we would find long

#### **Abstract**

Before 1990, India was considered a country of snake charmers all across the world but the opening of the economy & liberalisation in 1991 gave Indians an opportunity to showcase our talent as "Knowledge Centre" and "IT Experts" to the world. We Indians didn't miss the Bus and utilised the opportunity by earning name, fame and money for self and country. *Now, the whole world is talking about Startups* and again, in my opinion, it is an opportunity for us to capitalise further our strengths. We, as a country, can dominate the economy and soft power of the world with innovative, cost efficient and user friendly products & services through our knowledge based start ups. This article discusses these points with case studies.

queues everywhere, i.e from ration shops to two-wheeler showrooms, from telephone service providers to electric services and from bus stands to railway stations. Large population with limited availability of facilities was the norm. People from all across the developed world used to come to India to see and capture poverty in their cameras. Movies like "Slumdog Millionaire" can be made only in our country where our mass poverty, unhygienic slums and poor infrastructure were perfect natural film studios for them

But in later years the IT sector provided India an opportunity to earn name, fame and wealth. IT sector, followed by other avenues of service section, converted the image of our country in the eyes of the world. Many employees of multinational companies, posted in USA and other developed countries, started feeling the arrival of India in world market with a bang. The jobs of Americans started being "Bangalored" (meaning their jobs started to be outsourced from Bangalore and other such cities in India). Gradually India became the sixth largest economy of the world and got chairmanship of powerful forums like G20. Since, we inspire to be the third largest economy of the world now, start-up ecosystem, along with IT sector, is another opportunity to us where we can further strengthen our financial position and presence in the world.

Start-ups can, not only provide employment to the youngsters of the largest pool of youth of the world (which is India), but can also provide an opportunity to them to earn wealth. It can make the life of common citizen of India more comfortable by providing them easy solutions to long pending problems and bring peace and ease in their day-to-day life. Successful start-ups can also give further boost to the service sectors like education, bank and insurance. Ecommerce, retail, finance, logistics, food, hospitality, agriculture, education, entertainment, communication, health, hygiene, consumer products, electronic products, biotechnology, climate change, software, sports and garments are some of the areas where startups can bring sustainable growth and success. Let us try to understand the above with some real-life examples.

Earlier urban Indians were forced to consume carbonated soft drinks with high percentage of sugar because they were not trusting the quality and hygiene of Indian drinks which were sold by street vendors in extremely unhygienic conditions, but startups like Paperboat introduced pure ancient Indian drinks, like coconut water, Aam-panna, Kanji (a drink, very popular in Punjab and is made from fresh carrots) etc in small tetra packs all across the country at affordable prices. Now youngsters prefer these healthy drinks which improve their immunity.

Earlier to hire three-wheelers or taxis we had to rush to their stands to book a cab/auto for railway station etc. We would bring the cab from the stand to our houses first for boarding family and loading luggage etc. Now, *OLA*, *UBER* and similar service providers have made the job very easy; cabs are easily available at affordable rates through day and night 27 X 7.

Agrostar, another start-up is working to "help farmers win" by providing advisory services to improve crop In a country like
India, factors
like creation of
jobs, affordable
products and
services and
wealth creation
for self and nation
are extremely
important

yields and the opportunity to connect with exporters. It has also launched a quality assurance lab for the farmers to test seeds and fertilizers and also providing "Agro Doctors".

Animal lets farmers trade cattle directly via its app. Farmers are not required to visit cattle market to procure cattle at hefty prices and more over the health of the cattle is also not assured there.

FRND start-up runs dating app which helps users to connect while playing online games.

PARK+ start-up provides a platform that helps users find nearby parking spaces and then provide facilities like car washing. By providing real time correct information on availability of parking space, this start-up not only saves the time and costly fuel of users which they waste while searching for parking space in metros, shopping areas etc/ but they help in reducing unnecessary congestion on the roads.

Another start-up *Pocket FM* aims to build an entirely personalised, seamless, platform for audiobook and podcast content. People can use this platform while travelling in buses and metro trains and they are also not required to go online.

Start-ups like *Gramheet* use a digital platform to provide integrated post-harvest services to small farmers. Direct market linkage with the end buyer shifts the price gain from the intermediaries to the farmers and uplift the lives of distressed farming community.

There is a long list of such start-ups in our country. No doubt, inability to raise funds, mounting losses and recession in sight have created many question marks for their future but it is also a fact that busts will come and go but start-ups will keep thriving.

The Government of India has also shown its concern and taken many steps to ensure the continuing of start-up saga in our country. "Start-up India" is a flagship initiative of the Government of India with the aim to actively support start-ups. The primary objective of the programme is to create a strong ecosystem that nurtures and protects innovation and start-ups in India, ultimately generating large-scale employment opportunities and leading to sustainable economic growth of the country.

Schemes, like ASPIRE – A Scheme for Promotion of Innovation, Rural Industries and Entrepreneurship, Pradhan Mantri Mudra Yojana, Support for International Patent Protection in Electronics and Information Technology (SIP-EIT), Multiplier Grants Scheme (MGS), Zero Defect Zero Effect (ZED) scheme etc of the Government are trying hard to invite more young entrepreneurs to launch fresh start-ups.

Initiative like Aatma Nirbhar Bharat mission and the 'Make in India' program are aiming at transforming India into a global manufacturing and design export hub. These schemes enable the talent of India to dream new ideas, implement them and ultimately, convert them into a successful and thriving business.

Start-up is thus another opportunity for Indians to earn wealth and make India a great country. MA

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# CORPORATE SPECIFIC DETERMINANTS AND INTEGRATED REPORTING QUALITY: EVIDENCE FROM BSE 500 COMPANIES



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#### Abstract

In the corporate reporting movement, Integrated Reporting (IR) is the most recent evolution which is seen as a proficient elucidation to the apprehensions and constraints of customary economic reporting. This study purports to ascertain the degree of compliance of IR with IIRF and the impact of corporate specific determinants on integrated reporting quality (IRQ) in the top energy sector companies of India. The results demonstrate that the overall effect of the corporate specific determinants on IR quality is positively significant. However, at an individual level only size of the company and its ownership structure positively and significantly influence the IRQ of the sample companies.

#### INTRODUCTION

orporate Reporting is an approach of utilizing financial statements to unveil the economic information of a company, over a time period (Vitolla, 2019). However, widespread inequality in distribution of income, innumerable corporate failures triggered by frauds and scams and rise in global warming has increased the concerns of people worldwide (Orazalin and Mahmood, 2019; Kolk et al., 2017). These phenomena have rendered the actions of modern corporate houses questionable (Bapuji et al., 2018; van Zanten and van Tulder, 2018). In response to this, companies are using CSR reports, Sustainability reports, and ESG reports to offer useful comprehensions about their sustainable activities to the stakeholders (Higgins and Coffey, 2016; Bose et al., 2018). In this corporate reporting movement, "Integrated Reporting (IR) is the most recent evolution which is seen as a promising elucidation to the concerns and constraints of customary financial reporting" (Busco et al., 2019; Pistoni et al., 2018; Songini et al., 2018;

Verschoor, 2011). As per International Integrated Reporting Council (IIRC), Integrated reporting comprises a precise report that elucidates a company's strategy, governance, business model, performance, and prospects which results in creation of value in the short, medium, and long terms (Songini et al., 2018; Vitolla et al., 2019).

Considering the status of IR, South Africa is the only country globally, which has mandated IR adoption for Johannesburg Stock Exchange (JSE) listed companies. Similarly in India the regulations and legislations like Companies Act 2013, SEBI LODR, CSR, BRR, BRSR, etc., portray a noteworthy part in improvising the eminence of reporting (*PwC*, 2018). Therefore, more causal research is necessary on the quality or content IRs, including its determinants, which have been understudied (*Vitolla et al.*, 2020).

## REVIEW OF LITERATURE AND HYPOTHESIS DEVELOPMENT

#### Corporate Specific Determinants and IR Quality

Certain studies which have been conducted worldwide focused on some financial determinants like profitability or size (Girella et al., 2019; Sanchez et al., 2014; Busco et al., 2019) and found significant relationship. Similarly certain studies focussed on governance determinants like board characteristics and found significant relationship (Fiori et al., 2016; Izzo and Fiori, 2016; Raimo et al., 2020; Girella et al., 2019). Thus, to scrutinise the overall impact of corporate specific determinants on the IR quality, the following null hypothesis is developed:

## H0<sub>1</sub>: IR quality is not significantly impacted by the corporate specific determinants.

#### Company's Size and IR Quality

Company's size is one of the key drivers of IR (Busco, 2019; Frias-Aceituno et al., 2013 Girella et al., 2019; Qiu et al., 2016). The larger companies can strategize to counter to the vivid accountability expectations of the stakeholders' by preparing their reports at par with the IIRC framework which would ultimately assist them in earning the stakeholder's trust and confidence (Ahmed Haji & Anifowose, 2017; Nicolo et al., 2020). So, to find the impact of Company's Size on the quality of IR the following null hypotheses is proposed:

## H0<sub>2</sub>: IR quality is not significantly impacted by the Company's Size.

#### Profitability of the Company and IR Quality

As revealed by various studies, profitability of a company and its degree of voluntary adoption of non-financial information disclosure practices has a positive relationship between each other (*Wallace and Naser, 1995; Vitolla et al., 2020; Busco et al., 2019*). Further, in line with signalling

theory, it can be said that companies with good performance may be interested in signifying their performance to the stakeholders. In this regard, the following hypothesis is developed:

## H0<sub>3</sub>: IR quality is not significantly impacted by the Profitability of the Company.

#### Leverage and IR Quality

A company with high leverage needs to demonstrate the debt holder that they have the ability to satisfy their economic commitment (Eng & Mak, 2003; Vitolla, 2020). Sharif and Rashid, (2014), Andrikopoulos et al., (2014), and Girella, et. al., (2019) explained in their study that leverage and IRQ have a positive relationship with each other. In this regard, the following hypothesis is developed:

## H0<sub>4</sub>: IR quality is not significantly impacted by leverage.

#### • Firm Age and IR Quality

According to a paper by Vitolla et al., (2020) and on the basis of legitimacy theory, the older firms have already established years of legitimate relationship with its stakeholders and therefore they can be highly transparent with their stakeholders (Orazalin et al., 2019). On the contrary, researches likewise showcase an adverse association amid the age of the company and sustainable reporting practices (Liu and Anbumozhi, 2009). In this regard, following hypothesis is developed:

## H0<sub>5</sub>: IR quality is not significantly impacted by firm age.

#### Foreign Ownership and IR Quality

A company with more proportion of foreign owners tend to be more alert and aware about their reporting practices as they have pressure to meet the needs of the foreign owners who are conscious regarding the geographical, cultural and language barriers (Huafang and Jiangua (2007) Barako et al., 2006). Thus, to understand how ownership structure, especially the foreign owners influence its IR quality, the following hypothesis is formulated:

## H0<sub>6</sub>: IR quality is not significantly impacted by foreign ownership.

#### Growth Opportunity and IR Quality

Companies with more intangible assets are keenly interested in providing information regarding the use of their intangible capital and the impact they have on these capitals (*Frias-Aceituno et al., 2014; García-Sánchez et al., 2013*). In this regard, the following hypothesis is developed:

H<sub>0</sub>; IR quality is not significantly impacted by the Growth Opportunity of the companies.

#### Size of the Board and IR Quality

Obscurities in coordination and the principal-agent problem in management has drawn the attention of researchers towards the magnitude and composition of directors on the board and its impact on adoption and diffusion of high-quality disclosure practices in the company (*Fiori et al., 2016*). On the contrary, due to the issue of free-riding nature of majority of the directors on a board and possibility of conflicting opinion, larger number of directors may lead to delay in decision making and ineffective monitoring of management (*Busta and Hobdari 2015*). In this respect, the following hypothesis is developed:

H0<sub>8</sub>: IR quality is not significantly affected by the Size of the Board of the company.

#### • Independence of Board and IR Quality

Independent directors are responsible for shielding and promoting the interest of the shareholders and monitoring the managerial intent as well as their performance (Weir & Laing, 2003). The quality and quantity of IRs produced by the corporations is reflected by the distinctive role of the independent directors on its board (Fiori et al., 2016; Lorenzo and Sanchez, 2010; Busco et al., 2019). In this respect, the following hypothesis is developed:

## H0<sub>9</sub>: IR quality is non-significantly influenced by the Board's Independence

#### • Gender Diversity of the Board and IR Quality

As revealed by Bear, (2010); and Hillman et al., (2002),

"Female directors are likely to support the community at large, even at the cost of financial performance". Due to high degree of sensitivity of women with respect to sustainability, it is expected that presence of a greater number women directors on the board would lead to disclosure of better-quality information by the company (Lorenzo and Sanchez, 2010; Barako and Brown, 2008). In this respect, the following hypothesis is developed:

## H0<sub>10</sub>: IR quality is non-significantly influenced by Board's Gender Diversity

#### **OBJECTIVES OF THE STUDY**

- To determine the degree of compliance of Integrated Reporting disclosures by selected sample Indian companies with IIRC framework.
- To measure the effect of Corporate Specific Determinants on IR Quality of selected sample Indian companies.

#### RESEARCH METHODOLOGY

#### Sample Size and Sample Design

All the Energy Sector Companies under BSE 500 group i.e., 25 Companies are considered as the sample for conducting the study.

#### Duration of the study

For the purpose of study, a period of four financial years viz., 2017-18, 2018-19, 2019-20 and 2020-21 is taken into consideration.

Fig. 1: Variables for the study



#### Data Analysis Techniques

To analyse the data Variance Inflator Factor (VIF) Analysis, Jarque-Bera Test, White's Test, Durbin Watson Test, Linearity Test, Multiple Regression Analysis and Visual Content Analysis is used.

#### Regression Model

 $IRQ_{it} = \beta_0 + \beta_1 SIZE_{it} + \beta_2 ROE_{it} + \beta_3 LEV_{it} + \beta_4 AGE_{it} + \beta_5 OS_{it} + \beta_6 MTB_{it} + \beta_7 BSIZE_{it} + \beta_8 ID_{it} + \beta_9 GENDER_{it} + \epsilon_{it}$ 

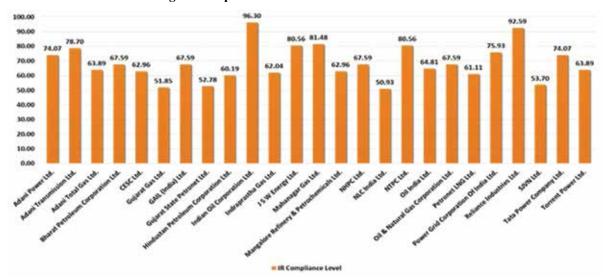
Where,  $\beta_0$ = Intercept for the regression model  $\beta_1$ -  $\beta_9$ = slopes of independent variables i = Number of companies i.e., 25 companies

t = Time Period of the Study i.e., from 2017-2021

 $\varepsilon_{it}$  = *Error term* of 25 companies over 4 years of period i.e., from 2017-2021

#### DATA ANALYSIS, RESULTS & DISCUSSIONS

Fig. 2: Compliance level of IR disclosures with IIRF



By conducting visual content analysis, the IR compliance among the sample companies with reference to IIRF over a period of four years i.e., from 2017 to 2021 was found. **Indian Oil Corporation Ltd** has the maximum compliance level, i.e., 96.03%, followed by **Reliance Industries** Ltd with an IR compliance level of 92.59%. On the other hand, **NLC India Ltd.**, **Gujarat Gas Ltd.**, **Gujarat State Petronet Ltd.** and **SJVN Ltd.** reflect a comparatively lower level of compliance at 50.93%, 51.85%, 52.78% and 53.70% respectively.

**Table 1 Linearity Test** 

DEPENDENT VARIABLE	P VALUE
Integrated reporting Quality (IRQ)	0.3424

Table 2 Jarque-Bera Test for Normality

DEPENDENT VARIABLE	P VALUE
Integrated reporting Quality (IRQ)	0.0509

**Table 3 Variance Inflation Factors Analysis** 

INDEPENDENT VARIABLES	VIF VALUES
SIZE	2.350
ROE	1.226
LEV	1.983
MTB	1.696
AGE	1.438
BSIZE	3.529
ID	2.377
GENDER	1.100

Table 4 White's test for heteroskedasticity

DEPENDENT VARIABLE	P VALUE
Integrated reporting Quality (IRC	<b>Q</b> ) 0.0501

**Table 5 Regression Analysis Results** 

Dependent variable: IRQ Model: Pooled OLS Total Period: 4 Total cross-sections- 25 Total Observations: 99	coefficient	std. error	t-ratio	p-value
C	0.03214	0.14308	0.22468	0.82274
SIZE	0.04484	0.01348	3.32494	0.00129
ROE	-0.00175	0.00123	-1.42012	0.15907

LEV	0.00242	0.01906	0.12673	0.89944
MTB	0.00247	0.00166	1.48892	0.14004
AGE	-0.01334	0.02904	-0.45925	0.64718
os	0.31713	0.10819	2.93099	0.00429
BSIZE	0.06691	0.09992	0.66967	0.50480
ID	0.03867	0.13306	0.29068	0.77197
GENDER	0.18191	0.24283	0.74913	0.45575
$\mathbb{R}^2$	0.3150			
Probability (F Statistics)	0.0000			
<b>Durbin Watson Statistics</b>	0.4554			

Source: Self Compiled

Table 1, 2, 3, 4 and 5 shows that the assumptions of linearity, normality (Jarque-Bera Test), multicollinearity (Variance Inflation Factors Analysis), heteroscedasticity (White's test), autocorrelation (Durbin Watson Statistics), were satisfied before performing the linear regression, respectively.

In regression analysis the proportion of change in dependent variable as a result of a proportionate change in independent variables is represented by the value of R<sup>2</sup>. As per the above results, 31.50% of activities of IRQ is described conjointly by all the corporate specific determinants considered under the study with a general significance level of 5% represented by the probability value of F- statistics.

$$\begin{split} & IRQ_{it} = 0.03214 + 0.04484 \; SIZE_{it} - 0.00175 \; ROE_{it} + \\ & 0.00242 \; LEV_{it} - 0.01334 \; AGE_{it} + 0.31713 \; OS_{it} + 0.00247 \\ & MTB_{it} + 0.06691 \; BSIZE_{it} + 0.03867 ID_{it} + 0.18191 \; GENDER_{it} \\ & + \epsilon_{.} \end{split}$$

## H0<sub>1</sub>: IR quality is not significantly impacted by the corporate specific determinants.

The results in the above table illustrate the p-value of F statistics, i.e., 0.0000. It is less than the standard value at 5% level of significance. Hence there is an overall positive and significant impact of corporate specific determinants on IRQ.

## H0<sub>2</sub>: IR quality is not significantly impacted by the Company's Size.

Considering H0<sub>2</sub>, the results discovered that SIZE and the IRQ possess a positive and statistically significant association with a p-value of 0.00129. Thus, the null hypothesis is rejected, signifying that companies that are large in size, probably prepare and disseminate high quality IRs. (*Vitolla et al.*, 2020; *Nicolo et al.*, 2020; Orazalin et al., 2019; Girella et al. 2019; Busco et al., 2019).

## H0<sub>3</sub>: IR quality is not significantly impacted by the company's Profitability.

In relation to H0<sub>3</sub> the analysis revealed a statistically insignificant negative association between ROE and IRQ. Hence null hypothesis is accepted. It signifies that weak financial performance does not lead to legitimacy threats for IR adopters (*Lai et al.*, 2014).

#### $H0_4$ : IR quality is not significantly impacted by leverage. In relation to $H0_4$ the analysis revealed a positive but

statistically insignificant relationship between LEV and IRQ. Hence the null hypothesis is accepted; signifying that the quality of integrated reporting is non-significantly influenced by the debt levels of the companies. This may be because of the increased focus of leveraged companies on short-term goals instead of being sustainable (Orazalin et al., 2019; Sierra et al. 2013; Mahoney et al. 2013; Kuzey and Uyar, 2017 and Branco et al., 2014)

#### H0<sub>5</sub>: IR quality is not significantly impacted by firm age.

In relation to  $\mathrm{HO}_5$  the analysis revealed a negative and statistically insignificant relationship between AGE and IRQ. Hence the null hypothesis is accepted, signifying that the age of the energy sector companies does not significantly impact it's IR Quality (Orazalin, 2019).

## $\mathrm{H0}_6$ : IR quality is not significantly impacted by foreign ownership.

Speaking of  $\mathrm{H0}_6$  the analysis revealed that the association amid OS and the IRQ is positive and statistically significant at a p-value of 0.00429. Hence the null hypothesis is rejected, signifying that the presence of foreign owners encourages the energy sector companies in India to prepare high quality reports (Huafang and Jianguo 2007).

## $H0_7$ : IR quality is not significantly impacted by the Growth Opportunity of the companies.

In reference to  $\mathrm{H0}_7$ , the results reveal a positive but statistically insignificant relationship between MTB and IRQ (Debreceny et al., 2002 and Larrán and Giner, 2002). Frias-Aceituno et al., (2014) assert that companies may tend to lose their bargaining power or competitive edge in their upcoming deals due to over revelation of information to competitors.

## H0<sub>8</sub>: IR quality is non-significantly influenced by the Independence of the Board.

## H0<sub>9</sub>: IR quality is non-significantly influenced by the Independence of the Board.

## $\mathrm{H0}_{10}$ : IR quality is non-significantly impacted by Gender Diversity of Board.

In relation to H0<sub>8</sub>, the existence of a greater numeral of directors on the board does not significantly influence IR quality of the energy sector companies of India. This is due

Corporate Reporting is an approach of utilizing financial statements to unveil the economic information of a company, over a time period

to the free-riding issues, that the companies with large sized board are sluggish in their decision-making processes (Busta and Hobdari (2015). Further in view of  $H0_9$ , the results show that, in order to adopt IIRC framework and produce high quality IRs, mere independence and objectivity of directors is not a sufficient factor (Frias-Aceituno et al. 2013). In relation to  $H0_{10}$ , the existence of more no. of female directors on the board of the company has a positive but statistically insignificant impact on the IR quality.

#### **FINDINGS**

- Indian Oil Corporation Ltd has the maximum IR compliance level, i.e., 96.03%, followed by Reliance Industries Ltd with an IR compliance level of 92.59%.
- A significant positive influence of corporate specific determinants on the IR quality of sample energy companies is found by the study.
- IRQ of the sample energy sector companies is significantly influenced by the size of the companies (SIZE) and presence of foreign investors (OS).
- Profitability (ROE) and age of the company (AGE), does have a negative and statistically insignificant influence on the Integrated Reporting Quality of the sample energy sector companies of India.
- Leverage (LEV), growth opportunities (MTB), board size (BSIZE), board's independence (ID) and gender diversity of the board (GENDER) have insignificant positive influence on the IR quality of the sample energy sector companies of India.

#### **CONCLUSION**

The results of the study show that size of the company has a strong and positive impact on the IR quality (Busco et al., 2019; Frías-Aceituno et al., 2013; Girella et al., 2019; Qiu et al., 2016). This implies that the public attention and the level of institutional pressure for disclosure of higher quality reports is more in case of larger sized Companies (Girella et al., 2019; Busco et al., 2019 and Qiu et al., 2016). The study also revealed that the presence of foreign owners encourages the energy sector companies in India to prepare high quality reports. The main reason behind this is that the foreign individual and institutional owners probably encounter an elevated information asymmetry due to space and language barriers, (Xiao et al., 2004). The outcomes of this investigation propose that from a practical viewpoint the integration journey for every company is considerably distinct as well as unique, and therefore these variations must be taken into consideration from every possible angle. The findings of the study are worth considering for the regulators such as MCA and SEBI as they may need to focus on the companies' characteristics and their unique business environment, based on which they can frame and implement distinct, flexible, and customizable regulations and frameworks, suiting the needs of every organization (Busco et al., 2019).

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## Down The Memory Lane

#### February, 2013



CMA D. Bandyopadhyay, Registrar of Companies, West Bengal at the Investor's Awareness Programme organized on 07th February, 2013 in Jadavpur University, Kolkata



Lighting of Lamp & Inauguration by Chief Guest; CMA R.S. Sharma, Chairman, Quality Review Board, ICAI and Former CMD, ONGC Ltd. with other dignitaries at National CMA Practitioner's Convention-2013, held in Chennai on Feb-23, 2013



CMA (Dr.) Asish Bhattacharyya addressing a gathering at a Panel Discussion on "Inclusive Growth-Prospects and Challenges Ahead" at Kolkata Book Fair on 09.02.2013. EIRC of The Institute of Cost Accountants of India for the first time had participated in the 37th International Book Fair

#### February, 2003

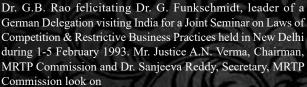


Felicitation Function at Chandigarh-Panchkula Chapter. Seen from left: Balwinder Singh, Secretary; Ashok Goyal, Executive Director, Spice Communications Ltd.; G. S. Narang, Commissioner, Central Excise & Customs; D.C. Arya, Vice Chairman, NIRC; Anil Gupta, Joint Commissioner, Central Excise & Customs; Renuka Rai Walia, Municipal Councillor, Panchkula; Dr. Manoj Anand, Professor, Punjab University

# Down The Memory Lane

February, 1993







IFAC & ICWAI Meet Shri H.R. Bharadwaj, Union Minister of Law, Justice & Company Affairs on professional matters. Seen from (L to R) Dr. G.B. Rao, Shri P.D. Phadke, Mr. Peter Agars, Shri H. R. Bharadwaj, Mr. Ken Biggs, Shri J.K. Puri, Shri S. R. Acharyya and Shri V. Kalyanaraman

February, 1983



Meeting of Financial Management Accounting Committee of International Federation of Accountants at Manila, Philippines on February 3-4, 1983. Philippines Institute of Certified Public Accountants, Philippines. Sitting L to R: Mr. Romeo; Mr. Ron Cotton, Chairman, Australia; Mr. Bob Semipier, Executive Director, IFAC. Standing L to R: Mr. Amitava Bhattacharyya, Vice-President, ICWAI; Mr. John Ross, Canada; Mr. V. Kalyanaraman, Past President, ICWAI; Mr. Dion L. de Beer, South Africa; Mr. Jake Claret, ICMA, London; Mr. Tom Kelley, Vice President, AICPA, USA and Mr. Derrick Willingham, ICMA London



The Tenth Eastern India Regional Cost Conference was held in CMERI Auditorium on 19 and 20th January 1983, organized by the Durgapur Chapter of Cost Accountants under auspices of the EIRC of the Institute of Cost and Works Accountants of India: Shri T. Chatterjee, Managing Director, Durgapur Projects Ltd., Chief Guest of the Conference delivering the address

Source: Extracted from the various issues of The Management Accountant Journal





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(Statutory Body under an Act of Parliament) www.icmai.in

Kolkata Dated the 13<sup>th</sup> February, 2023

#### **NOTICE**

In pursuance of Clause (3) of Schedule 2 of the Cost and Works Accountants (Election to the Council) Rules, 2006, as amended, the addresses of different polling booths at a place where there are more than one polling booth for the ensuing Election to the Council and four Regional Councils for the term 2023 – 2027 are notified as follows:-

#### **WESTERN REGION**

Ahmedabad	Aroma College of Commerce, Aroma College Campus, B/H Hotel Fortune Landmark, Ashram Road,
Timicaabad	Usmanpura, Ahmedabad - 380 013.
Ahmedabad	Prakash Higher Secondary School, Aurobindo Society Road, Near Sandesh Press, Bokadev, Ahmedabad – 380 054.
Mumbai	The Institute of Cost Accountants of India, Western India Regional Council, CMA Bhawan, Rohit Chambers, Janmabhoomi Marg, Fort, Mumbai – 400 001.
Mumbai	D. G. Ruparel College of Arts, Science and Commerce, Opp. Matunga Road Station (W. Rly.), Senapati Bapat Marg, Mahim, Mumbai - 400 016.
Mumbai	Ramniranjan Jhunjhunwala College of Commerce & Economics, Ghatkopar (West), Mumbai - 400 086.
Mumbai	SIES College of Arts, Science & Commerce, Sion (West), Jain Society, Mumbai - 400 022.
Mumbai	Karmaveer Bhaurao Patil College, Sector 15 A, Vashi, Navi Mumbai 400703.
Mumbai	M. M. K. College of Commerce & Economics, 32nd Road, TPS III, Bandra (West), Mumbai - 400 050.
Mumbai	St. Rocks College of Commerce & Science, Talephakri, Eksar Villeage, Near Aquaria Club, D.N. Mhatre Road, Borivali (West), Mumbai – 400 092.
Mumbai	Parle Tilak Vidyalaya Association's M L Dahanukar College Commerce, Dixit Road, Vile Parle (E), Mumbai - 400 057.
Mumbai	V. G. Vaze College, Kelkar Education Trust's, Mithagar Road, Mulund (East), Mumbai - 400 081.
Pune	Poona College of Arts, Science & Commerce, Camp, Pune – 411 001.
Pune	ATSS College, C2, MIDC, Opp. Niramaya Hospital, Chinchwad Station, Pune – 411 019.
Pune	MCE Society's Anglo Urdu Boys High School and Junior College, Gate No. 2, 2390-B, K.B. Hidayatullaha Road, Pune - 411 001.
Pune	Mahatma Phule Krishi Vidyapeeth, College of Agriculture, Shivaji Nagar, Pune - 411 005.

#### **SOUTHERN REGION**

Bangalore	The National Degree College (Autonomous), Pampa Mahakavi Road, Basavanagudi, Bangalore – 560 004.
Bangalore	Institute of Agricultural Technologists, No. 15, Queen's Road, Bangalore - 560 052.
Bangalore	Stracey Memorial Composite Pre-University College, 52, St. Marks Road, Bangalore – 560 001.
Chennai	The Institute of Cost Accountants of India, Southern India Regional Council, CMA Bhawan, 4, Montieth Lane, Egmore, Chennai – 600 008.
Chennai	Southern India Chamber of Commerce & Industry, Indian Chamber Buildings, Esplanade, Chennai – 600 108.
Chennai	South Indian National Association, Sastri Hall, Luz Church Road, Karpagambal Nagar, Mylapore, Chennai - 600 004.





Chennai	Shri Krishnaswamy College for Women, AC-48, 6th Main Road, Shanthi Colony, Anna Nagar West, Chennai – 600 040.	
Chennai	The Stenographers' Guild, 1, Guild Street, T. Nagar, Chennai – 600 017.	
Chennai	Chellamel Womens' College, No. 112, Anna Salai, Guindy, Chennai - 600 032.	
Hyderabad	Urdu Hall Trust, 3-6-157/1, Gulshan-E-Habib, Himayatnagar, Hyderabad - 500 029.	
Hyderabad	St. Anns Degree College for Women, Door No.12-2-823/1, Santosh Nagar Colony, Mehedipatnam, Hyderabad - 500 028.	
Hyderabad	Kasturba Gandhi Degree & P.G. College for Women, Street No. 10, Aswini Colony, West Marredpally, Secunderabad - 500 026.	

#### **EASTERN REGION**

Kolkata	The Institute of Cost Accountants of India, CMA Bhawan, 12, Sudder Street, Kolkata – 700 016.
Kolkata	The Institute of Cost Accountants of India, Eastern India Regional Council, CMA Bhawan, 84, Harish Mukherjee Road, Kolkata – 700 025.
Kolkata	Tirthapati Institution, 142/1, Rashbehari Avenue, Gariahat, Kolkata – 700 029.
Kolkata	Netaji Nagar Vidyamandir, 170/436, N.S.C. Bose Road, Regent Estate, Kolkata – 700 092.
Kolkata	All India Manufacturer's Organisation, West Bengal State Board, ILACO House, Gr. Fl., 1 & 3, Brabourne Road, Kolkata – 700 001.
Kolkata	Park Institution, 12, Mohan Lal Street, Kolkata – 700 004.
Kolkata	Bharatiya Vidya Bhavan, Block FA, Sector III, Salt Lake City, Kolkata - 700 097.
Kolkata	Behala High School, Behala, Kolkata – 700 060.
Kolkata	Sodepur Club, F-14, School Road, Sodepur, Kolkata - 700 110.
Kolkata	Subhash Institute, Near Colony More, Nabapally, Barasat, Kolkata – 700 126.

#### **NORTHERN REGION**

New Delhi	The Institute of Cost Accountants of India, Northern India Regional Council, CMA Bhawan, 3, Institutional Area, Lodi Road, New Delhi – 110 003.	
New Delhi	S.D. Education Society (Regd.), C/o. J.V.S.D.G.S.S. School, D-II, Link Road, (Opp. St. Hanuman Ji Statue), Near Jhamdewalan Metro Station, Karol Bagh, New Delhi – 110 005.	
New Delhi	Study Centre of NIRC, No.1 Panchkuian Road, R.K. Ashram, near R.K Ashram Metro Station, New Delhi-110 001.	
New Delhi	St. Lawrence Covent, Geeta Colony, Facility Centre, Delhi – 110 031.	
New Delhi	Red Roses Public School, D Block, Saket, New Delhi – 110 017.	
New Delhi	Nehru Bal Samiti, M-376, Masjid Moth, Near Jain Mandir, Opp. Ansal Plaza, South Extn. II, New Delhi-110 049.	

Any voter in such a place wishing to vote may send a request in writing giving his name, membership number and the address of the polling booth in which he would like to be attached. Such request should reach the Returning Officer at the Institute's Headquarters at CMA Bhawan, 12, Sudder Street, Kolkata – 700 016 within one month from the date of this notice.

(Kaushik Banerjee) Returning Officer & Secretary

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# NEWS FROM THE INSTITUTE

#### EASTERN INDIA REGIONAL COUNCIL

EIRC of the Institute in association with the Cuttack-Jagatsinghpur-Kendrapara (CJK) Chapter and in coordination with all chapters of Eastern India Regional council organized the Regional Cost Conference-2023 at Seven Pillars of Wisdom, Ravenshaw University, Cuttack on 28th and 29th January, 2023. The conference was inaugurated with the gracious presence of Swami Paramahamsa Prajnanananda, Spiritual Head, International Kriya Yoga, Shri Sujit Kumar, Hon'ble Member of Parliament, Rajya Sabha, Sj. Pratap Keshari Dev, Hon'ble Minister, Industries, Energy and MSME, Govt. of Odisha, Central and Regional Council Members of ICAI. CMA Pradip Kumar Das, CMD, IREDA chaired the Technical Session "Green, Clean and Affordable Energy Landscape" with keynote speakers including Ms. Poorva Mathur, Sr. Manager, IREDA, Cdr. Biswajit Nayak, Head of Operation, EV Drive Train Enterprise. The panelists deliberated on the transformations made in the country in the renewable sector in the recent years and focused on the future drives to meet energy requirements through various renewable sources ensuring ecological balance for the Country. Prof. (Dr.) Srikanta Patnaik, Director, IIMT, Bhubaneswar chaired the Technical Session "New Age Innovation in Finance and Accounts" with keynote speakers including CMA Rambabu Pathak Company Secretary, Eastern Coal Fields Limited and CMA Satya Sundar Mahasuar AGM (F), NALCO Ltd. CMA B Mallikarjuana Gupta and Shri Suresh Sivanandan, IRS, Director of Income Tax (I&CI), were the panelists of the session "Corporate Tax and GST@5- Litigation Management". Extensive deliberations were made on the pertinent issues of the GST for comprehensive approach to mitigate the litigations and ensures timely compliances. Risk Management practices in Business Value Chain session was quite interactive with deliberations made by CMA Siba Prasad Padhi, practicing CMA focusing the various management strategies to mitigate the risks of industries at large. CMA Sarada Bhusan Mohanty, Director (Finance), IRE Limited focused on the practices being followed by Core Industries to mitigate the corporate risks in turbulent situations. CMA Braja Kishore Dash, Group General Manager (Finance) and I/c ED, NALCO Ltd. deliberated on the topic with other keynote speaker, Er. Ashok Kumar Mishra, Expert- Contract Management. Dr. D. V. Ramana, Professor, XIMB, Bhubaneswar chaired the session on "Integrated Reporting- ESG framework" and focused on the inclusive reporting enabling the Stakeholders for making the comprehensive evaluation of the financials of the Corporates. CMA (Dr.) Sunil Kumar Gupta, MD, ICMAI Registered Valuers Organisation was the keynote speaker and highlighted the contributions of the CMAs in the integrated Reporting in the changing scenario. CFOs of various Corporates, Central and State PSUs deliberated during the CFO Meet on the key issues of different industries and the way out that would facilitate the decision making process for better discharging of functions more diligently. Advisory Meet was also conducted with deliberations made by former Presidents of ICAI to aware the members on the developments being made by the Institute to meet the requirements of the Industries, Practitioners and students at large. The success of



Conference was contributed by CMA Niranjan Mishra, CCM, Sri B. B Nayak, Chairman, EIRC, Sri L K Mishra, Chairman, CJK Chapter and with the untiring efforts by the Central and Regional Council members, managing committee members of CJK chapter, Bhubaneswar chapter, young CMA members and employees, officers of the institute.



# THE INSTITUTE OF COST ACCOUNTANTS OF INDIA TALCHER-ANGUL CHAPTER

CMA A.Acharya, Chairman of Talcher-Angul Chapter felicitated CMA Ramesh Chandra Joshi, Director (Finance) of Nalco with a bouquet of flowers on behalf of Institute and requested his support to the Profession. He apprised about the latest developments on social stock exchange and role of CMAs and in the course of discussion made a virtual conference with CMA Chittaranjan Chattopadhyay, Chairman, BFSI Board of ICAI. CMA Chattopadhyay discussed on the recent accolades of the Institute. Seen in the photo Shri A Acharya, Shri R.C. Joshi,D(F), Sri B S Pradhan ED (Nalco) and other senior members of Chapter.



#### SOUTHERN INDIA REGIONAL COUNCIL

SIRC organized a Professional Development Program on the topic "GSTR-9 & 9C" on 07.01.2023 at its premises. The guest speaker was CMA J. Murali, Tax Consultant, Chennai. A similar Professional Development Program on the Topic: "Valuation in Indirect Taxes" was organized on 20.01.2023 at its premises whereat the guest speaker was CMA J. V. Niranjan, Advocate, Chennai.

The 74th Republic Day celebrations were conducted at SIRC premises on 26th January, 2023. CMA Sankar P. Panicker, Chairman, SIRC- ICAI hoisted the National Flag and delivered the Republic Day address. CMA Vijay Kiran Agastya, Secretary, SIRC-ICAI and CMA Rajesh Sai Iyer, Treasurer, SIRC-ICAI addressed the gathering. Members, Staff & Students participated in the celebrations.

SIRC organized a professional development program on the topic "Transfer Pricing Recent Trends & Case Laws" on 28.01.2023 at its premises. The guest speaker was CMA N. Madhan, Partner, Price Waterhouse & Co. LLP, Chennai.

Career Guidance Programmes were conducted at the New College on 25.01.2023 and at Kumararani Meena Muthiah College of Arts and Science on 31.01.2023.





#### THE INSTITUTE OF COST ACCOUNTANTS OF INDIA SALEM CHAPTER

The Chapter conducted a seminar on 11th January 2023 at its premises on the theme 'How to handle GST Scrutiny'.

The speaker CMA (Dr.) K Nagarajan, Practicing Cost Accountant, Namakkal explained the types of assessment, scrutiny procedure, standard operating procedure for scrutiny of returns etc. He stated that Directorate General of Analytics and Risk Management (DGARM) is the authority to select GSTINs based on certain parameters.

# THE INSTITUTE OF COST ACCOUNTANTS OF INDIA BENGALURU CHAPTER

On 07.01.2023, the Chapter conducted a PD Programme on "Commodity Trading" whereat Sri. S. Sudheendra, Managing Director, NKG India Coffee Private Limited, CMA Satish R., Chairman BCCA, CMA Pranabandhu Dwibedy, Treasurer BCCA, CMA Vijayalakshmi K. R. Coaching Chairperson, CMA Sreepada H. R. PD Chairman BCCA, CMA Vishwanath Bhat, Vice Chairman, SIRC were the speakers.

The Chapter conducted a one-day Seminar jointly with Mysuru Chapter on "Industry 4.0: Changing Technologies for Manufacturing and GST Returns: A Compliance Matrix" at SDM Institute for Management Development, Mysuru. CMA (Dr.) Chidambaraganapaiah, Senior Director, Oracle Bengaluru, CMA Premanath Murthy, International coach for Strategic Management, Bengaluru, CMA Satish R. Chairman BCCA, CMA Jayaram A. V. Vice chairman BCCA, CMA Raghavendra B. K. Secretary BCCA, CMA Pranabandhu Dwibedy, Treasurer BCCA, CMA Vijayalakshmi K. R. Coaching Chairperson, CMA Venkataraman G. N. Former President ICAI, CMA Vishwanath Bhat, Vice Chairman SIRC, CMA Purushothaman R. Chairman Mysore, CMA Dr. Trinesh T.R. Vice Chairman Mysore, CMA Ashok Kumar Shetty, Secretary, Mysore Chapter, CMA Ashok Kumar, Treasurer, Mysore Chapter and CMA Ramesh S. Former Chairman SIRC were the speakers.

The Chapter organized many career counselling programmes at various colleges from 09th January to 18th January 2023.





# THE INSTITUTE OF COST ACCOUNTANTS OF INDIA HYDERABAD CHAPTER

The Chapter conducted a programme on "An insight into filing of GSTR 9 & GSTR 9C FY 2001-2022" on 18.12.2022. CMA (Dr.) K.Ch. A.V.S.N. Murthy, Central Council Member was the chief guest and CMA Vijay Kiran Agastya was the special invitee. Smt. Roopali briefed about the basics and contents of GSTR 9 and GSTR 9C, changes in annual return for FY 2021-22 in Form GSTR 9 and changes in reconciliation statement for FY 2021-22 in Form GSTR 9C.

The Chapter organised a programme on "Emerging Opportunities under IBBI" on 19.12.2022. CMA (Dr.) K.Ch. A.V.S.N. Murthy Central Council Member was the chief guest and CMA Vijay Kiran Agastya was the special invitee. Smt N. Lakshmi who handled this session explained the classes and types of assets, opportunity under companies act, valuation approaches, valuation issues, membership recognition, CPE hrs, Code, inception of insolvency laws in India, applicability, scope & structure, broad CIRP process, insolvency exam syllabus etc.

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#### WESTERN INDIA REGIONAL COUNCIL

Regional Cost Convention organised by WIRC on 20th & 21st January 2023 at Mumbai.



Colorful Souvenir was released at the hands of dignitaries during Inaugural session of WIRC Regional Cost Convention held on 20th & 21st January, 2023 at Mumbai.



Chaitanya Mohrir, Treasurer WIRC-ICAI, felicitating CMA Vijender Sharma, President ICAI during RCC 2023 held on 20th & 21st January 2023 at Mumbai, also seen CMA Shriram Mahankaliwar, Chairman WIRC-ICAI & CMA Ashish Bhavsar, Secretary WIRC-ICAI.



CMA Shriram Mahankaliwar, Chairman WIRC-ICAI, felicitating Shri Unmesh Wagh, Deputy Chairman, JNPA & Guest of honour during Regional Cost Convention 2023.



CMA Chaitanya Mohrir Treasurer WIRC- ICAI, CMA P. V. Bhattad, Past President ICAI & Advisor, Shri C.I. Acharya, Director - Finance, Shipping Corporation of India Ltd, CMA (Dr) D. V. Joshi, Past President ICAI & Advisor WIRC, CMA Ashish Bhavsar, Secretary WIRC-ICAI, & CMA Shriram Mahankaliwar, Chairman, WIRC-ICAI during valedictory session of RCC.

# THE INSTITUTE OF COST ACCOUNTANTS OF INDIA PUNE CHAPTER

The Chapter arranged CEP Webinar through Google Meet video conferencing on the subject "Analysis of Important Changes in 48th GST Council Meeting" on 16th January 2023 at CMA Bhawan, Karvenagar. CMA (Dr.) Sanjay Bhargave, Practicing Cost Accountant was the speaker. CMA Rahul Chincholkar, Managing Committee Member of the Chapter welcomed and introduced the speaker to the participants. CMA Rahul Chincholkar, Managing Committee Member of the Chapter delivered vote of thanks.

The Chapter conducted a Career Counselling session at P.E.S.Modern College of Arts, Science & Commerce, Shivajinagar on Tuesday 17th January 2023. Prof. Vijay Gaikwad, Principal of Modern College was the chief guest and Prof. Rasika Datey was the coordinator. CMA Abhay Deodhar and CMA Rahul Chincholkar Managing Committee Members of the Chapter were the faculty for the session. Shri Sandip Joshi and Smt Geeta Modak administration staff of the Chapter were also present at the programme. The speakers explained about the CMA Course which is statutorily recognized by the parliament and how it enriches with higher degree of employable skills and guarantees lifelong employability, requirement of professional accountants to serve the requirement of the Indian economy. They also explained the New Syllabus 2022 and the admission formalities within the cut-off date for June 2023 exam. Shri Sandip Joshi explained the CMA Course, and the importance of costing in today's globalisation. The speakers also gave information about the CAT Course (Certified Accounting Technician) conducted by Institute.

The Chapter conducted a Career Counselling session at Kaveri College of Arts, Science and Commerce, Erandwane, Pune on Wednesday, 18th January 2023. Dr. Deepa Sathe, HOD of the College was the coordinator for this CAT course

Counselling session. CMA Sujata Budhkar, Managing Committee member of the Chapter was the faculty for the session Pune Chapter administration, staff members Shri Sandip Joshi and Smt Geeta Modak were also present at the programme. CMA Sujata Budhkar gave information about the "CAT Course (Certified Accounting Technician)" conducted by the Institute and explained how this course is innovative and employment-oriented. Students' response for this session was overwhelming.

The Chapter celebrated the 74th Republic Day with Flag hoisting on 26th January 2023 at the Chapter premises.





# THE INSTITUTE OF COST ACCOUNTANTS OF INDIA PIMPRI CHINCHWAD AKURDI CHAPTER

The Chapter conducted a webinar on 'Price Valuation/ Escalation in Electrification Contracts and Opportunity for CMAs in PV' on the evening of 7.1.2023 through Google Digital platform. CMA Dhananjay Kumar Vatsyayan, Chairman of the Chapter welcomed the audience and the speaker CMA Santosh Korade. CMA Sagar Malpure, Chairman, PD Committee introduced the speaker. CMA Santosh Korade started his address with price variation. A question-answer session was conducted at the close. The session was interactive. The programme concluded with a vote of thanks.

The Chapter in association with the Indira Global Business School organized a National Conference on "Advancements in Business and Management Sciences: Embracing Change, Sustainability & Transformation." The objective was to provide a platform for budding researchers as well as





experienced researchers to state their view by taking into consideration the concepts of sustainability, growth and transformation within the business enterprises. The Conference held at the premises of Indira Global Business School commenced with a warm welcome to the chief guests by the volunteers followed by the lighting of the lamp of

knowledge by the chief guests. The felicitation of all the guests was done by Director of Indira Global Business School Dr. Virendra Tatake and the Faculty Members of the Institute. CMA Dhananjay Vatsayana, Chairman of the Chapter, Dr. Parag Kalkar, Dean, Faculty of Commerce and Management, Savitribai Phule Pune University, Dr. Pandit Mali, Executive Director, University Programs, Indira Group of Institutions and Dr. Dipanjay Bhalerao, Dean, Research, Indira Institute of Management Pune were the chief guests at the programme. Dr. Parag Kalkar stated that in this technology driven world the emotions and thought processes are tempered by artificial intelligence and various digital tools and apps. CMA Dhananjay Kumar Vatsyayan shared the glimpses of Indian educational history and its direct impact on our national wealth over a period of time. He also stated various examples to explain the following points – "Only education is not enough, focus also matters", "You are your best friend and worst enemy", "Competition is higher, not only within yourself but also with respect to market". He therefore advised to do additional courses to equip oneself. Dr. Pandit Mali and Dr. Dipanjan Bhalerao also guided the MBA Students. The brief idea about the motive behind the conference and the importance of research were explained precisely by Dr. Virendra Tatake. The program ended with a vote of thanks.

The Chapter conducted the inaugural function of the 24th batch of Online Coaching classes on 14th January 2023 through Google Digital Platform. CMA Dhananjay Kumar Vatsyayan, Chairman of the Chapter welcomed the audience and CMA Lalitha Deepak introduced the Chief Guest CMA Dr. Virendra Tatake, Director, Indira Global Business School, Pune. CMA Dhananjay Kumar Vatsyayan focused on the activities of the Chapter. Faculty members and Chapter staff are ready to provide help related to the course, its syllabus and related matters like mandatory training, examination notification etc. CMA (Dr.) Virendra Tatake in his address congratulated all the students for choosing CMA course and guided them about future career. The faculty members of the Chapter also interacted with the students and guided them. The programme concluded with the vote of thanks.

The Chapter celebrated the 74th Republic Day on January 26, 2023 at its premises. CMA Mahendra Bhombe, Chapter Chairman and Regional Council Member, WIRC of The ICAI hoisted the tricolour. CMA Mahendra Bhombe, RCM, Chairman CMA Dhananjay Kumar Vatsyayan, P D Committee Chairman, CMA Sagar Malpure and senior faculty member CMA Hanif Shaikh addressed the members and students on this occasion.

#### THE INSTITUTE OF COST ACCOUNTANTS OF INDIA AHMEDABAD CHAPTER

The Chapter organized a CEP on "Start to End" compliances under company law / LLP Act on 29th December 2022. CMA Malhar Dalwadi Chairman of the Chapter welcomed and introduced the speaker CS Vivek Vakharia, who gave a detailed presentation and explained the subject. The





presentation was very useful to the participants.

The Chapter organized a campus placement for qualified CMAs of June'22 exams on 05/01/2023. The WIRC jointly with the chapter organized a half day seminar under series of "Reach to Un-Reach" on the theme "CMAs - Growth Partner to Corporates" at MEHSANA on 7th January 2023. In the seminar, CCM CMA Ashwin Dalwadi, RCM & Secretary-WIRC CMA Ashish Bhavsar, Chapter Chairman CMA Malhar Dalwadi, Chief Guest Shri Asit Patel and Chairman Secretary CMA Mitesh Prajapati were the dignitaries who graced the function with their presence. CMA Malhar Dalwadi, Chairman of the Chapter introduced the dignitaries and delivered the inaugural address. CCM CMA Ashwin Dalwadi and RCM, Secretary-WIRC CMA Ashish Bhavsar also addressed the gathering. CMA Mitesh Prajapati, Secretary of the Chapter proposed a vote of thanks. CMA R B Kothari, Past Chairman of Chapter and CMA P D Modh, past chairman of chapter were the main speakers at the seminar. The seminar was followed by dinner.

The chapter organized a CEP on "PF & ESIC on Labour Law" on 18th January 2023. Mr. Ashish Gandhi welcomed and introduced the speakers CMA Bhavesh Ramchandani and CMA Ravi Nara. CMA Alok Sharma, Member felicitated the speakers and presented the mementos. The speaker gave a detailed presentation and explained the subject in greater details. The presentation was very useful to the participants.

An interactive open house discussion with Shri Shiv Kumar Sharma, Commissioner CGST, Shri P B Meena, Additional Commissioner, CGST and Shri Prashant Kumar, Joint Commissioner CGST was held on 18 January 2023. Cost &

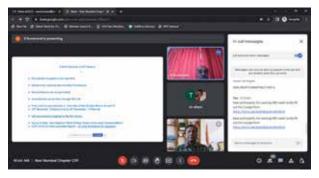
Management Accountants, Chartered Accountants, Company Secretaries, members of Gujarat Chamber of Commerce and Industry Indian Drug Manufacturers' Association, GST Bar Associations, Federation of Indian Chambers of Commerce & Industry and Lawyers Associations participated in the discussions. CMA Malhar Dalwadi, Chairman of the Chapter participated in the Interactive open house discussion.

A guidance lecture for upcoming online examination of foundation students was arranged on 6th Dec'2022. Chairman of Oral Coaching, CMA Mitesh Prajapati explained the methodology and process to be followed by the students to appear in the online examinations.

# THE INSTITUTE OF COST ACCOUNTANTS OF INDIA NAVI MUMBAI CHAPTER

The Chapter conducted a Webinar CEP programme on "New Requirements for Filing GST Returns" on 22nd January 2023. The speaker was CMA R Kumaravel. CMA Vaidyanathan Iyer, Chairman of the Chapter welcomed the audience and introduced the speaker and stressed on understanding the various intricacies of the new requirements for filing GST Returns. The speaker deliberated on various new requirements for filing GST returns. The lucid presentation and the interactive workshop concluded with a vote of thanks proposed by CMA Vivek Bhalerao, PD Committee Chairman of the Chapter.

The Chapter conducted a Career Counselling Session on 28th January 2023 via Google Meet app at SIES College, Nerul. The speaker was CMA Vaidyanathan Iyer, Chairman of the Chapter. The speaker articulated the salient features of the CMA Course and explained that CMA Course is going Global and there is tremendous value addition with this qualification. He briefed salient features of the New Syllabus 2022, and explained the admission formalities within the cut-off date of 31-01-23 for June 2023 exams, oral coaching course curriculum and skills training comprising of SAP, Microsoft Word, Excel, Power point, Cambridge University CSS and e-filing training which will be organized for the benefit of the students as part of the curriculum. He emphasized on the importance of attending these sessions and advised the students not to miss any classes. He also explained that a qualified cost accountant is well trained and skilled to use the cost management techniques to maximize profits of his organisation. HOD Ms Swati Kulkarni and the Dean Ms Madhavi extended excellent support and co-operation for conducting the career counselling session for the college students.





#### **Key Budget Highlights FY 2023-24**

he Union Budget FY 2023-24 is centered around the vision of Amrit Kaal. The seven priorities, termed Saptarishi, adopted in the Union Budget FY 2023-24 to guide the country towards **Amrit Kaal**, thus providing a blueprint for an empowered and inclusive economy. Seven Priorities that they complement each other and act as the 'Saptarishi' guiding us through the Amrit Kaal. They are as follows:

- Inclusive Development
- Reaching the last mile
- Infrastructure & Investment
- Unleashing the potential
- Green Growth
- Youth Power
- Financial Sector

The Budget for this year aims to further strengthen India's economic status.

#### **Inclusive Development**

Sabka Saath Sabka Vikas has facilitated inclusive development.

- Building Digital Public Infrastructure for Agriculture
- Setting up Agriculture Accelerator Fund
- Atmanirbhar Clean Plant Programme to boost availability of disease-free, quality planting material for high value horticultural crops
- Making India Global Hub for Millets: 'Shree Anna' such as jowar, ragi, bajra, kuttu, ramdana, kangni, kutki, kodo, support to be provided to IIMR Hyderabad for promoting research.
- Government will launch a new sub-scheme of PM Matsya Sampada Yojana to further enable activities of fishermen, fish vendors, and micro & small enterprises, improve value

- chain efficiencies, and expand the market.
- Setting up of widely available storage capacity multipurpose cooperative societies, primary fishery societies and dairy cooperative societies in uncovered panchayats and villages in the next 5 years.
- Health: one hundred and fifty-seven new nursing colleges will be established in co-location with the existing 157 medical colleges established, mission to eliminate Sickle Cell Anaemia, on Medical Research, select ICMR Labs will be made available for research by public and private medical college faculty and private sector R&D teams for encouraging collaborative research and innovation.
- Education and Skilling: Revamped treacher's training through District Institute of Education and, setting up of National Digital Library for children and adolescents, States to be encouraged to set up physical library at panchayat and ward level.

#### Reaching the last mile

- Pradhan Mantri PVTG Development Mission will be launched.
- More teachers to be recruited for 740 Eklavya Model Residential Schools
- Financial assistance to be given for sustainable micro irrigation and filling up of surface tanks for drinking water in drought prone region of Karnataka
- O Bharat Shared Repository of Inscriptions' will be set up in a digital epigraphy museum, with digitization of one lakh ancient inscriptions in the first stage.

#### Infrastructure & Investment

- Continuation of the 50-year interest free loan to state governments to spur investment in infrastructure
- Creating urban infrastructure in Tier 2 and Tier 3 cities via establishment of UIDF
- Capital outlay of Rs 2.40 lakh crore provided for the Railways
- 100 transport infrastructure projects identified for end to end connectivity

#### Unleashing the potential

- Make A-I in India and Make A-I work for India", three centres of excellence for Artificial Intelligence will be set-up in top educational institutions.
- An Entity DigiLocker will be set up for use by MSMEs, large business and charitable trusts for storing and sharing documents online
- One hundred labs for developing applications using 5G services will be set up
- National Data Governance Policy will be brought out, which will enable access to anonymized data.
- Phase 3 of E Court to be launched
- R & D grant for Lab grown diamonds
- Vivad Se Vishwas I relief for MSME affected during Covid 19
- Vivad Se Vishwas II Faster settlement of contractual disputes of Govt and Govt undertakings

#### **BUDGET - 2023**

#### **Green Growth**

- New 'waste to wealth' plants under GOBARdhan (Galvanizing Organic Bio-Agro Resources Dhan) scheme will be established
- MISTHI to be taken up for mangrove plantation along the coastline
- Bio-Input Resource Centres will be set-up
- Scrapping of old vehicles

#### **Youth Power**

- Government has formulated the National Education Policy
- States will be encouraged to set up a Unity Mall in their state capital or most prominent tourism centre or the financial capital for promotion and sale of their own ODOPs (one district, one product), GI products and other handicraft products, and for providing space for such products of all other States.

#### **Financial Sector**

- Maximum deposit limit for Senior Citizen Savings Scheme will be enhanced from Rs 15 lakh to Rs 30 lakh
- One-time new small savings scheme, Mahila Samman Savings Certificate, will be made available for a two-year period up to March 2025. This will offer deposit facility upto Rs 2 lakh in the name of women or girls for a tenor of 2 years at fixed interest rate of 7.5 per cent with partial withdrawal option
- To revamp the credit guarantee scheme for MSMEs additional collateral-free guaranteed credit of Rs 2 lakh crore expanded

#### **Tax Proposals**

- There are five major announcements relating to the personal income tax. The rebate limit in the new tax regime has been increased to ₹ 7 lakh
- The benefit of standard deduction has been extended to the salaried class and the pensioners including family pensioner under the new tax regime
- The highest surcharge rate in personal income tax has been reduced from 37% to 25% in the new tax regime for income above ₹2 crore.
- The limit of tax exemption on leave encashment on retirement of non-government salaried employees has been increased from ₹3 lakh to ₹25 lakh.

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  The limit of tax exemption on leave encashment on retirement of non-government salaried employees has

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- The new income tax regime has been made the default tax regime. However, the citizens will continue to have the option to avail the benefit of the old tax regime
- The Budget proposes enhanced limits for micro enterprises and certain professionals for availing the benefit of presumptive taxation, to support MSMEs in timely receipt of payments, the Budget allows deduction for expenditure incurred on payments made to them only when payment is actually made.
- Deduction from capital gains on investment in residential house has been capped at ₹ 10 crore.
- Extension of period of tax benefits to funds relocating to

- IFSC, GIFT City till 31.03.2025
- Common IT return form for tax payer convenience
- New cooperatives that commence manufacturing activities till 31<sup>st</sup> March next year shall get the benefit of a lower tax rate of 15%.
- The Budget proposes a higher limit of ₹ 3 crore for TDS on cash withdrawal for cooperative societies.
- The Budget provides an opportunity to sugar cooperatives to claim payments made to sugarcane farmers for the period prior to assessment year 2016-17 as expenditure. A higher limit of ₹ 2 lakh per member has been provided for cash deposits to and loans in cash by Primary Agricultural Cooperative Societies and Primary Cooperative Agriculture and Rural Development Banks.
- The Budget proposes to extend the date of incorporation for income tax benefits to start-ups from 31.03.2023 to 31.03.2024. It also provides the benefit of carry forward of losses on change of shareholding of start-ups from 7 years of incorporation to 10 years
- The Budget provides for amending the CGST Act so as to raise the minimum threshold of tax amount for launching prosecution under GST from ₹ 1 crore to ₹ 2 crore, except for the offence of issuance of invoices without supply of goods and services or both. The compounding amount will be reduced from the present range of 50 to 150% of tax amount to the range of 25 to 100%. It will also decriminalize certain clauses of the Act like obstruction and preventing of any officer from discharge of his duties, deliberate tempering of evidence or failure to supply the information.
- The number of basic customs duty rates on goods, other than textiles and agriculture, has been reduced from 21 to 13. There are minor changes in the basic customs duties, cesses and surcharges on items including toys, bicycles, automobiles and naphtha.
- Oustoms duty exemption has been extended to import of capital goods and machinery required for manufacture of lithium-ion cells for batteries used in electric vehicles.
- Relief in customs duty on import of certain parts and inputs like camera lens. The concessional duty on lithiumion cells for batteries will continue for another year. Basic customs duty on parts of open cells of TV panels has been reduced to 2.5%. The Budget also proposes changes in the basic customs duty to rectify inversion of duty structure and encourage manufacturing of electrical kitchen chimneys.
- Denatured ethyl alcohol has been exempted from basic customs duty. Basic customs duty has also been reduced on acid grade fluorspar and crude glycerin. Duty is being reduced on key inputs for domestic manufacture of shrimp feed
- The import duty on silver dore, bars and articles has been increased to align them with that on gold and platinum. The basic customs duty rate on compounded rubber has been increased. National Calamity Contingent Duty on specified cigarettes has been revised upwards by about 16%. The basic customs duty on crude glycerin for use in manufacture of epicholorhydrin is proposed to be reduced from 7.5% to 2.5%.

Sources: india.gov.in, pib.gov.in

## Direct & Indirect Tax Updates - January 2023

#### **DIRECT TAXES**

- Notification No: 1/2023 dated 5<sup>th</sup> January 2023: Addendum to Notification 2 of 2021 Format, Procedure and Guidelines for submission of Statement of Financial Transactions (SFT) for Interest income (Abolishing of limit of Rs 5000). The Remarks column at Annexure A is hereby being modified and may be read as "The information is to be reported for all account/deposit holders where any interest exceeds zero per account in the financial year excluding Jan Dhan Accounts".
- Notification Dated 16<sup>th</sup> January 2023: In exercise of the powers conferred by clause (ii) of sub-Section (1) of Section 35 of the Income-tax Act, 1961 (43 of 1961) read with Rules 5C and 5E of the Income-tax Rules, 1962, the Central Government hereby approves 'Indian Institute of Science Education and Research, Tirupati (PAN: AAAA-19820P)' under the category of 'University, College or Other Institution' for 'Scientific Research' for the purposes of clause (ii) of sub Section (1) of Section 35 of the Income-tax Act, 1961 read with Rules 5C and 5E of the Income-tax Rules, 1962.
- O Notification No: 2/2023 dated 25th January 2023: In exercise of powers conferred by sub-clause (iv) of clause (c) of the Explanation 1 to clause (23FE) of section 10 of the Income-tax Act, 1961 (43 of 1961) (hereinafter referred to as the Act), the Central Government hereby specifies the pension fund, namely, the California Public Employees Retirement System (PAN: AAATC6038J), (hereinafter referred to as the assessee) as the specified person for the purposes of the said clause in respect of the eligible investment made by it in India on or after the date of publication of this notification in the Official Gazette but on or before the 31st day of March, 2024 (hereinafter referred to as the said investments) subject to the fulfilment of specified conditions.

#### **INDIRECT TAXES**

#### **GST**

O Notification No. 01/2023-Central Tax dated 4th January 2023: In exercise of the powers conferred under section 3 read with section 5 of the Central Goods and Services Tax Act, 2017 (12 of 2017) and section 3 of the Integrated Goods and Services Tax Act, 2017(13 of 2017), the Central Govern-

ment hereby makes the following amendments in the notification of the Government of India, Ministry of Finance (Department of Revenue) No. 14/2017-Central Tax, dated the 1st July, 2017. In the said notification, in the Table, after Sl. No. 8 and the entries relating thereto, the following Sl. No. and entries shall be inserted.

Sl No.	Officers	Officers whose powers are to be exercised
	Additional	Superintendent
	Assistant Drector,	
	Goods and	
	Services Tax	
8A	Intelligence or	
٥Α	Additional Assistant	
	Director, Goods and	
	Services Tax or	
	Additional Assistant	
	Director, Audit	

- O Circular No. 89/01/2023-GST Dated 13th January 2023: Clarification regarding GST rates and classification of certain goods: (a) Applicability of GST on by-products of milling of Dal/ Pulses such as Chilka, Khanda and Churi/Chuni (b) Clarification regarding 'Carbonated Beverages of Fruit Drink' or 'Carbonated Beverages with Fruit Juice (c) Applicability of GST on Snack pellets manufactured through extrusion process (such as 'fryums') (d) Applicability of Compensation cess on Sports Utility Vehicles (SUVs).
- Oircular No. 190/02/2023-GST Dated 13th January 2023: Clarifications regarding applicability of GST on certain services: (a) Applicability of GST on accommodation services supplied by Air Force Mess to its personnel (b) Applicability of GST on incentive paid by MeitY to acquiring banks under Incentive scheme for promotion of RuPay Debit Cards and low value BHIM-UPI transactions.

#### **CUSTOMS**

• Notification No.01/2023—Customs Dated 13<sup>th</sup> January 2023: In exercise of the powers conferred by sub-section (1) of section 25 of the Customs Act, 1962 (52 of 1962), the Central Government,

#### STATUTORY UPDATES

on being satisfied that it is necessary in the public interest so to do, hereby exempts the goods of the description specified in column (3) of the Table below, falling within the Chapter, heading, subheading or tariff item of the First Schedule to the Customs Tariff Act, 1975 (51 of 1975) specified in column (2) of the said Table, when imported into India by Central Government or State Governments, from the whole of the duty of customs leviable thereon under the said First Schedule: COVID 19 Vaccine. This notification shall come into force on 14thJanuary, 2023 and remain in force upto and inclusive of the 31stMarch, 2023.

- Oircular No. 01/2023-Customs Dated 11<sup>th</sup> January 2023: Customs (Assistance in Value Declaration of Identified Imported Goods) Rules, 2023.
- Circular No. 02/2023-Customs Dated 11<sup>th</sup> January 2023: Faceless Assessment Standard Examination Orders through RMS -Phased implementation of Standardized Examination Orders through RMS.

#### **EXCISE**

• Notification No.01/2023-Central Excise Dated 2<sup>nd</sup> January 2023: In exercise of the powers conferred by section 5A of the Central Excise Act,1944(1of1944) read with section 147 of the Finance Act,2002(20of2002), the Central Government, on being satisfied that it is necessary in the public interest so to do, hereby makes the following further amendments in the notification of the Government of India in the Ministry of Finance (Department of Revenue),No.18/2022-Central Excise, dated the19thJuly,2022

In the said notification, in the Table,-

- i. against S.No.1, for the entry in column (4), the entry "Rs.2,100 per tonne" shall be substituted;
- ii. against S.No.2, for the entry in column (4),the entry "Rs.4.50perlitre" shall be substituted
- Notification No.02/2023-Central Excise Dated 2<sup>nd</sup> January 2023: In exercise of the powers conferred by section5A of the Central Excise

Act,1944(1of1944) read with section147 of Finance Act,2002 (20of2002),the Central Government, on being satisfied that it is necessary in the public interest so to do, hereby makes the following further amendments in the notification of the Government of India in the Ministry of Finance (Department of Revenue),No.04/2022-Central Excise, dated the30thJune,2022,-(i)againstS.No.2,-fortheentryincolumn(4),theentry"Rs.5perlitre"shall be substituted.

Notification No.03/2023-Central Excise Dated 16<sup>th</sup> January 2023: In exercise of the powers conferred by section 5A of the Central Excise Act,1944(1of1944) read with section 147 of the Finance Act,2002 (20of2002),the Central Government, on being satisfied that it is necessary in the public interest so to do, hereby makes the following further amendments in the notification of the Government of India in the Ministry of Finance(Department of Revenue),No.18/2022-Central Excise, dated the19thJuly,2022.

In the said notification, in the Table, -(i) against S. No.1, for the entry in column(4), the entry "Rs.1,900 per tonne" shall be substituted; (ii) against S.No.2, for the entry in column(4), the entry "Rs.3.50 per litre" shall be substituted.

Notification No.04/2023-Central Excise Dated 16<sup>th</sup> January 2023: In exercise of the powers conferred by section 5A of the Central Excise Act,1944(1of1944) read with section 147of Finance Act,2002(20of2002), the Central Government, on being satisfied that it is necessary in the public interest so to do, hereby makes the following further amendments in the notification of the Government of India in the Ministry of Finance (Department of Revenue),No.04/2022-Central Excise, dated the 30th June, 2022.

In the said notification, in the Table, -(i) against S.No.2, for the entry in column(4), the entry "Rs.3.50 per litre "shall be substituted.

Sources: incometax.gov.in, cbic.gov.in

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### **Advisory for Renewal of Certificate of Practice For 2023-24**

The members of the Institute holding Certificate of Practice (CoP) having validity up to 31st March, 2023 are requested to comply with the following guidelines for renewal of their Certificate of Practice:

- 1. The following changes consequent to amendment of the Cost and Works Accountants Regulations, 1959 vide Notification dated 4th February, 2011 published in the Gazette of India may be noted:
  - a. The validity of a Certificate of Practice (CoP) is for the period 1st April to 31st March every year unless it is cancelled under the provisions of the Cost and Works Accountants Act and Regulations, 1959 as amended.
  - b. The Certificate of Practice issued shall automatically be renewed subject to submission of prescribed Form M-3 (duly filled in) and payment of renewal fee\* and annual membership fee\*.
  - c. From the year 2011-12 onwards, letter for renewal Certificate of Practice is not being issued. However, the members concerned may download the renewal status from the Institute's website <a href="www.icmai.in">www.icmai.in</a>. Link: <a href="https://eicmai.in/MMS/Login.aspx?mode=EU">https://eicmai.in/MMS/Login.aspx?mode=EU</a>
- 2. It may please be noted that under Section 6 of the Cost and Works Accountants Act, 1959, **both the Annual Membership Fee\* and Fee for Renewal of Certificate of Practice\*** falls due on 1st April each year.
- 3. Special attention is invited to the fact that the validity of a Certificate of Practice expires on **31st March** each year unless it is renewed on or before the date of expiry in terms of the amended Regulation 10 of the Cost and Works Accountants Regulations, 1959. Hence, a member shall be required to renew the certificate of Practice within **31st March** every year.
- 4. If the Certificate of Practice of a member is not renewed within 31st March, 2023, his/her status of CoP from 1st April 2023 till the date of renewal would be "Not Active".
- 5. Subject to what has been mentioned in Sl. No. 3 & 4 above, a member can get his/her Certificate of Practice for 2023-24 renewed within **30th June**, **2023**. If application for renewal of Certificate of Practice is made after 30th June, 2023, the member's Certificate of Practice for 2023-24 will not be renewed but will be considered as a case of restoration of Certificate of Practice till 31/03/2024. This restoration is applicable only to the CoP holders whose CoP is valid till 31/03/2023. For restoration of Certificate of Practice, he/she has to pay Rs.500/-\* as restoration fee in addition to the **prescribed fees** \* **along with duly filled in form 'M-3'**.
- 6. It may please be noted that mere payment of fees \* alone will not be sufficient for renewal of Certificate of Practice. Application in prescribed Form M-3 is to be used for Renewal of Certificate of Practice duly filled in and signed is **mandatory**. The soft copy of prescribed Form M-3 for Renewal of Certificate of Practice can be downloaded from Institute's website <a href="www.icmai.in">www.icmai.in</a>.

Link: https://eicmai.in/external/PublicPages/WebsiteDisplay/PractitionersForms.aspx

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

undergone minimum number of hours of such training. The detailed guidelines in this connection are available on Institute's website www.icmai.in.

Link: https://icmai.in/upload/Institute/CPD/CEP Guidelines 01042021 31032024.pdf

8. For renewal and application of new CoP issued on and from 1st February, 2019, please refer to Notification F. No. CWA/21/2019 dated 1st February, 2019 and subsequent corrigendum dated 8th March, 2019.

Link: <a href="https://icmai.in/icmai/news/5435.php">https://icmai.in/icmai/news/5435.php</a>). Accordingly new CoP holders on and from 1st February, 2019 are required to comply with Mandatory Capacity Building Training (MCBT) requirement for renewal of CoP for the FY 2023-24.

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

- a. Application for renewal of Certificate of Practice upto 31st March, 2024 has to be made in prescribed Form M-3 which may be filled online or through hard Copy of form duly filled in and signed on both sides together with Renewal Certificate of Practice fee of Rs.2,000/-\* and all other dues to the Institute on account of annual membership fees \* and entrance fees \*.
- b. The annual membership fee for Associate and Fellow members are Rs.1,000/-\* and Rs.1,500/-\* respectively. The entrance fee \* for Associate and Fellow members is Rs. 1,000/-\* each payable at a time at the time of application for admission to Associateship or advancement to Fellowship, as the case may be.
- c. The fees \* may be paid online or by Demand Draft/at par cheque payable at Kolkata if remitted by post to the Headquarters of the Institute.
- d. Members should note that the renewal of Certificate of Practice can be effected only after receipt of the prescribed fees \* along with duly filled in form at the Headquarters of the Institute and on meeting the stipulated CEP credit hours. Mere submission of the same at the Regional Councils or Chapters will not be sufficient. Members are advised to make payment directly to the Headquarters or use the online facility of submission of application and payment to avoid any delay.

All practising members are advised to send their application for renewal of Certificate of Practice for the year 2023-24 along with other requirements as indicated above immediately so as to reach the Institute's Office at Kolkata well in advance to enable the Institute to issue the renewal of Certificate by 31st March, 2023.

#### **Renewal of Part-time Certificate of Practice**

the following	g form or in a form as near thereto as possible if the practising member has undertaken any employment been a change in employment:
	"Shri/Smt is employed as designation)
	permitted, notwithstanding anything contained in the terms of his/her employment, to engage himself/herself in the practice of profession of Cost Accountancy in his/her spare time in addition to his/her regular salaried employment with us.
	Signature of Employers with seal of Organisation"
•	be noted that members holding Part-time Certificate of Practice (CoP) are not eligible to undertake ignments like Cost Audit, Central Excise Audit, etc.

\*GST is applicable against payment

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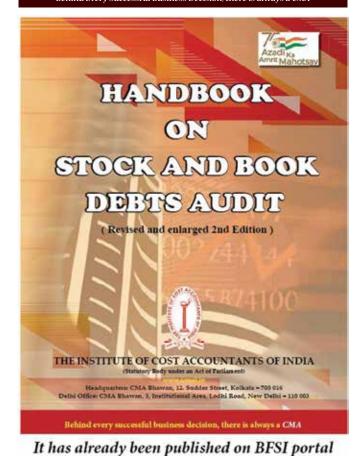
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