



**MMK: ACE**  
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*PROF.CA KISHORE PESHORI*  
*(PRINCIPAL)*

*Dr. AASHISH S. JANI*  
*(EXECUTIVE-EDITOR)*

**FROM THE DESK OF THE EDITOR...!**

After Covid-19 the education world has been changing very fast with drastic major changes in the research dimensions. UGC and MHRD have launched many virtual platforms with online depositories, e-books and other online teaching/learning materials. Combination of the traditional technologies' with mobile/web technologies to a single platform with depositories would enhance better accessibility and flexibility to education.

The main objectives of NEP 2020 clearly define the pivotal role in catalysing interdisciplinary /multi-disciplinary research culture at UG level.

Students' research at undergraduate and post graduate level is the key to success towards real life education. Implementation of this student centric research requires establishment of the Academic Bank of Credits (ABC), a national level facility which will be a bank for academic purposes with students as academic account holders. A minimum of 20 credits of the 160 credits in four years undergraduate degree programmes will be earned via research activities according to guidelines prepared under NEP 2020.

Further, it will encourage and make it possible for all students to open an academic bank account to commute credits to award any degree/research fellowship/certificates.

The ability to integrate classroom knowledge with practical problems is important to decide research problems of the real world and to provide realistic solutions for the same. Four years Undergraduate bachelor's degree programme objectives are clearly defined in these directions. This calls for developing research experiences in students and developing system of offering real life research projects with keen interest towards pursuing realistic research projects. Here role of research organisations, higher institutions or research centre can support research internships as providers.

Keeping such ideas in mind, I feel humbled to bring out the Third students special Issue of our reputed E-Journal "MMK: ACE", including research papers for the first time from students' community at various undergraduate, post graduate and Doctoral level Programmes of our College. This volume develops the fact finding empirical approach among students community at higher education.

I extend my sincere gratitude to the Management of H.S.N.C. Board and our respected Principal Prof. Dr. CA Kishore Peshori for their constant support and motivation towards a strong Research foundation.

Finally, a big thank you to the Peer-reviewers and Publishing House for helping us in publishing this E-Journal. I invite feedback and suggestions from our Readers, Researchers and Academicians for further improvement in our E-Journal "MMK: ACE".

***Dr. Aashish S. Jani***  
***Vice-Principal & Executive Editor***

**PRINCIPAL'S MESSAGE...!**

Dear Members of the Academia,

It brings me immense joy and pride to witness the continued growth of SMT. M.M.K. College, especially in the realm of research, as evidenced by the expansion of our esteemed Research Centre in Commerce (Business Policy & Administration) and the recent approval in Accountancy.

I extend my heartfelt gratitude to the dynamic editorial team, led by Dr. Aashish Jani, Vice Principal, for their unwavering commitment and dedication to advancing the cause of research at our institution. Their tireless efforts have played a pivotal role in steering our academic community toward the frontiers of knowledge.

In the spirit of our rich cultural heritage, I am pleased to include a Sanskrit shloka in this research endeavour, symbolizing the fusion of tradition and progress in our scholarly pursuits:

“चरैवेतिचरैवेति...”

***“Keep Walking, Keep Walking”***,

The present focus on student-centric research in this Third edition of MMK: ACE is indeed a commendable initiative taken at the opportune moment. It reflects our collective commitment to nurturing the research acumen of our students, a vital aspect of our academic mission.

I express my sincere appreciation to the Research Committee, whose proactive approach has not only fostered the development of new faculty but has also provided a platform for meaningful research at both undergraduate and postgraduate levels. The previous volumes of MMK: ACE have been well-received by the academic community, and I am confident that this edition, emphasizing student research, will further elevate our standing.

Kudos to the editorial team for curating diverse themes that delve into various facets of the Economy and Education sector. I extend my appreciation to the Course Coordinators, specialized students, academicians, research guides, and scholars whose valuable contributions have enriched the content of this journal.

I applaud the continuous efforts of the editorial board in cultivating and promoting a robust Research Culture across all multidisciplinary programs. Your dedication is instrumental in inspiring our faculty and students to embrace the role of researchers and critical thinkers.

As we embark on this intellectual journey through the pages of MMK: ACE, I wish the entire team the very best. May the ideas shared in this volume pave the way for positive outcomes and catalyze many more students and teachers to embark on the rewarding path of research and scholarly exploration.

With warm regards,

***Prof. Dr. CA Kishore Peshori***  
***(Principal)***

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# Analytical Study on Various Heterogeneous Valuation Techniques followed in Balance Sheet

MMK : ACE VOLUME 3:PAPER NO. 09

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**Abstract:-** Balance Sheet of a company shows its current financial position at a particular date while Profit & Loss shows its performance. Historically, assets and liabilities were shown in the Balance Sheet on cost basis. With the adoption of IND AS, various new valuation techniques measuring the current value like fair value, recoverable value are gaining acceptance, especially for assets. However, as the current value concept is being recommended on asset-to asset basis and not for the entire Balance Sheet together, it has led to various heterogeneous techniques being applied across asset categories. These research paper first identifies various techniques recommended by IND AS for different asset categories and then goes on to the practical application of such recommendations by five listed companies to whom IND AS applies. It also examines the impact of such heterogeneous valuation on the financial statements of companies. Based on the results, the research paper goes on to advise the investors to be careful while understanding the valuations in Balance Sheet.

**Keywords:-** Fair value, IND AS, historical cost, valuation techniques, Balance Sheet, financial assets.

## I. INTRODUCTION

All entities, be it company or otherwise, have to prepare general purpose financial statements in accordance with Accounting Standards ('AS') or Indian Accounting Standards ('Ind AS'). General Purpose Financial Statements are defined to mean "those intended to meet the needs of users who are not in a position to require an entity to prepare reports tailored to their particular information needs."<sup>1</sup>

A complete set of Financial Statements is basically understood to consist of the following:

- A Balance Sheet as at the end of the period,
- A Statement of profit or loss and other comprehensive income,
- A Statement of changes in equity,
- A Statement of cash flows for the period,
- Notes to accounts consisting of significant accounting policies and other information,

<sup>1</sup>MCA (2022, December 21) accounting-standards. MCA.gov.in. retrieved from <https://www.mca.gov.in/content/mca/global/en/acts-rules/ebooks/accounting-standards.html>

- Comparative information in respect of the preceding period.

Information about financial position is primarily provided in a Balance Sheet while information about performance is primarily provided in the Statement of Profit and Loss.

Interestingly, there are only two broad bases for calculating profit & loss- accrual and cash basis. Statement of Profit & Loss strictly follows the accrual base while Statement of Cash Flows follows the cash base, for reporting profits or loss. However, assets and liabilities in the Balance Sheet are measured using various base- such as historical cost, fair value, lower of cost or net realizable value, recoverable value etc, to name a few. In other words, while techniques like fair value accounting, recoverable value etc. have started gaining more acceptance in the Balance Sheet, historical cost valuation technique as traditionally used has also not completely gone, and therefore different assets and liabilities currently follow different base in the same Balance Sheet, depending on its category.

What impact such heterogeneous valuation techniques are having on the financial statements and on the investors' knowledge of the company, forms the subject-matter of this research.

## II. REVIEW OF LITERATURE

A study conducted by Ralph W Estes, in 1968 "An Assessment of the Usefulness of Current Cost and Price-Level Information by Financial Statement Users" attempted to determine the usefulness of information regarding current values for the users of financial statements. Three hundred random members each were selected from three well-known organizations comprising of Analysts, Bank Loan Officers and Financial Executives and mailed a two-part questionnaire. On an average 81% responses indicated that current cost information would be useful for them.

A study by Norby, William C (1978) compared the utility & interest in Historical Cost to some type of Current Cost accounting like Inflation Accounting. It suggests that while Historical Cost concept be retained as framework for primary set of Financial Statements (as confidence in that is likely to remain greater), supplementary inflation adjusted statements should also be presented. As experience develops in the measurement, presentation and utility of this data, the two type of statements can be integrated.



In their research on mark-to-market accounting, Eunsup; Larkin, Joseph M (1998) with the help of theoretical analysis and a case study on the Balance Sheet of a Fortune 500 company, concluded that the mark-to-market accounting provide more useful and relevant information to users despite its subjectivity as it presents the economic reality of transactions better than does Historical Cost based financial reporting.

In the research study conducted by Farcane; Deliu and Gheorghian (2011), "Auditing Fair Values in Sensitive Socio-Economical Context" the three researchers while stressing on the need for Fair Value Accounting opine that even though fair value accounting may not be as neutral or prudent as Historical Cost, still it is better to have it as it is relevant, transparent and current and not irrelevant like historical cost. Also, even if there is a lack of active markets, it only indicates development of appropriate valuation methodologies which can work even in such case and not the giving up of fair value accounting.

Tiago Cardao-Pito(2020) in his research paper "Enlightenment value theories and the three levels in fair value accounting" questions some researcher's conclusion that fair value accounting is derived from traditional economic theories like Adam Smith. In his study, the researcher argues that fair value accounting, as it exists today, must be considered with its three levels as laid down in recent standards regarding Fair value accounting as promulgated by Financial Accounting Standards Board ('FASB') and International Accounting Standards Board ('IASB'). Neither the traditional theories nor market value accounting is same as or match with current fair value accounting technique.

- **Research Gap:** While most of the above papers have recommended fair value or some sort of current value accounting to be used instead of historical cost, and even argued that fair value accounting as recommended by FASB and IASB is different from traditional as well as other modern valuation techniques, none of them has studied the impact of adopting different valuation techniques on the asset values as given by Balance Sheet or on the 'truth and fairness' of financial reporting for assets.

### III. AIMS AND OBJECTIVES OF THE STUDY

- To study various valuation methodologies that are recommended for asset valuation by IND AS;
- To examine the valuation model practically adopted for each asset category by listed companies to whom IND AS applies;
- To study if there is any variation across companies on valuation model practically adopted by them, within the framework specified by IND AS.
- To analyse the impact of adopting heterogeneous valuation methodologies on the financial statements.

### IV. VARIOUS VALUATION METHODOLOGIES CURRENTLY FOLLOWED FOR DIFFERENT ASSET CATEGORIES

Schedule III of the Companies Act 2013 provides the format for presentation of financial statements of companies. It has three divisions. While the first division applies to companies complying with Accounting Standards, second division applies to companies complying with Ind AS and the third division to Non-Banking Finance Companies complying with INDAS. This research proposes to restrict itself to listed companies, the data being easily available and more transparent, and as Scheduled Commercial Banks, Insurance Companies, non-banking financial companies have still not started mandatory adoption of IND AS, the categorization given by second division of Schedule III of Companies Act, 2013 is taken as the base, being for listed companies and in congruence with latest IND AS.

Division II of Schedule III makes it clear on the face itself that the disclosure requirements specified in it are in addition to and not in substitution of the disclosure requirements as per Indian Accounting Standards. In fact, it further lays down that for the purpose of this Schedule, the terms used in it shall have the same meanings as are assigned to them in the Indian Accounting Standards.

So there is a need to check IND AS, as amended last by Ministry of Corporate Affairs vide Notification no. G.S.R. 419(E) dated June 18, 2021, to understand the various terms and methodologies associated with each asset category. On reading through the IND AS, it is found that IND AS has suggested different measurement techniques or valuation methodologies for different type of assets, especially for these:

- **Inventories**—As per IND AS 2, inventories are to be measured at lower of cost or net realizable value. Cost here means costs of purchase plus costs of conversion plus other costs incurred in bringing the inventories to their present location and condition like transport, labour etc. Net realisable value means the amount the inventories are expected to realise.
- **Property, Plant and Equipment ('PPE')**—As per IND AS 16, Property, plant and equipment (erstwhile, fixed assets) shall be recognised as an asset at cost. However, this is subject to its fulfilling two conditions:
  - ✓ it is probable that future economic benefits associated with it will flow to the entity;
  - ✓ the cost of the PPE can be measured reliably.

An entity is also given the option to choose the revaluation model if the fair value of the asset can be measured reliably and apply it an entire class of PPE.

Further, IND AS 36 on 'Impairment of Assets' needs to be applied, and if there is any internal or external indications that an asset maybe impaired - the 'recoverable amount' of the asset needs to be estimated and if it is lower than the carrying amount, carrying amount needs to be reduced to the recoverable amount. This is besides depreciation, which is in any case used to allocate the depreciable amount of asset on a systematic basis over its

useful life and is allowed to be done in variety of ways like straight-line method, the diminishing balance method and the units of production method.

- **Intangible Assets ('IA')**– As per IND AS 38, measurement criterion of Intangible assets depends on the asset’s nature like goodwill, patent, trademark etc and mode of acquisition/creation like separately acquired, acquired as part of business combination, acquired in exchange, internally generated etc.
- Intangible Assets are also allowed to be measured as per cost as well as revaluation model like PPE (though initially only cost method is allowed) and need to be tested for impairment at the end of each reporting period as per IND AS 36, irrespective of whether there is any external or internal indication of impairment or not.
- **Financial Assets ('FA')** – As per IND AS 39, an entity shall measure a financial asset or financial liability initially at its fair value. However, subsequently it needs to be divided into four categories – Held-to-maturity instruments (measured at amortized cost), loans and receivables (measured at amortized cost), available for sale financial assets (measured at fair value) and other financial assets (measured at fair value through Profit & Loss Account). All Financial Assets not measured at fair value are subject to review for impairment. Further, a step-by-step framework for measuring fair value is provided by IND AS 113 – “Fair Value Measurement”

and disclosures required with respect to such fair value measurements, based on the level of inputs used for valuation (three categories).

- **Investment Property** – As per IND AS 40, investment property means land or building or both held by the entity to earn rentals or for capital appreciation, rather than for use in its own production or supply. While an investment property needs to be measured at its cost including transaction costs, all entities need to disclose the fair value of investment property in its financial statements, preferably based on valuation report by an independent valuer.
- **Assets Held for Sale**- As per Ind AS 105, an entity shall classify a non-current asset or disposal group as ‘held for sale’ if its carrying amount is expected to be recovered principally through a sale transaction rather than through continuing use, the asset is available for sale immediately and the sale is highly probable. Those non-current assets that meet such criteria are required to be measured at the lower of carrying amount and fair value less costs to sell, and depreciation on them should cease. Also, such assets and liabilities associated with such assets are required to be presented separately in the Balance Sheet.

The valuation techniques, recommended by INDAS, can be broadly presented in the form of following table.

Table 1: Valuation methodologies recommended by IND AS for different asset categories

| Asset Category                          | Valuation Technique as per INDAS  |
|---|---|
| Inventories (IND AS 2)                  | Lower of Cost or Net Realizable Value                                   |
| Property, Plant & Equipment (IND AS 16) | Cost Model or Revaluation Model, tested for impairment at year-end      |
| Intangible Assets (IND AS 38)           | Cost, that also only if specified criterion fulfilled else expensed off |
| Financial Assets (IND AS 39)            | Amortized Cost or Fair Value, depending on asset category               |
| Investment Property (IND AS 40)         | Cost. But Fair value disclosed  |
| Assets Held for Sale (IND AS 105)       | Lower of cost and fair value  |
| Other assets (Various IND AS)           | Costs. Tested for impairment at year-end.                               |

So as examined above, there are a couple of techniques recommended by IND AS to measure various assets in Balance Sheet besides cost, but these are different across categories - like net realizable value for inventories; recoverable value for impairment; fair value for financial instruments etc. A summation of all these techniques together goes on to make the ‘total assets’ balance in a Balance Sheet.

**V. PRACTICAL ANALYSIS OF ASSET VALUATION BY 5 LISTED COMPANIES**

An analysis of asset valuation and disclosure by listed companies was further made, to see how these valuation techniques blend together, practical application of each valuation technique and the impact of using heterogeneous valuation techniques. For this purpose, the top 50 companies listed on National Stock Exchange (NIFTY 50) to whom IND AS applied were listed separately (Banks and Insurance Companies were excluded as IND AS is not mandatory for them yet). Out of these companies, five companies were selected on random basis (though excel) and valuation policies followed for their various asset categories studied. Also, what percentage each asset category formed of the

total assets of the company was calculated (to analyse impact, if any). The five listed companies selected on random basis from NIFTY 50 are as under:

- Reliance Industries Ltd.
- Bharti Airtel Ltd.
- Sun Pharmaceutical Industries Ltd.
- Cipla Ltd.
- Coal India Ltd.

The assets of these companies were divided into the following categories based on their similar nature and similarity in valuation techniques suggested for each:

- Property, Plant & Equipment ('PPE') and Capital Work in Progress (CWIP);
- Goodwill, Intangible Assets ('IA') and Intangible Assets under development;
- Financial Assets ('FA') – valued at cost;
- Financial Assets ('FA') – valued at fair value;
- Inventories;
- Investment Property;
- Assets held for sale;
- Other Assets



Table 2: Review of valuation techniques of Reliance Industries Ltd assets as on March 31, 2022:

| Category of Assets | PPE+ CWIP  | IA + under development                         | FA - Cost   | FA- Fair Value | Inventories                            | Other assets                         | Total Assets |
|--------------------|--|--|---|----------------|--|--------------------------------------|--------------|
| Amount (in crores) | 2,43,091   | 31,197   | 3,33,692  | 2,10,473       | 45,923                                 | 14,298                               | 8,78,674     |
| Percentage         | 28%  | 3%   | 38%   | 24%            | 5%                                     | 2%                                   | 100%         |
| Measurement Base   | Cost less depreciation less impairment loss. Land valued at fair value on 1-04-2015. | Cost less amortization less impairment losses. | Amortized Cost. Includes Investment in group companies. | Fair value     | Lower of cost or net realizable value. | Costs. Doubtful assets provided for. |              |

Source: www.bseindia.com

Details of valuation techniques of Reliance Industries Ltd. as described in its Notes to accounts:

- PPE and CWIP are stated at cost. However, land is stated at fair value as on the date of transition to IND AS.
- All Intangible assets are assets with finite useful life and are valued using cost model of IND AS 38.
- All Financial assets are initially recognized at fair value. Subsequently, financial assets which are held to collect contractual cash flows at specified dates (like held to maturity) were measured at amortized cost. Investment in subsidiaries, joint ventures and associates ('group companies') was accounted at cost less impairment loss.

Financial assets other than these two were measured at fair value, either through profit & loss account or through other comprehensive income schedule. The percentage broadly was – 38% at amortized costs and 24% at fair value.

- Inventories are measured at lower of cost or net realizable value. By-products were valued at net realizable value only. However, amount of be-product value not specified. Weighted Average basis used to calculate inventory cost.
- Other Assets were measured at Cost. However, doubtful assets provided for.

Table 3: Review of valuation techniques of Bharti Airtel Ltd. assets as on March 31, 2022:

| Category of Assets   | PPE+ CWIP+ Right-of-use-assets               | Good will +IA+ IA under development            | FA - Cost   | FA- Fair Value | Inventories                            | Other assets                 | Total Assets |
|----------------------|--|--|---|----------------|--|------------------------------|--------------|
| Amount (in millions) | 9,30,553                                     | 7,96,089                                       | 6,46,286  | 1,58,463       | 4                                      | 3,17,150                     | 28,48,545    |
| Percentage           | 33%  | 28%  | 23%   | 5%             | 0%                                     | 11%                          | 100%         |
| Measurement Base     | Cost less depreciation less impairment loss. | Cost less amortization less impairment losses. | Amortized Cost. Includes Investment in group companies. | Fair value     | Lower of cost or net realizable value. | Costs. Provisions duly made. |              |

Source: www.bseindia.com

Details of valuation techniques of Bharti Airtel Ltd. used as described in its Notes to accounts:

- PPE, CWIP and Right-of-use assets are stated at cost. PPE is depreciated using straight line method of depreciation over its estimated useful life, except freehold land which is not depreciated. PPE including CWIP and right-of-use assets are reviewed for impairment, whenever events indicate that their carrying values may not be recoverable.
- The intangible assets are recognised at cost. Amortisation is computed using the straight-line method over the expected useful life of intangible assets.
- The Company recognises its investment in group companies at cost less any impairment losses. Assets that are held for collection of contractual cash flows are measured at amortised cost. All other financial assets are recognized at fair value. The percentage broadly was – 23% of total assets at amortized costs and 5% at fair value.

- Inventories are stated at the lower of cost and net realisable value. The cost is determined using the first-in-first-out method.
- Other Assets were measured at Cost. However, provisions as required were duly made.

Table 4: Review of valuation techniques of Sun Pharma Industries Ltd. assets as on March 31, 2022:

| Category of Assets  | PPE+ CWIP                                    | Goodwill+ IA + under development  | Financial Assets- Cost                                  | Financial Assets- Fair value | Inventories   | Other assets                         | Total Assets |
|---------------------|--|---|---|------------------------------|---|--------------------------------------|--------------|
| Amount (in million) | 53,285                                       | 52,129  | 2,838   | 2,41,782                     | 34,037  | 23,583                               | 4,07,655     |
| Percentage          | 13%  | 13%   | 1%  | 59%                          | 8%  | 6%                                   | 100%         |
| Measurement Base    | Cost less depreciation less impairment loss. | Research cost expensed off. Development cost capitalized, if specified conditions met. Tested for impairment at least annually. | Amortized Cost. Includes Investment in group companies. | Fair value                   | Lower of cost or net realizable value. 20% inventory was written off during year. | Costs. Doubtful assets provided for. |              |

Source: www.bseindia.com

Details of valuation techniques of Sun Pharma Industries Ltd. as described in its Notes to accounts:

- PPE and CWIP are stated at cost less accumulated depreciation less accumulated impairment loss. PPE is depreciated using straight line method of depreciation over its estimated useful life, except freehold land which is not depreciated.
- Goodwill and other acquired Intangible assets are measured at cost less accumulated impairment loss. For internally generated Intangible Assets -research cost is expensed off in Profit & Loss Account and development cost is recognized at cost but only if the necessary conditions for recognition are met. All intangible assets are checked for impairment at least annually.
- All Financial assets are initially recognized at fair value. Subsequently, debt instruments which are held to collect

contractual cash flows at specified dates (like held to maturity) are measured at amortized cost. The Company has also elected to recognise its investments in equity instruments of group companies at cost. Financial assets other than these two were measured at fair value. The percentage broadly was – 59% at amortized costs and 1% at fair value.

- All sorts of inventories are measured at the lower of cost and net realisable value. The cost of all categories of inventories is based on the weighted average cost method. Inventories amounting to 8461 million or 20% of the total inventory cost (8416+34037 million) was written off during the year, presumably to its net realizable value.
- Other Assets were measured at cost. However, allowances for doubtful made.

Table 5: Review of valuation techniques of Cipla Ltd. assets as on March 31, 2022:

| Category of Assets | PPE + CWIP + Right-of-use  | IA + under development  | FA- cost + Investment Property  | FA - Fair value | Inventories   | Assets held for sale                            | Other assets                         | Total Assets |
|--------------------|--|---|---|-----------------|---|---|--------------------------------------|--------------|
| Amount (in crores) | 3,281  | 261   | 13,533  | 2098            | 3,199   | 1,887   | 1,190                                | 25,449       |
| Percentage         | 13%  | 1%  | 53%   | 8%              | 13%   | 7%  | 5%                                   | 100%         |
| Measurement Base   | At Cost. However Right-of-use amounting to 62.17 crore (0.24%) measured at fair value. | Research cost expensed off. Development cost capitalized, if specified conditions met. Tested for impairment regularly. | Amortized Cost. Fair value of Investment property disclosed in notes. | Fair value      | Lower of cost or net realizable value. 13% inventory was written off during year. | Lower of cost or fair value less costs to sell. | Costs. Doubtful assets provided for. |              |

Source: www.bseindia.com

Details of valuation techniques of Cipla Ltd. as described in its Notes to accounts:

- All items of property, plant and equipment, including freehold land, are initially recorded at cost. The Company mentions that it had applied for the one-time transition exemption of considering the carrying cost on 1st April, 2015 as the deemed cost or historical cost

under Ind AS. However, no details of such assets or amount were given. Depreciation on PPE (other than freehold land) is provided using straight line method of depreciation. Right-of-use assets amounting to 62.17 crore (0.24%) is said to be measured at fair value.

- Intangible assets if separately acquired are measured at cost. Expenditure on regulatory approval and research expenses is charged off to Profit & Loss Account. Expenditure on subsequent in-house development is capitalized only if conditions of recognition are met. All intangible assets are checked for impairment regularly.
- The Company classifies its financial assets in two measurement categories: those to be measured subsequently at amortised cost and those to be measured subsequently at fair value. The classification depends on the entity’s business model for managing the financial assets and the contractual terms of the cash flows. Investments in group companies are carried at cost less accumulated impairment loss, reviewed at each reporting date. An impairment loss of 970 crores amounting to 10% of investments in subsidiaries and associates had been recognized in the financial statements.
- Investment Property was measured at cost. But fair value thereof based on valuation conducted by an external

registered valuer, also rental income from property and direct operating expenses related to such rental income were disclosed as part of Notes to accounts.

- Inventories are measured at the lower of cost and net realisable value after providing for
- obsolescence, if any. The cost of inventories is determined on a weighted moving average basis. During the year inventory worth 495 crores or 13% of total inventory (3199+495) was written down.
- Assets are classified as held for sale if their carrying amount is expected to be recovered principally through a sale transaction rather than through continuing use and a sale is considered highly probable. In such cases, assets are not depreciated or amortized and they are measured at the lower of their carrying amount and fair value less costs to sell. The company had 7% such assets.
- Other Assets were measured at Cost. However, allowances for doubtful made.

Table 6: Review of valuation techniques of Coal India Ltd assets as on March 31, 2022

| Category of Assets | PPE + CWIP  | Exploration Assets + IA + under development   | FA- cost   | FA - Fair value | Inventories                            | Other assets                         | Total Assets |
|--------------------|---|---|--|-----------------|--|--------------------------------------|--------------|
| Amount (in crores) | 474   | 110   | 19,970   | 407             | 13                                     | 1,467                                | 22,441       |
| Percentage         | 2%  | 0%  | 89%  | 2%              | 0%                                     | 7%                                   | 100%         |
| Measurement Base   | Land at historical cost and not depreciated. Rest at cost less depreciation less impairment loss. | Cost determined on project-by-project basis, provided conditions specified fulfilled. Less amortization less impairment losses. | Amortized Cost. Includes Investment in various subsidiaries and joint venture companies. | Fair value      | Lower of cost or net realizable value. | Costs. Doubtful assets provided for. |              |

Source: www.bseindia.com

Details of valuation techniques of Coal India Ltd. used as described in its Notes to accounts:

- Land is carried at historical cost. All other Property, plant and equipment are carried at its cost less any accumulated depreciation and any accumulated impairment losses.
- The intangible assets include exploration and evaluation costs, which are capitalised on a project-by-project basis after determination of the technical feasibility and commercial
- viability of the project and disclosed as a separate line item. If development of mines/project is sanctioned, exploration and evaluation assets are transferred to CWIP, else they are
- derecognised. All other IA are also recognised at cost, depreciated at straight line basis over their estimated useful life and tested for impairment at the end of each reporting period.
- All financial assets are recognised initially at fair value. For purposes of subsequent measurement, financial assets are classified in four categories. Debt instrument’ is measured at the amortised cost if the objective is to collect contractual cash flows, at specified date. All other categories of financial assets are recognized at fair value, either through profit & loss account or through other comprehensive income schedule. The percentage broadly

was – 89% of total assets at amortized costs (including investment in subsidiary, joint ventures etc.) and 2% at fair value. Financial assets comprised 91% of the total assets for Coal India Ltd.

- Inventories are stated at lower of cost or net realisable value. The cost is determined using the weighted average method.
- Other Assets were measured at Cost. However, allowances for doubtful provided.

**VI. RESEARCH FINDINGS**

- There are various methods prescribed by various IND AS for valuation of different assets in the Balance Sheet (refer Table 1). As a result of this, currently the Balance sheet is a summation of heterogenous methodologies, through which assets are added together to come to one consolidated number i.e., ‘Total assets’ in the Balance Sheet.
- While fair valuation is increasingly being recognized, PPE is still being measured at Historical Cost only, tested for impairment losses if any. This may sometimes lead to wrong valuation and representation to shareholders. For e.g.in Balance Sheet of Coal India Ltd, land is still recognized at historical cost and it has not even adopted fair value on 1-04-2015 allowed during transition to IND AS. This may be the reason for

percentage of PPE in its Balance Sheet being abnormally low at 2% (for all other companies selected in the sample PPE valuation was between 13%-33% of total assets).

- Intangible assets are also reported at cost, if separately acquired. If developed in-house – research cost is expenses off to Profit & Loss Account and only development cost is allowed to be capitalized, that also provided strict condition of development expense as per IND AS 38 are met. Fair value of intangible assets is not considered, unless impaired. Therefore, even for pharma companies like Sun Pharma and Cipla Ltd. expected to invest heavily in technical know-how, patents, research etc, the percentage of intangible assets to total asset valuation is only 13% and 1% respectively.
- Inventory is measured at cost or net realizable value, whichever is lower. But there is no concept of upward valuation based on market price. Similar is the case for ‘assets held for sale’ which are measured at lower of cost or fair value less cost to sell, with no concept of upward valuation.
- ‘Investment property’ which by its very purpose means land or building held for rentals or capital appreciation, are also valued at cost, as per IND AS 40. However, fair value thereof needs to be mandatorily disclosed as part of Notes to Accounts, whether more or less than costs.
- Only assets which are measured at fair value, irrespective of costs, seem to be financial assets. However, they are also divided into four categories and higher percentage of financial assets is measured at cost still.

## VII. CONCLUSIONS & SUGGESTIONS

The above analysis shows that currently there are different type of valuation techniques being recommended by IND AS and thought fit to measure various category of assets. So, while all asset numbers may be added together to come to one consolidated figure in the Balance Sheet, it is actually an end product of various methodologies followed, ranging from cost to fair value. This can sometimes lead to anomalous and non-current results. The research seeks to draw the attention of the standard-setters and investors to this anomaly, if any. Also, the investors are advised to understand the Balance Sheet carefully, being a mixed model approach. They are advised to read the various Schedules to Balance Sheet only in conjunction with Notes to Accounts, including significant accounting policies, and not on a stand-alone basis to understand a company’s financial position correctly.

## REFERENCES

- [1]. Cardao-Pito, T. (2020). Enlightenment value theories and the three levels in fair value accounting. *Accounting History*, 1–11.
- [2]. Este, R. W. (1968). An Assessment of the Usefulness of Current Cost and Price-Level Information by Financial Statement Users. *Journal of Accounting Research*, 6(2), 200–207.
- [3]. Farcane, N. (2011). Auditing Fair Values In A Sensitive Socio-Economical Context. *Annales*

*Universitatis Apulensis Series Oeconomica*, 2(13), 1–19.

- [4]. Norby, W. C. (1978). Accounting for Financial Analysis. *Financial Analysts Journal*, 34(2), 22–23.
- [5]. Shim, E. “Daniel,” & Larkin, J. M. (1998). Towards Relevancy In Financial Reporting: Mark-To Market Accounting. *Journal of Applied Business Research (JABR)*, 14(2), 33.