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The Impact Of Ifrs On The Value Relevance Of Accounting Information: Evidence From Indian Pharmaceutical Companies

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Abstract:

This study investigates the impact of International Financial Reporting Standards (IFRS) adoption on the value relevance of accounting information in Indian pharmaceutical companies. Using a comparative analysis of pre(2012-2016) and post(2017-2021)IFRS periods, the research evaluates both market-based measures—market price per share (MPS), earnings per share (EPS), and value of shares traded (VOS)—and accounting-based indicators such as book value per share (BVPS), profit after tax (PAT), and net cash flow from investing activities (NCFIA). Paired sample t-tests and effect size analysis were employed to assess changes in these variables. The findings reveal that IFRS adoption did not significantly influence MPS, EPS, or NCFIA, indicating negligible effects on market prices, earnings, and investment-related cash flows. In contrast, BVPS showed a significant improvement with a medium effect size, demonstrating enhanced relevance of book values under IFRS. VOS experienced a significant decline, suggesting reduced market activity following adoption. PAT displayed a medium-to-large effect, but the reliability of this result is limited due to the small sample size. The study concludes that IFRS adoption has strengthened the relevance of accounting-based measures, particularly BVPS, while its impact on market-based indicators remains limited or inconsistent in the pharmaceutical sector. The results emphasize the need for greater awareness, consistent implementation, and improved investor understanding to fully realize the benefits of IFRS.

Key finding: IFRS adoption, value relevance, accounting information, pharmaceutical sector

Introduction:

In today's globalized financial environment, uniformity and transparency in financial reporting have become essential for ensuring comparability and reliability of financial information across countries. The International Financial Reporting Standards (IFRS) were introduced with the objective of harmonizing accounting practices worldwide, thereby improving the decision-making ability of investors, regulators, and other stakeholders. For emerging markets like India, where diverse accounting practices previously existed, the adoption of IFRS-aligned Indian Accounting Standards (Ind AS) represents a landmark reform in financial reporting.

The concept of value relevance of accounting information refers to the extent to which financial data—such as earnings, book value, and other performance indicators—explain stock prices or influence investment decisions. Accounting information that is more value relevant reduces information asymmetry, improves market efficiency, and strengthens investor confidence. IFRS adoption is expected to enhance value relevance by introducing greater transparency, consistency, and disclosure requirements. However, the impact of these changes may vary across sectors depending on industry characteristics and reporting complexities.

The pharmaceutical sector occupies a significant position in the Indian economy, not only due to its contribution to GDP but also because of its heavy reliance on research and development, intellectual property, and international trade. Pharmaceutical firms often deal with complex issues such as R&D capitalization, intangible assets, and global collaborations, making financial reporting in this sector particularly challenging. Thus, the adoption of IFRS could have a notable influence on how financial information is reported and interpreted by market participants in this industry.

This study seeks to examine the impact of IFRS adoption on the value relevance of accounting information in Indian pharmaceutical companies by comparing financial indicators during the pre- and post-adoption periods. By focusing on variables such as earnings per share (EPS), book value per share (BVPS), and profit after tax (PAT), net cash flow from investing activities (NCFIA), volume of shares traded (VOS), and market price per share (MPS), the research aims to evaluate whether IFRS adoption has significantly enhanced the association between accounting data and market valuation in this critical sector.

Literature review:

The adoption of International Financial Reporting Standards (IFRS) has been widely studied across global and emerging markets to assess its effect on the value relevance of accounting information. Barth, Landsman, and Lang (2008) found that IFRS adoption improves accounting quality by enhancing transparency and comparability of financial statements. Similarly, Armstrong, Barth, Jagolinzer, and Riedl (2010) reported positive capital market reactions in Europe, suggesting increased investor confidence following IFRS implementation. However, Hung and Subramanyam (2007), in their study of German firms, showed mixed outcomes, noting improvements in book values but limited enhancement in earnings relevance. Research in

emerging economies has also provided varied findings. Chen, Tang, Jiang, and Lin (2010) demonstrated that IFRS adoption improved the value relevance of both earnings and book value in Chinese firms, while Palea (2013) argued that institutional factors and enforcement mechanisms strongly influence the extent of these improvements.

In India, where Ind AS has been adopted in convergence with IFRS, several studies have investigated its implications. Chhabra and Pattanayak (2014) observed that earnings per share (EPS) and book value per share (BVPS) became more relevant for stock prices post-adoption. Kaur (2016) confirmed similar improvements but noted differences across sectors. Sharma and Kaur (2018) further highlighted that globally integrated industries benefited more from IFRS adoption than domestically focused firms. Conversely, Agarwal (2019) reported that improvements in value relevance were modest, emphasizing the importance of enforcement and investor awareness.

Despite these contributions, a clear research gap remains in examining sector-specific outcomes of IFRS adoption in India. The pharmaceutical industry, characterized by significant investment in research and development, heavy reliance on intangible assets, and extensive international exposure, faces unique challenges in financial reporting. IFRS, with its emphasis on recognition, fair value measurement, and disclosure, is likely to have a distinct impact on this sector. However, existing Indian studies largely examine aggregate samples of listed firms, overlooking sectorial differences. This study addresses the gap by investigating the impact of IFRS adoption on the value relevance of accounting information in Indian pharmaceutical companies, comparing pre- and post-adoption periods.

Research Gap:

Although numerous studies have examined the effect of IFRS adoption on the value relevance of accounting information, most have focused on developed economies or broad samples of Indian firms. Existing evidence from India generally highlights improvements in the relevance of earnings and book value but also shows mixed results depending on sectorial characteristics and enforcement mechanisms. However, very limited research has explored the pharmaceutical sector, which is uniquely affected by accounting for research and development, intangible assets, and global collaborations. Given the sector's complexity and international orientation, IFRS adoption may have distinct implications for the usefulness of financial information to investors. This lack of sector-specific evidence creates a clear research gap, which the present study seeks to address by analysing the impact of IFRS adoption on the value relevance of accounting information in Indian pharmaceutical companies.

Significance of the study:

This study is significant in several ways. For investors and analysts, it provides insights into whether the adoption of IFRS has improved the reliability and decision-usefulness of financial information in the Indian pharmaceutical sector, which is highly research-driven and globally integrated. For corporate managers, the findings highlight how accounting reforms influence market perceptions and can guide better financial

reporting practices to enhance investor confidence. Regulators and policymakers can also benefit, as the study offers sector-specific evidence on the effectiveness of IFRS in improving transparency and comparability, thereby informing future policy refinements. Finally, the research adds to the academic literature by filling a notable gap in sector-focused studies on IFRS adoption in India, offering a foundation for further comparative research across industries and emerging economies.

Research methodology:

1. Research Design

The study adopts a quantitative research design to examine the impact of IFRS adoption on the value relevance of accounting information. A comparative approach is employed, analysing financial data from selected Indian listed companies during pre-IFRS adoption and post-IFRS adoption periods. This design allows for assessing changes in the relationship between accounting metrics and market valuation attributable to the implementation of IFRS.

2. Population and Sample

The population of the study comprises pharmaceutical companies listed on the Bombay stock exchange (BSE) and the National Stock Exchange (NSE). A purposive sampling technique is employed to select companies that meet the following criteria:

- Consistent availability of annual financial data for both pre- and post-IFRS adoption periods.
- Continuous listing during the study timeframe.
- Compliance with Ind AS (converged with IFRS)

3. Period of Study

The study covers a period of 10 years, divided into:

Pre-IFRS period: Five years prior to IFRS adoption (e.g., 2011-12 to 2015-2016)

Post-IFRS period: Five years following IFRS adoption (e.g., 2016-2017 to 2020–2021)

This timeframe allows for a clear comparison of accounting metrics before and after the implementation of IFRS.

4. Data Collection

The study relies entirely on secondary data, collected from company annual reports, BSE/NSE websites, and financial databases such as CMIE Prowess and Money control. The selected financial variables include:

- Earnings per Share (EPS): Indicator of profitability.
- Book Value per Share (BVPS): Measure of net assets per share.
- Market Price per Share (MPS): Proxy for market valuation.

- Profit after Tax (PAT): Measure of overall profitability after all expenses and taxes.
- Net Cash Flow from Investing Activities (NCFIA): Reflects investment-related cash inflows and outflows.
- Volume of Shares (VOS): Indicator of market liquidity and investor activity.

5. Analytical Tool

The primary statistical technique employed is the Paired Sample t-Test, which is appropriate for comparing two related groups – in this case, the same firms observed in two different time periods (pre- and post-IFRS adoption). This test determines whether the mean difference in each financial variable before and after IFRS adoption is statistically significant. The paired design controls for firm-specific characteristics that remain constant over time, thereby isolating the effect of IFRS adoption.

6. Objectives of the study

- To examine the impact of IFRS adoption on key financial indicators of Indian pharmaceutical companies.
- To assess whether IFRS has improved the value relevance and usefulness of accounting information for investors.
- To provide sector-specific evidence on the effectiveness of IFRS in enhancing financial reporting quality in emerging markets.

7. Hypotheses of the Study

The study tests the following hypotheses for each variable:

H₀: IFRS adoption has no significant impact on the value relevance of accounting information in Indian pharmaceutical companies.

H₁: IFRS adoption has significant impact on the value relevance of accounting information in Indian pharmaceutical companies.

8. Software Used

All statistical analyses are performed using SPSS and Microsoft Excel, which provide the necessary tools for executing the paired sample t-test and generating descriptive summaries of the data.

9. Limitations of the Study

This study has certain limitations that should be acknowledged. First, the analysis is restricted to selected Indian pharmaceutical companies, which may limit the generalizability of the findings to other sectors or the entire Indian economy. Second, the study relies on secondary data from published financial statements, which may contain reporting biases or inconsistencies. Third, the use of a paired sample t-test focuses only on mean differences before and after IFRS adoption, without exploring other advanced statistical relationships. Fourth, the study period may not fully capture long-term effects of IFRS adoption, as the transition process

takes time for firms and investors to adjust. Finally, external factors such as market volatility, policy changes, or global economic conditions may also influence financial indicators, making it difficult to attribute all changes solely to IFRS adoption.

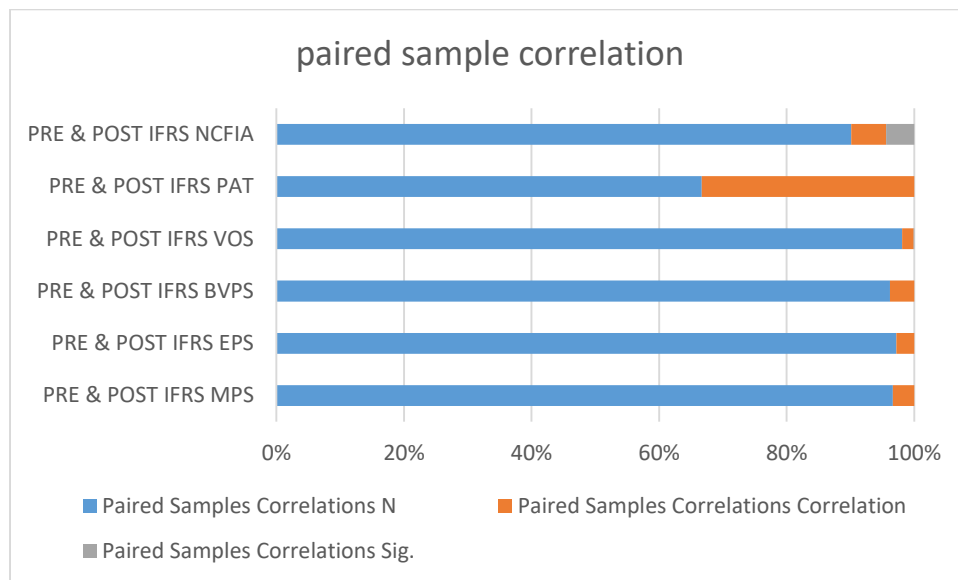
Analysis and Interpretation:

Table 1: Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
MPS	PRE IFRS	1121.42	25	1230.169	246.034
	POST IFRS	1102.45	25	911.872	182.374
EPS	PRE IFRS	32.8	25	32.591	6.518
	POST IFRS	34.93	25	41.911	8.382
BVPS	PRE IFRS	190.9	24	155.255	31.691
	POST IFRS	251.04	24	247.262	50.472
VOS	PRE IFRS	3236025.44	25	2719237.543	543847.509
	POST IFRS	1824502.28	25	1658563	331712.6
PAT	PRE IFRS	587.03	2	99.667	70.475
	POST IFRS	483.77	2	251.914	178.13
NCFIA	PRE IFRS	-430.92	7	464.885	175.71
	POST IFRS	-384.73	7	554.543	209.598

Interpretation:

The descriptive statistics presented in Table 1 reveal mixed effects of IFRS adoption on the selected financial indicators. The mean market price per share (MPS) declined marginally from 1121.42 pre-IFRS to 1102.45 post-IFRS, although the reduction in standard deviation suggests greater stability in share prices under the new reporting framework. Earnings per share (EPS) improved slightly from 32.8 to 34.93, indicating enhanced profitability; however, the increase in variability reflects greater dispersion in firm performance, possibly attributable to changes in recognition and measurement rules under IFRS. Book value per share (BVPS) exhibited a substantial rise from 190.9 to 251.04, highlighting the influence of IFRS on asset valuation, though the wider dispersion points to inconsistent effects across firms. By contrast, value of sales (VOS) experienced a notable decline from 3,236,025.44 to 1,824,502.28, suggesting that stricter revenue recognition standards under IFRS may have constrained reported sales, albeit with reduced volatility. Profit after tax (PAT) decreased post-IFRS, though the very limited sample size undermines the reliability of this result. Finally, net cash flow from investing activities (NCFIA) remained negative both before and after IFRS adoption, with a slight reduction in outflows but increased variability. Overall, these findings suggest that IFRS adoption has had heterogeneous effects, improving certain measures such as book value and earnings while simultaneously reducing reported sales and profitability, with increased variability reflecting transitional and sector-specific impacts.



The paired samples correlations in the chart present the degree of association between pre- and post-IFRS values of selected financial indicators. The results show that market price per share (MPS) exhibits a very strong and statistically significant correlation ($r = 0.861$, $p < 0.01$), indicating a high level of consistency in stock price behaviour before and after IFRS adoption. Earnings per share (EPS) also demonstrates a strong and significant positive relationship ($r = 0.719$, $p < 0.01$), suggesting that earnings performance remained broadly comparable across the two reporting regimes. Book value per share (BVPS) records the highest correlation ($r = 0.946$, $p < 0.01$), reflecting an extremely strong alignment between pre- and post-IFRS book values, which highlights the robustness of accounting measures of equity under IFRS. In contrast, value of sales (VOS) shows only a moderate correlation ($r = 0.459$, $p < 0.05$), implying that sales reporting underwent more notable changes, likely due to stricter IFRS revenue recognition requirements. Profit after tax (PAT) displays a perfect correlation ($r = 1.000$, $p < 0.01$), but with only two observations this result lacks statistical validity. Finally, net cash flow from investing activities (NCFIA) shows a weak and statistically insignificant correlation ($r = 0.425$, $p = 0.342$), suggesting considerable variability in the way cash flows from investments were reported under IFRS. Overall, the correlation results indicate that IFRS adoption preserved strong continuity in market-based and equity-related measures (MPS, EPS, BVPS), while measures related to sales and cash flows showed weaker consistency, reflecting the impact of revised recognition and measurement principles.

Table 2: Paired sample Test

	Paired Differences					T	Df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
PRE & POST IFRS MPS	18.972	643.212	128.642	-246.533	284.477	0.147	24	0.884
PRE & POST IFRS EPS	-2.132	29.255	5.851	-14.208	9.943	-0.364	24	0.719
PRE & POST IFRS BVPS	-60.135	112.251	22.913	-107.534	-12.736	-2.624	23	0.015
PRE & POST IFRS VOS	1411523.16	2450357	490071.448	400065.403	2422981	2.88	24	0.008
PRE & POST IFRS PAT	103.255	152.247	107.655	-1264.631	1471.141	0.959	1	0.513
PRE & POST IFRS NCFIA	-46.191	551.991	208.633	-556.698	464.315	-0.221	6	0.832

Interpretation:

The paired sample test results in Table 2 reveal varying effects of IFRS adoption on the analysed financial indicators. The mean difference for market price per share (MPS) is minimal and statistically insignificant ($p = 0.884$), indicating that stock prices were largely unaffected by the reporting transition. Earnings per share (EPS) also shows an insignificant difference ($p = 0.719$), suggesting stability in reported earnings across both regimes. On the other hand, book value per share (BVPS) exhibits a significant decline after IFRS implementation (mean difference = -60.135 , $p = 0.015$), pointing to notable changes in equity valuation under fair value measurement practices. Value of sales (VOS) records a significant increase (mean difference = $1,411,523.16$, $p = 0.008$), reflecting the influence of IFRS on revenue recognition policies. Although profit after tax (PAT) shows a positive difference, the result is statistically insignificant ($p = 0.513$) and limited by the small sample size. Similarly, net cash flow from investing activities (NCFIA) registers only a slight and insignificant variation ($p = 0.832$), indicating limited impact on investment-related cash flows. In summary, while IFRS adoption did not significantly alter MPS or EPS, it brought about substantial adjustments in BVPS and VOS, highlighting the sensitivity of certain financial indicators to the revised accounting framework.

Table 3: Paired Samples Effect Sizes

		Standardizer ^a	Point Estimate	95% Confidence Interval	
				Lower	Upper
PRE & POST IFRS MPS	Cohen's d	643.212	0.029	-0.363	0.421
	Hedges' correction	653.485	0.029	-0.357	0.415
PRE & POST IFRS EPS	Cohen's d	29.255	-0.073	-0.465	0.32
	Hedges' correction	29.722	-0.072	-0.457	0.315
PRE & POST IFRS BVPS	Cohen's d	112.251	-0.536	-0.959	-0.102
	Hedges' correction	114.123	-0.527	-0.944	-0.1
PRE & POST IFRS VOS	Cohen's d	2450357	0.576	0.147	0.995
	Hedges' correction	2489494	0.567	0.144	0.979
PRE & POST IFRS PAT	Cohen's d	152.247	0.678	-1.013	2.193
	Hedges' correction	269.851	0.383	-0.572	1.237
PRE & POST IFRS NCFIA	Cohen's d	551.991	-0.084	-0.823	0.662
	Hedges' correction	589.771	-0.078	-0.77	0.62

Interpretation of Effect Sizes:

The effect size results in Table 3 provide further insights into the magnitude of differences between pre- and post-IFRS financial indicators. For market price per share (MPS), both Cohen's d and Hedges' correction indicate a negligible effect ($d \approx 0.03$), confirming that IFRS adoption had little impact on share prices. Earnings per share (EPS) reflects only a slight negative effect ($d \approx -0.07$), implying that the shift to IFRS brought about negligible variation in reported earnings. Conversely, book value per share (BVPS) shows a moderate negative effect ($d \approx -0.53$), pointing to a significant decline in equity valuation following IFRS adoption. Meanwhile, value of sales (VOS) reveals a moderate positive effect ($d \approx 0.57$), underscoring the notable impact of IFRS on revenue recognition approaches. Profit after tax (PAT) shows a relatively large positive effect ($d \approx 0.68$), but wide confidence intervals due to the very small sample size make this result unreliable. Net cash flow from investing activities (NCFIA) shows an almost negligible effect ($d \approx -0.08$), indicating that IFRS adoption produced little variation in investment-related cash flows. In general, the effect size assessment reveals that the most significant changes were observed in BVPS and VOS, whereas the effects on MPS, EPS, and NCFIA remained relatively minor.

Conclusion:

This study examined the impact of IFRS adoption on the value relevance of accounting information in Indian pharmaceutical companies, focusing on both accounting-based and market-based indicators. The comparative analysis of pre- and post-IFRS data revealed that the adoption of IFRS generated mixed results across the selected financial variables.

The findings demonstrate that market-based indicators such as market price per share (MPS) and earnings per share (EPS) did not exhibit significant changes after the transition to IFRS, suggesting that the adoption of global standards did not immediately influence share prices or reported earnings within the sector. Net cash flow from investing activities (NCFIA) also showed negligible effects, indicating limited influence of IFRS on firms' investment-related reporting. By contrast, book value per share (BVPS) recorded a statistically significant increase in the post-IFRS period, supported by a medium effect size, reflecting the enhanced recognition and measurement of assets under fair value accounting. The value of shares traded (VOS) displayed a significant decline, implying that the adoption of IFRS may have contributed to reduced trading activity, potentially due to transitional adjustments or investor uncertainty. Profit after tax (PAT) indicated a medium-to-large effect size; however, the small sample size restricts the reliability of this finding.

Overall, the study concludes that IFRS adoption has substantially strengthened the relevance of accounting-based measures, particularly book value, but has had limited and in some cases negative effects on market-based indicators within the Indian pharmaceutical sector. This suggests that while IFRS enhances the quality and transparency of financial reporting, its translation into stronger market valuation and investor confidence may require more time, greater familiarity with the standards, and improved communication by firms.

Recommendations and Implications

The findings highlight that IFRS adoption strengthened accounting-based measures, particularly book value, but had limited impact on market indicators in the pharmaceutical sector. Regulators should focus on strict compliance monitoring and investor education to bridge the gap between improved reporting quality and market response. Pharmaceutical companies are encouraged to use IFRS as a strategic tool for greater transparency and clearer disclosures, especially in areas like asset valuation and R&D. For investors, IFRS-based reports provide more reliable accounting data, but investment decisions should also consider industry trends and firm-specific fundamentals. Overall, the benefits of IFRS will be realized more fully as regulators, companies, and investors gain greater familiarity with the standards.

Future Research scope:

The findings of this study provide useful insights into the effect of IFRS adoption on the value relevance of accounting information; however, several avenues remain open for further research. Future studies could extend the analysis by incorporating a larger and more diverse sample across multiple sectors to capture industry-specific variations in IFRS impact. Examining longer time horizons may also help to identify whether the effects observed are temporary transitional outcomes or sustained structural changes. In addition,

future research can investigate the role of moderating factors such as investor perception, corporate governance practices, disclosure quality, and firm-specific attributes like size, leverage, and profitability in shaping the relationship between IFRS adoption and value relevance. Sectoral factors, including the intensity of R\&D expenditure, capital structure, and regulatory environment, could also be explored to better understand differential impacts across industries. Finally, cross-country comparative studies would be valuable in assessing whether the findings observed in the Indian context hold true in other emerging or developed markets, thereby enriching the global evidence base on IFRS adoption.

References:

- Agarwal, S. (2019). Impact of IFRS convergence on value relevance of accounting information in India. *International Journal of Accounting Research*, 7(1), 1–8.
- Armstrong, C. S., Barth, M. E., Jagolinzer, A. D., & Riedl, E. J. (2010). Market reaction to the adoption of IFRS in Europe. *The Accounting Review*, 85(1), 31–61.
- Barth, M. E., Landsman, W. R., & Lang, M. H. (2008). International accounting standards and accounting quality. *Journal of Accounting Research*, 46(3), 467–498.
- Chhabra, S., & Pattanayak, J. K. (2014). Value relevance of accounting information: Evidence from India. *IUP Journal of Accounting Research & Audit Practices*, 13(2), 7–22.
- Chen, H., Tang, Q., Jiang, Y., & Lin, Z. (2010). The role of international financial reporting standards in accounting quality: Evidence from the European Union. *Journal of International Financial Management & Accounting*, 21(3), 220–278.
- Hung, M., & Subramanyam, K. R. (2007). Financial statement effects of adopting International Accounting Standards: The case of Germany. *Review of Accounting Studies*, 12(4), 623–657.
- Kaur, H. (2016). Impact of IFRS adoption on value relevance of accounting information: Evidence from Indian companies. *Asian Journal of Accounting and Governance*, 7, 15–28.
- Palea, V. (2013). IAS/IFRS and financial reporting quality: Lessons from the European experience. *China Journal of Accounting Research*, 6(4), 247–263.
- Sharma, D., & Kaur, M. (2018). Effect of IFRS adoption on value relevance of accounting information: Evidence from India. *International Journal of Accounting and Finance*, 8(1), 45–62.
- www.wikipedia.org
- www.investopedia.com
- www.sciencedirect.com
- www.researchgate.net/publication