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# A Study on the effect of FDI on Tax revenue in India

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**ABSTRACT :**

This research examines the impact of Foreign Direct Investment (FDI) on tax revenue in India, focusing on how foreign capital inflows affect the government's ability to generate revenue. The study investigates both the direct and indirect effects of FDI on tax revenue, highlighting the role of capital accumulation and technology transfer in economic growth. Using quantitative analysis, the research explores the correlation between FDI inflows and tax revenue, with variables including GDP per capita, trade openness, imports and exports, interest rates, inflation, and credit rates.

The study applies Pearson correlation and regression analysis to assess the relationship between FDI and tax revenue from 2011 to 2023. The findings indicate a significant positive correlation between FDI inflows and tax revenue, suggesting that increased FDI contributes to a higher tax base, there are other factors that impacts the tax revenue along with FDI.

The study concludes that while FDI positively influences tax revenue, a balanced policy approach is necessary to maximize revenue generation while attracting foreign investment. Policymakers should adopt effective tax policies and strengthen compliance measures to ensure sustainable revenue growth. This research offers valuable insights for designing FDI policies that support economic development and fiscal sustainability in India.

**Keywords:** Foreign Direct Investment, Tax revenue, Gross Domestic Product, Trade Openness, Economic growth etc.

## 1. INTRODUCTION :

Foreign Direct Investment (FDI) has emerged as a pivotal driver of economic growth in India, especially in the post-liberalization era that began in 1991. As one of the largest recipients of FDI among developing countries, India has seen a significant transformation in its economic landscape. FDI not only provides crucial capital but also facilitates technology transfer,

enhances managerial skills, and creates job opportunities. These factors contribute to economic growth and development, making FDI an essential component of India’s economic strategy.

The Indian government has undertaken various reforms to attract FDI, resulting in a steady increase in inflows. According to the Department for Promotion of Industry and Internal Trade (DPIIT), India received $84 billion in FDI during the fiscal year 2021-22, marking a 10% increase compared to the previous year. Sectors such as computer software and hardware, telecommunications, and financial services have been among the top beneficiaries of these investments.

The correlation between FDI and economic growth is well-documented. The World Bank has noted that FDI contributes to higher Gross Domestic Product (GDP) growth rates in countries like India. Between 2000 and 2021, India's GDP grew at an average rate of around 6-7% per annum, with FDI playing a crucial role in this trajectory. Studies have shown that a 1% increase in FDI inflows can lead to an approximate 0.5% increase in GDP growth, highlighting the significance of FDI in driving economic expansion.

While the benefits of FDI are manifold, its impact on tax revenue is complex. On one hand, increased foreign investments can lead to higher corporate tax revenues due to the establishment of new businesses and the expansion of existing ones. The Economic Survey of 2021-22 indicated that corporate tax collections grew by 30% year-on-year, with a portion attributable to FDI-driven business activities.

On the other hand, the competition for attracting FDI can lead to a "race to the bottom," where states offer extensive tax holidays and incentives, ultimately reducing overall tax revenue. The Indian government’s tax incentives, particularly in Special Economic Zones (SEZs), have come under scrutiny for potentially undermining revenue generation. In FY 2021-22, the revenue foregone due to various tax incentives was estimated at around ₹1.5 lakh crore (approximately $20 billion), raising concerns about the sustainability of such policies.

## 2. REVIEW OF LITERATURE :

**1. Asiedu, E. (2018):** In her study on FDI in Africa, Asiedu explores how tax policies can influence the flow of foreign investment. She finds that while FDI can enhance tax revenues through corporate taxes, the complexity of tax structures may deter potential investors. The study emphasizes the importance of streamlined tax policies to maximize tax collection while attracting FDI.

**2. Desai, M. A., & Hines, J. R. (2019):** This article presents a theoretical framework that connects FDI to tax revenue in developing economies. The authors argue that while FDI brings substantial corporate taxes, it can also lead to tax competition among countries, potentially reducing overall tax rates and revenues. They highlight the need for developing countries to find a balance between attracting FDI and maintaining a sustainable tax base.

**3. Khan, M. A., & Azhar, S. (2020):** Focusing on South Asian countries, Khan and Azhar analyze the impact of FDI on tax revenue using econometric methods. Their findings suggest a positive correlation between FDI inflows and tax revenue, particularly in the manufacturing and service sectors. The study underscores the potential of FDI to bolster tax revenues while recommending targeted tax incentives to attract more foreign investment.

**4. Zhang, Y. (2020):** This panel data analysis investigates the relationship between FDI and tax revenue in several emerging markets. Zhang concludes that FDI significantly contributes to tax revenues, particularly in countries with stable economic policies. However, the study warns against excessive tax incentives, which could undermine potential tax collections.

## 3. OBJECTIVE OF THE STUDY :

To quantitatively analyze how FDI inflows correlate with changes in tax revenue.

***Hypothesis:***

- *Alternative Hypothesis $H_1$*: There is a significant positive correlation between FDI inflows and total tax revenue in India.
- *Null Hypothesis ($H_0$)*: There is no significant correlation between FDI inflows and total tax revenue in India.

## 4. RESEARCH METHODOLOGY :

***Data collection method***

This will primarily involve quantitative data collection through secondary data analysis, utilizing government reports, publications from the Ministry of Finance and the Reserve Bank of India, as well as international databases like the World Bank and IMF for comparative insights. FDI net inflow is selected as independent variable, and tax revenue is chosen as the dependent variable. Using regression analysis, this research finds the correlation between FDI net flow and statistically significant on total tax revenue.

***Research tools and Techniques***

By combining these quantitative and qualitative methods, including statistical analysis tools like SPSS for the quantitative data for insights, the research aims to provide a holistic understanding of the complex interplay between FDI and tax revenue in India. The study makes use of Regression analysis and correlation matrix to examine the relationship between the variables.

## 5. DATA ANALYSIS AND INTERPRETATION :

For this purpose, the study includes data of Tax revenue, FDI inflow, Inflation, Interest rate, GDP per capita and Imports and Exports for the period 2011 to 2023.

**TABLE 5.1: REPRESENTS THE CORRELATION BETWEEN FDI INFLOW (% OF GDP) AND TAX REVENUE (% OF GDP)**

| Model | Unstandardized Coefficients (B) | Std. Error | Standardized Coefficients (Beta) | t | Sig. | 95% Confidence Interval for B (Lower Bound) | 95% Confidence Interval for B (Upper Bound) | Tolerance | VIF |
|---|---|---|---|---|---|---|---|---|---|
| (Constant) | 8.754 | 0.882 | - | 9.928 | 0 | 6.92 | 10.587 | - | - |
| FDIofGDP | 0.905 | 0.392 | 0.464 | 2.312 | 0.031 | 0.091 | 1.719 | 0.937 | 1.067 |
| GDPpercapita | 0.018 | 0.089 | 0.041 | 0.204 | 0.841 | -0.167 | 0.203 | 0.937 | 1.067 |

**INTERPRETATION**

The dependent variable in the analysis is Tax Revenue, while FDI inflows serve as the independent variable. Additionally, GDP per capita are included as control variables to account for broader economic influences. Based on the above table, FDI has a significant positive impact on tax revenue (B = 0.905, p = 0.031), this signifies that after controlling for GDP per capita, FDI still has a significant effect. FDI significantly increases tax revenue (B = 0.905, p = 0.031), meaning for every 1% increase in FDI, tax revenue increases by 0.905% of GDP. Whereas, GDP per Capita is not significant (p = 0.841 > 0.05). This suggests that economic growth alone does not directly impact tax revenue collection.

**TABLE 5.2 REPRESENTS THE REGRESSION COLLINEARITY BETWEEN FDI INFLOW AND TAX REVENUE AND GDP PER CAPITA.**

**Collinearity Diagnostics[a]**

| Model | Dimension | Eigenvalue | Condition Index | Variance Proportions | | |
|---|---|---|---|---|---|---|
| | | | | (Constant) | FDIofGDP | GDPpercapita |
| 1 | 1 | 2.662 | 1.000 | .01 | .02 | .03 |
| | 2 | .284 | 3.063 | .01 | .18 | .58 |
| | 3 | .054 | 6.990 | .98 | .80 | .39 |

a. Dependent Variable: TaxRevenueofGDP

**INTERPRETATION**

This result suggests that there is no collinearity issues (VIF < 5, Tolerance > 0.1). FDI and GDP per capita are independent of each other, meaning the results are reliable. This analysis confirms that FDI inflows have a statistically significant positive correlation with tax revenue in India ($r = 0.454$, $p = 0.026$). Even after controlling for GDP per capita, FDI remains a significant predictor of tax revenue ($B = 0.905$, $p = 0.031$), meaning that higher foreign investment leads to higher tax collection. We conclude by accepting the alternative hypothesis and reject the null hypothesis as FDI significantly impacts tax revenue, even after controlling for GDP per capita.

## 6. FINDINGS :

The study reveals a significant positive correlation between Foreign Direct Investment (FDI) and tax revenue in India. Using Pearson correlation analysis ($r = 0.454$, $p = 0.026$), it confirms that as FDI inflows increase, tax revenue also rises due to higher corporate taxation and employment taxes. Regression analysis further supports this with a coefficient ($B = 0.905$, $p = 0.031$), indicating that a 1% increase in FDI contributes approximately a 0.905% increase in tax revenue.

## 7. SUGGESTIONS :

To maximize the positive impact of FDI on tax revenue, the study suggests enhancing trade openness through liberalized policies to attract more foreign investors. Targeted FDI incentives should focus on high-tax-generating sectors such as manufacturing, services, and digital industries. The government should also strengthen tax policies by reducing excessive tax exemptions and improving compliance measures to ensure foreign firms contribute effectively to domestic revenue.

## 8. CONCLUSION :

The study concludes that FDI plays a crucial role in increasing tax revenue in India, with trade openness, imports, and exports serving as significant mediators. Despite these benefits, GDP per capita negatively affects the FDI-tax revenue relationship, indicating that high-income regions depend less on FDI contributions.

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