

Foreign Institutional Investment and Accounting-Based Financial Performance of Selected Pharmaceutical Companies in India

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1. Abstract

This research investigates the correlation between Foreign Institutional Investment and the financial performance based on accounting data of ten chosen pharmaceutical companies based in India. Quarterly statistics concerning twenty-four quarters from FY 2020-21 up to FY 2025-26 have been examined for Sun Pharmaceutical Industries, Dr. Reddy's Laboratories, Cipla, Divis Laboratories, Lupin, Torrent Pharmaceuticals, Zydus Lifesciences, Biocon, Aurobindo Pharma and Glenmark Pharmaceuticals. The independent variable was represented by FII/FPI ownership in the companies while the accounting performance was represented by Revenue from Operations, Profit after Tax and Basic Earnings per Share. The quarterly trends were analyzed with the help of the descriptive statistics and trend analysis along with Pearson's correlation that describes the strength and direction of the relation between two variables. The effect of FII ownership on different factors was evaluated by the means of Ordinary Least Squares regression along with diagnostic tests. The results indicate variation between the companies in question. Positive and significant impacts on revenue were found for Dr. Reddy's, Cipla, Lupin, Torrent and Aurobindo while Biocon and Glenmark demonstrated significant negative impact. Profitability impact was found positive in the case of Dr. Reddy's, Lupin, Torrent, Zydus and Aurobindo and negative in the case of Biocon. Sun Pharma and Divi's have shown no significant impact on accounting performance. In conclusion, the research shows that there is a connection between FII participation and accounting performance but the directions and magnitudes are company-specific in nature rather than uniform across the Indian pharmaceutical industry.

Keywords: Foreign Institutional Investment, Pharmaceutical Companies, Revenue from Operations, Profit after Tax, Earnings per Share.

2. Introduction

Foreign Institutional Investors play a pivotal role in the Indian capital market by enhancing liquidity, improving corporate governance standards and improving the investor confidence. Pharmaceutical sector attracts investors because of its export potential, research orientation, stability of demand, and prospects of long-term growth. But the increase in foreign institutional ownership does not mean that it leads to improvement in accounting related financial performance right away.

The present paper seeks to find out whether change in foreign institutional investor/portfolio foreign investment ownership is connected with change in Revenue from Operations, Profit after Tax, and Basic Earnings per Share of ten chosen pharmaceutical companies in India. The analysis takes 24 quarterly periods for each of the chosen companies from FY 2020-21 to FY 2025-26 which means that 240 corporate-quarter observations will be used. The firm-specific approach allows identifying positive, negative, and statistically insignificant effects otherwise hidden in the aggregate sectoral analysis.

3. Review of Literature

3.1 Bhaumik, Driffield and Pal (2010)

Bhaumik, Driffield and Pal (2010), According to a study titled "Does Ownership Structure of Emerging-Market Firms Affect Their Outward FDI? Case of Indian Automotive and Pharmaceutical Sector," the impact of ownership structure on the outbound investment behavior of Indian companies has been studied. In the research, the researchers employed an empirical approach at the firm level to examine whether family ownership and top-heavy structure influenced foreign direct investment. The findings suggest that family businesses are less likely to invest internationally, while foreign ownership, in the form of strategic investors, leads to international expansion.

3.2 Purkayastha, Manolova and Edelman (2020)

Purkayastha, Manolova and Edelman (2020), In their research paper titled “Innovation and Internationalization in the Indian Pharmaceutical Sector: The Moderating Role of Ownership Structures,” they analyzed the association between ownership structure, research intensity and internationalization. The authors studied 616 firm-year records of 88 research-based Indian pharmaceutical firms between 2006 and 2012, using random-effects two-stage least-squares panel regression. The findings revealed that research intensity was positively correlated with internationalization and that family ownership enhanced the relationship between research investments and international expansion. Nevertheless, foreign institutional and foreign corporate ownership were not found to significantly moderate the relationship between innovation and internationalization.

3.3 Behera and Rath (2021)

Behera and Rath (2021), In their research entitled The COVID-19 Pandemic and Indian Pharmaceutical Companies: An Event Study Analysis, they analyzed how Indian pharmaceutical companies performed in the stock market during the pandemic. The researchers have utilized the event-study method and verified the accuracy of abnormal returns for different models used. According to the study, the pharmaceutical sector earned positive average returns during the COVID-19 period. Nonetheless, the firm-level results varied. Thus, the findings showed that the impact of outside events and investors’ expectations differs widely for different pharmaceutical companies.

3.4 Lobo and Bhat (2024)

Lobo and Bhat (2024), In their paper titled Uncovering Investor Behaviour: A Study of the Impact of COVID-19 on Indian Pharmaceutical Sector, they studied factors of investment in pharmaceutical shares. Data was collected from 305 retail investors using electronic survey, and the analysis was carried out using the Theory of Planned Behaviour and Partial Least Squares Structural Equation Modelling. Results showed that the attitudes and subjective norms of investors, perception of behavioural control, and attention to market fundamentals had a significant impact on their decisions regarding investments. It can be said that whether to invest in pharmaceutical firms is determined by both financial and behavioural reasons.

3.5 Lourdesraj et al. (2021)

Lourdesraj et al. (2021), In their study Efficiency of Nifty Pharma Index during COVID-19 Pandemic in India, they focused on analysing the fluctuations of selected stocks in pharmaceutical sector (2021). The authors collected the daily closing prices of stocks of ten Nifty Pharma companies during the period from December 2019 to November 2020 and applied descriptive statistics, the Augmented Dickey-Fuller test, and the GARCH (1,1) model to analyze the data. The study made significant contributions as it discovered that almost all the studied pharmaceutical stocks experienced major changes during the pandemic with Divi's Laboratories showing the highest fluctuations while Biocon – the lowest. The study also shows that the changes in the sector affect pharmaceutical companies differently.

3.6 Varghese et al. (2025)

Varghese et al. (2025), In the paper named Fundamental Research and Analysis of India Pharmaceutical Sector, Varghese, Santhosh, Anjana and Francis examined the investment prospects and financial position of various companies in the pharmaceutical sector. The authors worked with data collected from various financial statement analysis and used the Altman Z score model, PESTEL and Porter’s 5 forces model to assess the financial strength of Cipla, Sun Pharma and Dr. Reddy. According to the results obtained, Dr. Reddy possessed the best financial condition whereas Cipla and Sun Pharma were able to maintain their stability but were in Altman’s Z score grey zone. In the end, the authors argued that for the development of the pharmaceutical businesses innovation, the efficiency of operations and financial monitoring are required.

3.7 Parab and Reddy (2020)

Parab and Reddy (2020), In their research paper titled A Cause-and-Effect Relationship between FIIs, DIIs and Stock Market Returns in India: Pre- and Post-Demonetization Analysis, they conducted research on the aspects of institutional investing and industry-level shares performance, including Nifty Pharma Index. They analyzed the inflow and outflow of FIIs and DIIs, as well as market and sector returns during the various periods before and after

demonetization using correlation, regression, unit-root and diagnostic testing. The research found that association of FII and DII trading with Nifty Pharma Index returns has been negative for both periods and that the demonetization had no significant effect on the total capital flows. Therefore, the researchers stressed the need for conducting an industry-wide analysis of the impacts of institutional investing.

4. Research Gap

The studies that have been reviewed focused primarily on internationalization, stock prices, volatility, investor behaviour, corporate control, and the financial viability of the pharmaceutical industry. However, little work has been done in terms of examining the connection between foreign institutional investment or foreign portfolio investment shareholding in a specific company and the accounting variables, including Revenue from Operations, Profit after Tax, and Basic EPS. Earlier studies also show that comparative evidence of multiple companies (from the Indian pharmaceutical sector) has been limited to one quarter. However, this paper fills the gap by examining an amount of ten pharmaceutical companies based on uniform quarterly figures.

5. Objectives of the Article

1. To analyze quarterly patterns of Foreign Institutional Investment with regard to accounting based performance of companies: To identify the trends in FII/FPI, Revenue from Operations, Profit after Tax and Basic Earnings per Share for Indian pharmaceutical companies over FY 2020-21 till FY 2025-26.
2. To examine the relationship between FII and operational performance of companies: To find out the nature of correlation between FII/FPI and Revenue from Operation using Pearson's correlation analysis.
3. To evaluate the impact of Foreign Institutional Investment on profitability of the companies: To assess the impact of FII/FPI on Profit after Tax and Basic Earnings per Share with the help of OLS regression model.
4. To evaluate the impact of Foreign Institutional Investment on accounting performance of specific firms: To select companies in pharmaceutical sector based on whether FII/FPI has any significant positive impact or there is no impact on performance indicators based on accounting perspective.

6. Research Methodology

6.1 Research Design

This research employs a quantitative, descriptive and analytical approach. Descriptive study is used to analyze the most important features such as averages, representations, and variation of the variables. At the same time, inferential analytics is used to assess the relation between the variables.

6.2 Nature and Sources of Data

The study is based entirely on secondary data obtained from published quarterly financial results and shareholding information compiled in the source document. The data relate to the period from FY 2020-21 to FY 2025-26.

This particular research relies heavily on the use of secondary data which is precisely sourced from the quarterly financial results and equity data listed in the paper. The information relates to the years FY 2020-21 to FY 2025-26.

6.3 Sample of the Study

Ten leading pharmaceutical companies listed on Indian stock exchanges were purposively selected:

1. Sun Pharmaceutical Industries Ltd.
2. Dr Reddy's Laboratories Ltd.
3. Cipla Ltd.
4. Divi's Laboratories Ltd.
5. Lupin Ltd.
6. Torrent Pharmaceuticals Ltd.
7. Zydus Lifesciences Ltd.
8. Biocon Ltd.
9. Aurobindo Pharma Ltd.

10. Glenmark Pharmaceuticals Ltd.

Each company has 24 quarterly observations, providing a total of 240 firm-quarter observations.

6.4 Variables of the Study

Type of Variable	Variable	Measurement
Independent variable	FII/FPI holdings	Percentage of equity shares held by foreign institutional or portfolio investors
Dependent variable	Revenue from Operations	Quarterly revenue measured in ₹ crore
Dependent variable	Profit after Tax	Quarterly net profit measured in ₹ crore
Dependent variable	Basic EPS	Quarterly earnings per equity share measured in ₹

6.5 Data Validation

The collected data were subjected to checks for absences, negative figures, range outliers and exceptional items. Each of the company datasets had 24 entries on each variable, and thus the datasets could ensure complete information load of the data. Both negative and exceptional items were kept as far as they are authentic business activities and not simply mistakes recorded by data entry process.

6.6 Statistical Tools

- Mean, median, standard deviation and coefficient of variation;
- Quarter-on-quarter growth, overall percentage change and CAGR;
- Pearson's correlation coefficient;
- Ordinary Least Squares regression;
- Coefficient of determination;
- t-test and F-test;
- Durbin-Watson test;
- Shapiro-Wilk normality test;
- Breusch-Pagan heteroscedasticity test; and
- Variance Inflation Factor.

The null hypothesis was rejected when the calculated p-value was below the 5 per cent level of significance. The document uses company-wise models because the response of accounting performance to institutional ownership differs across pharmaceutical companies.

7. Mathematical and Statistical Models

7.1 Model for Objective 1: Descriptive and Trend Analysis

The arithmetic mean of a variable is calculated as:

$$\bar{X} = \frac{\sum_{t=1}^n X_t}{n}$$

Where $\bar{X}$ is the mean value of the variable, X_t is the value in quarter t and n is the number of quarterly observations.

Quarter-on-quarter growth is calculated as:

$$QoQ_t = \frac{X_t - X_{t-1}}{X_{t-1}} \times 100$$

The overall percentage change is:

$$Overall\ Change = \frac{X_n - X_1}{X_1} \times 100$$

Compound Annual Growth Rate is calculated as:

$$CAGR = \left(\left(\frac{X_n}{X_1} \right)^{\frac{1}{Y}} - 1 \right) \times 100$$

Where Y represents the number of years between the first and final observations.

7.2 Model for Objective 2: Pearson's Correlation

The relationship between FII/FPI holdings and Revenue from Operations is measured through:

$$r_{XY} = \frac{\sum_{t=1}^n (X_t - \bar{X})(Y_t - \bar{Y})}{\sqrt{\sum_{t=1}^n (X_t - \bar{X})^2 \sum_{t=1}^n (Y_t - \bar{Y})^2}}$$

Where X_t denotes FII/FPI holding in quarter t , Y_t denotes Revenue from Operations in quarter t and r is Pearson's correlation coefficient. The value of r ranges from -1 to $+1$. A positive value represents a direct relationship, whereas a negative value represents an inverse relationship.

7.3 Model for Objective 3: OLS Regression

The effect of FII/FPI holdings on Revenue from Operations is estimated as:

$$REV_{it} = \beta_{0i} + \beta_{1i} FII_{it} + \varepsilon_{it}$$

The effect on Profit after Tax is estimated as:

$$PAT_{it} = \alpha_{0i} + \alpha_{1i} FII_{it} + \mu_{it}$$

The effect on Basic EPS is estimated as:

$$EPS_{it} = \gamma_{0i} + \gamma_{1i} FII_{it} + v_{it}$$

Where i represents the selected pharmaceutical company, t represents the quarter, FII_{it} is the percentage of FII/FPI holdings, the slope coefficients represent the estimated effects of a one-percentage-point change in FII holdings and the final terms are the respective error terms.

The slope coefficient is calculated as:

$$\beta_1 = \frac{\sum_{t=1}^n (X_t - \bar{X})(Y_t - \bar{Y})}{\sum_{t=1}^n (X_t - \bar{X})^2}$$

The intercept is:

$$\beta_0 = \bar{Y} - \beta_1 \bar{X}$$

The coefficient of determination is:

$$R^2 = 1 - \frac{\sum_{t=1}^n (Y_t - \hat{Y}_t)^2}{\sum_{t=1}^n (Y_t - \bar{Y})^2}$$

The significance of the coefficient is evaluated through:

$$t = \frac{\beta_1}{SE(\beta_1)}$$

The hypotheses are:

$$H_0: \beta_1 = 0$$

$$H_1: \beta_1 \neq 0$$

7.4 Model for Objective 4: Company-Wise Classification

Condition	Classification
$\beta_1 > 0$ and $p < 0.05$	Significant positive effect
$\beta_1 < 0$ and $p < 0.05$	Significant negative effect
$p \geq 0.05$	Statistically insignificant effect

8. Statistical Analysis and Interpretation

8.1 Descriptive and Trend Analysis

Table 1: Company-Wise Descriptive and Growth Summary

Company	Mean FII/FPI (%)	Mean Revenue (₹ Cr)	Revenue Overall Change (%)	Mean PAT (₹ Cr)	PAT Overall Change (%)	Mean Basic EPS (₹)
Sun Pharmaceutical	16.90	10,434.35	-34.06	1,604.20	136.76	6.62
Dr Reddy's Laboratories	35.20	6,607.21	70.06	1,051.18	-62.04	54.56
Cipla	29.61	6,060.40	56.83	1,014.47	-64.08	12.54
Divi's Laboratories	20.96	2,229.67	100.53	630.25	96.75	23.76
Lupin	30.94	4,806.74	85.01	624.54	89.08	13.79
Torrent Pharmaceuticals	12.55	2,624.04	75.93	411.96	88.89	12.18
Zydus Lifesciences	5.14	4,389.66	22.18	733.56	332.34	7.28
Biocon	11.12	2,972.12	127.73	331.30	161.64	2.76
Aurobindo Pharma	27.48	7,098.90	62.09	826.32	54.98	14.11
Glenmark Pharmaceuticals	22.58	3,540.97	84.88	474.79	176.08	16.85

Interpretation: Dr. Reddy's Laboratories had the maximum average shares of FII/FPI at 35.20 per cent. Lupin and Cipla followed. Zydus Lifesciences had the minimum average institutional sharing at 5.14 per cent only. In nine out of ten companies the total revenue rose, while Sun Pharmaceuticals shared a drop in revenues noted during the first and the last quarters. PAT increased in eight companies during the research period but decreased in the case of Dr. Reddy's Laboratories and Cipla, indicating that revenue increase does not mean that efficiency in terms of profit corresponds to it.

8.2 Pearson's Correlation Analysis

Table 2: Correlation of FII/FPI Holdings with Accounting-Performance Variables

Company	FII-Revenue r	p-value	FII-PAT r	p-value	FII-EPS r	p-value
Sun Pharmaceutical	-0.0753	0.7264	0.0938	0.6630	0.1542	0.4718
Dr Reddy's Laboratories	0.9563	<0.001	0.4732	0.0195	-0.0311	0.8852
Cipla	0.9044	<0.001	0.0744	0.7298	0.0752	0.7269
Divi's Laboratories	-0.2623	0.2156	-0.2687	0.2042	-0.2682	0.2050
Lupin	0.9708	<0.001	0.6972	0.0002	0.6977	0.0002
Torrent Pharmaceuticals	0.7783	<0.001	0.7925	<0.001	0.7925	<0.001
Zydus Lifesciences	0.0531	0.8053	0.5453	0.0059	0.5458	0.0058
Biocon	-0.9208	<0.001	-0.7453	<0.001	-0.7453	<0.001
Aurobindo Pharma	0.9533	<0.001	0.7150	0.0001	0.7159	0.0001

Company	FII-Revenue r	p-value	FII-PAT r	p-value	FII-EPS r	p-value
Glenmark Pharmaceuticals	-0.5913	0.0023	-0.3983	0.0539	-0.3981	0.0540

Interpretation: Lupin exhibited the highest positive correlation among FII/FPI ownership as well as the revenue, followed by Dr Reddy's Laboratories and Aurobindo Pharma. Biocon exhibited a strong, negative correlation between FII ownership and the three accounting variables. Torrent Pharmaceuticals, Lupin and Aurobindo Pharma exhibited a statistically significant correlation with FII ownership, revenue, profit after tax (PAT) and earnings per share (EPS). Sun Pharmaceuticals and Divi's Laboratories did not exhibit statistically meaningful relationships between any of the dependent variables used in this analysis.

8.3 OLS Regression: Revenue from Operations

Table 3: Effect of FII/FPI Holdings on Revenue from Operations

Company	FII Beta	R ²	p-value	Statistical Result
Sun Pharmaceutical	-60.91	0.0057	0.7264	Insignificant
Dr Reddy's Laboratories	341.46	0.9144	<0.001	Significant positive
Cipla	188.22	0.8180	<0.001	Significant positive
Divi's Laboratories	-41.55	0.0688	0.2156	Insignificant
Lupin	187.82	0.9424	<0.001	Significant positive
Torrent Pharmaceuticals	174.74	0.6058	<0.001	Significant positive
Zydus Lifesciences	35.18	0.0028	0.8053	Insignificant
Biocon	-141.33	0.8478	<0.001	Significant negative
Aurobindo Pharma	237.99	0.9088	<0.001	Significant positive
Glenmark Pharmaceuticals	-160.30	0.3497	0.0023	Significant negative

Interpretation: According to results, an increase by one per cent in the FII/FPI holdings of Dr Reddy's Laboratories is linked with the company achieving a rise in revenues of ₹341.46 crore and ₹237.99 crore in revenues of Aurobindo Pharmaceuticals, which are the second-highest. As per the statistics available, the company (Lupin) has the highest explanatory power, which is measured as the ratio of FII holdings accounting for 94.24% of the variation in revenues of the company. Biocon and Glenmark have the significantly negative coefficients illustrating that accounting revenues grow in the periods of decreasing institutional investors' holdings. The revenue models for the companies such as Sun Pharmaceutical, Divi's Laboratories, and Zydus Lifesciences underperform statistically.

8.4 OLS Regression: Profit after Tax

Table 4: Effect of FII/FPI Holdings on Profit after Tax

Company	FII Beta	R ²	p-value	Statistical Result
Sun Pharmaceutical	33.15	0.0088	0.6630	Insignificant
Dr Reddy's Laboratories	49.23	0.2239	0.0195	Significant positive
Cipla	6.63	0.0055	0.7298	Insignificant
Divi's Laboratories	-19.00	0.0722	0.2042	Insignificant
Lupin	33.36	0.4861	0.0002	Significant positive
Torrent Pharmaceuticals	46.31	0.6281	<0.001	Significant positive
Zydus Lifesciences	101.98	0.2974	0.0059	Significant positive
Biocon	-26.35	0.5555	<0.001	Significant negative
Aurobindo Pharma	34.57	0.5112	0.0001	Significant positive
Glenmark Pharmaceuticals	-19.70	0.1586	0.0539	Insignificant at 5%

Interpretation: The holdings of foreign portfolio investors had a substantial impact on the profit after tax of the companies such as Dr. Reddy's Laboratories, Lupin, Torrent Pharmaceuticals, Zydus Lifesciences, and Aurobindo Pharma. Torrent Pharmaceuticals had the highest share of influence with 62.81 per cent of the variation in profit after tax being attributed to foreign investment. In the case of Biocon, however, the influence was negative with 55.55 per cent of profit after tax depending on foreign investment. Glenmark, however, was very close to being significant in negative influence but was above 5 per cent.

8.5 OLS Regression: Basic Earnings per Share

Table 5: Effect of FII/FPI Holdings on Basic EPS

Company	FII Beta	R ²	p-value	Statistical Result
Sun Pharmaceutical	0.2084	0.0238	0.4718	Insignificant
Dr Reddy's Laboratories	-0.2253	0.0010	0.8852	Insignificant
Cipla	0.0829	0.0057	0.7269	Insignificant
Divi's Laboratories	-0.7152	0.0720	0.2050	Insignificant
Lupin	0.7369	0.4868	0.0002	Significant positive
Torrent Pharmaceuticals	1.3676	0.6280	<0.001	Significant positive
Zydus Lifesciences	1.0140	0.2979	0.0058	Significant positive
Biocon	-0.2195	0.5555	<0.001	Significant negative
Aurobindo Pharma	0.5912	0.5125	0.0001	Significant positive
Glenmark Pharmaceuticals	-0.6990	0.1585	0.0540	Insignificant at 5%

Interpretation: FII/FPI holdings had a significant and positive impact on the Basic EPS of companies such as Lupin, Torrent Pharmaceuticals, Zydus Lifesciences and Aurobindo Pharma. Torrent showed the highest coefficient, which indicates that any increase of FII's one percentage point would increase the quarterly EPS by ₹1.37. Biocon had a significant negative correlation concerning the FII holdings and Basic EPS. No significant impact about EPS was observed in companies such as Sun Pharmaceutical, Dr Reddy's Laboratories, Cipla, Divi's Laboratories or Glenmark Pharmaceuticals.

8.6 Comparative Evaluation

Table 6: Company-Wise Classification of Accounting-Performance Effects

Company	Revenue Effect	PAT Effect	EPS Effect	Overall Classification
Sun Pharmaceutical	Insignificant	Insignificant	Insignificant	No significant accounting effect
Dr Reddy's Laboratories	Positive	Positive	Insignificant	Partial positive effect
Cipla	Positive	Insignificant	Insignificant	Revenue-based positive effect
Divi's Laboratories	Insignificant	Insignificant	Insignificant	No significant accounting effect
Lupin	Positive	Positive	Positive	Broad positive effect
Torrent Pharmaceuticals	Positive	Positive	Positive	Broad positive effect
Zydus Lifesciences	Insignificant	Positive	Positive	Profitability-based positive effect
Biocon	Negative	Negative	Negative	Broad negative effect
Aurobindo Pharma	Positive	Positive	Positive	Broad positive effect
Glenmark Pharmaceuticals	Negative	Insignificant	Insignificant	Revenue-based negative effect

According to the regression diagnostics presented in the original document, it is observed that the model's Variance Inflation Factor is 1.00 as the models consist of only one independent variable. At the same time, some Durbin-Watson statistics suggest some positive autocorrelation. As for the Shapiro-Wilk and Breusch-Pagan tests, their results vary substantially across companies and dependent variables. Thus, it could be concluded that the estimated coefficients should be viewed as statistical correlations rather than the proof of causality.

9. Findings of the Study

- **Change in Institutional Ownership:** The level of foreign institutional (FII) or Foreign Portfolio Investment (FPI), varies across the firms, from Zydus Lifesciences' 5.14 per cent to 35.20 per cent as reported by Dr Reddy's Laboratories.
- **Revenue Expansion:** Nine out of the ten entities managed to grow their revenues positively, with Biocon leading through a notable increase of 127.73 per cent.
- **Profitability Growth:** Profit after Tax (PAT) increased in eight entities, whereas the other two companies (Dr Reddy's Laboratories and Cipla) achieved a decreasing trend in profit across the timelines analysed while still getting positive profits on average.
- **Positive Revenue Impacts:** There was a positive and significant impact of FII/FPI ownership on revenue of Dr Reddy's Laboratories, Cipla, Lupin, Torrent Pharmaceuticals and Aurobindo Pharma.
- **Negative Revenue Effects:** Biocon and Glenmark Pharmaceuticals saw a statistically significant inverse relationship between FII holdings and revenue.
- **Data on Profitability:** Statistically significant and positive PAT-related impacts of FII/FPI ownership were found in case of Dr Reddy's Laboratories, Lupin, Torrent Pharmaceuticals, Zydus Lifesciences and Aurobindo Pharma.
- **EPS influences:** Positive and statistically significant EPS influences were found in case of Lupin, Torrent Pharmaceuticals, Zydus Lifesciences and Aurobindo Pharma, while in case of Biocon, a negative EPS influence has been noted.
- **Companies with major positive influences:** The three companies that have presented positive influences on revenue, PAT and EPS include: Lupin, Torrent Pharmaceuticals and Aurobindo Pharma.
- **Companies with major negative influence:** Biocon has shown negative coefficients for all three profitability indicators, meaning financial growth of this entity happened with a drop in foreign institutional ownership.
- **No Influence:** No statistically significant relationship was confirmed for Sun Pharmaceutical and Divi's Laboratories.
- **Company-Specific Impact:** As can be derived from the analysis of the results, there can be no generalisation about the FII/FPI impact on the sector, as the significance, direction and size of the holding relationship differs amongst the ten entities studied.
- **Limitations of Causation:** The models used only considered FII/FPI ownership in the role of independent variable and did not take into account, exchange rates, expenses on R&D, approvals for new launches, regulatory changes, operating expenses etc.

10. Conclusion

The research has revealed that the relationship between Foreign Institutional Investment and accounting-based financial performance varies significantly amongst different drug manufacturing companies in India. While Lupin, Torrent Pharmaceuticals and Aurobindo Pharma registered generally positive outcomes from FII/FPI ownership, since it had major consequences in terms of their revenue, profit after tax, and earnings per share. At the same time, the results for Dr Reddy's Laboratories, Cipla, and Zydus Lifesciences were mainly positive since the ownership by the major institutional players affected some accounting performance metrics only partly. The statistics for Biocon were very negative, while Glenmark Pharmaceuticals was only negatively affected in terms of revenues. Sun Pharmaceutical and Divi's Laboratories, on the other hand, did not show high degree of reaction to the changes in the ownership patterns. Thus, it is possible to conclude that FII/FPI ownership should be treated as a specific factor affecting financial performance by pharmaceutical companies.

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