



"Evaluating the Impact of IND AS 16 on Capitalisation of Tangible Fixed Assets"

Ziyad Ilahi¹, Dr. Pushkar Parulekar²

¹ Student MET, PGDM

² Associate Professor, Met Institute of PGDM

ABSTRACT :

The implementation of IND AS 16 (Property, Plant and Equipment) has introduced significant changes in the way Indian companies recognise, capitalise, measure, and report tangible fixed assets. This research study investigates the financial, operational, and reporting impact of these revised capitalisation norms on Indian corporates, with a particular focus on capital-intensive industries such as oil & gas, manufacturing, power, and infrastructure. IND AS 16 mandates comprehensive guidelines on identifying directly attributable costs, applying component accounting, recognising dismantling and restoration obligations, and capitalising trial-run expenditures. These requirements represent a major shift from the earlier Indian GAAP (AS 10), resulting in both conceptual and practical differences in asset valuation.

The study evaluates pre- and post-implementation data from listed companies to quantify how IND AS 16 influences asset capitalisation, depreciation patterns, asset turnover, and profitability metrics such as ROA and EBITDA. Preliminary observations indicate material variations in reported asset bases, component-wise depreciation, and earnings due to changes in capitalisation criteria and measurement approaches. In addition to analysing financial data, the research incorporates insights from industry professionals to understand the real-world challenges faced in estimating useful lives, identifying asset components, and determining dismantling obligations.

Overall, the study aims to present a holistic understanding of the implications of IND AS 16 on financial reporting transparency, managerial judgement, and accounting consistency across sectors. The findings are expected to contribute to improved compliance, better interpretation of the standard, and enhanced alignment with IFRS principles within the Indian corporate landscape.

Introduction

The introduction of the Indian Accounting Standards (IND AS) marked a significant step toward harmonising India's financial reporting practices with global standards, particularly IFRS. Among these standards, IND AS 16 – Property, Plant and Equipment (PPE) plays a critical role, as tangible fixed assets form a substantial portion of the balance sheet for most capital-intensive organisations. IND AS 16 establishes comprehensive principles for the recognition, measurement, capitalisation, depreciation, and disclosure of PPE, ensuring that financial statements reflect a true and fair view of an organisation's long-term operational investments. Under IND AS 16, an asset is recognised when it is expected to provide future economic benefits and its cost can be measured reliably. This principle expands the scope of capitalisable costs beyond the basic purchase price to include various directly attributable costs such as site preparation, installation, testing, professional fees, enabling infrastructure, and even estimated dismantling and restoration expenses. This represents a departure from the earlier AS 10, which did not mandate such comprehensive treatment. The standard also introduces mandatory component accounting, requiring significant parts of an asset with different useful lives to be depreciated separately. This approach enhances accuracy in financial reporting by ensuring that asset consumption is matched more realistically with operational use.

In addition, IND AS 16 redefines the treatment of several previously ambiguous areas such as trial-run costs, dismantling obligations, and major inspections. The requirement to capitalise costs necessary to bring the asset into usable condition—after deducting any incidental revenue earned during testing—has significantly influenced companies' capitalisation practices. The inclusion of dismantling costs, recognised as a liability and depreciated over the asset's useful life, further strengthens the completeness and comparability of financial reporting across entities.

The transition from AS 10 to IND AS 16 has not only altered asset recognition and measurement but also affected depreciation schedules, reported profits, and key financial ratios. For industries like oil & gas, manufacturing, and infrastructure—where assets are large, complex, and specialised—the impact is particularly pronounced. Organisations are now required to exercise greater managerial judgement in determining useful life, estimating restoration obligations, and allocating costs among asset components.

This research paper aims to examine these changes in depth by analysing both qualitative aspects (the revised accounting principles and disclosure requirements) and quantitative impacts (financial ratios, depreciation patterns, and capitalisation values before and after IND AS 16 adoption). By studying selected listed companies over a multi-year period, the research seeks to understand how the revised standard has influenced financial reporting practices, comparability, and decision-making within the Indian corporate environment.

Objectives of the Study

The primary objective of this research is to analyse the implications, effectiveness, and financial impact of IND AS 16 on the capitalisation and reporting of tangible fixed assets across Indian corporates. The study aims to:

1. Examine the key provisions of IND AS 16 and understand how they differ from the earlier Indian GAAP (AS 10) framework.
2. Evaluate the extent to which organisations comply with the revised capitalisation criteria under IND AS 16, including treatment of directly attributable costs, dismantling obligations, component accounting, and trial run expenses.
3. Measure the quantitative impact of IND AS 16 on company financial statements, particularly focusing on:
 - Capitalised asset values
 - Depreciation expense
 - Profitability metrics (ROA, EBITDA, Net Profit)
 - Fixed Asset Turnover
4. Assess how IND AS 16 influences managerial decision making and accounting practices, especially in capital-intensive industries such as oil & gas, manufacturing, infrastructure, and power.
5. Compare pre- and post-adoption financial data (FY 2015–16 to FY 2019–20) to determine whether IND AS 16 has materially altered the recognition and valuation of property, plant, and equipment among sampled companies.
6. Identify challenges faced by companies during implementation—including estimation of useful life, dismantling costs, component identification, and fair value adjustments—and evaluate how these challenges affect disclosure quality.
7. Provide insights and recommendations for future improvements in compliance, reporting transparency, and practical adoption of IND AS 16 in alignment with IFRS best practices.

Literature Review

1. IFRS Foundation (IAS 16 – Property, Plant and Equipment). IASB Publications.

Link: <https://www.ifrs.org>

- Establishes global principles for recognition, measurement, and depreciation of PPE.
- Introduces component accounting and dismantling cost obligations, now mirrored in IND AS 16.
- Highlights the importance of capitalising only those costs that bring the asset to operational condition.
- Forms the conceptual foundation upon which IND AS 16 has been drafted.

2. MCA (2015). Companies (Indian Accounting Standards) Rules – IND AS 16 Notification.

Link: <https://www.mca.gov.in>

- Provided the legal mandate for adopting IND AS 16 across Indian corporates.
- Required a shift from historical cost focus (AS 10) to a more principle-based recognition system.
- Stressed disclosure requirements, useful life estimates, and component-level depreciation.
- Triggered system upgrades and accounting policy modifications across industries.

3. Bhargava, A. (2020). “Transition from Indian GAAP to IND AS – Key Challenges and Benefits.” *International Journal of Finance and Accounting*.

- Highlights implementation challenges such as valuation complexity, capturing directly attributable costs, and identifying significant components.
- Notes benefits such as improved transparency, better alignment with global standards, and more accurate depreciation schedules.
- Emphasises that capital-intensive industries experienced the greatest accounting impact.
- Identifies judgement-based areas (useful life, impairment, dismantling provisions) as sources of variability in reporting.

4. Tiwari, M. (2018). “Component Accounting under IND AS 16 – Its Need and Impact.” *Indian Journal of Accounting*.

- Explains the rationale for component accounting and its role in fair representation of PPE.
- Shows how ignoring component differences under AS 10 led to under/over-depreciation.
- Provides examples of assets (refinery units, aircraft engines, turbines) requiring separate depreciation.
- Concludes that componentisation enhances accuracy but increases complexity in asset tracking.

5. ICAI – Financial Reporting Study Material (2018–2023 Editions).

Link: <https://www.icai.org>

- Offers guidance on determining directly attributable costs and useful lives.
- Clarifies capitalisation vs expensing dilemmas (site prep, testing costs, abnormal losses).
- Provides case studies illustrating adjustments needed during transition from AS 10.
- emphasises requirement to capitalise dismantling liabilities and recognise corresponding provisions.

6. KPMG India (2018). “First-Time Adoption of IND AS: Practical Insights and Challenges.”

- Identifies major adjustments companies faced during IND AS transition, including PPE revaluation, component splits, trial-run expense capitalisation, and impairment testing.
- Discusses operational issues such as ERP system changes, asset tagging, and documentation gaps.
- Provides sector-wise impact analysis showing higher PPE values in oil, power, and infrastructure companies.
- Notes increased disclosure quality post IND AS adoption.

7. ResearchGate (2023). “Case Studies on IND AS 16 Implementation in Indian Manufacturing Sector.”
 - Examines multiple companies’ experiences with capitalisation of site preparation, inspection costs, and replacement components.
 - Shows significant increase in gross block and depreciation after adopting component accounting.
 - Highlights inconsistencies in useful life estimations across firms in the same industry.
 - Recommends standardisation and industry benchmarks for more comparable reporting.
8. EY India (2020). “Accounting under IND AS – Road to Convergence.”
 - Discusses challenges in practical application of IND AS 16 judgment areas such as determining dismantling obligations and revaluing long-lived assets.
 - Points out diversity in capitalisation policies during trial runs and major overhauls.
 - Analyses the impact of revaluation model adoption (where applicable) on OCI and equity.
 - Suggests better documentation and internal controls to maintain audit readiness.
9. NSE & SEBI Filings (2016–2023). Corporate Reporting Trends.
 - Indicates that IND AS 16 has improved disclosure of PPE categories, depreciation methods, and capital work-in-progress.
 - Shows increased recognition of decommissioning liabilities in oil & gas and power sectors.
 - Reveals that many companies initially struggled with identifying asset components and quantifying dismantling costs.
 - Highlights that capitalisation transparency has improved post-adoption.

Research Methodology

1. Research Design

The research adopts a **descriptive and analytical** research design. It aims to examine and understand the implications of IND AS 16 on capitalisation practices by analyzing financial data before and after the adoption of the standard, along with real-world company case studies.

2. Nature of Study

This study is both **qualitative** and **quantitative**:

- **Qualitative** in terms of analysing the accounting principles, changes from AS 10 to IND AS 16, and company disclosures.
- **Quantitative** in terms of analysing the changes in financial data such as asset values, depreciation methods, and profitability ratios.

3. Data Collection Methods

- **Primary Data:**
 - Conducted informal interviews and discussions with finance professionals, accountants, and auditors in companies affected by IND AS 16.
 - Observations of accounting practices followed by select companies.
- **Secondary Data:**
 - Annual reports and financial statements of listed companies.
 - ICAI study material, IFRS publications, SEBI/NSE filings, and scholarly research papers from SSRN and ResearchGate.
 - Government publications (MCA notifications and updates).

4. Sampling Technique

A **purposive sampling** method is used to select a few large, capital-intensive listed companies (e.g., Indian Oil Corporation, Bharat Petroleum, L&T) that were significantly impacted by IND AS 16. The focus was on companies where tangible fixed assets form a substantial portion of the balance sheet.

5. Data Analysis Tools

- **Comparative Analysis:** Review of pre- and post-IND AS 16 financials.
- **Ratio Analysis:** Assess changes in:
 - Fixed Asset Turnover Ratio
 - Return on Assets (ROA)
 - Depreciation expense
- **Case-based Evaluation:** Real examples of capitalisation of trial run costs, dismantling expenses, and component depreciation.

6. Time Period of Study

The study covers financial data from **two years before** and **two years after** the mandatory implementation of IND AS 16 (i.e., FY 2015–16 to FY 2019–20).

7. Limitations of the Study

- Limited availability of standardised data due to varying disclosure levels.
- Subjectivity involved in interpretation of what constitutes “directly attributable costs.”
- Generalisation may be difficult as the impact varies significantly across industries.

Understanding IND AS 16

Key Definitions

Cost:

In simple terms, "cost" means the total money spent to bring an asset to a working condition. This includes not just the purchase price, but also extra costs like installation, transport, testing, legal approvals, and even dismantling (if required in future).

Useful Life:

This refers to the time period during which the company expects the asset to be useful for its business. It's not always equal to the asset's physical life—it depends on how long the company plans to use it.

Component Accounting:

Think of it like breaking an asset into parts that have different lifespans. Instead of depreciating one big asset as a whole, we split it into key parts and depreciate each one separately. For example, a plane's body and engine are depreciated differently because they wear out at different speeds.

Capitalisation Criteria and Exclusions

- **When to Capitalise:**

A cost should be added to the value of the asset (capitalised) if:

1. It will probably bring future economic benefits, and
2. The cost can be measured clearly and accurately.

This includes:

- Site preparation
- Professional fees
- Testing before use
- Necessary government permissions
- Initial delivery or installation costs

- **What Not to Capitalise:**

Some costs must not be added to the asset value. These are expenses, and should go to the profit and loss account:

- General admin costs
- Training staff to use the asset
- Advertising or promotional activities
- Relocation costs
- Opening ceremonies
- Losses due to operating at low capacity in the beginning

Depreciation and Impairment

- **Depreciation:**

This is the method of spreading the asset's cost over its useful life. It shows how much value of the asset is "used up" each year. IND AS 16 allows different methods like:

- Straight-line
- Declining balance
- Units of production

If the asset is made up of components (like engine and body), each component is depreciated separately.

- **Impairment:**

Sometimes, an asset loses its value suddenly due to damage, change in technology, or reduced demand. If the asset can't earn as much as before, its value must be reduced in the books. This is called impairment.

3.Comparison with AS 10 (Old Indian GAAP)

Let's go through some real-life examples:

Road and Railway Construction for a New Plant

Before Ind AS 16: Expenses like road construction or railway sidings outside the plant boundary were often expensed, especially when ownership was not with the company.

Now under Ind AS 16: These costs are allowed to be capitalised as they are directly attributable to bringing the plant to operating condition, even if the company doesn't own the infrastructure, as long as it leads to future economic benefit.

Example: Indian Oil building a refinery and spending ₹10 crore on an access road. This cost can now be capitalised as part of the refinery's fixed asset value.

Component-wise Depreciation

Before: A machine with a 10-year life was depreciated as a single unit.

After Ind AS 16: If the engine has a 5-year life and body has 10 years, they must be depreciated separately.

Example: A ₹50 lakh machine where ₹20 lakh is engine value and ₹30 lakh is the body. Engine depreciated over 5 years, body over 10 years. Better accuracy in book values.

Dismantling and Restoration Costs

New Concept: Ind AS 16 mandates the inclusion of estimated dismantling/restoration costs at the time of installation in asset value.

Example: A windmill costing ₹1 crore has an estimated dismantling cost of ₹10 lakh after 20 years. This ₹10 lakh is added to asset value and depreciated over its life.

Trial Run Costs

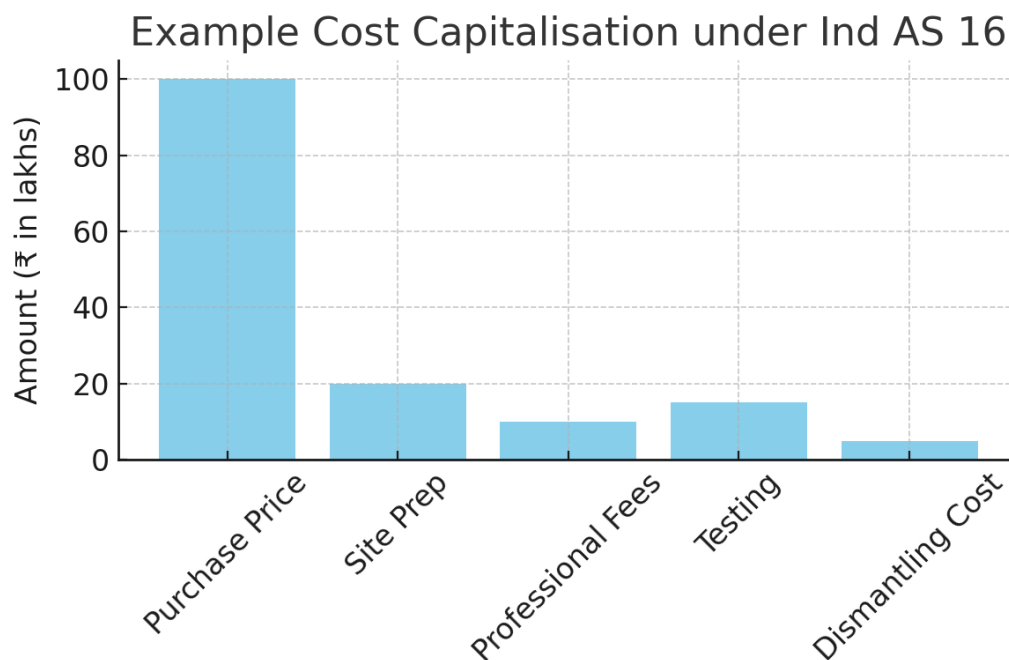
Before: Trial run expenses were sometimes debated—whether they should be written off or not.

Under Ind AS 16: These costs can be capitalised after reducing any income from sale during trial runs, provided they are necessary to bring the asset into working condition.

Example: A chemical company spending ₹5 lakh on material and labour to run test batches in a new plant, and earning ₹50,000 from trial product sale. The net ₹4.5 lakh gets capitalised.

Aspect	Old AS 10	Ind AS 16
Capitalisation	Limited to purchase cost	Includes directly attributable costs like site prep, permits
Component Accounting	Not required	Mandatory if parts have different useful lives
Revaluation	Not allowed	Permitted and affects <u>OCI</u>
Trial Run Costs	Generally expensed	Capitalised after deducting revenue from trial products
Dismantling/Restoration	Ignored	Capitalised if obligation exists

Summary Table: Key Differences between Old AS 10 and Ind AS 16



Breakdown of costs capitalised under Ind AS 16

REFERENCES :

1. Ministry of Corporate Affairs (MCA), Government of India : <https://www.mca.gov.in>
2. CA Final Study Material – Financial Reporting (New Syllabus) <https://www.icaai.org>
3. CMA Final Study Material – Corporate Financial Reporting
4. SEBI or NSE Publications <https://www.sebi.gov.in>
5. clear tax www.cleartax.in
6. Research papers on SSRN: <https://ssrn.com>
7. ResearchGate <https://www.researchgate.net>
8. Accounting Standards Board (ASB) – ICAI
9. IFRS Foundation – IAS 16 (International Equivalent) <https://www.ifrs.org>
10. SEBI. (2021). *Listing Obligations and Disclosure Requirements (LODR) Regulations*. Securities and Exchange Board of India. Retrieved from <https://www.sebi.gov.in>
11. KPMG. (2018). *First-time Adoption of Ind AS: Practical Insights and Challenges*. Retrieved from <https://home.kpmg/in/en/home/insights.html>
12. ResearchGate. (2023). *Case Studies on IND AS 16 Implementation in Indian Manufacturing Sector*. Retrieved from <https://www.researchgate.net>
13. Institute of Cost Accountants of India. (2023). *Corporate Financial Reporting Study Notes – Final*. Retrieved from <https://icmai.in>
14. NSE India. (2022). *Listed Company Filings and Financial Statements*. Retrieved from <https://www.nseindia.com>. □ Ernst & Young. (2020). *Accounting under IND AS – Road to Convergence*. EY India Publications.
15. Tiwari, M. (2018). *Component Accounting under IND AS 16 – Its Need and Impact*. Indian Journal of Accounting, 50(1), 25-32.
16. Bhargava, A. (2020). *Transition from Indian GAAP to IND AS – Key Challenges and Benefits*. International Journal of Finance and Accounting, 9(4), 92-97