

Impact of IND-AS Adoption on Accounting Quality: Evidence from Indian Agricultural Sector

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ABSTRACT

In this study we investigate the impact of Ind-AS on the accounting quality of financial reporting by Indian firms within the agricultural sector. This research specifically analyses how the implementation of these converged standards affects key accounting quality indicators, such as earnings management through earning smoothing & managing earning towards targets and loss recognition. The study employs a pre- and post-adoption quasi-experimental design to assess the impact of IND-AS adoption on accounting quality in Indian agricultural public listed companies. The study employs panel data regression models due to the longitudinal nature of the data. Our study provides evidence that, even within a specific economic sector like Indian agriculture, the impact of such a transition is multifaceted, leading to improvements in certain aspects of earnings management but not uniformly across all measures of accounting quality, particularly in areas like timely loss recognition.

Keywords: IND-AS, Accounting Quality, Earning Management, Loss Recognition

Introduction

The uprise of globalized economy and connecting business across the world arises the need of similar and comparable accounting standards to simplify the accounting process. On the other hand, the country-specific business and regulatory environment possess the unique challenge to compatibility of accounting standards. The adoption of Indian Accounting Standards (IND-AS, hereafter), which largely converge with International Financial Reporting Standards was to improve the accounting information environment represents a significant regulatory change in India's financial reporting landscape (Nikhil et al., 2023). This convergence aims to enhance the transparency, comparability, and overall quality of financial reporting for Indian firms (Meshram & Arora, 2021; Vishnani et al., 2021). Specifically, this transition from India's GAAP-based accounting standards to IND-AS, effective from the 2016-2017 accounting year for certain industries, endeavours to make financial information more comprehensive and investor-friendly globally (Rao et al., 2023). This move was primarily driven by the objective of bringing uniformity and transparency to financial reporting, thereby making financial statements more relevant and reducing information asymmetry for investors (Rao et al., 2023). In Phase-1 IND-AS was applicable with effect from April 2016 for all listed and unlisted companies with a net worth of Rs. 500 crore or above. Subsequently, Phase-2 extended applicability to all listed companies and unlisted companies with a net worth of Rs. 250 crore or above from April 2017, further broadening the scope of this regulatory transformation (Basu & Mitra, 2019; Ghosh, 2019; Shah et al., 2023). IND-AS changed the financial reporting standards and figures including net worth, working capital, various financial ratios etc., thereby requiring through examination of its impact on accounting quality (Ghosh, 2019)The present study investigates the implications of this transition on accounting quality within public listed companies in the agricultural sector, focusing on accounting quality. Accounting quality can be defined as extent to which financial statement provides the information that reflects underlying economic situation. The key metrics such as earnings smoothing, managing earnings towards target, and loss recognition are used as proxies for accounting quality, which have been also used in prior studies (Christensen et al., 2015; Dechow et al., 1995; Dechow & Dichev, 2002; Hung & Subramanyam, 2007; Larcker & Richardson, 2004). To achieve this, a pre- and post-adoption methodology will be employed to compare these metrics before and after the mandatory implementation of IND-AS for the selected firms of agriculture sector of India. This focus is particularly pertinent given the unique operational characteristics and financial complexities inherent to the agricultural sector (Noviari et al., 2021). IND-AS 41 for instance, specifically addresses agriculture, providing direction on accounting for biological assets and agricultural produce, which primarily alters how

agricultural industry recognize and measure their assets and revenues. The unique nature of agriculture activities, characterized by biological asset measurement challenges and extended production cycles, often complicates the application of cost accounting, making fair value application under IND-AS potentially more salient for depicting true value and improving financial reporting quality. These industry-specific standards, coupled with the broader convergence objectives, suggest a potentially significant, yet underexplored, influence on the reported financial performance and position of agricultural entities. There are studies which identified the impact of International Accounting Standard for Agriculture and Biological Assets (IAS-41) on firm value (Gonçalves et al., 2017; Ika et al., 2024) but there is no single study acknowledged by authors which directly identified the impact of IND-AS on the value of firm or financial reporting related to the agricultural sector in India, particularly concerning specific measures of accounting quality, thereby highlighting a significant research gap. This research aims to bridge this gap by examining how IND-AS adoption influences earnings quality indicators—specifically earning smoothing, and loss recognition—within this vital economic sector.

This nuanced study contributes significantly to the wider consideration of how sector-specific tenets interact with IND-AS to shape financial reporting outcomes compared to the previous GAAP framework. Given that previous research indicates differences in recognition and measurement principles between I-GAAP and IND-AS are expected to cause significant impacts, particularly with the inclusion of total comprehensive income as a new profit measure (Basu & Mitra, 2019; Ghosh, 2019; Rao et al., 2023; Shah et al., 2023), this study will provide crucial insights into whether these theoretical differences translate into observable changes in the agricultural sector's financial reporting quality.

The rest of this paper is organized as follows: Section 2 presents a comprehensive review of the relevant literature, while Section 3 outlines the methodology employed in this study. Section 4 presents the empirical results and discussion, and Section 5 concludes with policy implications and suggestions for future research.

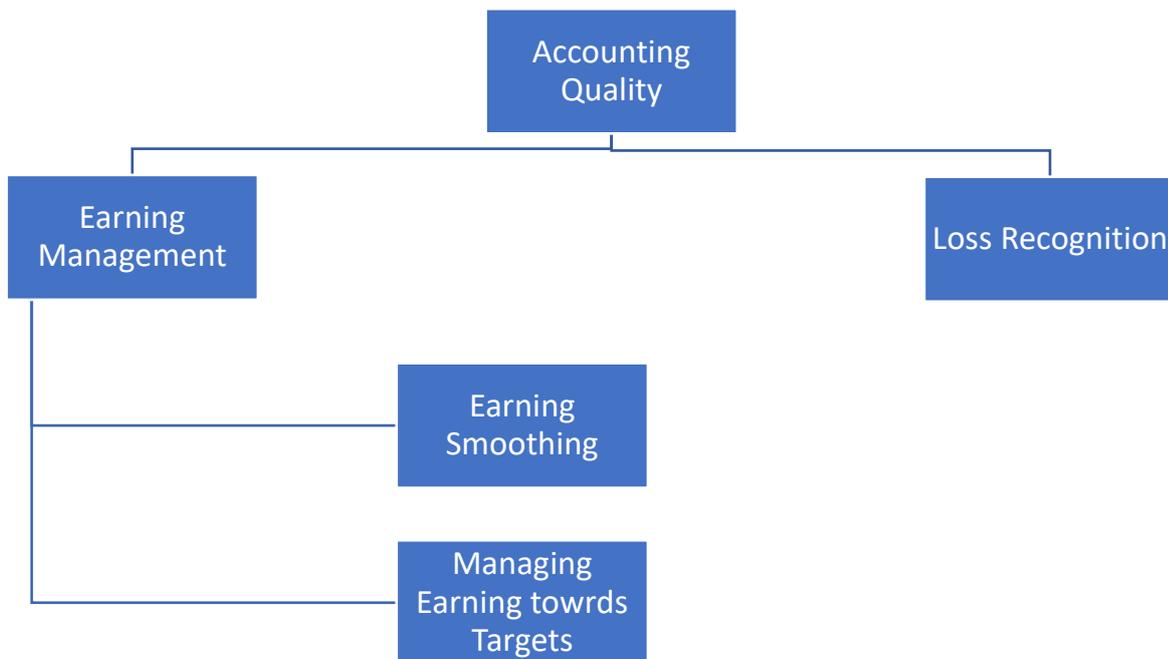
2. Conceptual Background & Hypothesis Development

This section critically assesses the existing literature concerning the impact of accounting standard harmonization, specifically focusing on the transition to IFRS-converged standards like IND-AS, on various dimensions of accounting quality within diverse industrial landscapes.

2.1 Accounting Quality

Accounting Quality, broadly defined, is the extent to which financial reports provide information that is useful for decision-making, accurately reflecting a firm's economic performance and financial position (Adhikari et al., 2021; Hribar et al., 2014). High-quality accounting information is characterized by its relevance, faithful representation, comparability, verifiability, timeliness, and understandability (Himanshu & Singh, 2022; Nikhil et al., 2023), thereby enabling stakeholders to make informed judgments about resource allocation (Ahmed et al., 2012; Chatterjee, 2021) and corporate governance (Almaqtari et al., 2020; Ozili, 2019). However, the precise operationalization of "accounting quality" remains a complex and frequently debated topic in academic literature, leading to the use of various proxies to capture its multifaceted nature (Barth et al., 2008; Soderstrom & Sun, 2007). These proxies often include measures such as earnings management and the timeliness of loss recognition, which collectively offer insights into the integrity and reliability of reported financial figures. Exhibit 1 clearly explains the accounting quality and its two means—earning smoothing and loss recognition—used in the study.

Exhibit: Accounting Quality & its Measures



2.1.1 Earning Management: Earning management is to mislead stakeholders about firm's economic performance through discretionary accounting choices that obscure true operational results. This can manifest as income-increasing or income-decreasing manipulations, often achieved through discretionary accruals, to meet specific earnings targets or present a more favourable financial picture (Adedokun et al., 2022). The common earning management metrics to assess accounting quality are- earning smoothing and managing earnings toward targets. These measures are crucial for evaluating how financial reporting standards, such as IND-AS, influence the objectivity and reliability of reported earnings, particularly in industries with unique accounting complexities like agriculture.

2.1.1.1 Earning Smoothing is a specific form of earnings management, involves the deliberate dampening of fluctuations in reported earnings over time to present a more consistent and predictable financial performance (Dechow et al., 1995; Dechow & Dichev, 2002), often achieved through discretionary accounting choices such as the manipulation of accruals (Alashi & Dumlu, 2015; Shubita, 2015). This practice can obscure the true volatility of a firm's underlying economic activities, potentially misleading investors and other stakeholders regarding sustainable profitability and risk exposure (Adhikari et al., 2021; Suhail PS & Gopaldaswamy, 2024). Such manipulations can distort the faithful representation of financial information by compromising neutrality and freedom from error, which are crucial for decision-making (Ahmed et al., 2012; Goel, 2017). Conversely, high-quality earnings should accurately reflect a firm's financial performance, free from such deliberate distortions (Habib et al., 2022). The extent of earnings management, including smoothing behaviours, often serves as an inverse indicator of earnings quality, meaning higher levels of management typically correlate with lower quality financial reporting (Tran & Duong, 2020).

H1: *The adoption of IND-AS leads to a reduction in earnings smoothing among Indian agricultural public listed companies.*

2.1.1.2 Managing Earnings towards target is another important metric of earning management. This practice involves adjusting financial figures to meet or exceed predetermined benchmarks, such as analyst forecasts or internal targets, thereby influencing market perceptions and investor confidence (Christensen et al., 2015). This form of earnings management can lead to a misrepresentation of a company's true financial health, as it may involve the selective application of accounting principles to achieve desired outcomes rather than accurately reflecting economic reality (Dechow & Dichev, 2002; Habib et al., 2022). Previous studies documented that manager manages small positive earnings to avoid reporting negative earnings (Barth et al., 2008; Hribar et al., 2014; Tran & Duong, 2020). The motivations behind such manipulations can be diverse, ranging from executive compensation incentives tied to performance metrics to mitigating information asymmetry between management and external stakeholders (Almaqtari et al., 2020; Ika et al., 2024; Meshram & Arora, 2021). Many studies identified that after adoption of IFRS exhibits a less extent of managing earnings towards a target (Barth et al., 2008; Chen et al., 2010; Suhail PS & Gopaldaswamy, 2024). However, other research indicates that the impact of IFRS adoption on earnings management, including the ability to manage towards targets, is not consistently significant across all industries or geographical regions (Nikhil et al., 2023; Rao et al., 2023; Shah et al., 2023), suggesting that contextual factors such as regulatory enforcement, corporate governance structures, and the inherent characteristics of the local business environment play a crucial role in moderating these effects (Chen et al., 2010; Nikhil et al., 2023).

H2: *The adoption of IND-AS leads to a reduction in the tendency of Indian agricultural public listed companies to manage earnings toward small positive targets.*

Loss Recognition

Loss recognition is widely regarded as an important indicator of accounting quality, as it reflects the extent to which firms recognize economic losses in a timely manner. Prior studies argue that timely recognition of large losses enhances the informativeness and conservatism of financial reporting by ensuring that adverse economic events are reflected promptly in earnings (Ball, 2006; Ball et al., 2000; Ball & Shivakumar, 2005). Extending this line of research, the present study examines whether Ind AS adoption leads to more timely recognition of large losses.

H3: *The adoption of IND-AS does not lead to an improvement in timely loss recognition among Indian agricultural public listed companies, and may be associated with a decline.*

2.2 Accounting Quality and IND-AS adoption

The evolution of International Financial Reporting Standards, and subsequently convergence to IND-AS in India, was largely driven by the expectation that harmonized accounting principles would enhance the quality of financial reporting (Vishnani et al., 2021), thereby reducing earnings management and improving transparency (Soderstrom & Sun.,2007). The empirical evidence regarding the effectiveness of IFRS, and by extension IND-AS, in mitigating earnings management remains mixed and context-dependent (Kliestik et al., 2021), particularly within emerging markets where institutional factors can significantly influence accounting practices. There is extensive research related to IFRS and accounting quality were performed over the time (Asyik et al., 2023; Basu & Mitra, 2019; Biehl et al., 2024; Chen et al., 2010) but its impact on earnings management and accounting quality in India, specifically concerning the transition from local GAAP to IND-AS, presents a nuanced picture. Further sector-specific studies especially the agriculture sector is not well-explored, despite the unique financial reporting challenges posed by its seasonal nature, susceptibility to climate conditions, and fluctuating raw material prices (Ilić et al., 2024). In this context, examining the impact of IND-AS adoption on earnings quality within the Indian agricultural sector is crucial, as the inherent volatility and operational complexities of this industry provide fertile ground for discretionary accounting practices (Ardana & Lestari, 2022; Gonçalves et al., 2017; Ordóñez-Castaño et al., 2025).

3. Methodology

This section details the research design, encompassing the sample selection, data collection procedures, and the specific econometric models utilized to analyse the impact of IND-AS adoption on accounting quality within the agricultural sector.

This study employs a pre- and post-adoption quasi-experimental design to assess the impact of IND-AS adoption on accounting quality in Indian agricultural public listed companies. By comparing key accounting quality metrics before and after the mandatory implementation of IND-AS, this approach allows for the isolation of the regulation's effects, while controlling for other firm-specific characteristics. The use of panel data analysis is appropriate for this design, allowing for the examination of changes over time within the same set of firms. This methodology facilitates a robust assessment of IND-AS implications, especially in the context of earnings management and loss recognition.

3.1 Sample & Data

The sample comprises 15 Indian agricultural public listed companies. These companies were selected based on their listing status and their primary operations within the agricultural sector, which is uniquely affected by standards like IND-AS 41 and IND-AS 16.

Time Period: The study analyses data from two distinct periods: pre-adoption period: 2014–2018 (57 observations) and post-adoption period: 2017–2024 (109 observations). As many of the companies adopted Ind AS in the Financial Year 2016-17, while some has adopted in the F.Y. 2017-18.

Financial data for the selected companies will be collected from their annual reports, financial statements, and reputable financial databases. This includes information necessary to compute the dependent and control variables. Specifically, comprehensive financial statements such as balance sheets, income statements, and cash flow statements will be meticulously reviewed to extract relevant accounting figures and disclosures pertinent to earnings, accruals, and loss recognition. This detailed data collection approach will enable the calculation of the dependent variables and independent variables for subsequent econometric analysis. The study's sample selection and construction are in-line with prior research in agriculture sector (Ardana & Lestari, 2022; Gonçalves et al., 2017; Ordóñez-Castaño et al., 2025) to ensure comparability and relevance to the agricultural sector, focusing on companies that consistently publish financial statements within the specified timeframe.

3.2 Measurement of Variables

For dependent variable the study focuses on two key proxies for accounting quality: Earning management through earning smoothing and managing earnings towards target and second proxy is Timely Loss Recognition. These variables are meticulously derived from financial statement data, reflecting the extent to which reported earnings are manipulated or accurately represent underlying economic performance. Furthermore, the operationalization of these variables considers discretionary components, allowing for a robust assessment of managerial intent and the effectiveness of IND-AS in curbing opportunistic reporting behaviours.

Earnings Smoothing: It includes two metrics: Discretionary Net Income (DNI) and Discretionary Cash flow from operations (DCFO). Discretionary net income serves as a measure of earnings volatility, where a higher value indicates

less smoothing or more volatile earnings. It is calculated as the difference in net income from one period to the next. We take the ratio of Standard Deviation of Changes in Net Income to Standard Deviation of Changes in Cash Flow from Operations (SD_DNI/SD_DCFO) for earning smoothing. A lower ratio suggests that net income changes are less volatile relative to cash flow from operations, indicating potential earnings smoothing. This is calculated as the standard deviation of DNI across years divided by the standard deviation of changes in cash flow from operations.

Managing Earnings Towards Target: This study examines earnings management by focusing on managers' tendency to report small positive earnings to avoid losses, as documented in prior research (Dechow & Dichev, 2002; Tran & Duong, 2020). Following Barth et al. (2008), earnings management is measured by analysing the distribution of reported earnings around zero, where an unusually high number of firms reporting small positive earnings compared to small negative earnings indicates earnings management. The study compares this pattern before and after Ind AS adoption and controls for firm-specific incentives that may influence earnings management. This method helps assess whether Ind AS adoption is associated with a lower level of earnings management. This is measured by SPOS.

Loss Recognition:

Loss recognition refers to the extent to which firms reflect economic losses in their financial statements in a timely manner. In empirical accounting research, timely loss recognition is commonly measured by examining whether firms recognize large losses earlier rather than delaying them across periods. Following prior studies of Ball & Shivkumar (2005) and Ball (2006) our study measures loss recognition using a logistic regression approach, where the dependent variable captures the occurrence of large negative earnings. The model tests whether the probability of recognizing large losses in more timely manner increases after Ind AS adoption. Firm-specific control variables are included to account for incentives that may influence loss recognition behaviour, such as firm size, leverage, and growth opportunities. A higher likelihood of recognizing large losses in a timely manner is interpreted as evidence of improved accounting quality (Ball, 2006; Ball & Shivakumar, 2005). The same is measured by LNEG.

Table 1: Dependent Variable

Variable	Definition
DNI	Change in net income before extraordinary items, scaled by lagged total assets. This variable captures changes in reported profitability.
DCFO	Change in cash flow from operations, scaled by lagged total assets. This measures the change in operational cash generation.
SPOS	An indicator variable set to 1 if annual net income scaled by lagged total assets is between 0 and 0.01, and 0 otherwise. This captures instances where firms report small positive earnings, often indicative of earnings smoothing to meet benchmarks.
LNEG	An indicator variable set to 1 if annual net income scaled by lagged total assets is -0.20, and 0 otherwise. This identifies firms reporting significant losses, which can be relevant for loss recognition analysis.

These dependent variables collectively provide a comprehensive view of how earnings smoothing is manifested in the financial statements, allowing for an examination of its changes post-IND-AS adoption.

Table 2 Independent Variable

Variable	Definition
SIZE	The natural logarithm of sales (in INR). Firm size is often a control variable as larger firms may have different incentives or capabilities for earnings management. Larger firms may also be subject to broader disclosure requirements.
GROWTH	Annual percentage change in sales. Growth can influence earnings management incentives, as firms under pressure to maintain growth might smooth earnings.

EISSUE	Annual percentage change in common stock. Equity issuance activities can affect reporting incentives.
LEV	Total liabilities divided by total assets (leverage ratio). Higher leverage may increase incentives for earnings management to avoid covenant violations.
DISSUE	Annual percentage change in total liabilities (debt issuance). Similar to leverage, debt issuance can be a driver of reporting choices.
TURN	Sales divided by lagged total assets (asset turnover ratio). This measures asset utilization efficiency, which can influence reported earnings.
CFO	Net cash flow from operations, scaled by lagged total assets. Cash flow is a fundamental indicator of operational performance and is often contrasted with accrual-based earnings.
AUD	An indicator variable set to 1 if the firm is audited by a Big 4/5 firm, and 0 otherwise. Audit quality can constrain earnings management.

This comprehensive set of independent variables are aligned with the previous studies (Barth et al., 2008; Chen et al., 2010; Hribar et al., 2014). Certain variables are removed like listing in specific of stock exchange (1 for listing, 0 for not) due to non-alignment with the Indian context or study context, while variables such as audit quality and firm size are retained due to their established impact on accounting quality in prior literature.

3.3 Research Model

The study employs panel data regression models to thoroughly analyze the impact of IND-AS adoption on accounting quality within the Indian agricultural sector. This approach is particularly suitable due to the longitudinal nature of the data, allowing for the observation of changes over time within the same set of companies and effectively controlling for unobserved firm-specific heterogeneity that may bias results in purely cross-sectional analyses. The unbalanced panel dataset comprises observations from 15 cross-sectional units (companies) over both pre-adoption (2014–2017) and post-adoption (2018–2024) periods.

Model Selection: Fixed vs. Random Effects

A crucial step in panel data analysis is determining the appropriate model specification: pooled Ordinary Least Squares, Fixed Effects, or Random Effects. To address this, the study primarily utilizes the Lagrange Multiplier tests for Random Effects, particularly the Breusch-Pagan LM test, to evaluate the presence of unobserved random effects. The null hypothesis of this test posits that there are no random effects, implying that a pooled OLS model would suffice. Conversely, the alternative hypothesis suggests the presence of significant random effects, favouring a Random Effects model.

The results from the Breusch-Pagan LM test, along with variants such as Honda, King-Wu, and Gourieroux et al., are examined. For instance, if the cross-sectional effect shows a statistically significant p-value (e.g., below 0.05), it indicates that random effects across entities are significant, justifying the use of a random effects model over pooled OLS. While the time effect might not always be statistically significant, a robust finding of cross-sectional random effects supports the adoption of a Random Effects model, primarily to account for heterogeneity among firms. In cases where the random effects model is deemed appropriate, Panel EGLS estimation is applied for dependent variables such as SPOS and LNEG. For other analyses, Panel Least Squares regression is also conducted. The performance and validity of the econometric models are assessed using several key statistics: R-squared and Adjusted R-squared, F-statistic and Prob., and Durbin-Watson statistic. Through the application of these panel data methodologies and rigorous diagnostic checks, the study aims to provide a robust and reliable analysis of how IND-AS adoption has influenced accounting quality in the Indian agricultural sector.

4. Result Analysis

This section presents the empirical findings derived from the analysis of financial data from 15 Indian agricultural public listed companies, spanning the pre-adoption (2014–2018) and post-adoption (2017–2024) periods of IND-AS. The analysis utilizes descriptive statistics, univariate tests, and multivariate panel data regression models to investigate the impact of IND-AS adoption on key accounting quality proxies: earnings smoothing, managing earnings towards target, accrual quality, and loss recognition. The results provide nuanced insights into the effectiveness of IND-AS in enhancing financial reporting quality within the Indian agricultural sector.

4.1 Descriptive Statistics of Variables

The descriptive statistics offer a crucial initial overview of the dataset and highlight significant shifts in financial behaviour, operating performance, and corporate financing strategies following IND-AS adoption. Table 3 presents the mean, median, standard deviation, and quartile values for both the test and control variables across the pre- and post-adoption periods as shown in Table 3.

Table 3: Descriptive Statistics of Variables

Variables	Pre Adoption Mean	Pre Adoption Median	Pre Adoption Std Dev	Post Adoption Mean
DNI	-0.00409	-0.02031	0.143471	0.00248*
DCFO	-0.0034	-0.06335	0.099855	0.001693*
SPOS	0.22807	0	0.423318	0.183486*
LNEG	0	0	0	0.009174*
SIZE	287.24	40.25	733.51	463.38
GROWTH	0.0753	-0.0691	0.7712	0.0342
EISSUE	6.66	0	38.08	0.018
LEV	0.474	0.2109	0.3957	0.487
DISSUE	-35.02	-0.0041	148.86	0.158
TURN	1.165742	0.357422	1.350064	1.049832*
CFO	0.017309	-0.01187	0.098567	0.032998*
AUD	0.122807	0	0.331133	0.137615

The change in net income shifted from a negative mean pre-adoption (-0.0041) to a positive mean post-adoption (0.0025), accompanied by a decline in standard deviation (from 0.143 to 0.102). This indicates enhanced earnings stability and reduced volatility, potentially reflecting improved earnings quality. The median DNI, however, became more negative post-adoption (from -0.0203 to -0.0321), suggesting that while the average firm improved, a significant portion still faced downward earnings pressure, which could imply more transparent loss recognition. The change in cash flow from operations also marginally improved and showed slightly lower dispersion, pointing to a greater alignment between reported earnings and underlying cash flows. In Pre Adoption period, Net Income and Cash flow both has reduced but the same is not significant also; In Post adoption period, Income has increased and change is significant, with that Net Cash flow has increased and that change is also significant. Which shows there is no significant Earning smoothing found either in Pre or Post adoption period as the change in Net Income is mostly aligned with Change in Cash Flow.

A notable finding is the significant decline in the SPOS variable, which measures the propensity of firms to report small positive earnings, from 0.2281 to 0.1835 . This reduction, with an unchanged median of zero, indicates a decreased tendency for "just-above-zero" earnings management post-IFRS adoption. Conversely, LNEG, representing the incidence of large negative earnings, increased slightly (from 0 to 0.009174), suggesting firms became more forthcoming in recognizing substantial losses, consistent with stricter reporting requirements under IND-AS.

Among control variables, firm size showed a substantial increase in both mean and median, suggesting overall growth in the agricultural sector companies. Growth moderated, and equity issuance dramatically decreased, indicating a reduced reliance on equity markets. Leverage remained stable, but its median increased, while debt issuance shifted from negative to positive, reflecting a change in financing preferences. Asset turnover modestly declined, but with narrower dispersion, suggesting more consistent operational efficiency. Cash flow from operations improved significantly, indicating that earnings quality is increasingly underpinned by real cash performance. Finally, the proportion of firms audited by a Big 4/5 firm slightly increased, suggesting a marginal rise in the use of high-quality auditors.

4.2 Univariate Analysis of Accounting Quality Proxies

Beyond descriptive trends, univariate tests were conducted to assess the statistical significance of changes in accounting quality metrics between the pre- and post-adoption periods.

Earnings Smoothing and Discretionary Accruals:

For earnings smoothing, measured by changes in net income and the variability of DNI over DCFO, the univariate results suggest that IND-AS adoption did not lead to a statistically significant improvement. While a reduction in mean earnings smoothing for DNI was observed (from 1.462 pre-adoption to 1.229 post-adoption), the Wilcoxon rank sum test statistic (-0.121) indicated this decline was not statistically significant. Similarly, the variability of DNI over DCFO showed a negligible and statistically insignificant change.

Regarding discretionary accruals, measured by the absolute difference between changes in net income and cash flow from operations ($|DA|$) and $|DA|$ adjusted by CFO residuals, a reduction in mean values was observed post-adoption. For $|DA|$, the mean declined from 0.1114 to 0.0837, and for $|DA|$ adjusted by CFO, it decreased from 0.1052 to 0.0781. These reductions suggest some improvement in accrual quality. However, the t-statistics and MW p-values reveal that these reductions are not statistically significant. This suggests that while IND-AS adoption is associated with small reductions in earnings smoothing and discretionary accruals, these effects are not strong enough to be deemed statistically significant in univariate analysis, implying a potentially modest rather than transformative immediate impact on earnings management practices.

Managing Earnings Toward Target:

In contrast to earnings smoothing and discretionary accruals, the SPOS variable, which captures the tendency to manage earnings towards small positive targets, showed a significant decline in the post-adoption period. This indicates that firms in the Indian agricultural sector were less inclined to engage in "just-above-zero" earnings management after IND-AS implementation. This reduction suggests that IND-AS has had a discernible effect on restraining opportunistic earnings management aimed at meeting or narrowly exceeding performance benchmarks.

Loss Recognition:

The analysis of loss recognition presents a mixed picture. While the descriptive statistics indicated that the median DNI became more negative, which could be interpreted as more transparent recognition of losses, the univariate findings were less conclusive regarding improvement in timely loss recognition. Specifically, the document notes that "the expected improvement in timely loss recognition was not evident" and that, "contrary to expectations, timely recognition of large losses declined in the post-adoption period". This suggests that despite the overall aims of IND-AS, its impact on timely recognition of large losses might not have been positive, or could even have been adverse within this context.

4.3 Multivariate Analysis: Panel Data Regression Results

The study employed panel data regression models to further explore the determinants of discretionary net income and the impact of IND-AS adoption, controlling for firm-specific characteristics. While the full regression tables are not reproduced here, the key findings regarding model fit and individual variable significance are discussed.

The panel regression model for DNI demonstrated limited explanatory power, with an adjusted R-squared of 0.074370 for one specification, and 0.051413 for another. Despite this, the overall model for DNI was statistically significant at the 1% level (F-statistic = 3.2191, Prob = 0.0052). This indicates that, as a group, the independent variables have a non-trivial joint effect on DNI.

Among the predictor variables, GROWTH emerged as the most statistically significant variable ($p < 0.001$), exhibiting a positive and substantial impact on DNI. This suggests that firms experiencing higher sales expansion tend to report stronger income changes, potentially reflecting income-increasing incentives in growing firms. Additionally, CFO was found to be statistically significant at the 5% level ($p = 0.0153$) and positively associated with DNI, implying that firms with stronger operational cash flows tend to report higher discretionary income. Other variables such as SIZE, EISSUE, LEV, DISSUE, TURN, and AUD, did not show a statistically significant association with DNI in the multivariate context, suggesting their limited influence on discretionary net income within the observed timeframe.

The Durbin-Watson statistic of 3.654 suggested the presence of negative autocorrelation in the residuals, which warrants further robustness checks or model refinement to ensure the validity of inferences drawn from the regression. The document acknowledges the limited explanatory power and suggests that the inclusion of alternative variables (e.g., governance indicators, earnings management proxies), panel fixed or random effects, or non-linear specifications may be necessary to better understand the determinants of DNI.

5. Discussion of Key Findings and Hypotheses

The empirical analysis provides a mixed but insightful picture of the impact of IND-AS adoption on accounting quality in the Indian agricultural sector, addressing the hypotheses outlined in the study.

- **Hypothesis 1: Earnings Smoothing:** The findings from the univariate analysis **do not statistically support** the hypothesis that IND-AS adoption leads to a reduction in earnings smoothing. While some descriptive reductions were observed, they were not statistically significant. This suggests that the impact on overall earnings smoothing may be modest or requires further time to materialize significantly.
- **Hypothesis 2: Managing Earnings Toward Target:** The results **strongly support** the hypothesis that IND-AS adoption leads to a reduction in the tendency of firms to manage earnings toward small positive targets. The significant decline in the SPOS variable indicates a positive effect of the new standards in curbing opportunistic "just-above-zero" earnings management.

- **Hypothesis 3: Loss Recognition:** The findings partially **support** the hypothesis that IND-AS does not lead to an improvement in timely loss recognition and may even be associated with a decline. While the increase in LNEG suggests more transparent reporting of substantial losses, the document explicitly states that the "expected improvement in timely loss recognition was not evident" and that "timely recognition of large losses declined". This complex outcome suggests that while firms might be recording more significant losses, the *timeliness* of that recognition might not have improved, or could have worsened.

Overall, the results suggest that IND-AS adoption has exerted a partial yet meaningful influence on accounting quality. While it appears to have constrained opportunistic discretion in managing earnings towards small positive targets, its effectiveness in uniformly improving all dimensions of accounting quality, particularly earnings smoothing and discretionary accruals, is not statistically significant. The observed changes are conditioned by the broader institutional environment in India. These findings underscore that while accounting standards matter, their full impact is shaped by the interplay with country-specific settings, including governance, enforcement, and market discipline.

6. Concluding Remarks

The overall conclusion regarding do convergence of Indian accounting standards from IND-GAAP to IFRS-converged IND-AS on accounting quality within the Indian agricultural sector presents a nuanced picture, with evidence suggesting both improvements in specific areas of financial reporting (Vishnani et al., 2021) and persistent challenges in other (Kliestik et al., 2021). But the persistent question still hingers on "Are accounting standards truly matters". The answer doesn't only rely on the quality of accounting standards only rather it also depends on the broader institutional context within which these standards are implemented, including regulatory enforcement, corporate governance, and market mechanisms (Ordóñez-Castaño et al., 2025; Rudra & Bhattacharjee, 2011). Our study provides evidence that, even within a specific economic sector like Indian agriculture, the impact of such a transition is multifaceted, leading to improvements in certain aspects of earnings management but not uniformly across all measures of accounting quality, particularly in areas like timely loss recognition (Outa, 2011). Specifically, while the study indicates a decline in the tendency to manage earnings toward small positive targets, the lack of statistically significant improvements in earnings smoothing and accrual quality highlights the complexities inherent in assessing the full effects of such a regulatory shift. This aligns with broader research suggesting that mere convergence to international accounting standards does not automatically guarantee superior accounting information quality without concomitant robust security laws, stringent legal enforcement, and strong investor protection mechanisms (Rudra & Bhattacharjee, 2011). The policy implication of our study is that convergence from IND GAAP to IND-AS would have incremental effect on accounting quality.

The study is limited by its focus on the Indian agricultural sector. In future the scope could be expanded to include other industrial sectors. In future the study could encompass the view of the stakeholders, managers you make accounting books (i.e. Chartered Accountant in Indian case) and auditors to understand the implications of convergence as they can easily differentiate between the pre- and post-converged. Future research could also delve into the implications of Ind AS adoption on capital markets, particularly concerning capital flow across diverse sectors, and conduct comparative studies with other emerging economies to explore variations in IFRS adoption or convergence.

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